Örebro University Research Evaluation 2025 (ORU2025)

Foreword

High-quality research depends on scientific creativity and academic freedom, but also on the collective efforts that sustain an excellent research culture.

At Örebro University, the systematic review of research quality is an integrated part of our quality assurance system. Since 2010, recurring research evaluations have provided opportunities for reflection, learning, and renewal. ORU2025 builds on this tradition and is important in our ongoing efforts to strengthen the research at Örebro University.

During ORU2025, 28 Units of Assessment representing the breadth of research have reflected on their achievements, challenges, and future ambitions. Through self-assessments, quantitative data, and dialogue with national and international reviewers, the evaluation has provided a picture of our research and their development since the previous evaluation.

The evaluation confirms that Örebro University has continued to strengthen its research since the previous evaluation. The reviewers describe a university with a broad portfolio of high-quality research, growing international visibility, and an increasingly strategic approach to research development. They also identify substantial potential for further advancement. At the same time, ORU2025 highlights challenges, including the need to attract and retain talent, strengthen doctoral education, secure long-term research capacity, and create the conditions required for future excellence. The insights and recommendations provided through ORU2025 will therefore play an important role in guiding the university’s continued development in the years ahead.

A strength of ORU2025 lies in its developmental perspective. The purpose has not been to rank research environments, but to provide constructive feedback from peers and create a foundation for continued improvement. The reviewers have acted as critical friends, identifying strengths to build upon and opportunities for further development. Their insights will be important not only for individual research environments but also for faculties and university leadership in shaping the next phase of Örebro University's research strategy.

I would like to express my sincere gratitude to all those who have contributed to ORU2025. The evaluation has required significant efforts from researchers, doctoral students, reviewers and professional services staff across the university.

The future of research at Örebro University will be shaped not only by external evaluations, but by our collegial ability to learn from them. I am confident that the reflections, recommendations, and ambitions captured in ORU2025 will support our continued development as a university.

Åke Ingerman

Vice-Chancellor

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Preface

We are delighted to present the results of the ORU2025 research evaluation, in which leading external experts have provided feedback on 28 Units of Assessment at Örebro University.

The main focus of ORU2025 was to evaluate the university's research, with particular attention to the research environment, research quality and future development. The university management and deans decided to retain the main structure and method of the previous research evaluation in 2020, and a planning group with representatives from each school made minor adjustments. A smaller project group, with representation from the three faculties, then oversaw the evaluation.

Contact persons were appointed for each Unit of Assessment to maintain continuous contact with the project group. Information was provided in writing and at a start-up meeting, and regularly scheduled question-and-answer sessions were offered throughout the process.

Self-assessments made by the Units of Assessment served as the main basis for evaluation. In the self-assessment, each unit described and reflected on its research environment and the quality of its research. The units also presented a development plan for the coming five years. To support units in their self-assessment and reviewers in their evaluation, data on personnel, economic resources, publications, and bibliometric analysis were provided to units and reviewers.

Providing useful feedback requires a good understanding of the field and of how high-quality research is conducted. In collaboration with the Unit of Assessment, well-respected international and national scholars were recruited to serve as reviewers. In addition to expertise in the respective fields, reviewers were selected based on a verified lack of conflicts of interest with the evaluated units. The reviewers were instructed to act as "critical friends", meaning that they should be guided by a friendly approach to help the unit find a path for quality development by identifying strengths and weaknesses and suggesting possible avenues forward.

An important part of the evaluation process was the reviewers' visit to Örebro University. Evaluation teams of 3-4 reviewers met with representatives of the units under review. The meetings provided an opportunity to gather more information and gain a better understanding and sense of the research environments, their work, successes, and challenges.

On behalf of the project group, we would like to thank all Units of Assessment, reviewers and professional services staff across the university for their cooperation in this undertaking. It is our hope that the evaluation results will support and inspire further development of excellent-quality research at Örebro University.

Ann Quennerstedt
Chair of ORU2025

Jacob Ehnfors
Coordinator of ORU2025

Introduction

Örebro University

Örebro University was granted university status in 1999 and has since then developed distinguished academic degree programmes and research. Despite its relatively recent establishment, the university is ranked in the interval 601-800 by Times Higher Education World University Rankings and is positioned as number 135 among universities worldwide that are 50 years old or younger.

Our vision, *Örebro University –leading towards a knowledge-driven society*, emphasises the university's motivation to continually develop and contribute to solving societal challenges. The university's currently identified areas of development are:

Research

• Increased research volume while sustaining high quality

• Strategic profiling and increased visibility

Education

• High quality and attractiveness

• Leading-edge higher education pedagogy

A stimulating place of study and work

• Proximity and cooperation

• Strategic recruitment and skills development

In figures, Örebro University has approximately 17 000 students, some full-time program students and some only taking single courses (equivalent to around 11 000 full-time students). The university offers 80 degree programmes, 1,080 single courses, and employs approximately 1600 staff members in total, of whom 490 are doctoral students. Research revenues at Örebro University were 730 million SEK in the year 2024 (see Figure 1), of which 108 million SEK was ALF funding and 202 million SEK was external research funding from different funding bodies. Research, including doctoral education, contributed to 40% of the university's total annual turnover.

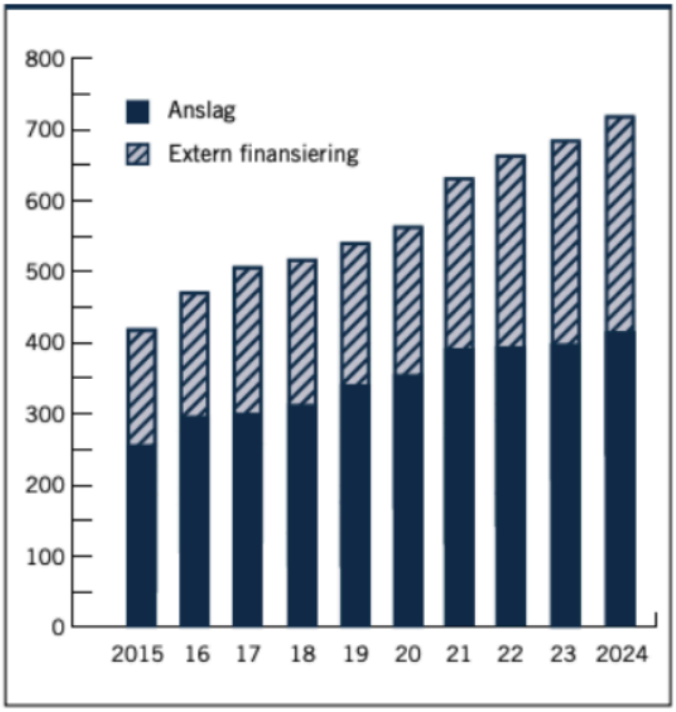


Figure 1. Research revenues at Örebro University 2015-2024. Solid colour shows direct funding, shaded bar depicts external financing. Source: Unit4 ERP

Organisational structure

Örebro University's board is chaired by Professor Lars Haikola, the former head of the Swedish Higher Education Authority (Högskoleverket). The university management team consists of the Vice-Chancellor, deputy Vice-Chancellor, and university director. There are three faculties at Örebro University: the Faculty of Business, Science and Engineering (ENT), the Faculty of Humanities and SocialSciences (HS), and the Faculty of Medicine and Health (MH) (see Figure 2). Each faculty and its Faculty Board are led by a Dean who reports to the Vice-Chancellor.

The Deans and Faculty Boards are responsible for the quality of research and education within each faculty. Additionally, the Faculty Boards decide on the allocation of about 70 per cent of the university's government research funding. A considerable portion of that funding is allocated to cover professors' research time (ranging from 40 to 60 per cent).

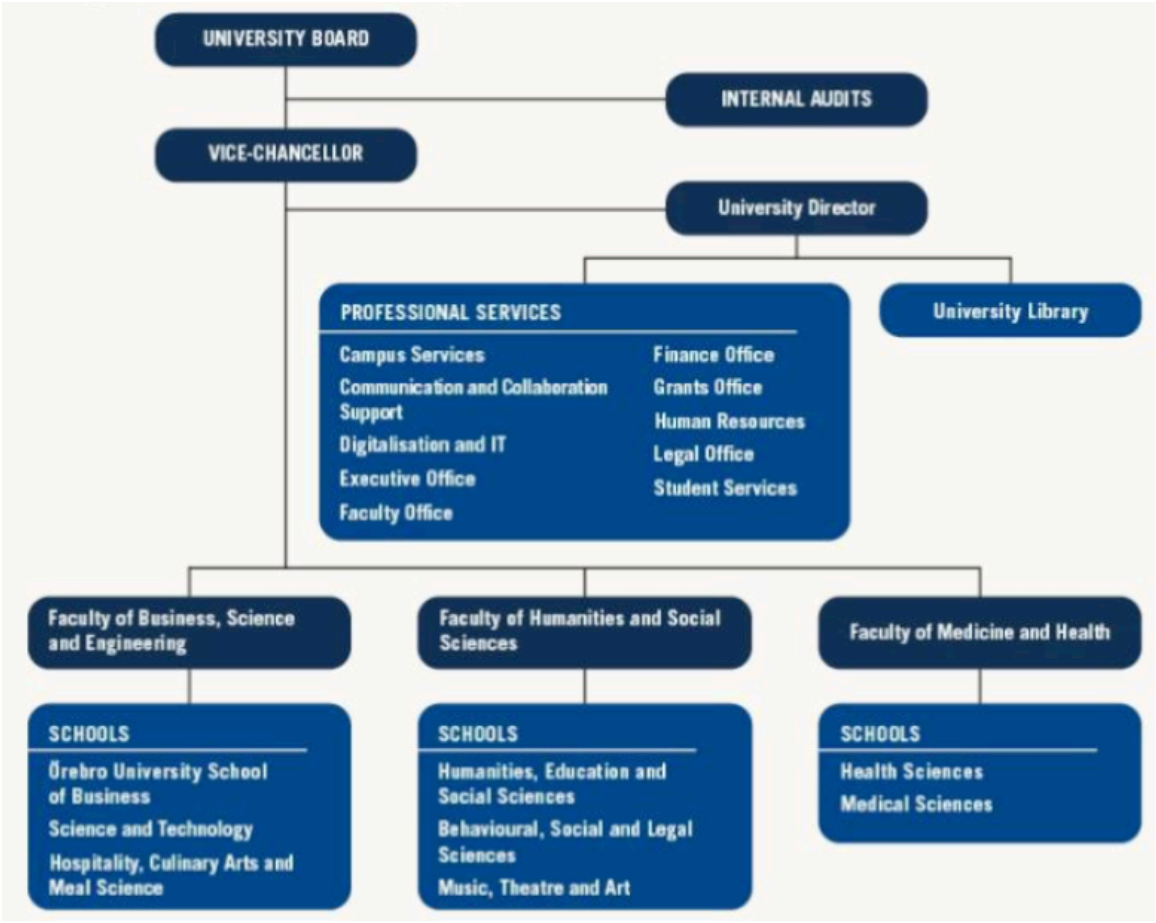


Figure 2. Organisation and governance at Örebro University

The activities within education and research are organised into eight Schools, each led by a Head of School (Prefekt). The organisation of divisions within each school varies depending on the nature and scope of its activities. Divisions are led by appointed Heads of Division (Enhetschef), who are faculty members serving temporarily in this role as part of their work. Another position at the school level is that of Head of Subject (Ämnesansvarig). Heads of Subjects are appointed by the Faculty Boards to oversee the quality assurance and development of research and doctoral education within each discipline. This role does not include any employer responsibilities for the personnel.

The University Administration provides professional support and services to Faculties and Schools. The Grants Office helps researchers maximise the success of their external funding grant proposals. This is achieved by supporting long-term planning and strategies for funding applications, as well as offering quality control, advice, and project management support from the initial planning of a grant proposal through to the completion of the research project. The university's Holding Company oversees the utilisation and commercialisation of ideas and innovations. It is owned by the Swedish government but managed by Örebro University.

The faculties and their academic focus

Faculty of Business, Science and Engineering

The faculty is organised into three schools: the School of Business, the School of Science and

Technology, and the School of Hospitality, Culinary Arts and Meal Science. Research is conducted in artificial intelligence and autonomous systems; applied research on the environment and sustainable development; life sciences; information security; organisational, social, ethical, and economic aspects of organisational control; applied policy-oriented empirical research in economics; statistical method development in survey methodology and econometrics; sensory science; public health and nutrition. Undergraduate and master's courses, as well as several study programmes, are offered in these fields. Additionally, interaction with the private sector is strong, particularly within business administration, informatics, computer science and engineering.

Faculty of Humanities and Social Sciences

The Faculty of Humanities and Social Sciences comprises three schools: the School of Humanities, Education and Social Sciences (HumUS), the School of Behavioural, Social and Legal Sciences (BSR), and the School of Music, Theatre and Art (MHS). Collectively, these schools form an interdisciplinary academic environment characterised by methodological breadth and theoretical diversity. Research within the Faculty encompasses a wide spectrum of disciplines and addresses central dimensions of human behaviour, social interaction, communication, cultural expression, and institutional organisation. This research contributes both nationally and internationally, engaging with contemporary societal challenges and generating knowledge of substantive public relevance. The Faculty offers undergraduate, master's, and professional degree programmes across multiple academic fields and vocational trajectories. These include, among others, clinical psychology, law, teacher education, public administration, and music.

Faculty of Medicine and Health

The faculty consists of two schools: the School of Health Sciences and the School of Medical Sciences. The research subjects represented in the faculty are Occupational Therapy, Biomedicine, Public Health Sciences, Disability Research, Sport Science, Surgical Science, Medicine, and Nursing Science. The research covers a broad range of areas from fundamental understanding of pathological mechanisms and patient-centred research to questions related to society. There is strong collaboration with Örebro University Hospital and other relevant actors in the region.

Past and current University-wide research initiatives

Starting in 2018, Örebro University undertook a significant interdisciplinary research initiative in the focus area of Food and Health. The programme was overseen by a designated Pro-Vice-Chancellor and encompassed most of the university's food and nutrition-related research. The primary aim of the Food and Health programme was to substantially contribute to improved health and well-being among targeted groups of individuals or consumers by producing cutting-edge interdisciplinary research in the fields of food, nutrition, and lifestyle. This initiative later led to the formation of the profile area Food and Health and, in 2025, to the establishment of a university-wide research centre at Örebro University, following a decision by the Vice-Chancellor.

In parallel, strategic initiatives were undertaken in the area of AI and robotics, including senior lecturers with focus on collaboration (Samverkanslektorer) and the establishment of robotics and visual laboratories. This initiative also led to the formation of the interdisciplinary research profile AI and Robotics, and subsequently to the creation of the university-wide research centre AI, Robotics and Cybersecurity (ARC) at Örebro University in 2025.

Teacher Education for Tomorrow was a strategic initiative at Örebro University from 2017 to 2021. Its aim was to enhance the quality of the university's teacher education programmes so that they could meet current and future needs and standards. The visionwas to develop a stimulating learning environment and challenging study programmes that attract motivated students. Parts of the initiative focused on research relevant to schools and teacher education, including practice-based research.

As part of the university's efforts to secure strategic and long-term competence supply, investments have been - and continue to be - made in both doctoral students, associate senior lecturers and guest professors. As an investment in the Research Leaders of the Future, the university has, for example, simultaneously recruited senior lecturers across all schools and provided excellent conditions for their development as researchers, including a fellowship programme.

Long-term and extensive investments in research infrastructure have also been made to strengthen the conditions for successful research. One type of investment includes research equipment such as advanced instrumentation and devices, while another focuses on data- related infrastructure: storage systems for large-scale data, acquisition or access to databases, the establishment of proprietary databases, specialised software, and the recruitment of several new positions in data management.The university has maintained and strengthened co-financing instruments to facilitate participation in major funding initiatives, including collaborations within the Wallenberg AI, Autonomous Systems and Software Program (WASP). During this period, the University has increased its publication output, broadened its external funding base, and further developed its research culture.

The research evaluation ORU2025

Background

The Swedish Higher Education Authority (UKÄ) has established a national framework for the assurance and enhancement of research quality. Within this framework, regular evaluations of research at an HEI are a key element of the institution's research quality system. Three research evaluations have previously been conducted: ÖRE2010, ORU2015 and ORU2020

The evaluation model

A planning group was formed with representatives from each faculty. The group conducted a thorough planning of the evaluation model, in close contact with a steering group. Once the model was set, a smaller project group was in charge of coordinating all of the evaluation-related activities.

The main aim of ORU2025 was to enhance the quality of research at the university by establishing a foundation for future development. The evaluation did not directly assess or grade research quality or output, but examined the conditions necessary to support and improve high-quality research and strategic growth. It was anticipated that the evaluation will increase awareness of the university's research strengths and weaknesses, as well as identify aspects of research practices that should be actively maintained and those that require further development. The evaluation also aimed to aid decision-making by providing data for strategic planning at various organisational levels within the university.

ORU2025 was intended to provide each Unit of Assessment (UoA) with a foundation for further developing their research and systematic quality work. The analysis and reflection involved in the self-assessment process, along with the feedback and recommendations from external peers, are expected to support the further development of the UoAs and the university as a whole.

Units of Assessment and evaluation data

The research and researchers at Örebro University have been organised into 28 UoAs (see appendix 1), as proposed by the Deans and decided by the Vice-Chancellor. For each UoA, the following data were utilised for the evaluation and provided to the reviewers:

Quantitative indicators (further details in appendix 2)

-Staff details
-Research resources
-Bibliometrics
  publication list from Web of Science, and for some units also from DiVA[1]
  bibliometric analysis (only of data from Web of Science)

[1] DiVA is the institutional repository used by Örebro University and many other Swedish higher education institutions to register research publications. Publications in several UoAs include books, book chapters, and works published in Swedish, many of whichare not covered by Web of Science. While Web of Science does index books, this primarily applies to books in English and with a clear scholarly orientation. Bibliometric data for books are also often limited and difficult to extract. To provide a more complete picture of the publication output within these UoAs, publication lists from DiVA are therefore used to complement the WoS data.

Self-assessments prepared by each UoA

In self-assessments (template in appendix 3), the units described and reflected on their research environment and performance, as well as consider quantitative indicators and other factors that might signal research quality or challenges. The units also outlined a development plan for their future research.

Reviewers were provided with the self-assessments with all supporting text, as they were completed by the UoAs. This way, the reviewers could see all prompts and questions the units have been asked to respond to.

The units were recommended to mirror their own environments and outcomes against those of an external research group or environment, or against any other external benchmark. However, such reflection was not mandatory, which is why some units have done so and others have not.

Self-assessments by research centres, the faculties and the university

To support the UoAs in their self-assessment work and external reviewers in their evaluations, self-assessments have also been produced by two research centres (Food and Health and ARC), the three faculties, and the university. These give additional information from organisational levels and centres that could help clarify or shed light on matters discussed in the UoAs' self-assessments. The UoAs were advised to refer to centre-, faculty-, and university-level assessments when relevant, rather than repeating their texts.

The university's self-assessment, the assessments from relevant faculty or faculties, and both centre assessments was provided to reviewers.

External reviewers who would like to comment on anything in the faculties' or university's self-evaluations, either in relation to the evaluation of a unit but not in direct response to it, or independent from the units, were encouraged to send these to the project team of ORU2025.

ORU2025 Project organisation

Steering group

Vice chancellor
Deputy vice chancellor
University director
Dean ENT faculty
Dean HS faculty
Dean MH faculty

Planning group

ENT faculty
Sune Karlsson, Business school
Todor Stoyanov, NT
Ute Walter, RHS

HS faculty
Jonas Persson. BSR
Ann Quennerstedt, Humus
Sam de Boise, MHS

MH faculty
Susanna Geidne, HV
Mussie Msghina, MV
Coordinator: Jacob Ehnfor, Exceutive office

Project group
Ann Quennerstedt, Humus (Chair)
Todor Stoyanov, NT
Mussie Msghina, MV
David Haglind, Executive office
Marie Andersson, Exceutive office
Jacob Ehnfor, Exceutive office (Coordinator)

External reviewers
One external reviewer was appointed to each UoA. Reviewer teams, consisting of the external reviewers of 3-4 units, collaborated to evaluate the units they were responsible for. Each reviewer was main reviewer for the UoA he or she was appointed to, and co-reviewer for the others. Consequently, the task involved both individual and collaborative work, assessing data for 3-4 UoAs, with primary responsibility for one.

Based on the evaluation data, the reviewers were expected to:

-Assess the quality of each unit's research environment, their work to strive for highquality research, the outcome of the unit's work, and the contributions to the field and society they describe. A review template provided further guidance for the assessment.

-Assume the role of a 'critical friend' to support the UoAs in their development. This involved highlighting identified strengths and suggesting ways to enhance them. It also included identifying and clearly articulating areas for quality improvement and offering guidance on how to achieve such progress. The development plans submitted by each UoA were assessed in relation to their strengths and weaknesses.

Visit to Örebro University
Reviewers visited the university over two days. During these days, the reviewer team met representatives from each UoA, giving reviewers the opportunity to gather more information and seek clarifications from the unit. The UoAs could also initiate explanations and provide comments on the assessment.

Each UoA meeting was organised as follows:

In total, two hours were allocated to each unit. First, the team had 30 minutes for final preparation before meeting the unit; thereafter, reviewers met with 4-6 unit representatives for one hour, and finally, the review team had 30 minutes to summarise impressions and thoughts. The meetings with units were led by the reviewer appointed to the respective UoA.

On the first day of the visit, Tuesday 21 April, two unit meetings took place during the afternoon. On the second day, Wednesday 22 April, one unit meeting was scheduled before lunch, and reviewer teams that assessed four units met the last after lunch.

At the end of the visit, each review team had some time allocated to initiate and plan the joint assessment. As we have aimed to minimise the time we asked reviewers to stay in Örebro, the visiting days were tightly scheduled, especially for teams with four units to evaluate. We therefore advised

reviewer teams to organise a pre-meeting to prepare for the task. We also believed that one or two additional digital meetings between reviewers were likely necessary after the visit, particularly for teams with four UoAs. These pre-and post-meetings were arranged by the reviewers themselves.

After the visit

Following the visit, the review team prepared and distributed evaluation reports for the 3-4 UoAs (using the provided template). The designated reviewer for each UoA was responsible for drafting the report for that unit, while the other reviewers in the team provided comments.

The initial version of the report was sent to each UoA. They had the opportunity to check facts, and if the reviewers had any remaining questions, these were addressed. Once feedback from the units was received, the final reports were revised if needed, and submitted.

Precise timeline

The specific timeline for the evaluation was:
2 March 2026: The reviewer teams had access to the quantitative data and self-assessments through the online platform cloud

21-22 April 2026: Reviewer teams visited Örebro University.

13 May 2026: The first version of the reviewer teams' reports was sent to UoAs for fact-checking and responses to remaining questions.

22 May 2026: Feedback from UoAs was forwarded to reviewers.

5 June 2026: Final reports were submitted.

Appendix

Appendix 1. Units of Assessment

as per Vice-Chancellor's Decision

Faculty of Business, Science and Engineering

Biology and Chemistry
Business Administration
Computer Science
Culinary Arts and Meal Science
Mathematics, Science and Technology Education
Economics and Statistics
Informatics
Mathematics and Physics
Mechanical Engineering

Faculty of Humanities and Social Sciences

Criminology
Education
Gender Studies
Human Geography
Legal Science
Media and Communication Studies
Musicology
Political Science, including Social Studies
Psychology
Social Work
Sociology
Studies in Humanities

Faculty of Medicine and Health

Biomedicine
Disability Research
Medicine
Nursing Science
Occupational Therapy
Sport Science
Surgical Science

Appendix 2. Description of quantitative indicators

Resources

The data was gathered from the university's financial systems in autumn 2025. For each Unit of Assessment, a financial report was prepared. The report details the UoA's research expenses from 2020 to 2024.
Three types of funds are reported:
•Government funding (statsanslag): Direct government funding.
•External grants (externa medel): Funds for research applied for in competition.

Individual scholarships are not recorded in the university's financial system. Therefore, some UoAs have an additional report for research scholarships where scholarships are listed under external grants.

External grants

A figure under this heading shows research expenses for 2024. The pie chart provides an overview of the proportion of external funds from each financier.

External grants and government funding

The table under this heading displays research expenses by financier and year and compares the ratio of external grants to total funds spent (government funding plus external grants) from 2020 to 2024.

The university uses accrual accounting. This is an accounting method where revenue and expenses are recorded when the transaction occurs, rather than when income is received or payments are made. Therefore, negative values may arise if corrections have been made to the accounting at the end of the project. If any expense is corrected, the accrued revenue and expenses are also automatically adjusted.

Personnel data

For each unit of assessment, a list of personnel employed in September 2025 was extracted from the university's personnel data system. All employees with a PhD degree were included. All doctoral students were also included, regardless of their funding type.

No names are included in the lists. Only data such as position, gender, year of birth, employment status, scientific degrees (such as docentship), and year of obtaining a doctoral degree are provided.

A **docent** is an academic title denoting that the individual has achieved a level of scientific and teaching competence that clearly surpasses the requirements for a doctoral degree. Each faculty board has an academic appointment committee that manages docent applications before a decision is made by the faculty board.

Affiliated researchers are also included. An affiliated researcher is associated to the university but without an employer-employee relationship between Örebro University and the researcher. Through affiliation, a researcher is engaged by the university to develop research and education, benefiting both parties.

Research staff categories

Professors - A professor spends most of their working hours on research but is also expected to be involved in all three levels of higher education and to disseminate information about and collaborate on their own and the department's research activities.

Adjunct professors - An adjunct professor at Örebro University is mainly employed (at least 51 percent of a full-time post) outside the higher education sector.

Visiting professors – A visiting professor is employed at another higher education institution, in Sweden or abroad, but also has employment at Örebro University for a limited period.

Senior professors – A professor who has continued activity as an employee after retiring. This category differs from professor emeritus/emerita, who no longer have employment but can still be active in research.

Senior lecturers - A senior lecturer has a PhD and is expected to spend their working hours on education at all levels, research, and related collaboration activities. Most of their research activities require external funding.

Associate senior lecturers – An associate senior lecturer has a PhD and a four to six-year employment aimed at developing research autonomy and output, as well as teaching qualifications required for appointment as senior lecturer.

Adjunct senior lecturers - An adjunct senior lecturer is a specialist/expert with research/artistic qualifications who agrees to work part-time at the university for a limited period.

Postdoctoral researchers - The appointment as a postdoctoral researcher is intended to enable individuals who have recently been awarded their doctoral degree to consolidate and develop their research or artistic skills.

Researchers - The researcher category is used for appointments primarily funded by external research grants.

Lecturer – A lecturer has a PhD and conducts research, however they are expected to spend most working hours on education.

Adjunct lecturer - A lecturer has a PhD and conducts research, however they are expected to spend most working hours on education. An adjunct lecturer is a specialist/expert with research/artistic qualifications who agrees to work part-time at the university for a limited period.

Doctoral students – Besides those doctoral students employed at the University, Örebro University also has a significant number of doctoral students who are admitted to third-cycle courses and study programmes at the University but are employed either at other HEIs or in the public or private sectors.

Bibliometric data and methodology

Bibliometric analyses in ORU2025 were carried out using Web of Science (WoS) as the data source, and reports for each UoA were prepared by the same analyst at Örebro University Library, ensuring a consistent application of methodology across all UoAs. The specific methodology applied is described in each individual report, and a list of the publications included in the analysis has been made available to each UoA.

As ORU2025 is intended to be forward-looking, with a focus on assessing current research capacity and future potential, only publications authored by researchers employed at the unit at the time of data extraction are included, regardless of their affiliation at the time of publication. The analysis therefore reflects the research experience and expertise of the current staff rather than the unit's full research output for the period 2019–2024.

Publication and citation practices vary across research fields. For units where publication in Swedish is common, or where books and book chapters constitute a significant share of the output, a complementary publication list was extracted from DiVA, the university's institutional repository, in order to provide a broader overview of the unit's overall publication output. This complementary extraction included books, book chapters, and articles not indexed in WoS. Where articles were considered, only peer-reviewed journal articles were included.

The bibliometric indicators and reports are based solely on publications indexed in WoS. Articles published in Swedish are included if indexed in the database, although coverage of Swedish-language publications is more limited than that of English-languagepublications. While WoS also indexes books and book chapters, bibliometric indicators for these publication types are generally less robust and less consistently comparable than those for journal articles. Books and book chapters have therefore been excluded from the WoS-based analyses, in line with common international bibliometric practice.

Appendix 3. ORU2025 Self-assessment template

ORU2025 self-assessment template - Unit of Assessment (UoA)

This self-assessment is intended to provide an overview of the research environment, the quality of research, progress since ORU2020 and the developmental plans for each Unit of Assessment (UoA).

The goal of ORU2025 is to evaluate research quality and, through the UoA's reflections and self-assessment, identify possible development opportunities for the individual UoA, including any subunits. ORU2025 will not result in any form of grading, nor is it intended to directly affect resource allocation. Comparison between different environments is not the purpose – particularly since research environments vary in terms of their traditions, cultures and preconditions.

Although comparisons between different UoA at Örebro University will not be done, the UoA is recommended to identify a research group or research environment (national and/or international) of similar size and focus to use as a benchmark when filling out the assessment. The idea is to identify a comparable research group/environment and to use this benchmark to compare for example: activities, organisation, networks, funding situation, publication patterns, competence profile etc. The benchmark may be a research environment that UoA has been or is in contact with, has collaborated with, or without such historical ties. It is prefarable that it is a research group/environment of high research quality that the UoA aspire to develop in line with. Using a self choosen benchmark for comparing activities and outcome can hopefully help the UoA to mirror the UoA and concretize what another high performance research groups/environments do to achive high research quality. It is up to the UoA to decide if a benchmark is useful and whether rather a few different benchmarks would be useful for reflecting the UoA. The recommendation is to use the benchmark were applicable and useful in the self assessment.

Each UoA should identify its own strengths, weaknesses and areas for development by analysing the current research environment and quality. This self-assessment should involve both researchers and PhD students. While some data on bibliometrics, research funding, and personnel is provided, other data will need to be collected by the UoA.

This self-assessment is a key document in ORU2025 and the developmental plan for the UoA is a very important part. A panel of external reviewers assigned to each UoA will examine the self-assessment and the materials provided by ORU (bibliometrics, resources and personnel) in order to provide feedback. This feedback (from external peers) is intended to contribute to the further development of quality enhancement and quality assurance procedures at all levels of the university.

The self-assessment has the following main sections:
1. The unit's research environment
2. Quality of the research
3. Progress since ORU2020
4. Development plan

Each UoA is asked to complete all sections. It is the responsibility of the UoA coordinator to lead and document the strategic discussion needed to complete sections 1 - 4 of this document and to submit the entire self-assessment by Januari 31st of 2026 via mejl to ORU2025@oru.se

Please note that this document will not be included in the final report of the research evaluation ORU2025 but it should be seen as a public document.

The self-assessment document should be concise. The total number of words is expected to vary depending on the size of the UoA and the number of potential subunits, but it should not exceed the total number of words indicated for a particular section.

The self-assessment may refer to, rather than duplicate, relevant information in the self assessment of the Faculty, Center or the University-level.

Name of the UoA	
Appointed UoA coordinator	
Coordinator's e-mail	
Briefly describe who has been involved and how the self-assessment process has been conducted	

1. The unit's research environment, resources, and output

1.1 Describe how the UoA is organised in terms of:

- Subunits, links to external organisations, etc.
- Formal leadership (board, head(s), director(s), etc.)
- The extent of teaching responsibilities at both undergraduate and graduate levels.
- The description may refer to rather than duplicate relevant information in the self assessment of the Faculty or University-level center (if applicable).

Not more than 500 words

1.2 List the UoA's main area(s) of research

1.3 Reflective analysis of the unit's research environment, resources and output

Structures and processes are key to creating a good environment for high-quality research. You are therefore asked to consider several important factors listed below.
The section (1.3.1 - 1.3.7) should not be more than 2 500 words in total.

1.3.1 Personnel and recruitment

- How are you currently working to ensure that your personnel and recruitment contribute to high quality research?
- What strengths and weaknesses do you see in your current personnel and recruitment strategy?

- How are equal opportunities, with regard to gender, ethnicity and age, ensured in personnel and recruitment issues?
- Include reflections on career support and competence development.
- The description may refer to rather than duplicate relevant information in the self assessment of the Faculty

1.3.2 Leadership

- How are you currently ensuring that the leadership of your UoA contributes to high-quality research? Describe how the academic research leadership and the formal leadership (head of unit (enhetschef) and head of school (prefekt) influence this work.
- What strengths and weaknesses do you see in your current leadership strategy?
- How are equal opportunities, with regard to gender, ethnicity and age, considered in relation to leadership matters?

1.3.3 Academic culture

- How are you currently working to nurture a culture that is conducive to high quality research? (e.g. with regard to open and respectful intellectual interaction, internal and external peer review, collegiality, creativity, ambition, freedom to define your research area etc.?)
- What strengths and weaknesses do you see in your current strategy with regard to academic culture?
- How are equal opportunities, with regard to gender, ethnicity and age, taken into account in relation to issues of academic culture?

1.3.4 National and international collaboration

- Describe the UoA's main collaboration partners, both academic and non-academic, and how these collaborations have contributed to the unit's development.
- How are you currently working to establish and maintain both national and international collaborations and networks that contribute to high quality research?
- What strengths and weaknesses do you see in your current collaboration strategy?
- How are equal opportunities, with regard to gender, ethnicity and age, taken into account in relation to collaborations?

- Identified benchmark environment(s) may be given a brief description under this heading

1.3.5 Research funding

- Please comment on the data provided regarding your current funding situation, including the balance between internal and external funding. Please describe your current strategy for research funding (at the UoA and/or sub-unit level) and how this contributes to high quality research.
- What strengths and weaknesses do you see in your current strategy?
- How are equal opportunities, with regard to gender, ethnicity and age, taken into account in relation to your current strategy for research funding?
- It may be relevant to compare answers to these questions in relvenat parts to corresponding information for identified benchmark(s).

1.3.6 Publications

- Comment upon the UoA's research output based on the bibliometric data provided.
- Are there any noticeable changes over time?
- What strengths and weaknesses do you see in the UoA's publication practices?
- How are equal opportunities, with regard to gender, ethnicity and age, taken into account in the UoA's publication practices?
- It may be relevant to compare answers to these questions in relvenat parts to corresponding information for identified benchmark(s).

1.3.7 Research productivity

- Comment on data provided for your UoA concerning the number of research hours available and the research output.
- Describe differences between perceived time and actual allocated time for research and how these differences may vary between gender and academic level.
- Describe how the time for competence development is used in general terms for research purposes.

2. Quality of Research

Although quality of research is somewhat difficult to define, this section provides an opportunity for the UoA to reflect on the present status of its research in terms of the following aspects of quality.

This section (2.1 - 2.4) should not be more than 2 200 words in total

2.1 Credibility of the research

- Describe how the UoA works to ensure research credibility (procedures are rigorous, and findings are reliable and valid) and how this is reflected in activities and output during the period 2020-2024 (e.g. publications, external research funding, invited keynote lectures, international commissions of trust, or other measures of credibility in your area).
- Describe how the UoA works to secure that doctoral students develop knowledge and capability to carry out credible research.
- Consider the strengths and weaknesses of the UoA in relation to the above points.

2.2 Contribution to the research field

- Describe the main contributions of the UoA's research during 2020-2024 to the research field.
- Describe how the outreach and impact of the UoA's research are reflected in/through the unit's citations, keynote or expert assignments, and/or other relevant measures.
- Describe other academic contributions (e.g. editorial work, peer review, research assessment, etc.).
- Consider the strengths and weaknesses of the UoA in relation to the above points. This may be done in terms of a comparison with identified benchmark(s).

2.3 Contribution to society

- Describe which societal stakeholders (e.g. public sector, policy makers, professionals, trade and industry, society at large) the UoA aims to reach and impact.
- Describe how the outreach, knowledge transfer, and impact of the UoA's research on society are reflected in the unit's activities (e.g. by communication, use in professional or educational contexts, expert assignments, media presence, or other measures in your field).
- Consider the strengths and weaknesses of the UoA in relation to the above points.

2.4 Regulations, ethics and sustainable practices

- Describe how the UoA ensures that research conducted within the UoA complies with ethical and other regulations and standards.
- Describe how the UoA nurtures sound ethical conduct and ensures that these practices are sustainable over time.
- Describe how the UoA works to secure that doctoral students develop knowledge about ethical and other regulations, and sound ethical conduct.
- Consider the strengths and weaknesses of the UoA in relation to the above points.

3. Progress and outcome since the last research evaluation ORU2020

Please refer to the provided self-assessment, when applicable, from the faculty and the university management when filling out 3.1 and 3.2.

This section (3.1 – 3.2) should not be more than 500 words in total

3.1 Describe how university, faculty or school initiatives have affected the UoA.

3.2 Describe the UoA's initiatives in response to the feedback from the external reviewers of ORU2020 and as part of implementing the development plan in ORU2020.

If the UoA is not the same as in ORU2020, the reflection can be made at the sub-unit level where applicable.

4. Developmental Plan for the UoA

Because future development is a central part of ORU2025, this section provides an opportunity to describe the capacity your UoA has for maintaining and enhancing quality research. While sections 1, 2 and 3 focused on what has been accomplished during the past 5 years and your current situation, this section is concerned with development potential, i.e. what might be accomplished during the next 5 years. Such a plan underscores the UoA's capacity for development by outlining strategies of why and how the plan will lead to advancements. Development is not simply doing "more" research. It involves a vision for using the current situation (for your UoA) as a platform and planning for future activities that will enrich the quality of the research.

This section (4.1 – 4.3) should not be more than 3 000 words in total

Describe your developmental plan for the UoA for the coming 5-year period. This might include specific plans for each sub-unit. Focus on areas in need of development identified in sections 1, 2 and 3 as well as any other areas with potential for further development, underscoring each point's priority. Indicate which support (internal and external) is needed in order to realise the plan. The descriptions may refer to the strategic initiatives taken or planned a the level of the Faculty or the University level, or within the University-level centers.

4.1 The vision

Describe the 5-year vision for the UoA and/or its sub-units.
What would you like to maintain and what would you like to improve/develop?

4.2 The plan

Describe how you plan to realise the vision.
Please use the same structure as in 4.1 above.

4.3 Support needed to realise the plan

Describe the support (internal and/or external) needed to realise the plan.
Please use the same structure as in 4.1 and 4.2 above.

Appendix 4. Review teams and reviewers

Assessment team	Faculty	Unit of assessment	Reviewer
1	ENT	Computer Science	Ann Nowé, professor, Vrije Universiteit, Brussel
1	ENT	Informatics	John Sören Petterson, professor, Karlstad University
1	ENT	Mathematics and Physics	Niklas Wellander, professor, Luleå University of technology
1	ENT	Mechanical Enineering	Stefan Lindström, professor, MID Sweden University
2	ENT	Business Administration	Johnny Lind, professor, Stockholm School of Economics
2	ENT	Biology and Chemistry	Ian Cousins, professor, Stockholm University
2	ENT	Economics and Statistics	Markku Lanne, professor, University of Helsinki
3	HS	Political Science including social studies	Katarina Eckerberg, professor, Umeå University
3	HS	Legal Science	Ruth Mannelqvist, professor, Umeå University
3	HS	Criminology	Janne Kivivuori, professor, University of Helsinki, Finland
3	HS	Psychology	Karin Brocki, professor, Uppsala University
4	HS	Musicology	Kai Arne Hansen, professor, University of Inland, Norway
4	HS	Studies in Humanities	Eva Lindgren, professor, Umeå University
4	ENT	Culinary Arts & Meal Science	Michael Bom Frøst, associate professor, University of Copenhagen, Denmark
5	HS	Gender Studies	Lars Jalmert, professor, Stockholm University
5	HS	Human Geography	Eeva-Kaisa Prokkola, professor, University of Oulu, Finland
5	HS	Sociology	Johanna Essevald, professor, Lund University
6	HS	Social Work	Jill Manthorpe, professor, Kings College London, United Kingdom
6	HS	Media and Communication Studies	Lars Lundgren, professor, Södertörn University Stockholm
6	HS	Education	Kirsten Sivesind, professor, University of Oslo, Norway

6	ENT	Mathematics, Science and Technology Education	Cigdem Haser, Professor, University of Turku, Finland
7	MH	Sport Science	Klavs Madsen, professor, Norwegian School of sport sciences, Norway
7	MH	Disability Research	Dimitris Michailakis, professor, University of Linköping
7	MH	Occupational Therapy	Gunilla Isaksson, professor, Luleå University of technology
7	MH	Nursing Science	Marie Friedel, professor, University of Luxemburg, Luxemburg
8	MH	Biomedicine	Annelie Brauner, professor, Karolinska Institutet
8	MH	Medicine	Karl Michaëlsson, professor, Uppsala University
8	MH	Surgical Science	Mats Brännström, professor, University of Gothenburg

Appendix 5. Template for reviewers

TEMPLATE

for reviewers in

Örebro University's research evaluation ORU2025

ORU2025 Review Report

The total number of words in your report should be a maximum of 3 000 words[1].

Unit of Assessment:_____

Review Team: _____

Please insert text under each heading.

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

1.2 Are the main research areas appropriate for the unit and its development?

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?
Please provide specific comments on the unit's research funding, publications and productivity.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

[1]This includes the template text. The text you insert will be 2 500 words.

PART 2: REVIEW REPORTS

ORU2025 Review Report: Chemistry and Biology

Review team: Ian Cousins (main reviewer), Johnny Lind and Markku Lanne

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The Biology and Chemistry Unit of Assessment (UoA) spans two research environments (Man-Technology-Environment (MTM) and Life Science Centre (LSC)) and two subjects (Chemistry and Biology) with distinct disciplinary traditions. Despite this structural complexity and breadth, the unit has developed a coherent scientific identity centred on environmental chemistry, exposure science, toxicology, molecular biology, and environmental systems. This environmental orientation provides a strong thematic anchor and aligns well with national and European research priorities.

The organisational structure is functional but strained. The Head and Deputy Head of Unit provide overall leadership, while Heads of Subject coordinate academic activities. Research leadership is largely Principal Investigator (PI)-driven, with MTM and LSC coordinators facilitating collaboration. The structure supports autonomy and collegiality, but legacy divisions between MTM and LSC continue to complicate long-term coordination. The interview confirmed the claims in the self-assessment report that Chemistry and MTM have historically been more represented in leadership structures than Biology and LSC, despite the latter's strong contributions to research output and external funding.

Teaching responsibilities are extensive and unevenly distributed. Permanent staff carry 30–80% teaching depending on external funding and administrative roles. Although buy-out mechanisms exist to reduce teaching loads, even well-funded PIs teach frequently due to the overall high load. Externally funded researchers, postdocs, and PhD students deliver a substantial share of teaching, which supports programme delivery but reduces their research time and creates structural fragility. The breadth of the teaching portfolio across several bachelor's and master's programmes is difficult to sustain with the current staffing base, though MTM and LSC collaborate effectively to manage it.

Despite many pressures, the research environment remains vibrant. The unit coordinates one EU project, participates in several others, and maintains strong national and international collaborations. Informal academic culture is strong, supported by a flat hierarchy, daily interactions, collegial support, regular "fika", and an open atmosphere that facilitates collaboration. Regular social activities further strengthen cohesion. However, the seminar programme is irregular, and time pressures limit participation in joint activities.

1.2 Are the main research areas appropriate for the unit and its development?

Yes. The UoA's four integrated research themes are well chosen, coherent, and strategically aligned with both disciplinary strengths and societal needs. The combination of environmental chemistry and exposure science; molecular and cellular biology; environmental systems; and applied environmental and biotechnological solutions reflects a mature interdisciplinary profile that is distinctive within the Swedish landscape. The themes map directly onto major European and national priorities, including chemical pollution, environmental and occupational health, sustainability transitions, and biotechnological innovation, and they position the UoA to remain competitive in EU-level and national funding schemes.

A major strength is the cross-cutting methodological platform built around advanced analytical chemistry, high-content imaging, molecular methods, and bioassay-based approaches. This shared infrastructure enables genuine integration across biology and chemistry and supports research that spans molecular mechanisms, organismal responses, environmental processes, and applied solutions. The thematic structure also provides flexibility for future development, including the planned strengthening of applied environmental chemistry and solution-oriented research.

In conclusion, the research areas are strategically advantageous, providing a clear scientific identity and a strong foundation for continued growth and competitiveness.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

The UoA's reflective analysis provides a credible overview of strengths and challenges, with good awareness of constraints around staffing, external funding dependence, and infrastructure. However, the self-assessment underplays several acute risks highlighted in the interview, including the promotion bottleneck, the limited number of university-funded technical staff, the fragility of infrastructure funding, and the competitive disadvantage faced by smaller Swedish universities due to the lower compensation per student.

A significant mismatch exists between permanent staffing and the breadth of teaching and research activities. Permanent staff numbers are low relative to programme responsibilities, and externally funded researchers carry much of the teaching, making capacity sensitive to project cycles. Recruitment is rigorous and international, but strategic workforce planning is constrained by limited permanent positions, lack of promotion pathways, reliance on external funding, and upcoming retirements in several key areas. These factors heighten the risk of losing critical expertise and institutional memory.

The academic culture is a clear strength: collegial, open, and interdisciplinary. Research groups maintain regular meetings and manuscript discussions, and MTM and LSC provide platforms for cross-disciplinary interaction. However, engagement varies across groups, and heavy teaching and administrative loads limit broader participation.

The UoA has an impressive collaboration portfolio, including major EU consortia, national networks, and strong links with regulatory agencies and industry. These collaborations enhance research quality and visibility but are often tied to individual researchers, creating vulnerability if key individuals leave.

Doctoral education is well structured, with individual study plans, regular supervision, and participation in national research schools. However, reliance on external funding for doctoral positions (for the full four years) and uneven supervisory capacity create vulnerabilities.

Infrastructure sustainability remains a major concern. The current model of funding equipment through small project contributions does not match instrument lifespans and risks chronic underinvestment.

Please provide specific comments on the unit's research funding, publications and productivity.

The UoA has demonstrated strong and sustained growth in external funding, increasing from approximately €28 million in 2019 to €38 million in 2024. External funding now constitutes 61% of total research income, with EU programmes and the Knowledge Foundation as major contributors. This trajectory reflects a mature and competitive research environment with good alignment with societal needs. The diversification of funding sources is a clear strength, and the increasing success in competitive EU schemes demonstrates international visibility and credibility.

However, the funding profile also exposes structural vulnerabilities. The high dependence on external funding makes the unit sensitive to fluctuations in project cycles, particularly because externally funded researchers carry a substantial share of teaching and supervision. Limited internal funding for infrastructure renewal and the near-absence of university-funded technical staff create long-term risks for maintaining analytical capacity. Reliance on small national grants that do not cover full costs further constrains strategic planning. The unit's funding strategy is ambitious and appropriate, but long-term sustainability will realistically require institutional investment in permanent staffing, technical support, and infrastructure.

The UoA also demonstrates a strong and consistent publication record. Over the past five years, the unit has produced 505 publications, with 97% cited at least once and nearly 13,000 citations overall. Annual output is stable at approximately 78 research articles and 5–8 reviews. The category-normalised citation impact (CNCI) ranges from 1.2 to 1.88, exceeding 1.4 in all but one year, indicating impact well above global field averages. A clear majority of papers appear in Q1 journals, including several in the top 1% of their subject categories. Interdisciplinary co-authorship across chemistry, biology, medicine, environmental science, and data science is a defining strength and

contributes to visibility and citation performance. At the interview, it became clear that researchers in the unit actively consider bibliometric indicators (e.g., journal impact factors) when selecting journals.

Research productivity is shaped by uneven research time allocations across staff categories. Externally funded researchers and postdocs are formally appointed with high research time, but in practice they also carry substantial teaching responsibilities, which reduces their effective research time and creates variability across individuals. It is remarkable that research output remains high under these conditions, which speaks to the strength and commitment of the research staff but also highlights that current performance is achieved despite, rather than because of, the structural conditions.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

The UoA produces credible research supported by well-established analytical and biological methods, clear laboratory procedures, and a culture of internal scrutiny. The shared analytical platform provides consistent measurement quality, and cross-checking between biological and chemical approaches strengthens reproducibility. Participation in EU consortia contributes to method harmonisation and external validation, while regular manuscript discussions and collaborative project structures ensure that work is exposed to multiple perspectives before publication in good quality journals.

Structural risks remain: heavy teaching loads reduce protected research time, reliance on temporary staff affects continuity, and limited university investment in both technical staff and instrument renewal threatens the long-term viability of the analytical and biological methods.

2.2 Contribution to the research field.

Do the unit’s research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

The UoA contributes visibly to its research fields through sustained publication output, methodological development, and active participation in European research infrastructures. Its work in environmental chemistry, exposure science, and environmental systems is recognised through leadership roles in major EU initiatives, which help shape research agendas and strengthen the unit’s international profile. The integration of molecular, analytical, and systems-level approaches positions the UoA at a productive interface between disciplines and enables contributions that are not easily replicated elsewhere in Sweden.

The main limitation is scale: several research areas rely on a small number of senior researchers, creating vulnerability in leadership and long-term continuity.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

The UoA's research has clear societal relevance, addressing issues such as chemical pollution, environmental and occupational health, and sustainable resource use. The unit works closely with regulatory agencies, municipalities, and industry partners, providing evidence for risk assessment, monitoring, and policy development. Participation in large EU consortia extends this impact to the European level by contributing to shared data, harmonised methods, and coordinated policy support. Public outreach, school collaborations, and media engagement further broaden societal reach.

A weakness is that engagement varies across groups, and a more coordinated strategy would help ensure consistent visibility and long term impact.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The UoA works in a generally robust and responsible manner to ensure that research complies with ethical, regulatory, and safety standards. Research in environmental chemistry, toxicology, molecular biology, and exposure science requires high methodological rigour, and the unit demonstrates appropriate procedures for sample handling, data management, laboratory safety, and ethical review. The self-assessment also notes that the unit follows sustainable laboratory practices, including responsible chemical handling, waste management, and efforts to minimise the environmental footprint of research activities.

Doctoral students receive structured training in research ethics, laboratory practice, and regulatory frameworks through both faculty-level courses and supervision within research groups. This provides a solid foundation for responsible conduct of research.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The UoA's reflections on university, faculty, and school initiatives are accurate and highlight several long-standing structural issues that remain unresolved. The unit has engaged constructively with university leadership on the need for a sustainable infrastructure funding model, but progress has been limited. The lack of university-funded technical staff is a critical gap, particularly for a research environment that depends on advanced analytical instrumentation with high maintenance demands. This limited institutional support places disproportionate responsibility on externally funded projects and jeopardises long-term continuity.

The UoA also correctly identifies the low compensation per student as a structural disadvantage compared with other Swedish universities. This directly affects staffing capacity, as permanent positions cannot be expanded in line with teaching obligations. As a result, externally funded researchers continue to shoulder a substantial share of teaching, which limits the unit's ability to plan staffing and research time on a stable, long-term basis.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

The UoA has implemented several of the recommendations from ORU2020. Increased participation in EU projects, including assuming coordination roles, demonstrates strengthened international competitiveness and strategic alignment with European research priorities. The development of a new master's programme, the incorporation of data science and AI into research and teaching, and the deepened collaboration with the medical faculty all reflect meaningful progress in broadening the unit's scientific scope and enhancing interdisciplinary integration. Strategic recruitment efforts, particularly in areas aligned with long-term priorities, further indicate a deliberate response to earlier feedback.

However, several structural issues highlighted in ORU2020 remain largely unresolved. The persistent mismatch between permanent staffing and teaching obligations continues to constrain research time and strategic planning. Infrastructure funding remains fragile, with no sustainable university-level model for instrument renewal or technical support. Career progression challenges, especially the difficulty of promotion to professor, have not been addressed in a way that improves competitiveness or retention.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The vision presented for 2030 is coherent, realistic, and well aligned with the UoA's existing strengths in interdisciplinary research, advanced analytical capability, and international collaboration. The

emphasis on stabilising staffing, securing sustainable infrastructure funding, increasing visibility, and deepening integration across biology and chemistry reflects a clear understanding of the unit's long-term needs. Importantly, the vision is aspirational without being speculative: it is grounded in the structural challenges identified in the self-assessment and reinforced during the interview.

However, the vision's feasibility depends heavily on institutional decisions outside the UoA's direct control. Achieving greater stability in staffing and infrastructure will require university-level investment in permanent positions, technical support, and a sustainable equipment-renewal model. Without such commitments, several elements of the vision may be difficult to realise within the proposed timeframe.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The development plan identifies appropriate and well chosen priorities: stabilising permanent staffing, securing sustainable infrastructure funding, strengthening recruitment, and increasing visibility. These priorities align with the structural challenges identified in the self-assessment and the interview, and the plan shows a clear understanding of the unit's long-term needs.

However, the plan remains high level and would benefit from clearer sequencing and prioritisation. Several actions are presented in parallel rather than as a staged roadmap, which makes it difficult to see how the unit intends to balance immediate pressures with longer term ambitions. The plan also lacks an explicit consideration of risks, such as delayed recruitments, fluctuations in external funding, or further retirements in key areas. Many of the proposed measures, including increased permanent staffing, a sustainable model for equipment funding, and improved career pathways, depend on decisions at faculty or university level. Without explicit institutional commitments, these elements risk remaining aspirational rather than actionable. The plan would be strengthened by distinguishing more clearly between actions that the unit can implement itself and those that require support from higher levels of the organisation.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

The UoA has several signature strengths that should be actively protected and leveraged in future development. These include a strong interdisciplinary research culture, an advanced analytical chemistry platform, high success in securing external funding, extensive international networks, and

research themes with clear societal relevance. These strengths form the foundation of the unit's competitiveness and should remain central to its strategic direction.

At the same time, several critical risks mentioned in this report require urgent institutional attention. To address these issues, the assessment panel recommends the following actions:

• Increase permanent staffing to reduce dependence on externally-funded researchers and stabilise teaching provision.

• Establish a sustainable infrastructure funding model, including university-funded technical staff, to ensure long-term maintenance and renewal of critical equipment.

• Improve career pathways, with particular attention to transparent and achievable promotion criteria for professorship, in line with some other Swedish universities.

• Strengthen leadership representation and development to ensure balanced participation across research environments and support for emerging leaders.

• Strengthen seminar culture and internal scholarly exchange to enhance intellectual cohesion and visibility across research environments.

• Formalise collaboration strategies to reduce dependence on individual researchers and ensure continuity of external partnerships.

• Increase national and international visibility of all positions, including strategic use of international recruitment channels.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

The UoA is a scientifically strong, collegial, and outward-looking environment with a clear scientific profile. It demonstrates high research quality, strong external funding performance, and an impressive record of interdisciplinary collaboration. The unit's achievements in publication impact, international networking, and participation in major EU consortia reflect a mature and competitive research environment. These accomplishments are particularly notable given the structural constraints under which the UoA operates.

The review identifies several systemic challenges that threaten long-term sustainability. Limited permanent staffing, heavy teaching loads, insufficient technical support, and an infrastructure-funding model misaligned with equipment lifespans all constrain the unit's ability to maintain and expand its research capacity. Career progression pathways, particularly promotion to professor, remain a bottleneck that affects recruitment competitiveness and retention.

The UoA has strong foundations and clear strategic direction. With decisive institutional investment in staffing, infrastructure, technical support, and career development, the unit is well positioned to

strengthen its national and international standing over the next five years and to continue delivering high-quality, societally relevant research.

ORU2025 Review Report: Computer Science

Review Team: Ann Nowé (main reviewer), John Sören Pettersson, Niklas Wellander, Stefan Lindström

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The computer Science unit consists of five labs : Cognitive Robotic Systems Lab, Robot Navigation and Perception Lab, Machine Perception and Interaction Lab, Autonomous Mobile Manipulation Lab and Adaptive and Interpretable Learning Systems Lab. All five labs are affiliated with the university-wide AI, Robotics and Cybersecurity Center (ARC) and are also affiliated groups of excellence in the Wallenberg AI. These embeddings make the labs an attractive partner in projects, both in terms of organisational support, for example for workshops, inviting international fellows, as well as infrastructural needs.

The different labs have autonomy over their research focus and strategy. The more central steering is related to education requirements. All labs have the ambition to acquire competitive funding, and to publish at high impact venues. The labs differ somewhat in their current research volume, funding success, and publication visibility. Members of the unit who have the ambition to improve their research KPI's can rely on support from the university services as well as feedback from colleagues within the unit.

1.2 Are the main research areas appropriate for the unit and its development?

The main focus of the unit is on AI, and more specifically embodied AI. This unites the five labs, while giving the labs the necessary freedom and opportunities to react to new developments in AI. The unit follows broader developments in AI and Computer Science, such as the Large Language Models and the more general Generative AI, without having a targeted research focus on those topics. The review team agrees with this strategy. The embedding in ARC also provides the connection with Informatics and aspects such as security. The connection between AI and security, is strategically important, and could lead to interesting cross-fertilisation of the two units. The evaluation committee advices to explore opportunities for further collaboration.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

All labs are headed by people with a strong research network, and the unit is very active in international collaborations. The unit has been successful in attracting guest professorships and sabbatical exchanges with leading institutions. This strategy has led to a high number of collaborative articles with international co-authors.

The department functions within a collegial management framework and are committed to informal mentorship and peer support. Unit members regularly participate in trainings offered by the university, including support for grant writing. The Head of Unit delegates selected responsibilities to laboratory leaders in accordance with the department's leadership strategy. A core group composed of these lab leaders convenes twice each semester to coordinate activities and discuss strategic planning. In addition, broader subject-area meetings, held twice per semester, together with general staff meetings conducted once per semester, provide platforms for information sharing and consensus-building.

Teaching-related issues are discussed in dedicated meetings, while the supervision of PhD candidates is coordinated through a collegium that meets twice per semester. Most members have a reasonable teaching load, around 50%, only few members have a higher teaching load up to 80%.

As acknowledged in the self-assessment, the absence of a more formalised delegation structure may lead to ambiguity regarding roles and responsibilities and may also reduce the visibility of the important contributions made by early-career researchers. The evaluation committee advices that the roles and efforts that are taken up by unit members are documented and monitored.

The unit also reported that increasing administrative demands sometimes shift routine support tasks back to researchers, reducing effective research time.

Please provide specific comments on the unit's research funding, publications and productivity.

The unit is very successful is the acquisition of external funding, with main funding coming from EU funds (25%), the Wallenberg foundation (24%) and The Knowledge foundation. A fair share comes from the Swedish research council, and there is also some more applied research funding (18%). So, there is a healthy spread over different funding agencies and funds for fundamental as well as applied research.

The unit might start thinking about what will be the strategy in terms of funding acquisition once the Wallenberg support would stop. This funding has allowed to broaden the scope of the research, and to build up new expertise. While this has also led to new positions for young faculties, these are temporally and therefore the unit might start developing a strategy to maintain these areas of expertise. This might e.g. be by preparing these people to apply for other prestigious grants, or by building up a relationship with industry in certain application domains.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

As is common in Computer Science, the unit publishes in journals as well as conferences. Publishing in top conferences, which the unit does, is very important in the field of computer science. Some of the conferences are included in Scopus but not all conferences which are important for the unit. As the university premium is based on Scopus not all publication efforts are accounted for. As these funding is at the end important for the unit, it e.g. supports traveling, this might be a point of attention for the unit.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

The CNCI per year for Computer Science is varying between 1.1 and 1.7. The review team supports the decision of the unit to also publish at major conferences which are not necessarily included in Scopus. These conferences are not only important for networking but also to build up a strong CV to apply for competitive funding in Computer Science.

The unit also maintains a strong and well-balanced project portfolio. It is advisable to sustain these efforts and further strengthen support mechanisms for colleagues who are less experienced or less successful in acquiring research funding, thereby broadening the overall funding base of the unit.

PhD students are well supported, and their views and concerns are actively listened to. Their concerns are collected through a PhD representative and discussed during staff meetings three to four times per year.

A wide range of PhD courses is available, particularly for students affiliated with WASP. Attendance at summer schools appears to be less common; however, such activities provide important networking opportunities and can significantly benefit doctoral training. The unit could therefore consider encouraging participation in summer schools more actively, especially for students outside the WASP network.

Overall, the travel grants available for PhD students to attend conferences appear to be sufficient. The unit is also proactive in targeting a variety of funding agencies that provide travel support for doctoral researchers.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

The unit focuses on the development of human-centered AI and autonomous systems, ensuring that technological advancements serve the needs, safety, and well-being of individuals and society. Its work aligns with democratic values and addresses divers societal challenges.

The ARC provides a valuable environment for interaction with other disciplines, including social sciences, psychology, and communication studies. Although such collaborations already occur occasionally, they could be strengthened further, particularly given the growing deployment and societal impact of AI applications. More intensive interdisciplinary engagement is increasingly important in this context.

At the same time, establishing formal interdisciplinary collaborations and securing acceptance for interdisciplinary proposals remains challenging. Nevertheless, recent funding calls specifically aimed at interdisciplinary research may offer new opportunities to foster and expand such collaborations.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

A broad range of training opportunities is available for staff and PhD students. However, as noted above, developing more structured collaborations within an interdisciplinary context would be advisable and could foster valuable synergies that benefit all parties involved.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit’s reflections on how university, faculty or school initiatives have affected the UoA.

ARC has had a positive impact on the unit. It provides an interesting work environment, it also provides opportunities to connect to the wider public, and to organise impactful dissemination events.

3.2 Initiatives after ORU2020

Please comment on the unit’s reflections on how they have implemented feedback from reviewers in ORU2020.

The main points have been implemented, most through the opportunities that were given through WASP, e.g. extra hiring of part-time professors, who brought in important expertise, both on missing topics as well as on acquiring external, international funding.

The recommendation to invest in Natural Language expertise has not been implemented in the strict sense. This is understandable in the context of the impact Large Language Models (LLMs) have had recently. The unit however is having the necessary competence to follow up the field. The committee strongly advices to keep on doing do, and to explore opportunities to connect LLMs with other ongoing topics in the unit, such as e.g. neuro-symbolic AI and robotics.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The unit has articulated a clear and relevant vision for the next five years. Its strategy focuses on sustaining a strong tradition of high-impact, externally funded research while further advancing contributions to fundamental questions in AI and autonomous systems. At the same time, the unit aims to strengthen collaboration with industry and society in order to maintain societal relevance and ensure that fundamental research is aligned with real-world needs. By reinforcing its position within both the Swedish and international research landscapes, the unit seeks to remain at the forefront of technological and societal development.

The unit's strategy for the coming years focuses on strengthening excellence in fundamental research in AI and autonomous systems, while expanding its research scope in response to emerging scientific and societal needs. It aims to support new research directions and junior researchers, including the development of dedicated groups in areas such as cybersecurity, neuro-symbolic methods, and neuromorphic computing. To this end dedicated research groups will be defined. The unit will continue to target WASP strategic recruitments, Wallenberg Scholar, SSF and VR career support grants. The unit has set as a clear goal to increase the number of applications to career support grants by at least 50% over the next five years, with an ambition to secure at least one ERC grant. More broadly, the unit also has the ambition to participate more intensivle in EU projects, and will opportunities for this in it's existing network.

The unit also seeks to deepen collaborations with industry, the public sector, and academic partners to ensure societal and industrial relevance. Through joint projects scientific advancements will contribute to address real-world challenges. In parallel, it remains committed to advancing human-centered AI and autonomous systems that are ethical, transparent, inclusive, and aligned with democratic values and societal well-being.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

In terms of academic excellence, the plan appears realistic and well grounded. The unit is able to build on its strong internal expertise, including competencies developed through WASP, as well as its extensive international network. Combined with the central support provided by the university — such as grant-writing assistance and support through the ARC — this provides a solid foundation for achieving the unit's objectives. At the same time, it remains important to continue efforts to involve and support less experienced staff members in order to broaden the base of researchers contributing to these activities.

The unit's research depends heavily on access to advanced computing infrastructure, which is currently secured through WASP and NAISS. In addition, the research activities rely on robotic and other technical infrastructure that require dedicated technical support. In this context, technical support is necessary. Therefore, it is crucial to continue the unit's efforts to be able to support a lab engineer.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

While the unit currently covers a nice pallet of AI expertise it is important to keep this broad scope and monitor that the expertise in the various fundamental core approaches to AI and ML are covered. What is receiving less attention today in research as well as industry, might become crucial in the coming years.

Connect more actively to other units, such as Informatics and Mechanical Engineering. The former could support the ambitions with respect to AI and Cybersecurity. The latter is especially relevant for the ambition to build up more expertise in control. The unit should also define concrete mechanisms for turning ARC's visibility and coordination role into sustained joint projects across units.

More generally, the unit could consider, potentially through the ARC, offering AI-related services and expertise to other units within the university. To support such initiatives sustainably, an appropriate compensation mechanism should be developed. This approach could further strengthen the unit's ambition to enhance its connections with industry and societally relevant applications. Achieving this objective will also require a broader culture of engagement within the unit, rather than relying primarily on a limited number of individuals who must simultaneously need to maintain a strong focus on fundamental research as well.

5. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

Overall, the review team has a very positive impression of the Computer Science Unit. It is a strong unit with a well-balanced budget supported by a diverse range of funding sources, and it has articulated a convincing plan for the future. The unit has been successful in addressing the concerns of the previous evaluation, largely through its strong position in WASP.

There are, however, a few points that warrant attention, including the need to ensure sufficiently broad internal support to achieve its strategic goals, as also noted earlier in this report.

As recognised in the self-assessment, staff retention may be a concern. Given that this is a broader institutional issue closely linked to the university's promotion policies, it is recommended that this be further discussed at university level to clarify what is feasible and desirable.

The unit has also expressed an ambition to become an independent school, whereas it is currently grouped with chemistry, biology, mathematics, and other disciplines. While ARC has contributed to increasing the visibility of Computer Science, its focus is primarily research-oriented. Establishing a separate school could improve the unit's representation within the university's organisational structure, which is understandable given the size and importance of Computer Science. It is therefore advisable to further explore this ambition.

ORU2025 Review Report: Business Administration

Review Team: Johnny Lind (main reviewer) Ian Cousins and Markku Lanne

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organized to promote quality research?

The UoA is organized into the following research environments: the Centre for Empirical Research on Organizational Control (CEROC), the Interorganizational Research Centre (INTERORG), and the Centre for Sustainable Business (CSB). CEROC and INTERORG have been established for a long time, whereas CSB is a newer centre that also involves researchers from other units within the university with an interest in sustainability issues. The centres are of roughly equal size. The three centres overlap, and several faculty members are affiliated with more than one centre. Together, the centres create a close research environment and provide critical mass for individual researchers. There are also strong research clusters within the centres that are internationally established. The large majority of employees in the UoA belong to one or more research environments and are research-active.

The unit currently has five PhD students: two industrial PhD students, two PhD students employed by the department, and one PhD student funded by the University of Skövde. PhD students are treated as "junior faculty". They are also part of various PhD collaborations, such as MIT and FIRE. Most PhD students are funded through external sources, although the university has funded one full-time PhD position since 2023. A critical mass of PhD students is an important component of a vibrant research environment.

Overall, the UoA research environment is well organized to promote high-quality research.

1.2 Are the main research areas appropriate for the unit and its development?

The three research environments consist of several related research themes. Together, these themes cover many of the topics traditionally included within the field of business administration. One notable area that is not represented is corporate finance. However, this topic is often covered within finance departments, which typically have a research tradition rooted in economics. The areas chosen by the UoA are central to the discipline and are appropriate for the unit.

Both the INTERORG centre and the CSB centre have a strong position within the Industrial Marketing and Purchasing (IMP) research tradition, which was initiated more than 50 years ago. From

this foundation, the two centres have developed and expanded into new research areas. The CEROC centre has, over the past 25 years, been one of the strongest management accounting research environments in the Nordic countries. While it has primarily continued to focus on management accounting, it has also expanded into related areas such as auditing.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

The UoA has recruited only a few new faculty members during the past five years. However, a larger number of employees were recruited over the past ten years, including candidates from Stockholm, Uppsala, Karlstad, and abroad. During this period, the department has used an open and broad recruitment process, announcing positions in both English and Swedish through social media and personal networks. Across Europe, international recruitment has become increasingly important, particularly in accounting, where many hires are made through the European Accounting Association (EAA) Talent Workshop, established in 2015. Recruitment processes through the EAA workshop are fast, typically taking only a few months to complete.

A common challenge across the three research environments is that several key researchers are approaching their 60s. It is therefore important to develop and retain the next generation of research leaders within these environments. It is important to ensure clear career progression, including opportunities to promotion to full professor.

The department's research activities are based on a culture that emphasises decentralisation and academic freedom. This includes personal initiative, responsibility, and the opportunity to pursue individual research interests within a collegial and supportive environment. The three research environments benefit from strong leadership by professors and senior faculty members who are established scholars in their respective fields. These senior scholars support junior researchers and teaching faculty in various ways, including assisting with grant applications, mentoring, and co-authoring papers. At the same time, the research environment is characterised by a bottom-up culture that emphasises autonomy and freedom. The underlying ambition is that research should be driven by curiosity rather than by output-based performance measures.

A central component of a well-functioning research environment is the seminar series and the interaction among scholars during these seminars. It is in these settings that PhD students, junior researchers, and senior scholars continuously develop their understanding of what constitutes high-quality research. The UoA currently runs a single biweekly seminar series. None of the three research environments has its own seminar series. This structure is intentional, as it is designed to promote interaction and collaboration across the three research environments. The seminars are well attended and generate strong engagement among participants.

The department has formal collaborations with national research schools for PhD students. In addition, both the department and its scholars maintain formal and informal relationships with private and

public organisations, nationally and internationally. A substantial proportion of published papers are co-authored with international scholars. However, this share has declined somewhat in recent years.

Longer international research visits (exceeding six months) for PhD students, junior scholars, and senior faculty are uncommon. Two faculty members have undertaken medium-length visits to leading universities in the United States (US) and the United Kingdom (UK). The department has limited resources to support medium- to long-term international visits, although funding is available for short-term visits, particularly to universities in the UK. The UoA also hosts ad hoc visits from international researchers. The importance of international experience could be made more explicit, and senior faculty could further foster a culture that more strongly supports international mobility. In addition, establishing ongoing relationships with leading, regularly visiting scholars in prioritised fields could further strengthen the department's internationalisation efforts.

Please provide specific comments on the unit's research funding, publications and productivity.

Research funding is primarily driven by individual researchers as part of the department's bottom-up culture. While formal encouragement is not strictly necessary, senior scholars actively provide support and guidance. Faculty members collaborate through workshops on research proposal writing, as well as through the sharing of experiences and applications. The vast majority of funding comes from traditional research foundations, with the Handelsbanken Research Foundation being the most important source.

The UoA has a strong publication record. Faculty publish regularly in journals ranked at Level 3 in the Academic Journal Guide (AJG), and occasionally in top-tier Level 4 journals. These publications are produced by a broad group of scholars, and the number of publications has increased during the period.

The university places considerable emphasis on bibliometric measures, particularly the Journal Impact Factor. However, this is a somewhat problematic measure for evaluating research performance in the field of Business Administration. Several journals regarded as top journals in the field, according to the AJG and the Financial Times Top 50 (FT50) list, have impact factors in the range of 4 to 7, whereas some lower-ranked journals may have impact factors of around 10. As a result, young scholars who base their publication strategy primarily on impact factors, rather than journal reputation within the field, may face challenges in being competitive for positions at leading departments.

The department's leadership acts in the interest of early-career scholars and emphasises the importance of publishing in journals that are highly regarded within the international research community. However, the strong focus on impact factors can create misaligned incentives within the organisation. Over the past five years, the importance of publishing in top-tier journals has increased in relation to tenure decisions. Scholars within the department have demonstrated their ability to publish in these journals, and continued efforts to increase the number of such publications would further strengthen the department's research profile.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

An indication of the credibility and reliability of the research output from the UoA is the consistent publication of research in a wide range of leading journals by various scholars. Many of the key journals for leading business schools in Europe are included in the FT50 list, and scholars at the department could aim to increase the number of publications in these journals. Another indicator is that several scholars at the department hold editorial roles in leading journals within the field. This suggests that the department's research output is recognised and valued by the international research community. A further indication is the stable level of external funding from multiple sources, including the Swedish Research Council, where competition for funding is intense.

A key activity supporting the production of credible research is the active discussion within and across the research environments, facilitated by the joint seminar series. The biweekly seminars have high participation and include discussions of papers at various stages of development and research proposals.

The department also has formal procedures in place to ensure the quality and credibility of PhD education. In addition, it collaborates with other universities through national research schools to create a critical mass for PhD students.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

The main contribution and impact on the research field are achieved through regular publication and active engagement in the international scholarly conversation. The training of PhD students represents another contribution to the field.

The department educates a relatively small number of PhD students compared to many Business Administration departments. However, the vast majority of these graduates have been employed at universities such as Linköping University, the Stockholm School of Economics, and San José State University.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

Scholars at the UoA contribute to society in various ways, both in Sweden and internationally. These contributions include serving as experts, participating in parliamentary hearings, engaging in public debates, and publishing popular articles in newspapers and magazines.

The department has not developed a formal strategy for societal engagement. Instead, such activities are largely driven by individual researchers' interests, which appear to provide sufficient motivation. While it is important that scholars contribute their knowledge to society, such engagement can reduce the time available for academic publishing. This trade-off may be particularly challenging for early-career researchers.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The department has formal procedures in place, such as an ethics course that all senior researchers are required to complete. However, as noted in the self-assessment, the key element is the development of a research culture that emphasises ethics and sustainable practices. Daily research discussions, as well as the reading and commenting on each other's work at various stages, are central to this process. The seminar series, with its high level of participation, is a key component in fostering this culture. These activities are particularly important in the current research landscape, characterised by the growing use of AI and increasing pressure to publish.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The initiatives from the university and faculty have not been closely aligned with the specific competencies and needs of the UoA. The faculty's decision to allocate funding for one PhD student within the UoA has created an opportunity to use this support as a foundation when senior scholars apply for additional PhD funding from external sources. If it were possible to carry funding over from one year to another, this initiative could potentially be leveraged even more effectively.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

The UoA has taken the recommendations into consideration in the implementation of the ORU2020 development plan. However, changes in areas such as research processes, publication strategies, internationalisation, and PhD funding require a longer time horizon to materialise.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The vision is stated as "to conduct societally relevant, high-quality research in the field of business administration." The UoA has developed a strategy through earlier initiatives such as FEK40, and this work has been further refined into the vision presented in ORU2025, which is suitable for guiding the unit's development. The UoA specifies the vision through three key components: (1) a relevant and attractive Business Administration department in Scandinavia, (2) a maintained and developed academic culture, and (3) processes and practices that support continuous development. A central objective in achieving this vision is to emphasise research quality rather than quantity.

The vision is well developed and appropriate for guiding the future development of the UoA. It focuses on key aspects that are critical for the unit's progress. A central component in strengthening the department's attractiveness is to establish a strong reputation through the publication of high-quality research.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The plan further specifies the three main areas of the vision outlined above. Over the next five years, the ambition is to become a relevant and attractive Business Administration department in Sweden, which appears reasonable. The plan outlines concrete activities within these three areas to guide the development of the UoA in alignment with its strategic objectives.

The importance of recruiting new faculty members is emphasised. However, the plan does not clearly specify how the recruitment process should be conducted, particularly with regard to attracting high-quality international candidates.

The vision and plan are sound and represent the natural next step in the development of the UoA; however, their realisation depends on additional resources.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

Based on the above assessment, we suggest the following recommendations to the unit:

The unit should continue the efforts and strategic direction that have guided its development over the past five years.

The vision is to become a “relevant and attractive Business Administration department in Scandinavia.” A central activity in achieving this vision is to produce high-quality research. The UoA should strive to increase the number of publications in top-tier journals within its fields, particularly those included in the FT50 list and ranked at Level 4 in the AJG. Publications in these journals will enhance the department’s ability to attract high-quality scholars.

Increase efforts to secure research funding for senior lecturers as well as PhD students. The faculty funding for PhD positions should be used as a foundation, complemented by external grants to expand the number of PhD students.

Continue to promote collaboration across traditional subfields such as accounting, entrepreneurship, marketing, management, and strategy. The joint seminar series is an effective mechanism for facilitating such interaction.

Maintain and further strengthen the bottom-up, informal, and collegial culture that characterises the department. A supportive and collaborative environment is a key strength, and collective efforts can contribute to increased external funding and higher-quality research.

Increase efforts to develop the next generation of academic leaders within the unit. It is also important to retain these individuals, particularly given that several leading scholars approaching their 60s. This could otherwise create vulnerability, as the development and retention of academic leadership takes time. Building on existing strengths is likely to be more effective than relying on external recruitment.

Strengthen internationalisation efforts. It is important to foster a culture in which PhD students and early-career researchers view longer research visits abroad as a natural part of their development. Senior faculty and academic leaders should act as role models. The unit should seek funding for longer-term visits and recurring exchanges with key international partners, and increase efforts to recruit international scholars.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

The Department of Business Administration is on a promising path of development. It has established three strong research environments that conduct high-quality research. Increased attention to publishing in top-tier journals, such as those included in the FT50 list, as well as greater emphasis on internationalisation, would further strengthen the department. However, these efforts should not come at the expense of the department's bottom-up, informal, and supportive culture, which is a key strength.

At the same time, several challenges can be identified. The age profile of some of the leading and driving academics makes the department more vulnerable in the coming years. It is therefore essential to develop and retain the next generation of academic leaders. Ensuring clear career progression, including opportunities for promotion to full professor, is critical in this regard. Recruiting external scholars with similar competence may be difficult. In addition, the funding of PhD positions remains a challenge, making it difficult to establish a critical mass within the PhD programme.

ORU2025 Review Report: Informatics

Review Team: John Sören Pettersson (main reviewer), Ann Nowé, Niklas Wellander, Stefan Lindström

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

Yes, but one question arise when reading the self-evaluation: Is it efficient to have the parallel structurer of a centre when it overlaps completely with the subject group (the "Department of Informatics")? This question will be discussed under headings 1.3 and 4.1 below.

Secondly, having two intakes to the undergraduate study programme drives teaching hours and possibly competes with research time. Notably, the limit to 65 students for each new cohort means 130 new undergraduates each year. It also means that each course has to be given twice every year. Would concentrating intake lead to better conditions for pursuing research? Or would it make collaboration with external partners more complicated when students' practical works, thesis works, and graduations are not distributed evenly between autumn and spring? In essence, it is not clear if it benefits the research ambitions to accept one or two cohorts in informatics each year.

ARC is gradually fulfilling its purpose to bridge the gap between different subjects at the university pursing similar research. Besides seminars and a joint conference, the Informatics group sees an opportunity to strengthening its information security research as cybersecurity is the origin for the third letter of ARC. Cybersecurity is a new area for Computer Science at Örebro University, and the two subjects have joined a KK application led by CS at Karlstad University. For the overall picture, it should be noted that even if project collaboration has been low for several years until recently, they have always exchanged expertise such as serving on each other's grading committees.

Computing power is important for many AI research directions. The central computing service at the university has been so badly communicated that the Informatics have only recently become aware of it. However, now they are included in discussions around the upgrading of the service.

1.2 Are the main research areas appropriate for the unit and its development?

Yes. How these are presented is another question, which is discussed further in section 1.3 immediately below.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

It seems the double structure IS + CERIS creates a need to characterise the centre. The “E” for “Empirical” in “CERIS” can be interpreted as a wish to contrast against pure modelling approaches and it could have a value when applying for funding and seeking partners. However, the general impression when reading the whole self-assessment is that the researchers feel a need to further specify something specific topic-wise/content-wise rather than explaining the “E”. Nevertheless, the description of the work reveals interesting outcome of this work, namely the “synergy strategy”, that is, the department has taken the trouble to “mapping core research areas (themes) through workshops. [This] increased interaction through new collaborations.” And this opened up “small, fixed constellations”.

This is not the final step in this collaborative process – the group explained at the hearing that the process is still on-going; see section 4.1. Perhaps this is just a healthy sign of an awakening self-consciousness resulting from the self-assessment work as well as from the need to relate to the new centre, ARC.

In many respects there are good grounds for a positive development of researchers. Notably, the Division head includes the Subject head in the annual development reviews with staff – this is likely to be instrumental for aligning teaching with content development. Moreover, at university level there are initiatives to support junior researchers’ development. From the previous ORU evaluation, the unit has been granted one (1) faculty-financed doctoral student. However, only 6 of 13 subjects were awarded this, and the allocation is on a rotating basis which mean that when the faculty PhD graduates, there will be one less doctoral student at the unit.

One of the IS professors serves as Dean which leaves the subject with two professors. A recruitment is planned of a professor in information security, strategically targeting three aims: increasing external funding, strengthening the master’s education, and clearly linking the research to the new pan-university centre called ARC (where the “C” stands for Cybersecurity).

One thing that worries the UoA is the university’s restrictive policy against promotion which lead associate professors to seek positions elsewhere. This is a worry that the university management has to take seriously. There is apparently a >40% research time rule at this faculty, and that financing this should be made by government allocation to ÖRU. This principle obviously limits the number of full professors. A further problem is a temporal lag between different levels of the university when it comes to development of strategy plans: when Informatics requested permission to hire a professor in cybersecurity in line with the subject’s expertise area and aligned with the university-level strategy including the recent inauguration of the ARC centre, the subject was told that the faculty has not finalised its strategic plan. It is easy to agree with the unit’s analysis that there exists a misalignment.

Please provide specific comments on the unit’s research funding, publications and productivity.

The unit reports having for several years some major fundings through programmes that since then have ceased. There is an interesting self-reflection on how the lure of the prestigious awards (funding from the national Research Council) have had a negative effect – turning to the most competitive sources has not yielded as many funding possibilities as provided by special agencies. In short, the "empirical = applied" focus was initial successful, led to higher ambitions in an academic-ranking view of "what counts", the "empirical=applied" focus was not so applicable anymore, external funding dwindles. The renewed focus on Cybersecurity definitively seems to be timely (and empirically focused) and will benefit from closer cooperation with Computer Science.

The publication strategy of the unit works well, and fluctuations might simply reflect funding which varies across the years as even the PhD programme is mostly funded by project money. Concentrating on journal publications might, as the unit says, lead to less networking. On the other hand, the production of journal articles is rather impressive. The unit points out that already in ORU2020 the concept of "productivity" was contested by CERIS: having a vision of addressing societal changes means that counting papers and gauging the level of external funding is at best only a secondary means of evaluation. Nevertheless, the measures provided tell a story of increased productivity, as gauged by paper per person, despite a smaller research budget, and even more so if counted as paper per million SEK.

The evaluation team finds gender analysis made in the self-assessment convincing. The unit sees no systematic differences between genders, not even when regarding academic levels separately. The unit holds differences to be explained by the success of applications for research funding. Nothing is mentioned about employees with international background, but in a previous section, it was noted that language requirements pose a challenge to get formal leadership roles for this group. The Informatics group questions this barrier and holds it to be specific to some schools. The evaluation team concludes that the university should be able to explain any differences in policies within the university.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

The unit has a very well-functioning way of conducting research, and by all measures produce credible research of high quality. Roles as journal editors spill over to the department's peer review practices. 81% of CERIS publications are cited and every year 2-3 papers are among the 10% most cited in the field (WoS). Members of CERIS serve at various kinds of "assignments of trust".

The department also has a well-functioning research education, with no less than 10 PhD courses – most not given every year, but the doctoral students explain that the existence of such courses at the home base ease their stress as it is cumbersome to take several courses each semester if all courses have to be read jointly with other subjects and/or universities.

The self-assessment supports this positive assessment with concrete evidence. CERIS publishes in recognized Information Systems and related outlets, performs substantial academic service roles, and has established doctoral procedures that combine coursework, supervision, internal seminars, and external scrutiny before defence.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

CERIS contributes to the field across its four themes, including information security, software development management, Informatics education, and digital tools for health and well-being. These contributions are both conceptual and applied, which is consistent with the unit's profile. The research is further supported by editorial work, conference organization, peer review, and doctoral examination assignments. A remaining weakness is that research results have not led to visibility outside academic circles.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

CERIS works with both public sector and some industry communities. The unit's self-report mentions some distinct impacts including on their own teaching, which has international impact as the master's programme has several international students. Furthermore, they hold the empirical grounding to make their research relevant to society and practitioners. On the other hand, they have noted that a lack of systematic communication efforts tends to make media coverage focus on individual researchers or the university at large.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The UoA appears to have an appropriate awareness of research ethics and regulatory requirements, supported by its seminar culture, doctoral education, supervision practices, and experience with ethics-review processes. Research-data management requires further development, according to the self-assessment; given the organisation-based character of the research, more support for deploying

defined routines for data classification, storage, access, and responsibility would strengthen the research practice.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The unit is satisfied that the faculty supports PhD student (so far 1 student) but regards it as still a rather small contribution compared to a perceived need for a larger group of doctoral students. The faculty PhD money can be used for co-funding and thus be the basis for hiring more than one student. However, the UoA perceives current faculty procedures for admitting externally financed doctoral students as difficult to reconcile with project-based funding, since a financing plan for the whole study period is required even though very few projects span four or five years. This makes it hard to have the continuous application work financing doctoral students.

The unit expresses an assumption that the group of IS doctoral students must be large to be well-functioning. They do not find it sufficient to rely solely on the bigger research environments such as the Business School and the new ARC centre. This is explained by multiple arguments:

It is easier to speak about research problems with students with similar focus.

The Business School has started a doktorandfika, but the informatics holds this initiative to be dying out. Indeed, it can be hard to arrange multidisciplinary fika meetings on office hours as everyone has other schedules to attend to.

The research students have much more time for research than their supervisors, which strengthens the research profiles.

Moreover, from the researchers' perspective, supervision is needed to qualify for docent and professor why more enrolment gives more possibilities to qualify.

The evaluation team's comment to these arguments is simply that they hold but that cross-disciplinary engagement in doctoral clubs also have merits.

The ban on promotion to professor is commented on twice: once as a reason why *docents* seek to leave the unit for other universities, and once when the ban itself is lamented.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

CERIS is happy over how they have implemented feedback from the last evaluation. Characterising the work in CERIS as belonging to one of four themes is a reasonable attempt to strengthening the identity and outreach of the centre but is part of an on-going process.

A low degree of collaboration within the university has been changed by an increased collaboration with Business Administration and Political Science, but also by individual CERIS members' increased collaboration with Computer Science. Notably, the emergence of ARC as a centre seems to further this trend, especially within cybersecurity where CERIS counts several researchers.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The vision and the plan seem to stem from thorough discussions within the unit. Obviously, much hinges on how to present the CERIS centre. It seems CERIS is dear to them and simply saying "informatics" (or "information systems") instead of "CERIS" does not appear as an option.

The vision presented consists of 7 *strengths to promote* further and 6 *weaknesses to overcome*:

"+ Publication strategy

+ Empirically grounded research

+ Academic culture including the willingness to work in different constellations

+ Internationalisation work

+ Agile research teams

+ Strong ties between research and teaching

+ Active involvement in university fora

– Invent a single coherent research narrative for CERIS

– What does it mean to contribute to CERIS research? (=Having a core area to relate to.)

– Increase interdisciplinary collaboration within the university

– Redirect the approach to seeking external funding (including change project concept from individual grants to regard them as parts of some 'larger' projects)

– Workplace presence (changing the culture of absenteeism)

– Create a critical mass of doctoral students"

In principle, these priorities are reasonable. However, the evaluation team has two comments:

• The hearing revealed a new effort to rethink the CERIS profile question. The review team encourages the UoA to consider what is needed to guide recruitment, collaboration choices and funding applications, while still being understandable to non-specialist stakeholders.

• Another point to reconsider is the reason put forward to *why* the doctoral student number should increase; doctoral students belong to an extended family through MIT and the Business School, and now also through closer cooperation with(in) ARC. An argument could instead be sought in the need to secure the labour market with qualified experts, including the university/ies. Another is simply to increase the number of active researchers, if the research is valuable. In these arguments, "critical mass" plays no role.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The plan connects well to the vision and the 13 points brought up there. It is realistic in terms of resources and organisation. However, two points were questioned above in 4.1.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

UoA: A very well-wrought list of support needed.

Faculty/university: Having more professors helps application for research funding. If evaluators can see the actual expertise level rather than assistant/associate professor, project plans appear more credible. Discussion is probably needed with all research units about resource-allocation for a broader professor programme. If promotions are made possible again, how should that not affect the possibility to hire doctoral students by the direct government funding? Should there be differences in salaries between promoted and recruited professors? Or should there be other things that a recruited professor can negotiate about, such as resources to her "lab", such as research assistants?

5. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

This unit has made a very good job in identifying strengths and weaknesses, and already have many good procedures in place. Increasing physical presence would probably facilitate inter-group and inter-subject collaboration.

Moreover, the broadened target for funding appears as a necessary step as all universities compete for the traditional government research funds. A greater EU focus brings more collaboration partners which even without more funding can result in more and better research if studies are validated (or contradicted) by similar studies in other countries.

Increasing the number of PhD students, and the career opportunities within Örebro University, would make continued efforts to reach excellence worthwhile for the individual researchers.

ORU2025 Review Report: Mechanical Engineering

Review Team: Stefan Lindström (main reviewer), Ann Nowé, John Sören Pettersson, Niklas Wellander

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The research environment appears to be organized in a workable and generally appropriate way to support quality research. The unit is built around two distinct research groups with credible profiles within Mechanical Engineering, giving a useful combination of specialization and subject breadth. Rather than fragmenting the subject, this structure seems to provide a reasonable basis for pursuing different but compatible lines of work, while still allowing collaboration where research questions, educational activities, or project development overlap. For the unit's present size and profile, the organization appears adequate and provides a sound basis for further development. A continuing priority will be to broaden responsibility for networking, consortium-building, and proposal development across the staff, so that the environment becomes less dependent on a small number of highly active individuals.

1.2 Are the main research areas appropriate for the unit and its development?

The unit's two main research areas are appropriate both to the subject of Mechanical Engineering and to the unit's further development. Together they form a coherent strategy that combines academic legitimacy with clear industrial relevance. Mechanics and Materials is rooted in established engineering science with continued scientific and industrial importance, while Digitalised Product and Production Development is well aligned with current needs in design, production systems, and digital transformation.

The self-assessment and hearing both support the view that the two areas are complementary. They are not presented as a tightly integrated joint research program, but neither are they disconnected. Rather, they share a common mechanical engineering orientation, with one group approaching product-related questions mainly from the materials and mechanics side and the other from the production and development side. This gives the unit a profile that is broad enough to support development and collaboration, while still focused enough to remain coherent.

Going forward, recruitment should strengthen or incrementally expand the present profile rather than dilute it. The key task is not to redefine the research areas, but to build further quality, visibility, and independent research capacity within them.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

The unit’s reflective analysis identifies several of the right issues, and overall the structures and processes provide a workable basis for high-quality research. The environment benefits from engaged leadership, a shared sense of direction, and two research groups aligned within a common Mechanical Engineering profile. The unit's holistic view is an asset. At the same time, the unit is small, with a limited number of highly active researchers, which makes research capacity and external visibility dependent on a narrow core. The marked gender imbalance reflects a wider pattern in Mechanical Engineering, but still underlines the importance of sustained local efforts in recruitment and environment-building. A constructive priority is therefore to broaden participation in research leadership, networking, consortium-building, and proposal development.

The academic culture appears collegial and accessible, with a mix of formal meetings and informal day-to-day interaction. That is an advantage in a small environment, but the limited seminar culture is a weakness. Re-establishing a light but regular seminar structure could strengthen intellectual exchange, shared research identity, and broader engagement across the group.

National, and to some extent international, collaboration is one of the unit’s strengths. The collaboration network appears broad relative to the size of the environment, especially in relation to industry, but it still seems closely tied to individual researchers and their personal networks. Broader staff involvement in external networking and consortium-building would therefore strengthen continuity and reduce person-dependence.

A further issue is the high teaching load, which the unit itself identifies as a central constraint. This limits the time available for strategic research development, networking, proposal preparation, and broader participation in the research culture. The key question is whether the environment can create sufficient space for research to develop in a sustainable way.

Please provide specific comments on the unit’s research funding, publications and productivity.

With respect to research funding, the unit appears to have built a reasonable external funding base for an environment of this size. The funding profile fluctuates over time, which is not unusual in a small unit, and remains somewhat concentrated to a limited number of funders, especially Vinnova and the Knowledge Foundation. The strategy of developing projects together with industry is appropriate and well aligned with the unit’s profile. It would nevertheless strengthen the unit’s strategic clarity to formulate more explicit goals for research activity and funding development, so that the broader vision is translated more clearly into practical expectations.

The publication profile is respectable, with output in recognized journals and conferences, but the visibility of the portfolio appears uneven. In particular, the strongest citation visibility seems concentrated in topology optimization and in a limited number of papers and individuals. This does not weaken the strongest parts of the portfolio, but it suggests that the next step is to broaden research visibility across more of the unit.

Research productivity should also be interpreted with some caution. The material suggests that too little time remains for research once teaching and associated duties have been taken into account. This constrains not only output, but also proposal preparation, consortium-building, and longer-term research development. The issue is therefore not simply how much is produced, but whether the unit has conditions that allow research activity to be sustained and broadened across the staff.

2. QUALITY OF RESEARCH

2.1 Credibility.

The unit's research appears credible and methodologically serious, and there is no clear reason to question the basic quality of its research practices. The strongest evidence of credibility includes peer-reviewed publication in recognized journals and conferences, success in competitive external funding, and visible scholarly and expert roles held by members of the unit. Taken together, these are reasonable indicators that the unit is able to produce research of good academic quality and to engage with the standards of its field.

At the same time, the evidence also suggests some unevenness within the unit. Some subfields and some researchers appear to account for a larger share of the strongest visibility and recognition, while the breadth of research-driving capacity across the whole environment is more limited.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field? Please identify strengths and weaknesses in their contributions to the research field.

The unit contributes to the research field through a combination of applied mechanical engineering research with clear industrial relevance and a methodological orientation. The strongest visible lines of contribution appear to include topology optimization, wire drawing, paper-related work, additive manufacturing, and research on relations between material, process, and product properties. These are areas in which the unit seems able to connect technically meaningful problems with research questions of interest beyond a single local context. The contribution is also supported by editorial work, peer review, committee participation, and related expert roles, which indicate professional recognition and help maintain collaboration networks.

The main weakness is less the quality of the visible contributions than their limited breadth. The strongest influence appears to be concentrated to a relatively small number of lines of work and researchers, which is understandable in a small environment but still creates some fragility. In the longer term, a broader contribution to the field will depend on the unit's ability to expand its active research base, and that in turn is closely linked to attracting more external funding and building greater volume across the staff.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders? Please identify strengths and weaknesses in their contributions to society.

The unit makes a clear and credible contribution to society, and this appears to be one of its strongest dimensions. The self-assessment and hearing both suggest that collaboration with industry is not incidental, but part of an explicit and shared strategy across the unit's research areas. The main societal stakeholders are Swedish engineering, manufacturing, and process industries, and the unit appears to contribute through collaborative research, expert roles, courses, and invited lectures. This gives the research a clear route to relevance outside academia and helps anchor the unit's work in real industrial needs and problems.

A further strength is that industrial engagement appears to contribute to knowledge transfer, as well as the formulation of relevant research questions and to the development of longer-term collaboration. In that sense, societal contribution is linked to the unit's broader research strategy rather than being treated as a separate activity. International collaboration also contributes to this outward reach, although this dimension would likely become stronger as the overall research activity and volume of the unit grow.

The main challenge is that collaboration with industry often begins through personal contacts, while long-term value depends on developing those contacts into more stable relationships between the unit and the partner organization. At present, the outward activity appears to rely on a limited number of researchers. Over time it would be beneficial to involve more staff in collaboration projects and external contacts. That would help convert individual trust into a broader and more durable collaborative base, making the societal contribution less person-dependent and strengthening the unit's long-term capacity for both industrial relevance and research development.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The unit appears to work within a reasonably sound framework for regulations, ethics, and research integrity, and much of this framework is provided at faculty and university level rather than developed separately within the unit. This seems acceptable given the present size of the environment.

The main point for development is not a lack of formal structures, but that the local practice appears somewhat implicit. In a small unit, it may be useful to create occasional deliberate discussions of ethics-related issues at subject level, including emerging questions such as the use of LLMs in writing papers and applications. Such discussions need not be extensive, but they could help ensure that shared standards are actively maintained rather than assumed.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The unit's reflections on university-, faculty-, and school-level initiatives are broadly reasonable. Mechanical Engineering operates within a wider framework of support structures and development initiatives that are relevant in principle, but their practical effect on the unit appears to have been limited and uneven.

A key point is that the unit's main constraints do not appear to lie primarily in proposal writing support as such, but in limited research-active capacity, high teaching load, the need for strong ideas and networks, and the need to prepare collaborations well in advance of calls. These are only partly matters that support structures can resolve, so support functions would not likely have had a decisive effect on the unit's development.

A balanced conclusion is therefore that higher-level initiatives have probably been helpful at the margins, but have not altered the core capacity constraints of the unit. For Mechanical Engineering, the most direct gains would likely come from stronger staffing and more room for research activity, while support structures should be seen as supplementary rather than decisive.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

The unit's reflections on its response to ORU2020 are broadly credible and suggest partial progress rather than full resolution. The clearest advances appear to be stronger industrial collaboration and a more proactive approach to project development. In particular, both the self-assessment and the hearing suggest that the unit now tries to prepare project ideas earlier, to identify topics that are scientifically relevant and attractive to industry, and to build collaborations before specific calls appear. This seems like a constructive response to earlier concerns and is well aligned with the unit's applied profile.

At the same time, the main remaining weaknesses seem to be structural rather than a lack of intent. Limited research time, a small doctoral environment, and dependence on a relatively small number of senior researchers continue to constrain the unit's development. The overall impression is therefore that the unit has taken sensible steps in response to ORU2020, but that implementation has been only partly able to overcome the underlying capacity constraints.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The five-year vision is reasonable and points in a constructive direction. Its main strength is that it can be read as centered on one leading aim: to build a more sustainable and attractive research environment. That is an appropriate vision for a small unit whose long-term development depends on strengthening staffing, retaining competence, attracting collaborators, and creating conditions in which research can grow in a stable way.

From that perspective, the other elements of the vision are best understood not as separate ambitions, but as means of achieving that broader goal. Stronger industrial collaboration, greater international visibility, and closer integration of research and education are valuable insofar as they help build a more robust research environment. Read in that way, the vision is coherent and can serve as a useful guide for development.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The development plan has a sensible overall direction and is strongest when read as serving one central objective: to build a stronger and more sustainable research environment. Read in that way, stronger industrial collaboration, greater international visibility, and closer integration of research and education are not separate ambitions of equal weight, but means of reinforcing the long-term viability of the unit.

The planned Master's program is particularly important in this context. It appears strategically justified as part of building a more complete subject environment across first-, second-, and third-cycle education, and it could strengthen both subject identity and long-term recruitment. It could also provide a useful platform for deeper company involvement in second-cycle education, for example through guest lectures, project collaboration, and externally connected thesis work. At the same time, it introduces a clear short-term risk, since it is likely to draw on already limited staffing resources before the hoped-for benefits are fully realized.

The plan is therefore not unrealistic, but it would benefit from clearer prioritization and a more explicit implementation logic. In particular, it says less than it could about sequence: what needs to happen first, and how key aims such as stronger integration of research and education are to be realized in practice. The hearing suggests that the unit already has a practical sense of several important directions, including stronger industrial collaboration, broader academic collaboration, and the wish to become a preferred academic partner for industry. The main need is to translate these directions into a more clearly staged plan that fits the unit's real resource constraints.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

The unit should work more deliberately to create effective time for research activity, including protected time for proposal development and publication work, while continuing to strengthen staffing in ways that reduce pressure on the existing core group.

Grant writing and external networking should be broadened across the staff. In particular, more researchers should be involved in early consortium-building, external contacts, and proposal preparation.

The planned Master's program should be used strategically to deepen industrial ties and strengthen the unit as a more complete subject environment. Company involvement in second-cycle education, for example through guest lectures and externally connected thesis work, could strengthen both relevance and longer-term research networks, but the short-term staffing implications will need careful management.

The unit should also strengthen its local research culture through a light but regular seminar structure. A stronger model would be to focus less on presentation of one's own current research and more on broader themes such as seminal papers, technical developments, methods, or questions in Mechanical Engineering education.

Finally, the unit would benefit from formulating internal goals that can be quantified, especially for research activity, networking, proposal development, and funding. This would make the plan more concrete and help translate vision into practice.

5. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

Mechanical Engineering presents a small research environment with clear strengths in industrial relevance, external collaboration, and parts of its publication and funding profile, together with credible potential for further development. The unit shows credible intent and has taken constructive steps since ORU2020, particularly in strengthening industrial collaboration and preparing projects more proactively. At the same time, the environment remains structurally fragile because of limited size, uneven breadth across staff and research lines, and constrained room for research activity. The key development task for the coming years is therefore to convert existing strengths into a broader and more sustainable research environment with greater critical mass, and wider participation in research leadership and networking.

ORU2025 Review Report: Mathematics and Physics

Review team: Niklas Wellander (main reviewer), Stefan Lindström, Ann Nowé och john Sören Petterson

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

Is the environment well organised to promote quality research?

The research of the UoA is distributed among three subjects (physics, pure mathematics and applied mathematics) with at most three people in each group[2]. The rest of the staff are not active in research. Internal collaboration within the unit and across ORU appears limited, although there are some examples of collaboration; the small, applied mathematics group, is organized in some sense to have one professor and one senior lecturer that work together. An explanation for this situation could be that the research leadership and shared strategic direction are insufficiently developed at unit level.

The research in the UoA is based on individuals' interests. A consequence of this is that the unit has no pronounced scientific area. The research environment appears to be shaped primarily by the substantial teaching responsibilities of the staff, rather than by structures designed to promote research activity.

1.2 Are the main research areas appropriate for the unit and its development?

The research areas are reflected by the competence and interest of the personnel. The applied mathematics research area is appropriate due to the connection with teaching engineering students. It is unclear whether the pure mathematics research area is well suited considering the suspension of the Bachelor program in mathematics.

The research in physics and pure mathematics, although of high international standard, is a result of individual researchers' interests more than the relevance for the courses that are taught or for other units in the school or departments at the university. That said, it would be unfair to say that the research done is not appropriate for the unit. All research is good since it increases the competence of

[2] The head of subject for mathematics covers both mathematics and mathematics education, where the mathematics education group belongs to a different department and is not part of this UoA.

the staff and gives them the possibility to expose students to a research perspective and bring in new ideas in the teaching. This is relevant for both basic courses and more advanced ones.

The unit collaborates with the School of Business, but it seems to have been done only by a few of the members of the UoA. It could be beneficial for the UoA to find further research areas that connect with other research groups at the department and/or other schools at ORU. That would set the research in a broader context that makes it relevant not only for the unit but for ORU and the region.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

The research in the unit is not structured since the research is done on an individual level. The researchers have well established collaboration with researchers at national and international universities. The self-evaluation states that it is unrealistic to have a research leader that decide what the research groups should focus on. This is not surprising, considering that recruitment done is mainly based on the need to have teachers in mathematics, taking less consideration of research topics of the applicants. Mathematics, as a subject, covers a broad field. Recruiting staff with no specified research profile will quite likely result in a heterogeneous unit with little chance that the members have common research interests. The consequence is that the researchers have little help from each other when writing grant applications and in the development of projects. It should strengthen the unit if they find ways to increase collaboration. Right now, it is irrelevant to speak of critical masses since only the applied math group do collaborate (two people).

The high teaching load is identified as a constraint that limits the time available for strategic research development, networking, proposal preparations and broader participation in other research groups activities at ORU.

A strength is that the staff do come into office every day, not only for teaching classes. This means that the unit sees each other daily which gives the possibility to discuss research and strategic questions related to research. An opportunity which could be exploited more.

Please provide specific comments on the unit's research funding, publications and productivity.

There is some external funding from the research council (VR). The physics group has two external grants. The mathematics group had a VR grant some years ago. Approximately 35% of the research budget is from external sources. One exception was 2024 (50%), but that was due to a conference organized at ORU, which was marked as corporate money and was not related to any research project. We believe that the applied mathematics group should be able to get more external funds if they could find some research area that is relevant either for some of the other research groups at ORU or for some research institute or industry.

The publications frequency is stable at a high level, and it is well received in the scientific community. The CNCI index is on average. That said, it is unclear what the expectations on the research are since there are no explicit goals formulated.

The self-evaluation mentions that the UoA hosted four very high productive postdocs during the evaluation period, but that the stipend-based grants are not available anymore. The high teaching load is a constraint and in many cases the time for competence development is mainly used for preparation of courses and to little extent for research, proposal preparation, networking and consortium building and long-term research development. This is a weakness since teaching for many years makes it very hard to pick up research again.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

The publication in physics is strong with several papers in very-high-impact journals which are reflected in obtained VR grants. Mathematicians also publish in journals of high status and impact in the mathematical community. Participation as external experts in grading committees and research panels reflects that the members of the unit do produce research results of high quality. A clear strength is that most researchers have an extensive external collaborative network, a sign that the research is credible. The quality of the research of the UoA is excellent, as stated in the self-evaluation report.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

All three research areas contribute to the respective research fields and parts of the research are very well received. The fact that the citation level is on average level for the field is a strength considering that teaching is the main occupation for the groups.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

The unit contributes to society by giving popular science talks at the university, on radio and in public schools. The applied mathematics group did some work on Covid during the pandemic, in collaboration with a medical doctor. Radio interviews are mentioned in the self-evaluation report. This is an example of contribution to society. The research of the UoA may have an impact on society on a long timescale. Publications in Nature and Science indicate that this may very well be the case, but it is hard to know now.

A strength is that the unit has the "brain power" and competence to address important and urgent societal research questions if they decide to go in that direction.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The current research directions do not need to consider any particular regulations, ethics or sustainable considerations. The unit has one doctoral student, which follows the general courses provided at ORU regarding this topic.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

There has not been any major change since the ORU2020 evaluation regarding the balance between teaching and research.

The university recruited a couple of Associate Senior Lecturers (later promoted to Senior Lecturer) and one Senior Lecturer as well as some teaching personnel just before or in the beginning of the evaluation period. The promoted Senior Lecturer in mathematics has since then left ORU.

The suspension of the Bachelor's program in Mathematics reduces the amount of higher-level mathematics courses. This may influence the possibility of attracting lecturers and professors when recruiting staff in the future.

The unit is still waiting for a decision on faculty-financed PhD students. The unit believes it is realistic to get this funding although it is a ten-year gap without such funding.

The non-existing faculty funding of PhD students and the ending of faculty funding of postdocs stipends has been negative for the UoA.

The unit believes that the Grants Office does not understand very well mathematics applications. During the hearing, the unit representatives thought that the Grants Office could help with the packaging of research proposals. The main constraint is not the lack of administrative support but rather the scattered research interests in combination with high teaching load. The lack of internal and industrial networks makes it up to individuals to prepare proposals.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

After ORU2020 several initiatives were suggested. Most of them are still not implemented. The main reason seems to be the lack of time, due to the high teaching load. Recruiting has been focusing on immediate teaching needs without considering the research profile of the UoA.

A possible reason that all the initiatives suggested in ORU2020 are not implemented might be the lack of a strong executive research leader with sufficient time allocated for developing the research.

The members in the UoA have different expectations, some would like to increase collaboration, others prefer to work independently, possibly with external collaborators.

Consolidation and concentration of research effort was suggested but was not realized. It was mentioned in the interview that constraints on research performed in the unit, i.e., forcing researchers to change research area, may not be productive. This is understandable since it is not easy to change from one research area to another.

The self-assessment states that the need for the unit to collaborate more both when doing research and when applying for funding remains and should improve. The evaluation team agrees with this conclusion.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

There are some apparent threats mentioned; The removal of non-permanent research funding is seen as a threat. Teaching volume may shrink and no recruitment is planned this year. What is asked for is some basic funding for research.

The unit seems to lack a coherent vision for the research. The unit asks for time for research and less teaching. They wish to reintroduce the stipend-funded postdocs. Another wish is to get travel money. Some limited travel money is certainly valuable, as part of a plan, to be able to attend conferences or research visits.

The maybe most visionary is the suggestion to start a mathematics-oriented engineering programme that could relate to the research they do. The idea is promissing, but some investigation needs to be done first, e.g., estimate how big the student population is that can be recruited to this programme. There might be competing programs in the region, as well as nationally. In the end, is it realistic to establish such a programme?

The UoA suggests recruiting a professor in pure mathematics. This might not be the way to go considering the suspension of the Bachelor's programme in mathematics, nor if ORU would like to increase external funding for mathematical research and build a strong group collaborating with applied subjects, society and industry.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The development plan does not have a clear focus and path forward. The unit has an idea to start a master program with a strong mathematics profile. The plan seems to be to start on a small scale and take it from there. The small group in applied mathematics could be the basis for such a programme, offering courses in mathematical modelling, numerical methods, analysis of dynamical systems, etc.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

The unit needs to decide on a vision, find a strategy and develop an explicit plan for how to develop the research as well as how to expand the network with industry and other stakeholders in society. Most likely, the highest probability for the plan to be successfully implemented is to base it on existing research in applied mathematics and physics and develop it from there. This requires a willingness to do this as a prioritized activity and some management skills. If needed, recruit a person that has demonstrated this competence and has a vision of developing the research. That can be an applied mathematician coming from industry or a research institute, bringing existing network.

Possibly, it could be a good idea to begin with a SWOT analysis (Strength, Weaknesses, Opportunities, Threats) and use the results from the analysis for the plan and strategy.

Some thoughts and suggestions from the assessment group are (not listed in priority):

There may be little rationale for pure mathematics as a standalone direction. A stronger emphasis on applied mathematics could better support engineering education and create collaboration opportunities.

Consider whether "computational mathematics" would be a more effective label than "applied mathematics". Changing to computational mathematics would possibly be a change of the applied mathematics group profile.

The unit should make a strategic choice of which other groups at the department or other departments to collaborate with besides the School of Business, e.g. medical school or mechanical engineering. The unit can help other groups to develop research questions and by doing this contribute to stronger applications and position itself as a partner in proposals. Relevant research questions don’t come by themselves, nor from other teams. They are most likely best formulated by members in the UoA together with the more applied groups at ORU. Meetings with other teams on a regular basis are essential in the process since it takes time to learn their language and understand important and challenging research questions that are relevant to address.

Organize and invite external collaborators, including participants from their networks to small workshops on topics that are of interest to at least some of the researchers in the unit. Optimal would be to find topics that relate to some of the local or regional industry and/or public sectors. If the unit can do this and attract stakeholders, then the network will grow, more or less, by itself. The key is to find the right topics for the workshops.

There are abundant possibilities for research in the medical fields, e.g. inverse imaging, cell dynamics, optimizing testing and treatment plans in cancer treatment, as well as develop mathematical models for drugs and their effects on humans and/or animals.

Incorporating statistics as part of the unit could bring a stronger grant tradition.

5. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

The quality of the research done by the UoA is excellent, and the production rate is good considering the amount of teaching done. The research interests in the unit are scattered, and few members collaborate with each other.

The impact on the research community at ORU and society would probably be greater if the researchers in the unit collaborated more in the unit as well as with other research groups at ORU. They should promote their research at ORU and in the region and find partners at the university, society and industry to tackle important research questions.

ORU2025 Review Report: Mathematics, Science and Technology Education

Review Team: Çiğdem Haser (main reviewer), Lars Lundgren, Jill Manthorpe and Kirsten Sivesind

Abbreviations: MED: Mathematics Education; STED: Science and Technology Education

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The UoA includes one professor (appointed September 2025), one associate professor, four senior lecturers, five lecturers, and one PhD student. The professor and the associate professor work in the MED field. One professor and one senior lecturer in MED, and one associate professor in STED left during the evaluation period. All doctoral students have graduated. The lack of professors and the increased teaching workload (due to staff turnover) have caused significantly limited research leadership time in the UoA and affected planning and coordination of research activities during the evaluation period. A lack of critical mass is also affecting the research environment.

Another important limitation revealed both from the self-assessment and the discussion with UoA staff is that the MED and STED groups do not consider themselves to be in the same UoA. The groups are in separate buildings, affecting the sense of belonging to a single unit and limiting daily research communication. Although there are potentially common research interests, the two groups are not collaborating in research. A current initiative to strengthen collaboration is the start of exchanges with each other about their seminars, encouraging the participation of researchers from different groups and mutual learning. The UoA did not outline any further collaboration with the other related units such as Education or units in Natural Sciences, although there were joint publications in the past. This represents another loss of research collaboration opportunities.

Despite these limitations, the UoA seems to be research active with seminar series (regular in MED, irregular in STED) and other scholarly activities such as project funding applications, collaborations and conference participations. There are also currently two potential doctoral student positions. Overall, a combination of several institutional and unit-based interrelated factors, such as staff turnover, lack of professors and associate professors, lack of research leadership time, increased teaching workload and lack of effective research communication and collaboration between MED and STED groups and between the UoA and other units present challenges for the research environment to promote quality research.

1.2 Are the main research areas appropriate for the unit and its development?

Research areas in both groups reflect current trends and also timeless important areas in their respective fields. While the MED group is interested in broad research areas, STED group focuses on three major areas. These areas seem to reflect the research active members' interests yet are still addressing important research in the field.

1.3 Please comment on the unit's reflective analysis of their environment.

The UoA emphasizes the effects of the lack of permanent formal leadership and strategic planning, lack of senior research staff, and heavy teaching load on the research environment. Yet, it also demonstrates scholarly engagement in terms of publications, international and national collaborations, practice-based research and funding applications. There are regular research seminars and writing retreats within the MED group, which are established parts of the research culture that serves all researchers. Despite the lack of staff, the MED group hosted two important national conferences during the evaluation period which shows the potential of its collaboration network. An important development is the formation of the STEAM research group by the STED researchers. While its potential for interdisciplinary collaboration is indicated, the reflective assessment and the discussions revealed that STEAM group's collaboration with the MED researchers (as natural collaborators) is weak and more importantly, the STEAM group has not yet established sustainable research activities yet.

New appointments are expected to bring better research conditions for high quality research. The two potential doctoral students may enhance the research activities within the UoA. However, the STED group's need for a professor for research leadership remains. The turnover of research-oriented staff affects the research environment. Gender, ethnicity and age distribution in the UoA and recruitment strategies regarding inclusivity are not mentioned. The documents indicate that gender distribution is almost balanced. However, the UoA needs junior researchers for a sustained and evolving research culture and a more inclusive approach to recruitment. The newly appointed professor is an international staff member and her networks can enhance the current research collaborations.

External grants obtained during the evaluation term ranged from 16% to 31% of total funding in a year, with no external grants in 2024. There is a clear need to focus on external grant applications to increase the research activities within the UoA. There have been applications showing that the UoA's research culture supports such applications. Funding applications within the STEAM group can become stronger if STED and MED researchers collaborate.

Despite several persistent limiting factors, the UoA has produced scholarly publications in peer-reviewed journals. However, most publications did not include researchers from other countries, indicating a clear need for more international collaborations and publications. About 70% of publications in the evaluated period were open-access, increasing visibility of the research. There is a need for an increase in publications.

The UoA has been producing research outputs, been active in national and international conferences, and has practices that enhances the quality and productivity (research seminars and writing retreats).

However, an increase in quality and the number of the publications is possible with more strategic research planning for funding, international and national collaborations, and recruitment of more research-active members (which could also decrease the teaching load). Grant applications that include international collaborations may strengthen the applications with international relevance and improve both external funding and international collaborations.

2. QUALITY OF RESEARCH

2.1 Credibility.

The UoA publishes in high quality MED, STED and general education/teacher education journals and participates in key national and international conferences which indicate credibility. UoA researchers also serve as reviewers for high-quality journals. Citations have been accumulating, which shows that the UoA's research outputs has been considered as credible and relevant to the other researchers' work. Publications in high impact journals in WoS are few; however, such journals in MED and STED fields are not many. Journals with well-respected publishers and quality in both fields should be prioritized.

2.2 Contribution to the research field.

The UoA contributes to research with a moderate number of outputs covering a wide range of research topics/methods. Publications have been in good quality journals. The research outputs are cited moderately indicating some contribution to the field and relevance to other studies. MED researchers have organized major conferences for researchers and teachers in Sweden and a doctoral course. These are important contributions and have reinforced national research collaborations. However, international collaborations and collaborations with other UoAs, which could strengthen research productivity, remain to be improved.

2.3 Contribution to society.

The UoA has made important contributions at the societal level especially through professional development activities for practice-related stakeholders and public outreach. These contributions are important for reflecting research findings in practice, supporting the research fields with inputs from practice, and informing society. Therefore, the UoA is in a unique position to enhance both research and practice. However, the contributions rely on the initiatives of only a few staff. Strategic planning of professional learning activities for teachers could lead to important research collaborations for the UoA. Including teachers into research teams could bring valuable contributions, partnerships and shared workload. In return, such collaboration has the potential to increase teachers' research at schools, which contributes to professional learning of teachers and consequently to the society.

2.4 Regulations, ethics and sustainable practice.

The UoA works in line with the international and national research ethics guidelines and ensures that the processes are handled carefully and are legally based. Support for doctoral students in terms of research integrity should be addressed more explicitly.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Faculty- and school-level factors in terms of staff recruitment, teaching obligations due to staff turnover, and the departure of the professor during the evaluation period resulted in increased teaching workload and the lack of effective research leadership and strategic planning. Therefore, the UoA's research productivity has been limited. Despite these unfavourable conditions, the UoA has maintained certain research activities with considerable research outputs, conference organization and established/potential collaborations with other universities and practitioners. The appointment of the professor and associate professor to the MED group strengthens opportunities for strategic planning. However, the lack of a permanent professor in the STED group remains a problem.

The UoA relates the lack of research leadership problem to the lack of clearly stated research expectations for the UoA by the university. They indicate that the lack of clear expectations affects long-term plans, sustained capacity-building for research and most possibly staffing structures especially for the STED group. These interrelated factors limit the research culture and sustained research activity and productivity in the UoA.

One of the two potential doctoral researcher positions is STEM/STEAM-oriented but organizationally placed under the STED group, and the other is MED-oriented placed under the MED group; both will be supervised by the professor in the MED group. While this has the potential to enhance the collaboration between MED and STED groups, it also strongly exposes the need for a professor and/or associate professor in the STED group.

3.2 Initiatives after ORU2020

The UoA indicates that sustained strategic planning and coordination of research have not been achieved during the evaluation period. However, the MED group has strengthened the research activities by publications, doctoral dissertations and collaborations. The STED group has been more affected by the lack of research leadership and the group has had to focus on teaching due to the staff turnover. Although the new MED professor could support STED research activities, there is a clear need for a STED research leadership.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

A new research environment, The Research Environment on Learning and Teaching Mathematics, has been proposed (and accepted) by the MED group with three concrete and interrelated research themes covering a wide range of research topics. One theme targets interdisciplinary fields, which also addresses the STEAM group. Therefore, the environment has the potential to address both MED and STED research interests. However, MED and STED groups' visions differ to some extent, leading the following comments to be provided separately.

The MED group vision is described through the environment, and it aims to not only contribute to mathematics education by producing high quality research but also to influence related scholarly and societal communities. The environment is designed to systematize individual research and collaboration efforts so that high quality research is produced. The vision emphasises connecting research, practice and society and reflects the strengths and potential development areas, especially of the MED group with mostly explicit actions; therefore, serving as a general guide for the development of the UoA. However, strengthening the potential of the research environment as an ecosystem to attract doctoral students for high quality research and organizing doctoral training should also be prioritized.

The STED group envisions a strong and sustainable research environment through increasing university recognition of STED as a research field, establishing research leadership, balancing teaching and research responsibilities, and enhancing collaborations. There is also an emphasis on increasing doctoral supervision in STED to strengthen recognition. Another important element is the establishment of the STEAM research group as a structure to bring in researchers from related fields. Its connection to the Research Environment on Learning and Teaching Mathematics is mentioned. The vision does not address contributions to the field, practice and society although these connections are within the practices of the STED group and are important for education-related units in terms of research productivity and impact.

The vision and the sustainability of the MED research environment and of the STEAM group require multiple long-term inputs from the university, most importantly staff appointments to different positions. Considering staff turnover in the UoA, making the UoA an attractive long-term location for researchers, should also be within the vision.

4.2 The plan

The plans of the MED and STED groups for development have both concrete and tacit elements. MED plans are more structured, targeting both long-term and short-term goals. STED plans are more general and less specific.

The MED group states that the environment will enhance existing effective practices, such as research seminars, collaborations and networks, which are already within the group's capacity. The research seminar is important and it could be restructured to support the needs of the new research environment more systematically for proposal and manuscript development. The importance of maintaining and enhancing participation in national and international networks is emphasized. There is also an emphasis on the nature of the mathematics education research carried on within the environment and how it will focus on generating new knowledge with different perspectives, which shows that the MED group prioritizes high quality research. These plans are concrete to some degree, building on existing actions and strengthening them while utilizing them in a more structured way under the new research environment. An anticipated timeline and more concrete steps to enact the plan are needed. On the other hand, plans to collaborate with other related UoAs at the university and the STEAM group are missing although highly important. While these groups are related to the interdisciplinary theme in the environment, their collaboration should be planned in concrete steps.

The STED group plans to enhance research activities by taking more initiatives and collaborations which could help it share leadership tasks with researchers in other UoAs and increase research productivity. The plans include gaining recognition, recruiting senior academic staff, establishing clear workload models, and strengthening the research and development infrastructure to support the professional development of researchers. However, these plans are not clearly elaborated. The STED group needs clearer pathways, such as gradual steps on receiving recognition, to enact. On the other hand, the STED group is about to experience further staff turnover through losing experienced staff and recruiting new ones, which makes the already vulnerable STED group more at risk of being affected by changes and still being unable to respond to the need for research leadership.

The plans of both groups require significant input from the wider university, the most important of which is providing senior and junior researcher positions for both groups. The sustainability of the new research environment and the STEAM group, and enactment of the plans rely on recruiting more research-active staff who will help balance the research-teaching workload for all staff and produce high quality research. Identifying concrete pathways and continuously communicating these to the university should be a priority. Clear decisions and concrete plans about the collaboration between MED and STED groups are also needed.

4.3 Recommendations

The recommendations are developed for the UoA based on the analysis of both groups' vision and plans as follows:

The UoA needs new research-active members to reach to the critical mass, increase research activities and balance research-teaching workload. The UoA should develop a joint strategy to be better recognized at the university level so that new staff positions are supported. A research leadership position for the STED group and continuous doctoral student positions for both groups should be a joint priority.

The new research environment and the STEAM research group should be utilized as structured communication and collaboration platforms between MED and STED groups and with other UoAs, such as Education and Mathematics, to develop joint research initiatives. Such communication and collaboration will help strengthen the research culture in the UoA, enhance existing strong practices and develop new ones.

The UoA should develop funding applications with institutional, national and international networks and collaborate for doctoral education with these networks, which will also lead to better recognition and staffing positions.

Collaborative structures for teaching, which are already strong in the UoA, should be transformed to collaborative structures for research more systematically and strongly.

The UoA should negotiate the start of supervision of master's theses and enhancing the supervision of independent projects with related university units. This will increase research activities in the UoA, support recognition by the university, and attract potential doctoral students.

University support should be sought for a better-balanced research-teaching workload to provide research time for UoA members, which could also reduce staff turnover and provide stability.

Strategies to transform societal networks and collaborations with local organizations to research collaborations should be developed and implemented.

A timeline and concrete stages for implementing the plans should be established to provide the UoA with concrete benchmarks and self-evaluation criteria.

4. CONCLUDING REMARKS

The UoA's staff is committed to research but has suffered from a lack of leadership and staff turnover, and challenges remain. Nonetheless, there have been significant improvements in terms of leadership, environment and activities. Research activities can only be sustained by establishing strong leadership, increasing research-active staff, maintaining and enhancing the strengths, and developing and maintaining strong collaborations within the UoA and with other institutional, national and international networks.

While this evaluation addresses the UoA, a strategy for the university should also be stated. Globally, the MED and STED fields are often located under one department which focuses either on teacher education or exclusively on mathematics and science education. However, the MED and STED groups at the University of Örebro are under the Department of Natural Sciences and Technology and have been placed in this artificial UoA for this evaluation despite operating separately most of the time. The research of this UoA is education research rather than natural science research, disconnecting them from the rest of the department and possibly affecting their resources. Therefore, the university should strategically consider–in collaboration with the MED and STED groups–establishing this UoA as a formal unit under an education-oriented department by maintaining the new research environment and STEAM group. This also includes locating the MED and STED groups in the same physical environment to establish and strengthen daily research communication and collaboration as well as a common identity for this UoA.


ÖREBRO UNIVERSITY

ORU2025 Review Report: Culinary Arts and Meal Science (CAMS)

Review team: Michael Bom Frøst (main reviewer), Kai Arne Hansen and Eva Lindgren

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The structure of the research environment is presented in the UoA's self assessment report. Below is outlined the main activities that CAMS does to promote an internal research-driven culture:

Organisation of research staff forums for senior staff to secure the quality of the research such as external funding, publications, conference attendance and collaborations

PhD-student supervisors meet once per semester in the supervisor forum, where the PhD-students' Individual Syllabus Program (ISP) is discussed.

CAMS organizes 2-3 higher seminars (högre seminarier) each semester. The main goal is to highlight interesting research topics relevant for the UoA. The topics are suggested by professors, but all staff are free to contribute with relevant ideas.

PhD-education (current enrolment is 3 PhD-students): CAMS organizes PhD-seminars once a month related to the general syllabus (ASP), and a total of 15 ECTS PhD-courses (2 x 7.5). In addition there are 4 mandatory seminars throughout a PhD. In all of these senior researchers are engaged for discussion and advise.

During the interview one of the points that was discussed was challenges in protecting research time as a lecturer or senior lecturer, as their primary work tasks relate to teaching. The organisation of the teaching does not allow for extended periods allocated for research focus. Overall the research organization is well organized, but the self-assessment and interview leaves the impression that time-priorities squeeze research activities of the researchers that are much involved in teaching.

1.2 Are the main research areas appropriate for the unit and its development?

CAMS is initiated and continues to develop as a multidisciplinary field that encompasses research fields from social sciences and the humanities, combined with elements of natural science and integrated with culinary craft and aesthetics. There are two research fields in the UoA, that reflect the interdisciplinary field of food/meals and hospitality:

MEALS (covering sociological and cultural perspectives on food, meals, hospitality and culinary craftmanship) and SENSES (covers the senses in relation to multisensory experience and perception of foods and drinks to contribute to healthy, safe, and sustainable eating habits). The organization is

evaluated to be useful for the progression of the UoA from its current position. At the current staff size this organization of fields is the most salient.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

In the self-assessment, the UoA concludes that collegial collaboration must be strengthened to firmly establish and further develop the research unit. The field CAMS draws on theories and methods from many disciplines which is a clear strength. At the same time this multidisciplinary character poses challenges, as it requires an ability to engage with and value perspectives beyond one's own disciplinary comfort zone. There is a risk that collaboration remains limited within disciplinary boundaries, particularly in relation to joint research publications.

The continued development of the field would benefit from recurring and prioritized peer-review routines for both research grant applications and research publications. While such activities are already embedded in existing seminar structures—PhD seminars, monthly seminars, and higher seminars—they would benefit from clearer definitions of purpose and expectations. PhD seminars focus on presenting and commenting on ongoing work within sections, higher seminars are more ideational with a broader outlook, and monthly seminars address current research and funding applications. The UoA is encouraged to further develop these formats by introducing more structured and in-depth written feedback. One possible approach would be to establish obligations for colleagues to review and comment on applications and manuscripts in advance, with materials circulated approximately one week before meetings to allow for more substantive discussion.

The UoA also reflects on significant differences in recruitment conditions between teaching-focused positions requiring Swedish language competence and internationally advertised research positions. International calls often attract up to 40 applicants, whereas Swedish-language teaching posts frequently generate far fewer candidates, often internal. This divide is difficult to address given existing institutional regulations. However, with a major generational shift expected over the coming decade—during which more than 50% of current staff are projected to retire—this imbalance poses a substantial risk to the long-term teaching capacity and sustainability of CAMS.

Please provide specific comments on the unit's research funding, publications and productivity.

At CAMS, the number of newly enrolled PhD students has recently increased. In 2025, three new PhD students were admitted, compared with none in 2023–2024. Two of these positions are part of a PhD-school collaboration with Högskolan Kristianstad (HKR), with joint supervision and enrolment at ORU. This collaboration enhances research capacity and academic exchange, but it also entails potential risks, as HKR plans to establish its own PhD programme. The third PhD student is funded by

the ENT faculty. Consequently, none of the newly enrolled PhD students are financed through external research grants led by CAMS.

An overview of resources indicates a general decline in external grants and government research funding, decreasing from 8.6 million SEK in 2020 to 7.0 million SEK in 2024, with a five-year low of 5.3 million SEK in 2023. In 2025, the UoA submitted 15 funding applications, seven as lead applicant and eight as co-applicant. Although the long-term trend remains downward, funding levels appear to have recovered slightly after the 2023 minimum, possibly linked to the recruitment of a professor that year. External funding remains essential for long-term strategic development, and sustained efforts to develop competitive research proposals are necessary.

The range of funding bodies is limited: more than 90% of external funding in 2024 originated from only two agencies, Vinnova and Formas. Both prioritise interdisciplinary food-systems research, which aligns well with CAMS' profile. Two recommendations follow. First, CAMS should more clearly communicate its distinctive research strengths in addressing major societal challenges, such as obesity prevention and the transition to more sustainable food consumption through restaurants and culinary practices. Second, the unit should actively explore funding from private and independent foundations to reduce dependence on a narrow funding base.

Since 2020, the unit has significantly strengthened national and international collaborations. Nationally, it participates in initiatives such as the Food DOC PhD network, the Meal Academy, and the Formas-funded PAN Sweden platform, together with partners including Uppsala University, SLU, Chalmers, and RISE. These collaborations have generated numerous joint publications and expanded engagement with municipalities, public institutions, and industry actors.

Internationally, researchers are active in global research arenas, organising and participating in conferences across Europe, North America, the Middle East, and Asia, including keynote contributions. International co-authorship has increased, involving institutions such as Oxford University and New York University, alongside substantial editorial and peer-review activities. Despite declining funding, these collaborations have strengthened research quality, impact, and international visibility.

Publication volume has remained stable over the five-year period, with a slight increase in Q1 and Q2 Web of Science-indexed journals, indicating consolidation around core research themes. Research diversity remains high, with 62 WoS-indexed articles published across 38 journals and extensive output in DiVA, where approximately 80% of publications are international and written in English.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

The research output is amazingly diverse. The publication profile shows high quality and relevance, with research published in well-established and reputable journals spanning widely within food science, nutrition, hospitality, sociology, psychology, and interdisciplinary social sciences. This broad scientific dissemination reflects methodological rigor and scholarly recognition across diverse academic contexts. The interdisciplinarity of CAMS and the closeness to the practice of the industry facilitates this, and it is an identified strength of the UoA. The percentage of peer-reviewed articles is less than 50% (62/137) in the total sum of articles, book chapters, edited books and books. The WoS-listed output is cited, with the natural delay that comes from publications in this field. The number of citations sum to 437 at the time of recording, and the Category Normalized Citation Impact (CNCI) per year has in 2024 jumped above the global average for the subject area. It is immensely difficult to assess the impact of the publications that are outside WoS. The high diversity of research is a strength in itself, and a simplified impact perspective in terms of WoS publications and citations does not capture the breadth the research from the UoA has.

The quality and credibility of the research from the UoA are demonstrated through multiple reinforcing indicators across publications, scholarly engagement, research practices, and the doctoral training that is outlined in the report.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

This type of research unit is rare in EU, as stated earlier. Thus the UoA has an identified position and strength in the field of culinary arts and in the broader area of hospitality.

The research makes substantial contributions to the development of the field through both some theoretical advancement, innovations in methods, and interdisciplinary integration. The UoA has produced peer-reviewed work on tacit knowledge, creative processes, meal experiences, meal practices, materiality in hospitality, and food design. Uniquely the UoA carry out experimental studies in gastronomic test environments and advance sensory and consumer research by shifting focus toward actual behavioural change in sustainable diets. Collectively, these efforts strengthen the theory–practice profile of CAMS and enhance its visibility across gastronomy, hospitality, and food studies. The challenge and the weakness is self-identified by the UoA as '*the reliance on small research environments, where*

output can depend heavily on a few key individuals and access to external funding'.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

The research from CAMS contributes to society through a broad engagement with industry, public organisations, education, and policy makers. It supports the sustainable development in food, hospitality, and public meal systems. Through collaboration with municipalities, foodservice companies, unions, and policymakers, it informs practice and large-scale transitions such as protein shifts. Partnerships with hospitality professionals and initiatives like industry seminars and the Gastronomy Academy facilitate direct knowledge exchange. Societal impact is further demonstrated through studies addressing social sustainability and labour conditions. A critical weakness that the UoA identified, and that is shared by this reviewer is the breadth of gastronomy as a field, which can dilute messages and make societal contributions of research in the field less clearly communicated. A good advice is to use the great interest in gastronomy in society as a lever to influence larger structural and policy-oriented processes that can shape future research. The diversity of the research field makes it possible for many societal actors to be collaborators.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

Research ethics at the UoA are supported through seminars and procedures outlined in the "Quality System for Research". PhD-students receive compulsory ethics training covering regulations, data management, and practical dilemmas. They are active participate in ethics applications for their own studies and receive supervisory guidance in this process. An individual judgment on ethics review needs is addressed by a newly developed ethical decision tree.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The Food and Health program and PAN Sweden has positively affected the UoA's integration into interdisciplinary research environments – so far this has resulted in 1 faculty-funded PhD-student. The faculty has supported academic exchange through international seminars, which has advanced CAMS internationalisation.

In addition, at the university level funding has been allocated for associate senior lecturer position, that has supported career progression and succession planning. The University has also financed a guest professor.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

Following the ORU 2020 review, the UoA refined its research focus by establishing sustainability as a core long-term theme and strengthening theoretical and analytical perspectives through strategic recruitment. The last feedback led to reorganizing research into two coherent fields (MEALS and SENSES). Recruitment processes and international profiling improved, and grant-support initiatives were introduced in the period 2020-2025. While funding success remains limited, although increasing from 2023 to 2024. Overall, the ORU 2020 thus appears to have had a positive effect on CAMS.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The vision statement for 2030 is succinct and clear, and appear to be the results of a longer process of formulation in the UoA. It points forward to emphasis on winning successful grant applications to CAMS through clear priorities, i.e. also deselecting some topics that have shown to be less competitive in attracting funding from external donors. The vision states that research and education form equal pillars of the CAMS mission. It follows from the statement that investments in grant application process and quality are necessary.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The proposed plan shows progress in several areas, notably increased interdisciplinarity, rising research output and output journal quality, growing international connectivity. These strengths should be strengthened through structured, long-term collaborations that consolidate existing networks (e.g. Food and Health). A key area that needs additional development is external funding success that has remain too low despite increased application activity and the high-quality publications the UoA has achieved with limited resources in the last review period.

Misalignment with disciplinary funding calls challenges an interdisciplinary unit like UoA. The planned strategic grant workshops, new platform partnerships (e.g. PLATE), and pursuit of larger, long-term funding schemes with multiple PhDs are crucial next steps to strengthen sustainability and capacity. However, any proposed increase in external funding may not be possible without substantial support from ORU grant offices.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

The first recommendation is to actively cultivate and formulate the core of gastronomic research. It is a unique strength for the UoA. The researchers master and use a wide variety of research methodology that facilitates multifaceted solutions to challenges around both culinary arts in restaurant and meal sciences in other settings.

As part of this effort, it is recommended to define and financially estimate the positive societal benefits from CAMS research. A pathway to this can be to commission or to make a report that shows and financially estimates the benefits from a healthy and sustainable hospitality sector. The UoA should based on the two first recommendations be able to develop and drives applications better, and to a minor degrees jump on those of others researchers.

Use existing unique infrastructure resources develop a platform for interacting with and soliciting input from a range of stakeholders. Develop and communicate that the UoA has a food lab (Living Lab).

What would make a difference for your research quality, in addition to money

The special need of CAMS due to the near-practice character of their work: Different kinds of positions in research: post-docs, biträdande lektorat, docent and professor with varying degrees of research responsibility. Flexibility can be used to accommodate different generations of researchers and teachers career trajectories.

In the discussion a topic that came up in a number of variations was the importance of faculty support. To secure an increase in quality of research applications there needs to be a strong structural support for this. Among this could be a thorough screening and evaluation of private foundations (starting with the non-profit organisation Riksbanken Jubileumsfond) to understand and utilise the private foundation opportunities.

During the interview with assessors the UoA were asked into their largest unused potential in research. They identified it as

Potential: Strong in taste, cultural aspects and senses; They have tools for researching gastronomy and analyse many aspects of the meal and dining.

The focus on taste, from the chemistry of taste to the cultural and social aspects of taste, which is important with regard to changing eating habits towards more sustainable options.

5. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

The UoA in its current constellation is on a positive trajectory for increased research output. In a period up to start 2024, a full professorship was vacant. Like any other small organization, the UoA was vulnerable to absence of central staff. The instalment of this professorship appears to have contributed to solving some of the challenges. There was a doubling of external grants budget in 2024 compared to the year before. The UoA submitted a large number of applications in 2025, of which the result of some is not announced yet. The UoA needs to focus their attention on submitting application of high quality utilising their unique competitive advantage in gastronomic research that covers topics from STEM to humanities. The recommended development of the internal research presentation procedures to secure consistent and diverse feedback to research applications can facilitate that.

The current external grants (in 2024) mainly come from two national agencies. It is recommended to explore opportunities with private and independent foundations, among them Riksbankens Jubileumsfond. Foundations in other Nordic countries or through Nordic collaborations is also an opportunity that appears to not have been used much.

It is imperative for the UoA that it utilizes its unique competitive advantage of gastronomy to solve societal challenges such as prevention of obesity and changes to more sustainable food consumption patterns in the arena of restaurants and culinary arts.

The low amount of PhD-students is a threat to the future development to the field. This is exacerbated by a substantial likelihood that PhD-students from HKR may no longer be enrolled at ORU, as they consider developing their own PhD-education. Similarly, the expected generational shift in the coming 10 years pose a challenge to the teaching in the CAMS-programs. These latter two threats needs a strategic effort from the ORU-faculty and rectoral management to address.

ORU2025 Review Report: Economics and Statistics

Review team: Markku Lanne (main reviewer), Ian Cousins and Johnny Lind

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The Unit of Assessment (UoA) comprises two administrative units (subjects), Economics and Statistics, each with its own Head of Unit and Head of Subject. The Head of Unit acts as he first-line manager and is responsible for teaching and holds personnel responsibility, while the Head of Subject mainly coordinates research. This structure may lead to prioritising teaching at the cost of research although this is currently no problem. Research activities are organised in five closely linked research groups that arrange regular seminars with external speakers. In addition, there are informal brown-bag seminars and subject group meetings.

National and Scandinavian networks support doctoral education, and PhD students are encouraged to spend a visiting period abroad. Most PhD students are externally funded, and they tend to have less presence and do not regularly participate in research activities. Also, few graduates pursue an academic career.

1.2 Are the main research areas appropriate for the unit and its development?

Some of the areas of research are clearly fields of economics or statistics, but several involve researchers in both subjects. Most of the research at the UoA is empirical or applied, so synergies between Economics and Statistics arise quite naturally. Close ties to Statistics Sweden lying in Örebro offer access to high-quality register data, albeit the unit has no special data arrangements with them. A greater emphasis on strong areas of research, especially those involving both subjects, might help improve the quality, impact and visibility of the unit.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

Research at the UoA is characterized by a bottom-up approach where researchers develop their own research agenda and find collaborators. The main role of formal leadership is thus ensuring sufficient time for research. While this leadership model has its merits, it may lead to a multitude of scattered projects and make it difficult to gather sufficient critical mass. An alternative would be to consolidate identified strengths through recruitments and research time allocations.

Although the location of the university may be seen as a potential disadvantage from the point of view of recruitment, the UoA has been able to attract a strong applicant pool also internationally. While post-doctoral researchers have been recruited in the international job market, the lack of clear career progression in the form of a formal tenure track makes international recruitment otherwise problematic. Especially in Economics, the European and American job markets are the main channel of recruitment, and the possibility to recruit to the assistant professor level would facilitate selection from a considerably wider pool of competent applicants. Also, in view of the expected retirement of both professors in Statistics within two years, it is important to have effective recruitment procedures to ensure continuity.

The “empty hallway syndrome” is a persistent challenge because many members of the staff commute or work partly from home and externally funded PhD students tend to work at their funders’ offices outside of Örebro. This issue has been addressed by arranging seminars and meetings to support physical presence and concentrating on-campus events on certain days. Additional university-funded PhD positions would probably partly alleviate the problem, and in this respect, some progress has been made, but the volume of university-funded PhD student positions still seems very small.

The lecturers carry a substantially greater teaching load (70–80 % of the work time) than professors (20–30 %), but this is not unusual in social sciences at Swedish universities. Nevertheless, the former seems high, but the attempt to align teaching duties with individual research interests and reductions due to external funding and internal allocations alleviate the situation. In particular, the possibility for lecturers to have additional research time awarded by the faculty is important and the practice should be continued. Also professors must devote a large share of their research time to other activities, and the Faculty’s decision to reduce the research allocation for newly hired professors is likely to make the situation worse by increasing reliance on external funding. Therefore, the effective research time tends to be considerably lower than formally stated, which likely leads to doing research outside regular working hours and reduces well-being. Having very little time for research and for preparing high-quality funding applications also easily leads to lack of external funding, which, in turn, may have implications for motivation, career prospects and possibilities to attract (externally funded) PhD students. The small number of PhD students also makes it difficult for junior researchers to gather sufficient supervision experience for a docentship.

The UoA has close connections to three organisations, all with headquarters in Örebro. With Statistics Sweden, the Statistics unit has a joint professorship in the production of official statistics. Kommuninvest finances one postdoctoral researcher and one PhD student in Economics. Collaboration with the Swedish Entrepreneurship Forum has been mainly administrative, but the appointment of a new research leader is expected to increase research interaction. In addition, the

Economics unit hosts affiliated researchers, including one part-time professor and two adjunct professors, and researchers of the UoA hold affiliations with national and international organizations and networks. PhD students are encouraged to spend visiting periods abroad, and some funds are available for this purpose. Unfortunately, the sabbatical programme facilitating international research visits by the staff has recently been discontinued.

Please provide specific comments on the unit's research funding, publications and productivity.

Although the share of external funding has slightly increased since the previous research assessment, it still remains quite low. Swedish non-profit organizations and the Knowledge foundation cover most of the external funding, whereas the role of other sources, including EU-funds, is limited. Concentration on a small number of funders poses a risk, and there is clearly room for diversification. It seems that systematic support for applying for external funding is not abundant, and tighter coordination as well as allocating more internal resources to freeing time from teaching for preparing grant applications would be advantageous.

Since the previous research evaluation, the quantity of publications has substantially increased, and their overall quality (measured by journal rankings) has improved. Most articles are published in journals with relatively low impact factors, and the number of citations vary a lot across the publications. The publications span a very wide set of research areas instead of being focused on a limited number of key fields and they have predominantly appeared in publication outlets other than core journals in economics and statistics. About half of the research publications involve an international co-author, which marks an increase compared to approximately 30 percent during the previous assessment period. While there seems to be an upward trend in the quantity and quality of publications, there is still room for improvement.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

Assessing the credibility of research is difficult without thoroughly scrutinising the research output of the UoA. However, the fact that the articles have been published in high-quality peer-reviewed journals and receive citations attests to credibility. Moreover, the principles of open science are largely followed. The researchers of the UoA have also been invited as keynote speakers and belong to established international networks.

The active seminar programme with participants across the research groups ensures wide discussions of ongoing work prior to publication. There are also procedures to guarantee the credibility of doctoral education, and the unit participates in national networks in PhD education.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

Members of the UoA have contributed to research in several fields of Economics and Statistics, and the research publications have received a fair number of citations, but in this respect, there is room for improvement. Given the relatively small size of the unit, concentration on fewer areas of research might be beneficial and lead to higher quality and greater impact of research.

The researchers of the unit have also been involved in organising a number of international conferences in Örebro and elsewhere. They have also served in editorial duties in international scholarly journals as well as panel members and evaluators for national and international funding bodies. In addition, the UoA hosts two major RePEc platforms providing access to a comprehensive collection of research publications.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

Especially the researchers at the UoA conducting policy-relevant research contribute to media. Members of the unit also hold positions of trust and advisory roles in which they can convey research-based knowledge to societal decision making. In addition, some researchers have undertaken expert assignments for national and international organisations. Societal outreach contains quite diverse activities but seems to be concentrated among a small number of researchers. This is a potential weakness but quite understandable as communication of research results beyond academia is inherently more difficult in some fields.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The UoA is committed to high ethical standards, which shows up as regular ethical discussions and requirements of sufficient training in research ethics. The PhD students are required or encouraged to include a course in research ethics in their studies, and ethics training is regularly revisited in the PhD programmes. The regular seminar activities and informal ethics discussions strengthen a research culture that emphasises the ethical dimension.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

There have been two initiatives related to PhD students: the university has introduced co-funding for the fourth year of doctoral studies, and the faculty has introduced a funding scheme that enables each subject to admit one internally funded PhD student every four years. The former funding has not been used yet, and the latter is found important but insufficient to build a stable doctoral cohort over time.

In addition, the faculty has placed a greater emphasis on promising early-career researchers in allocating research time to lecturers, which has supported career progression. The funding for inviting international seminar speakers has unfortunately been discontinued in 2026.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

Progress in four development areas has been made to varying extent. First, as recommended, the unit has become more international: there is one international PhD student, international mobility of researchers has increased, and there are several international researchers affiliated or connected to the unit. Second, the UoA is now involved in the university initiative on artificial intelligence via the AI Econ Lab. Third, the effort to encourage PhD students to pursue an academic career has not been very successful, as only one PhD graduate has been recruited to a postdoctoral position. Finally, the UoA has managed to increase external funding only slightly.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The UoA aims to be a research environment recognised for rigorous quantitative methods as well as substantive contributions to core economic questions, sustaining high-quality output and increasing national and international visibility. The unit will preserve a bottom-up research agenda instead of imposing thematic priorities and use shared platforms to build critical mass. However, strengthening purposeful connections between Economics and Statistics is correctly identified as a distinct opportunity. Finally, the unit intends to deepen societal interaction through policy-engaged and methodologically sound work.

The vision is correct but quite ambitious. Reaching the goals calls for sufficient financial resources, and hence, increased external funding. While maintaining intellectual breadth and a bottom-up approach in formulating the research agenda are seen important, it should be beneficial to focus on areas in which the UoA is already strong, especially those where interaction between Economic and Statistics arises naturally. This is likely to facilitate building critical mass and to help improve the quality of research on both methods and substantive economic questions.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The plan is in line with the vision and contains measures that are, in general, both effective and realistic.

Introducing a more systematic approach to the application process should be helpful in improving the quality of funding applications and over time lead to higher success rate and more time for research. This, as well as strengthening internal routines as suggested helps improve the quality of research. These measures should not require major additional resources. However, some form of internal financial support, such as a reduced teaching load to facilitate preparing a large funding application, as well as grant-writing assistance would be desirable.

Strengthening internal routines related to dissemination of research results as working papers as well increasing international researcher exchange along with improved hosting routines for visitors and better seminar practices are likely to increase visibility and recognition. Maintaining and strengthening collaborations with the public sector and entrepreneurial communities is important not only from the point of view of societal relevance, but it could also improve the quality of research by offering access to high-quality data. The latter probably calls for sufficient assistance with contracting as well as delegated discretion at unit level to run smoothly.

Stronger collaboration between Economics and Statistics should lead to improved quality of research and facilitate organising doctoral education. In particular, such collaboration should open possibilities for increased funding and facilitate effective supervision of PhD students. While collaboration is more natural in some areas of research than others, given the small size of the UoA, it might be desirable to emphasise closely connected areas in recruitment if possible.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

Based on the above assessment, we offer the following recommendations:

Reconsider the number of research areas and emphasise those with naturally close connections between Economics and Statistics in recruiting staff and PhD students.

Increase collaboration between Economics and Statistics to improve the success rate in applying for external funding.

Find ways to collaborate in PhD education in Economics and Statistics to make efficient use of existing resources.

Place stronger emphasis on publishing in core journals in economics and statistics.

The plan to strengthen external funding through a more structured internal process is highly recommendable. However, additional internal resources in the form of teaching releases and professional grant-writing assistance should be made available for applying for major grants, including ERC funding. Moreover, the funding sources should be diversified.

Continue the practices of coordinated on-campus days and try to integrate externally funded PhD students more closely.

Reintroduce a system of regular sabbaticals to improve the quantity and quality of research as well as to increase internationalisation and external funding.

Strengthen national and international collaboration to improve the quality of research and to open up new opportunities for external funding.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

The UoA has a collegial, ethically sound, bottom-up research culture supported by five research groups, active seminars, and robust national and international networks. Recruitment draws strong candidates. Output volume and quality have improved, and international co-authorship, conference organisation, editorial service, as well as the RePEc platforms enhance visibility. Collaborations with outside organisations bring applied relevance.

At the same time, several constraints limit impact. A heavy teaching load for lecturers compresses effective research time and weakens possibilities to apply for external funding, whose level remains relatively modest. The “empty hallway syndrome” lowers on-campus critical mass due to commuting staff and externally funded PhD students based off-site. Doctoral capacity is fragile, with too few university-funded positions, limited integration of externally funded PhDs, and weak transitions to academic careers. Moreover, the lack of clear career progression leading to promotion to full professor adversely affects recruitment, especially from the international job markets. Finally, given the size of the UoA, the research portfolio is broad, which spreads effort and dilutes critical mass.

The five-year vision of the UoA is sound and ambitious. The development plan is realistic and appropriately stresses systematic grant processes, stronger internal routines for dissemination and hosting visitors, expanded international exchange, as well as deeper public and entrepreneurial partnerships. Greater strategic focus on synergistic areas connecting Economics and Statistics, enhanced internal support for major grant applications, expansion of university-funded PhD positions with cross-subject training, and strengthened national and international collaboration would enable the UoA to convert its breath into enduring quality, impact, and visibility.

ORU2025 Review Report: Gender Studies

Review team : Lars Jalmert (main reviewer), Eeva-Kaisa Prokkola and Johanna Esseveld

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The Unit of Assessment Gender Studies (GS) is a small unit within the Division of Gender Studies and Sociology in the School of Humanities, Education and Social Science at the Faculty of Humanities and Social Sciences.

The Unit consists of one professor and three full-time senior lecturers (all docents) and one full-time associate senior lecturer (also a docent). There are also three temporary positions (one assistant professor, one postdoc and one researcher) at GS.

According to the self-assessment "GS runs the interdisciplinary gender research environment Centre for Feminist Social Studies (CFS) that gathers all GS researchers and gender researchers from other subject areas at ORU and beyond".

Leadership roles are shared. The professor leads the CFS together with an associate senior lecturer. One of the senior lecturers heads the GS Research and collaborates with the supervisors committee on strategic and practical issues related to research and research education.

(Issues common to all GS staff are discussed in subject meetings).

GS is very well organized to promote high quality research.

1.2 Are the main research areas appropriate for the unit and its development?

The research in GS and the CFS has a social science focus. This distinguishes it from most of the 10 other gender studies environments in Sweden, where the focus is on humanities or cultural studies.

There are six research themes in the CFS´ research environment through which questions of gender, gender division and policies are explored:

Feminist theory and knowledge production

Love and sexuality

Sustainability and masculinities

Work and organization

Politics and social movements

Violence studies

Researchers at GS contribute to the six themes taken together. They have their own research focus, projects and networks but have a commitment to developing gender studies in common.

The research areas are appropriate for the unit and its development as well as for gender studies.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

The main idea for the unit to create good conditions for high-quality research is **working together**. This also means commenting respectfully and constructively on each other´s work. Thus, creating a sense of trust and collegiality.

GS fosters a non-hierarchical culture which lowers the barriers for junior scholars to participate in research seminars. This culture was evident during the onsite interview session where a PhD-student took active part in the discussion.

GS collaborates with several researchers for mutual exchange of research findings and initiative. This increases e.g. the visibility of GS research.

Collaboration and Networks. According to the self-assessment, GS has established strong project-centred collaborations and networks, including several EU funded projects. This means a good potential for **new** competitive funding and joint publishing**.**

Participation in international and national conferences. GS provides funding for researchers with no external funds. There are also funds for PhD-students for participating.

Research-specific networks of individual researchers. GS faculty collaborate in and across their key research areas through international, European, Nordic and Swedish networks.

Gender Studies networks. GS is part of the Swedish Gender Studies Association and the Swedish Association of Gender Researchers. GS is also part of The European Association för Gender Research, Education and Documentation.

Guest researchers GS is quite often visited by guest researchers.

To sum up, GS researchers have many established international and domestic collaborations.

Please provide specific comments on the unit's research funding, publications and productivity.

According to the self-assessment of the unit, GS has a comparatively high proportion of external funding. This amounted to 60% of the total funding during the whole evaluation period and as much as 72% in 2022.

Most external grants come from Swedish research councils. In 2024, for example, 37% of external funding came from The Swedish Research Council Forte, 21% from the Swedish Research Council (Vetenskapsrådet) and 18% from the Swedish Foundation Riksbankens Jubileumsfond.

The unit received EU-funding for a little more than 13.3 million SEK during 2021-2023.

GS has a strategy concerning publications. This includes an aspiration to publish in highly ranked international journals while also focusing on publishing in Swedish. The publication list for the researchers is extensive, and researchers' productivity is high. Researchers from the Unit publish articles in international journals, review articles and proceeding papers as well as anthologies and monographs. From 2019 to 2024 there was an increase in GS publications. Each researcher active at GS and GFS, has several publications in the Web of Science.

The strategy also includes a particular focus on Swedish-language publications including monographs, edited volumes and popular scientific essays. These are prioritized as GS finds it important to distribute research findings to the Swedish community (outside of academia).

GS also has a clear strategy for facilitating the writing of/applying for external grants. GS researchers have received external grants, during the whole evaluation period.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

The unit shows research of credible and very high-level quality. The researchers regularly discuss methodological issues at seminars and workshops. Furthermore, the research is secured by internal and external peer review processes. The strong publication record is also a sign of research robustness.

GS researchers are active as academic reviewers of research manuscripts both nationally and internationally. Another strength in the unit's research is that GS researchers often are invited as keynote speakers.

The strengths in the high-quality research are evident and there are no identifiable weaknesses.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

According to the unit's self-assessment: "The GS milieu has made contributions to gender studies and neighbouring fields as political science, sociology, media and communication studies, feminist science studies, transport studies and social work." (s 13))

In the self-assessment 13 examples of such contributions are mentioned. GS research has contributed to scientific debates, among others, increasing understanding of how violence against women functions as a system, for conceptualization of sugar dating and inequality in green transition. Outputs include two monographs.

Senior GS staff has been reviewing assessments for professorships, lectureships and senior promotions. Activities such as faculty opponent and member of grading committees have been undertaken.

The research and other academic activities at GS make important contributions to the research field.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders

Please identify strengths and weaknesses in their contributions to society.

GS has quite a few collaborations. Many of the researchers work with different societal stakeholders in their projects. Examples of these are police, social services and schools. Results from collaborations are validated with professionals on practical and policy levels.

During the evaluation period, GS faculty gave expert advice to around ten organizations/ boards, both in the EU and Sweden.

GS regularly organizes local and national outreach activities. All are based on the unit's research expertise. Örebro County has been the receiver of a number of these.

GS staff has contributed extensively to media on many topics. The research has been presented in a popular way in newspapers, radio and television, both locally and nationally.

Books, in Swedish, authored by GS staff are used in courses across the country.

Collaboration with non-academic actors is of importance for GS, but the conditions for sustaining these practices are challenging. There is often no time set aside for these activities in manning plans.

GS has a multifaceted collaboration strategy, continuously to deepen partnerships.

The unit has a strong relevance for society.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

Some of the unit's research handles sensitive topics which has contributed to researchers' strong expertise in handling ethical issues, practically and with regard to formal rules and procedures. Most projects undergo ethical review by the Swedish Ethical Review Board. Since the last evaluation ORU2020 there have been improvements.

Supervision meetings guarantee that PhD students are informed about ethical issues. There is however a problem: applications for ethical approval must be written in Swedish. When PhD students lack Swedish language skills this can create an extra workload for others, e. g. supervisors.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The different initiatives the UoA can take are dependent on the number staff with permanent positions and the size of the undergraduate education influences the number of permanent positions for the unit. GS provides education for some 120 undergraduate students per year.

A permanent lecturer position includes 70% teaching. This percentage can, however, be reduced if the lecturer receives external funding.

In the unit's self-assessment there are several positive initiatives mentioned, one of them is that "High quality support from Grants Office has been instrumental in strengthening research applications". Another one is that the new head of division has provided support for the specific needs and vulnerabilities of the unit.

Amongst the negative initiatives mentioned, is a lack of opportunities for promotion to professor, which amongst others has led to the departure of highly qualified staff and to candidates declining positions during recruitment processes. Another negative initiative mentioned are new routines for handling expenses for the salaries.

We second the unit´s reflections.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

GS received a very positive evaluation in ORU2020 with a recommendation to continue the good work.

Another recommendation given was that the unit should improve external research funding. During the evaluation period the unit has succeeded to receive more external funding and to uphold research of very high quality and much quantity.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The self-assessment includes a very elaborate vision for the directions of the unit for the coming years. Central here are a focus on specific areas of research and a strengthening of already existing high-quality research.

The vision also contains continued efforts to sustain a critical mass. One goal here, is to increase the number of professors from one to two. A second professor would benefit the unit in many ways – and even the Örebro University

In the self-assessment, the unit gives very thorough descriptions of how the unit can develop to reach its visions. Examples are to continue the work to sustain a critical mass and to increase the number of professors from one to two.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

GS aims to develop into a stronger research unit with high quality research, extensive networks and stable external funding.

The unit aims to increase the number of students at the undergraduate level as well as at PhD and postdoc levels as this would strengthen the unit.

This vision and plan are realistic and well supported by the unit's publications, networks, collaborations and ongoing projects.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

The University and Faculty should ensure that success in securing major research grants also leads to positive outcomes at the subject unit level. It is essential that the most competitive researchers can realise their full potential and contribute to the University-wide goal of increasing research outputs and strengthening the Unit's research profile.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

GS is very strong in research equality and will be able to strengthen this further over the coming years. The unit is (and has been) very good in securing grants, publishing in high-level international journals and in actively collaborating with researchers at other universities in Sweden and Internationally. Our conclusion is that it is important that the unit tries to strengthen these activities even more.

To maintain and further develop research excellence it is important that GS achieves a critical mass and that the School, Faculty and University support GS in this endeavour.

The collaborations of the unit and its effects could lead to a further strengthening of the unit's excellence. This aligns well with the goals of Faculty- and School.

GS has made excellence contributions. This conclusion is also apparent in the self-assessment and the vision and plans for the next five year-period.

ORU2025 Review Report: Studies in Humanities

Review Team: Eva Lindgren (main reviewer), Kai Arne Hansen och Michael Bom Frøst

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The unit is well organised to promote quality research, combining disciplinary breadth with a strong interdisciplinary structure. The four research groups provide a clear and effective framework for collaboration, while the regular seminar functions as a central arena for intellectual exchange, feedback, and continuous development.

A defining strength of the environment is its collegial culture. Researchers engage actively in shared practices such as internal peer review of funding applications, collaborative project development, and cross-disciplinary dialogue. This collective approach contributes significantly to both research quality and productivity and appears to be a key enabling factor in the unit's development.

At the same time, the organisation operates within certain structural conditions. The close integration of teaching and research responsibilities, together with the unit's size, means that staff often balance multiple roles. This may influence the scope for sustained research focus. In addition, ongoing organisational changes at the institutional level introduce some uncertainty regarding future conditions, where continued dialogue may support long-term planning.

Overall, the environment is well organised and characterised by strong adaptive capacity, with a collaborative culture that effectively supports research development within given structural conditions.

1.2 Are the main research areas appropriate for the unit and its development?

The main research areas are highly appropriate and well aligned with both disciplinary developments and broader societal challenges. The thematic focus on multimodality, inclusive and multilingual education, sustainability, and narrative studies provides a coherent and forward-looking research profile. The interdisciplinary orientation is a clear, strength enabling innovative approaches and supporting externally funded collaboration. These areas also intersect with emerging developments in digital and AI-related research, particularly in relation to multimodal communication, education, language, and narrative practises.

At the same time, the breadth of the profile entails an ongoing balancing act between interdisciplinarity and disciplinary depth. Maintaining a wide disciplinary base is important for the unit's identity and sustainability, while continued attention to opportunities for deeper specialisation will support long-term academic development, particularly for early-career researchers. This balance is also relevant for doctoral training, where the interdisciplinary environment provides valuable breadth, while continued attention to disciplinary depth remains important for the development of doctoral students.

Maintaining this balance will be important for the unit's continued development, particularly in shaping a profile that combines interdisciplinarity with cumulative disciplinary strength.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

Please provide specific comments on the unit's research funding, publications and productivity.

The unit demonstrates a high level of reflexivity and a well-developed understanding of its strengths and developmental areas. The analysis is balanced and highlights key structural factors such as the relationship between teaching and research, the size of the environment, and the importance of institutional conditions.

Research is supported by well-functioning structures and processes. The seminar culture, collaborative practices, and shared responsibility for research development create favourable conditions for high-quality research. The unit's success in increasing external funding further reflects both research quality and an effective approach to proposal development, where collective practices play an important role.

At the same time, there are indications of some variation in research activity across the unit, and the overall workload may influence the ability of all staff to engage equally in research. The size of the environment also suggests a degree of sensitivity to long-term changes in staffing and competence supply.

Publication output has increased, alongside enhanced international visibility. The shift towards article-based publishing supports this visibility, while continued attention to maintaining diversity in publication formats remains important for the humanities.

Doctoral training is an important part of the research environment and benefits from the unit's collaborative culture and participation in broader doctoral frameworks. At the same time, the breadth of the environment and varying levels of research activity suggest that continued attention to integration, supervision structures, and opportunities for disciplinary specialisation would further strengthen doctoral education.

Overall, the unit combines strong performance with a clear capacity for reflection and adaptation, providing a solid basis for further strategic development.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

The unit conducts research in a way that supports high credibility. This is reflected in its success in external funding, active engagement in peer review and editorial work, and participation in national and international research networks.

The internal research culture, particularly the seminar environment and collegial feedback mechanisms, contributes positively to research quality by supporting continuous discussion and development.

While there are indications of variation in research activity, the overall environment provides a solid foundation for credible and high-quality research, with opportunities to further broaden participation across staff. This also extends to doctoral training, where integration into the research environment contributes to the development of independent and credible researchers.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

The unit makes strong and visible contributions to its research fields, particularly in areas such as multimodality, humanities-based educational research, and interdisciplinary approaches to sustainability and narrative practises.

Through externally funded projects, doctoral training initiatives, and active participation in academic networks, the unit contributes to the development of its fields both nationally and internationally. Editorial work and engagement in peer review further strengthen this contribution.

The breadth of the research profile offers significant opportunities for interdisciplinary innovation, including emerging areas related to digital and AI-informed research on for example, multimodality, communication, language, education, narrative practises, and sustainability. Continued attention to the strategies and external visibility may further support cumulative development and long-term impact.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

The unit demonstrates clear and substantial societal relevance. Research is closely integrated with teacher education and includes collaboration with schools and public-sector organisations. Work on inclusion, education, and communication contributes directly to addressing important societal challenges.

The unit also contributes through applied research areas such as crisis communication and through engagement in public debate and media.

There is potential to further strengthen the strategic dimension of societal engagement, particularly through more coordinated communication of research outcomes and expanded collaboration with a broader range of stakeholders.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The unit works in a satisfactory and well-integrated way to ensure compliance with regulations and ethical standards. Ethical considerations are embedded in research processes, seminar discussions, and doctoral education.

Doctoral students receive relevant training and support in developing ethical awareness and research practice.

Further development may focus on areas such as research data management and the continued adaptation of ethical procedures to the needs of qualitative humanities research.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The unit has benefited from several university and faculty-level initiatives in the period since ORU2020, particularly in relation to doctoral education, including participation in structured doctoral programmes and international collaborations, and opportunities for research funding. Participation in broader collaborative frameworks has contributed to strengthening the research environment and its external engagement.

The unit has also made effective use of available support mechanisms, including those related to competence development and research funding. These have contributed to increased external funding, strengthened doctoral training, and broader participation in research activities.

At the same time, overall development suggests that progress has been driven to a significant extent by the unit's own initiatives and internal capacity. Structural support for the humanities appears to have developed more gradually than the unit's demonstrated performance and ambitions might suggest. Conditions related to teaching responsibilities, resource allocation, and organisational change continue to shape the scope for further development.

Overall, the unit demonstrates strong research performance within existing frameworks, while further development may benefit from closer alignment between institutional support and the specific conditions of humanities research.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

The unit has responded constructively to previous evaluation feedback and has implemented a range of purposeful developments, particularly in strengthening research culture, interdisciplinary collaboration, and external funding capacity.

A key development has been the consolidation of collective research practices. Internal processes for peer review, proposal development, and collaboration across disciplines have been further strengthened, contributing to a more systematic approach to research development and to increased success in external funding.

The research group structure has also been further developed and now functions as an important platform for collaboration, intellectual exchange, and strategic support. Efforts to strengthen areas with lower levels of activity indicate a growing emphasis on inclusiveness and shared development across the unit.

The unit has also taken steps to broaden participation in research activities, including initiatives to involve more staff in publishing and project work and to use competence development time more strategically.

At the same time, some of the challenges identified earlier remain areas of ongoing development. There are indications of variation in research activity, and the balance between interdisciplinary breadth and disciplinary depth continues to require attention. Structural conditions, including the balance between teaching and research responsibilities, also shape the scope for further development.

Overall, the unit demonstrates a clear capacity to respond to feedback through incremental and well-directed changes, providing a strong basis for more explicit strategic development going forward.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The vision is well aligned with the unit's strengths and reflects a clear commitment to interdisciplinarity, internationalisation, and the continued development of research capacity. It builds on areas where the unit already demonstrates strong performance, particularly in collaborative and externally funded research.

The vision is appropriately ambitious while remaining realistic. Further clarification of strategic priorities could strengthen its role as a guiding framework for the unit's continued development. This also provides a useful framework for strengthening doctoral training, particularly through closer integration of doctoral students into research groups and collaborative activities.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The development plan contains several well-founded elements that build directly on the unit's existing strengths. The focus on strengthening research groups, enhancing competence development, and broadening participation in research is well aligned with the unit's trajectory.

The emphasis on research groups as platforms for collaboration and development is particularly promising and builds on established strengths in collegiality and interdisciplinary work.

At the same time, the plan remains relatively broad in operational terms. Further clarification of priorities, timelines, and the relationship between goals and available resources could support implementation. In particular, more explicit consideration of how the plan will address variation in research activity, the balance between teaching and research, and the interplay between interdisciplinarity and disciplinary depth would strengthen its strategic value.

Looking ahead, an additional area of potential development lies in the unit's established strengths in multimodality and communication research. These areas are closely aligned with emerging research on generative AI, particularly in relation to language technologies, multimodal communication, and human–machine interaction. In addition, the other research profiles including education, sustainability, and narrative practises are highly relevant for the development of forward-looking research in the generative AI-field. The unit is well positioned to contribute to such developments, and further consideration of how this potential could be more explicitly integrated into the research strategy could represent a valuable direction for future development.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

In relation to the vision and the development plan, the panel suggests focusing on a small number of areas where further development could have the greatest impact, building on the unit's demonstrated strengths and addressing key structural considerations identified in the review.

At the level of the unit:

1. Move from a broad profile towards a more clearly articulated and recognisable strategic shape

The unit's breadth is a key strength and an important part of its identity. At the same time, further development would benefit from a clearer articulation of how different areas relate to one another and where cumulative strength can be developed over time. This is likely to be a sensitive process in a broad and interdisciplinary environment, and may be less about narrowing than about reshaping and making existing strengths more visible and connected. In practice, this could involve aligning research group activities, funding strategies, and future recruitment with a more clearly defined overall profile.

2. Translate the strong collegial culture into more structured and sustainable capacity-building

The unit's collaborative culture is a central asset and has contributed significantly to research quality and funding success. Further development could focus on making these practices more systematic and inclusive, for example through structured mentoring, clearer pathways into collaborative projects, and coordinated support for proposal development. This would help broaden participation in research activities and support more even development across the unit particularly for early-career researchers and doctoral students.

3. Use research groups more explicitly as strategic instruments for development

The research groups provide an effective organisational structure and could be further developed as platforms for both intellectual exchange and strategic coordination. This may include strengthening their role in supporting early-career researchers and doctoral students, fostering disciplinary depth within interdisciplinary settings, and coordinating research planning, publication strategies, and external funding applications.

4. Make implicit strengths more explicit in external positioning, visibility, and future-oriented research

The unit demonstrates clear potential in areas such as multimodality and communication, which are closely aligned with emerging research fields, including generative AI. Further development could focus on making this potential more explicit through targeted collaborations, strategic project development, and alignment with external funding opportunities. At the same time, continued development of societal engagement could enhance the visibility and relevance of the unit's research.

At the level of faculty and university leadership:

1. Align structural conditions with demonstrated research capacity

The unit shows strong performance relative to its size and resources. Further development would benefit from conditions that support sustained research activity, particularly in relation to the balance between teaching and research responsibilities.

2. Provide stable and transparent frameworks for long-term development

Continued organisational clarity and dialogue would support strategic planning and contribute to maintaining a stable and sustainable research environment.

3. Support environments with limited critical mass but high potential

Targeted support to research environments that combine strong performance with relatively small size could further strengthen research quality, sustainability, and long-term impact.

5. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

The unit represents a collegial, engaged, and intellectually active research environment with clear strengths in interdisciplinary collaboration, research culture, and external funding success. This includes the continued development of doctoral training as an integrated part of the research environment. A defining feature of the unit is its ability to combine a strong collaborative culture with increasing research performance over time.

The progress achieved in recent years indicates both capacity and commitment to development. In particular, the strengthening of collective research practices and the expansion of externally funded activities demonstrate an environment that builds effectively on its internal strengths. Building on this foundation, the unit is also well positioned to contribute to emerging interdisciplinary areas, including research related to generative AI, where its wide expertise in the humanities provides a strong basis.

At the same time, the unit operates within structural conditions that shape its possibilities for further development. Continued progress will depend both on sustained internal efforts and on the alignment between the unit's ambitions and the broader institutional framework.

Overall, the unit is well placed to continue strengthening its research profile and impact in the coming years.

ORU2025 Review Report: Criminology

Review Team: Janne Kivivuori (main reviewer), Karin Brocki, Katarina Eckerberg, and Ruth Mannelqvist

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The UoA of Criminology is internally organized into three research environments: (1) Biopsychosocial Criminology and Psychology (BPS), (2) Center for Criminological and Psychosocial Research (CAPS) and Center for Violence Studies (CVS). This organization reflects clearly the research emphases and promotes quality research. The informal culture of the UoA supports well this division.

1.2 Are the main research areas appropriate for the unit and its development?

The three areas – biosocial criminology, developmental criminology, and violence studies –

are clearly defined. They also manifest good balance between generality and specialization in topics. The focal areas are suitably chosen also from the point of view of European and global criminology field. They communicate with central concerns in criminology while also presenting appropriate specialization; overall, they make Örebro criminology distinctive and visible. In other words, the main research areas provide an appropriate 'niche' in the global Criminology ecosystem, making the UoA recognizable when perceived from the outside.

In the on-site interviews, representatives of BPS and CAPS were present. The profiles, approaches and data bases of these environments clearly justify their independent identities. In comparison, the third environment, forms an internally more diverse area whose concerns appear more linked to policy needs.

Research coordination primarily takes place within the three areas, which are led by senior researchers. However, one of the environments (BPS) does not have a professor to lead its activities. It would be advisable that all three environments would have at least one full professor as lead.

Doctoral education has been offered since 2021. The number of completed doctoral theses is three, and there are currently three doctoral students. The small size of the doctoral programme is mostly funding related, but the relatively recent origin of the programme must also be noted. One challenge might be the capacity of the 1-year master's programme to feed the doctoral track. However, based on the interviews, there is no shortage of demand for criminological doctoral education. The

master's program is research oriented and many master's students would like to continue in researcher education. Master's students are also integrated to research projects during their studies.

1.3 Please comment on the unit's reflective analysis of their environment.

Staff and recruitment policies are designed to prioritize demonstrated research productivity, international visibility, and methodological competence. This priority list focusing on scientific merit is an excellent strategy. Its results show positively in the publication and research profile.

There is no promotion track available in the career paths of senior level staff. This is a problem and may lead to excessive staff turnover, if merited senior researchers leave because of this policy. The concern for senior researchers leaving was expressed also by junior staff in the interviews. For staff strategy, it is not sufficient to attract the best competence; the other side of the coin is to keep such competence when it has been secured.

International recruitment is used whenever possible. However, in practice international representation remains limited. The reasons why this is so (e.g. teaching language requirements) would call for attention during the next 5-year period. Judging from the impressive breadth of international collaborations, the structures and processes have created good conditions for increasing internationalization of the staff.

Research leadership operates within the three research environments. This is natural as academic leadership is linked to substantial expertise and referred to as a research-proximate leadership model, which appears clearly justified and beneficial. Having at least one professor in the lead, in each of the three environments, would be additional boost for this model.

The seminars are mostly hybrid in form. Based on the interviews, in-person activity and presence on campus have not yet reached the pre-Covid levels. In-person presence is preferred and clearly needed for an academic community to prosper. How presence on campus could be incentivized calls for attention. The current multi-layered seminar structure (combined higher seminar and environment-specific layer) may contribute to work burden, even though currently the seminars are well attended.

The Unit has received extensive competitive research funding, and the past five years trajectory is upwards; the overall share is more than half of the budget (as the percentage of grants of total funding) and therefore quite impressive. While the share of EU funding has increased (10 % in 2024), the share could be increased in the future.

The exception to the excellent development of external resources is doctoral research funding. While that has already been noted by the UoA, further action can be taken on that front (see recommendations section below).

Overall, the productivity of the UoA is very good, even excellent, given the small size of the unit. Excellent productivity is testified by the 104 peer reviewed articles published during the evaluation period. The number of citations is also impressive. Research outlets are mostly high-impact journals. In the previous evaluation, the UoA received feedback that its publications should focus more on criminology journals. The current distribution of criminology journals vs. more general journals is good. Aiming for very high impact factor publications requires that some research is targeted to general journals, even the very highest category might be within reach during the next five-year period.

2. QUALITY OF RESEARCH

2.1 Credibility.

The credibility of the Criminology UoA research is very high. The research is published in high quality journals and recognized as such in the discipline.

In terms of substantial practices ensuring research quality and credibility, the work of the UoA can be commented from the interconnected points of view of open science, credibility revolution, and replication crisis.

The UoA refers to open science goals in its future plans, but they have already applied many of the core principles of openness. It is very important to acknowledge that open science is more than open access publications. Other key aspects include data sharing, code sharing, and pre-registration. Based on the interviews with the UoA staff, many of these are already applied regularly. Overall, the open access stance of the unit is very good, and they seem to be at the spearhead of this global movement in science, compared to what is being done in other universities (and other UoAs).

Based on research topics and data emphases, the UoA has also partaken in what is called the ‘credibility revolution’ in social sciences. It refers to sustained efforts to move from correlative to causal research designs (longitudinal data, twin data, systematic reviews with attention to causal evidence levels).

Because of their attention to open science and credibility of research designs, the UoA has responded adequately to the replication crisis in human and social sciences. Their research appears to be replicable and therefore highly credible; research attention to international validation of psychometric scales is also consistent with this aim. Overall, the UoA research activity is consistent with the three interconnected dimensions of improved research quality (open science, credibility revolution, and increased replication),

2.2 Contribution to the research field.

The work done in the UoA represents the cutting edge of criminological research. The research profile clearly contributes to criminology, globally considered. As regards the 'niche' they have chosen in the field, it is well chosen. A particular strength in the research profile is the extremely strong grip on individual-level, psychological and biosocial risk factors (causes) of crime, including genetically informed approaches. It is possible that the BPS is the most distinguished unit in biosocial criminology in Europe, while the same can be said of the CAPS research environment in the developmental criminology domain.

2.3 Contribution to society.

The research themes of the UoA clearly contribute to society and to criminal justice policy. Its focus on individual level traits on a high level or sophistication is rare in European criminology. The Center of Violence Studies complements this with its more policy-oriented focus. Based on the evaluation material, more substantial attention to formal sanctions (punishments) might increase policy relevance even further; this dimension is linked to individual traits via interactions between individual traits and reactions.

2.4 Regulations, ethics and sustainable practice.

The UoA applies strict ethical guidelines in its work. The open science framework is intimately connected to this dimension (see recommendations section below for further comments on this).

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

The overall effect of the ORU2020 evaluation on performance has been good. The doctoral programme was established after that evaluation, so it can be considered as work in progress. The small number of doctoral students is a challenge which calls for attention by the UoA (and by the supporting administration, especially given the need to secure the continuation of the high quality research in the UoA).

3.2 Initiatives after ORU2020

The implementation of the feedback from ORU2020 evaluation has been very good.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

The vision of the UoA is very well formulated. Notably, the aim to increase the number of doctoral candidates is warranted. Further increase of publication in criminological journals is good even though aiming for 100% is not needed. The aim of securing larger, multi-institutional grants is good. The UoA should preferably adopt the more ambitious goal of leadership in such grants. This aim should be supported by the university administration, also in terms of career paths of senior staff who can lead such projects.

4.2 The plan

The UoA's plan is well articulated and provides clear steps to be undertaken in future development. Here the goal of receiving more university support for larger grants is clearly justified. The subtheme of research infrastructure funding (point 3 in the plan) is also a good addition.

4.3 Recommendations

Within European and global criminology, this UoA represents the cutting edge of the discipline. They have established a niche within the field which is adequately narrow and still broad in relevance with state-of-the-art research. Moreover, the UoA has addressed the main challenges of current human and social sciences: open science, the credibility revolution (the causal turn), and the replication problem.

The unit stands out in its advancement of open science in its various dimensions. This involves not only open access publishing, but code sharing, pre-registration, data release, etc. Based on this evaluation, the Criminology UoA could serve as a university-level vanguard and benchmark in open science, to be emulated by other UoAs.

In doctoral education, the small number of students could pose a problem if it does not meet a 'critical mass'. The number of doctoral students is described as 'shrinking', reflecting limited success in funding applications for PhD positions. The UoA has made several suggestions aiming at improving the researcher career in its early stages, notable by increasing funding efforts. The possibility of faculty-level co-funding is mentioned; the very high research quality of the UoA clearly supports such investments by the administration. The problem of shortage of doctoral students should perhaps be addressed on a more general, strategic and structural levels. There is a strong demand for doctoral studies in criminology from 'below' (from master's level), and probably also from the societal level (increasing salience of the crime problem in public policy).

To increase the number of doctoral students, it would be useful to target funding frames suitable to that level. A case in point are the doctoral training networks funded by the European Union through Marie Skłodowska-Curie Actions (MSCA).

A related, broader strategic consideration is the role of the UoA in international funding calls. In seeking multi-institutional grants, the vision should aim to take the lead, that is, to serve in the coordinator role rather than 'only' as partner. Of course, in this regard, the usual path is to start from the partner roles and then move, with more experience, to coordinator role. The lead vs. partner role could be also more consciously addressed in the publishing of articles. Örebro criminology's strong reputation may attract invitations for co-authorship, increasing quantitative output without necessarily enhancing the unit's capacity to direct the focus of its research. Thus, we see great promise in the UoA's capability to move to an increasingly leading position on multiple fronts (funding, authorship, more breakthroughs in substantial findings).

Some of the obstacles in this path are not in the hands of the UoA; rather, the university leadership should acknowledge the potential of the UoA and make supportive measures accordingly. One means to that end might be the reconsideration of the 'no promotions' policy. The evaluation team finds that such a strategy may work in large/old universities, but not so well in younger/smaller universities who need to be more agile and flexible in recruitment policy. Irrespective of how professors are recruited, all three research environments of the UoA should be led by at least one full professor.

In the interviews, members of the BPS and CAPS environments were present. Based on the written self-evaluation, the topical spectrum of the CVS is wider and policy oriented. That is as such an asset. Possibly the units could together think how their different focal concerns could yield more synergy. One potential domain concerns the effects of formal sanctions (including punishments), as such effects can depend on individual-level and psychological factors, and the societal demand for such research is likely to (further) increase.

The evaluation team finds that the UoA's profile in the field of Swedish criminology is well chosen and distinctive. Also, the cooperation in doctoral education between Stockholm, Malmö and Örebro universities appears to be complementary, yielding clear synergy effects.

4. CONCLUDING REMARKS

The Örebro university criminology is a very strong research unit and highly respected in global and European criminology. Based on the quantitative information and the listing of the articles published during the last five years, the quality of research is excellent. Its research profile ranges from biosocial to developmental studies to violence prevention. Overall, the research represents the cutting edge of the field. The will to engage open science practices is, in our view, related to this excellence. In the future as well, open science should be conceived broadly, incorporating other elements in addition to open access publishing.

This said, there is still room for some improvement. It seems that tackling researcher education (the doctoral programme) might require new efforts and a new kind of funding focus. This might be addressed with a general attempt to move from partner to coordinator and leading roles in collaborations. Being the coordinator usually involves more assets and more say in the overall configuration of the applications; hence, possibly more leeway in funding doctoral projects. In

addition, and as a pathway to that, specific funding frames might be tried. Especially the MSCA actions should be given a careful study; participation might start with partner roles and move later to coordinator role. Some MSCA projects have been interdisciplinary and even transcended the divide between human and natural sciences; on that dimension, the UoA might have a competitive edge.

ORU2025 Review Report: Human Geography

Review team: Eeva-Kaisa Prokkola (main reviewer), Johanna Esseveld and Lars Jalmert

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

Is the environment well organised to promote quality research?

The UoA, Human Geography, is a small unit located at the School of Humanities, Education and Social Sciences at the Faculty of Humanities and Social Studies.

The UoA consists of one professor (the head of subject) and four full-time senior lecturers. In addition, one senior lecturer and one researcher work part-time for the UoA (49-50%). A senior professor is also affiliated with the UoA with a 3% appointment. Two of the senior lecturers hold docentships, both obtained within the last five years.

The environment is well organised and supports high-quality research, academic freedom, and collegiality. Many core activities for doctoral training are offered at the faculty level, highlighting the importance of the broader research environment for the subject units.

1.2 Are the main research areas appropriate for the unit and its development?

What are strategically the most important research areas in the coming years;

what are the common themes and questions that you work with; how do you see you research excellence in relation to University's profiling areas?

The subject unit's research areas are diverse and that each researcher has their own networks and areas of excellence. The UoA identifies the following main areas as appropriate for the unit and its development: regional development, urban and rural planning, natural resources and crises, mobility and transport, as well as working lives, gender, and cultural and community identity. These varied research topics are unified by human geographical and planning perspectives. The common theme connecting these topics is sustainable social change, which forms an appropriate basis for courses in urban planning and sustainable development. The description of the common themes identified in the UoA self-evaluation was rather brief. A more thorough reflection on the main areas requiring further development would be highly recommended, as this would support the UoA's goal of prioritizing its projects.

Although the profiling area Crises and Transformation was not mentioned in the UoA, the publication report suggests that the subject unit can make a significant contribution to this University's profiling

area. A new project led by subject-unit personnel also appear to have connections to the nutrition and health profiling area

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

The subject unit organizes its personnel and leadership activities according to the general instructions from the Faculty and the University. Recruitment is dependent on decision-making at the faculty and school levels and follows University-level procedures. The human geography personnel also take advantage of University-level training opportunities.

The head of the subject promotes and encourages personnel in their research activities. Research leadership and support are provided through research meetings, seminar series, collegial informal discussions (fika), and structured discussions via the Supervisory Board. The group takes collective responsibility for ensuring high-quality research as well as for coaching junior scholars.

The subject unit's researchers are active in various international networks, and the unit benefits from the expertise of visitors from these networks. The relevant academic networks and collaborations are well documented in the self-assessment, highlighting both field-specific and broader societal contributions.

The onsite interview provided valuable insights into the subject unit's academic culture and wider research environment. Although the self-assessment emphasized challenges and vulnerabilities more than strengths, the interview shed light on the factors behind the unit's high-level publications and success in securing research grants. It also became evident that some of the concerns highlighted in the self-assessment have already been addressed through new initiatives.

The interview further revealed that the group has a strong internal dialogue and a culture of collective responsibility. The members appear to share an understanding of the need to achieve critical mass and to maintain their positive trajectory in obtaining external research funding. There also seems to be a shared awareness of the importance of each group member, and that the small size of the group increases its vulnerability should key personnel be lost. This concern regarding vulnerability due to small group size also emerges in the assessment of research collaboration networks.

Please provide specific comments on the unit's research funding, publications and productivity.

The research funding, publications, and productivity of the subject unit indicate a strong academic culture. The quality and quantity of publications are considerably high.

External research funding for 2020–2024 accounts for 65% of total funding, which is well above the University's target. The share of external funding has increased steadily in recent years, with one major Swedish Research Council Formas grant representing 79% of the total amount of 7 584 477 SEK awarded grants. The strategy is to further strengthen external research funding by promoting discussion and collegial peer support within the unit.

The bibliometric report for 2019–2024 includes a total of 80 publications. The publication venues range from leading human geography journals to gender studies journals, highlighting the thematic connections and focus areas of the research environment. Overall productivity reflects the number and scale of externally funded research projects.

The publications have been cited 746 times. Most of the outputs are research articles, with only a few review papers. The report is based on data from the Web of Science (WoS) database and the analytical platform InCites (extracted on 10 October 2025). The number of publications between 2019 and 2024 is stable, with some fluctuation (most notably a peak in 2021 with 25 publications) which is typical in project-based research environments. Both domestic and international publication forums are well represented, with international outlets forming the majority (60% international, 40% domestic). One third of the publications are in Q1 journals, and two publications rank in the top 1% worldwide. The open-access rate ranges from 70% to 80%, depending on the year. Overall, the bibliometric report indicates high quality and strong productivity within the subject unit.

The self-evaluation and the interviews both point to structural challenges affecting the conditions for high-quality research. Human Geography currently has only one professor, and additional resources for conducting research must be secured through competitive external grants. The subject unit has an upward trend in obtaining grants, supporting the University's ambition to expand and strengthen its research profile. However, with only one professor, the unit lacks critical mass. Hence, success in securing competitive research funding, combined with understaffing—most notably the long-term non-fulfilment of a senior lecturer position in human geography—has placed considerable pressure on the personnel responsible for the subject unit's courses. Temporary staffing arrangements have created a situation in which substantial time is spent familiarising new teaching personnel with the curriculum and practices.

The subject unit emphasises its eagerness to grow and reach critical mass, thereby reducing the vulnerability that stems from its small size. To work toward this goal, the professor and senior lecturers (two docents) are continuously applying for competitive research funding, which enables the unit to sustain and further develop successful research initiatives.

The Faculty-level initiative (Faculty self-assessment page 6) for a joint Doctoral College and multi-year support aimed at creating strong, thematically coherent research environments appears promising and highly relevant for human geography as well as for other small subjects.

A structural weakness at the University level—also noted in ORU2020—is that lecturers with strong international research merits and a continuous record of securing competitive funding are not appointed as professors within their own university. This means that the most productive and scientifically ambitious scholars must seek employment at other universities if they wish to advance in their careers.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality? Please identify strengths and weaknesses in their work.

The subject unit produces credible, high-quality research, as demonstrated by its international and high-profile publications. This strong international publication record is a clear strength and is typically accompanied by other positive outcomes, such as robust research networks and successful funding acquisition. There are no identifiable weaknesses in the quality of the research. However, based on the self-evaluation and the interviews, the unit aims to become even more strategic by further prioritizing its research networks and funding applications.

The UoA self-assessment mentions only a few projects and topics. Additional information was found on the human geography research subject page (www.oru.se/english/research/research-subjects/human-geography/) include projects on water planning (PhD projects funded by the research school WATCH: Water challenges in sustainable planning and the built environment), sharing economy, decent work, and neighbourhood planning.

The material indicates that the subject unit's research is of a high international standard, ambitious, dynamic, and forward-looking. Moreover, the unit has played an active role in developing new research environments. The doctoral education programme WATCH is an excellent example of an initiative that brings together multiple disciplines to address societal and environmental challenges that are complex and cannot be solved within disciplinary silos.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to an impact the research field? Please identify strengths and weaknesses in their contributions to the research field.

The unit's research and academic activities are ambitious and make a significant contribution to the field. The key researchers appear to be at the forefront of shaping agendas in human geography research—actively participating in agenda-setting scholarly debates and international networks. They also hold editorial roles in leading international journals and are regularly invited to serve as external

experts. The publication record is very strong for such a small unit, with most outputs appearing in top-tier journals.

Although it is difficult to identify explicit weaknesses, there are some vulnerabilities related to the unit's limited critical mass. It may not be feasible to develop excellence across all areas of sustainable societal transition, even if these areas become highly prominent in the future and hold strong potential for the University's profiling themes. Fully realising the potential of the subject unit within the University's areas of excellence would require increasing the unit's critical mass, including the establishment of new professorships that link human geography with university-level development and growth initiatives.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

The subject unit's research is socially relevant and addresses several pressing societal challenges related to sustainability transitions and equality. Many geography-initiated projects are carried out in close collaboration with stakeholders, involving partners at state, regional, and local levels.

Please identify strengths and weaknesses in their contributions to society.

The unit's contribution to society is strong, and several projects are explicitly designed to provide solutions that enhance societal and community well-being. The subject unit appears to be particularly well positioned due to its extensive international, national, and regional networks and its established collaborative relationships.

The main weaknesses relate to the unit's small size and limited time resources. Societal engagement often requires substantial time investments, for example in building stakeholder relationships and establishing trust.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct? Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The subject unit highlights its high ethical standards in research, education, and supervision. Ethical issues in research are regularly discussed in research meetings and seminars, and ethical review procedures are applied when appropriate. The central university rules regarding data management and

GDPR are followed. The UoA also emphasises the strong interest among the researchers in questions of sustainability and ethics.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The subject unit reports challenges regarding membership and engagement in university-led research profiles and platforms, which is problematic for both the unit and the Faculty. It is important to ensure that small subject units are included in Faculty- and School-level planning and decision-making processes, and that their commitment to, and resources invested in, joint initiatives lead to positive outcomes. The unit's suggestions for new initiatives—such as seed funding and bottom-up, cross-disciplinary collaborations—are highly recommended.

The subject unit also reports challenges and difficulties arising from School-level management. During the visit to Örebro University, the external evaluators were informed about forthcoming Faculty- and School-level reorganisations, indicating that steps have been taken to improve administrative functioning and the overall research environment. The interview discussions reflected optimism about future developments.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

The subject unit has achieved its main goal of becoming a stable and highly qualified research environment. This is demonstrated by the high-quality research outputs produced during 2019–2024. The recommended critical mass of doctoral students (5-6) has not yet been reached; however, the interdisciplinary research school WATCH has provided opportunities for peer engagement with students from other subjects.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The subject unit aims to develop into a larger and stronger research group with high-quality research, extensive networks, and a stable influx of research funding, with particular emphasis on new PhD and postdoctoral projects. This vision is realistic and well supported by the unit's international and domestic networks as well as its ongoing research projects.

Yet, the UoA would benefit from working toward a more concrete vision that reflects its main research areas and clarifies the research topics and fields in which it aspires to grow and develop its activities.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward? *Is it realistic in terms of resources and organisation?*

The development plan is realistic and reasonable. The plan builds on ongoing activities and collegial efforts, which is reasonable given that the subject unit has been successful in securing external grants. The plan to establish more joint projects and internal collaborations is also an important path forward and aligns well with the new School-level initiative to strengthen research environments and consolidate efforts around key themes.

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The development plan is rather general and does not specify particular topics, themes, or initiatives. It will be important to continue discussions on key thematic areas, strategies, and priorities, and to consider how these align with the new thematic areas of collaboration at the University, Faculty, and School levels.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

The permanent fulfilment of the senior lecturer position needs to be prioritised.

The UoA is recommended to work toward a concrete vision regarding its main research themes and the areas in which it aspires to grow and develop its activities.

The Faculty and University should ensure that success in securing major research grants also leads to positive outcomes at the subject-unit level. It is essential that the most competitive researchers are able

to realise their full potential and contribute to the University-wide goal of increasing research outputs and strengthening the research profile.

The Faculty-level initiative to identify thematic areas of collaboration appears promising, and it is important to recognise the contribution that small subject units with strong international research profiles can make to such collaborative efforts.

The vulnerabilities associated with the small size of the subject unit and the pressure created by the lack of critical mass constitute a structural challenge that should be addressed at the Faculty level.

It would be beneficial to develop measures for periodic internal evaluation of Faculty- and School-level processes and administrative practices.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

Based on the data provided, the subject unit demonstrates several strengths, including success in securing grants, high-level international publications, and active international collaborations. To maintain and further develop research excellence, it is essential that the unit achieves a sufficient critical mass. The unit's international publishing activities and networks, together with its ambition to advance high-quality research, align well with the Faculty- and School-level goals of strengthening and expanding research excellence.

ORU2025 Review Report: Media and Communication Studies

Review team: Lars Lundgren (main reviewer), Çiğdem Haser, Gillian Manthorpe and Kirsten Sivesind.

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

Media and Communication Studies is organized in three research groups: *Discourse, Communication and Media* (DCM), *Moving Images and Screen Cultures* (MICS), and *Strategic Communication* (SCOM). They each have a distinct research profile, answering to central themes in Media and Communication Studies more broadly.

The Unit's researchers have well-defined research identities belonging to one of the groups, but often participating in the activities of several research groups. The Unit organizes joint research activities (seminars, research days, etc) and there is collaboration and co-authorship across groups. Overall, the organization of the Unit serves to promote quality research.

1.2 Are the main research areas appropriate for the unit and its development

Organizing research into three distinct groups allows the Unit to develop focused research interests while at the same time sustaining a breadth of topics. The groups are well-grounded and the result of a dynamic, bottom-up perspective where members of the department have conjured around common interests. At the same time, a more general impression based on interviews with several Units is that research groups are sometimes the result of top-down priorities where departments are expected to increase visibility by forming research groups.

Two of the groups are thematically closer, with DCM and SCOM stemming from the part of Media and Communication Studies that is grounded in the social sciences. The third, MISC is closer to film studies and the humanities. While seemingly different, the Unit is organized in a way as to benefit from the variety of perspectives between and within the groups.

The Unit is in the early phase of establishing a new research environment, *Geopolitics and Media* which could potentially engage researchers across all three research groups of the Unit, as well as researchers at the university more widely.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

Please provide specific comments on the unit's research funding, publications and productivity.

The Unit demonstrates an awareness of opportunities and challenges regarding research leadership, recruitment, academic culture and internationalization. The research leadership, together with the department leadership, often face challenges in organizing staff's research time. One particular challenge is to avoid fragmentation of research time; this is particularly important for faculty with less than 40% research time. At the time, the Unit is currently slightly overstaffed, contrary to previous years, which could be used in order to consolidate research and strengthen strategic research planning.

In terms of (individual) career support and leadership, the Unit has strategies in place but still identify the risk of what they call a "lone wolf" culture. The Unit also notes that senior faculty are expected to develop their research independently. One risk is that the university's overarching research ambitions might be difficult to implement. "Regulated individualism", a balance between individualism and collectivism, often mark a creative research environment and should not necessarily be considered a risk, neither within the Unit (i.e. in the relation between researchers and research groups) nor the university at large (between university overarching strategies and the Unit). Still, it should be noted that the Unit demonstrates awareness of this tension and works actively to reduce "lone wolf" culture while retaining creativity and innovation.

The Unit is a highly international department with extensive participation and engagement in international networks. Nationally the Unit notes their membership in The Swedish Association for Media and Communication Research and the national network for doctoral training, TRAIN. In respect to the latter, the self-assessment is somewhat modest and does not mention that they are one of three founding member departments of the today nationwide network, and also key conveners of one of the two national PhD courses within the network.

The Unit emphasizes the importance of a thriving seminar culture for nurturing the wider academic culture at the department. Media and Communication Studies organize higher seminars, with more formal presentations and international guests, and informal occasions when research applications are discussed ahead of submission. Additionally, a Research Day is organized every semester. The Unite recognizes the need to actively foster a seminar culture and encourage engagement and attendance.

Funding: The Unit notes that the share of external funding has increased in comparison to ORU2020. This is at least partly explained by having secured funding from a more diverse set of research funders, making the Unit less dependent on fewer but larger grants. There is still room for further improvement, attracting larger grants and increasing opportunities for long-term funding of research projects and programmes.

Publications: The Unit notes a decrease in citations over time. There are two key explanations for this. First, a substantial part of the publications are registered in DiVA but not in WoS (40 peer-reviewed publications, more if counting non-peer-reviewed). Second, the Unit points to loss of personnel with high individual citation index. These two explanations reflect weaknesses in the bibliometric evaluation of publication patterns: first, certain research fields and disciplines are less likely to be listed in WoS, and second, the legitimacy of a system based on metrics that can be warped by the loss of one or even a few individuals can be questioned.

Based on the submitted material, the Unit publishes in relevant journals across a broad range of topics. Widening the perspective to include publications registered in DiVA confirms this picture. The Unit states its intention to continue to publish in venues outside of WoS which should be supported and encouraged. There are an increasing number of formats and venues in which research can be published and the Unit is well positioned to do so, even if it means that these outputs won't be registered in WoS.

Productivity: The Unit notes that the research output reflects the actual allocated time, even if this is notoriously difficult to gauge. Importantly, the Unit notes a discrepancy between perceived time and actual allocated time. Two things stand out. First, there seems to be a threshold around 40% research time, below which productivity drops relative to allocated time. Second, the gap between perceived and allocated time is wider for female researchers.

The Unit's ambition is to attract further external funding. Besides the obvious benefit of more research time and potentially more research output, this would ensure that the funding can be equally distributed across the Unit in that the resources may be less concentrated to "successful" individuals.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

The Unit publishes in a wide variety of outlets, peer-reviewed articles, book chapters, as well as monographs. Their research is highly international and to a large degree peer-reviewed, ensuring its quality and credibility. Faculty members serve as reviewers for national and international research councils and journals and have been invited as keynote speakers.

There is a general gender discrepancy at the Unit, ranging from formal positions to the distribution of external research funding. As a consequence of this, men are over-represented in many of the areas that render academic credibility. Here, it is important to work towards greater equality. The Unit mentions a strive toward a more even distribution of research funding in order to benefit less privileged staff. Another strategy could be to actively create opportunities for less privileged staff to take part in activities that render both individual and institutional credibility.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

The Unit makes significant contributions to a number of research fields relevant to the research groups. Furthermore, they serve as editors and reviewers for a large number of journals and publications.

Here one could add that Media and Communication Studies as a discipline consist of many subfields, both nationally and internationally. The Unit occupies a well-established position and contributes to the national, as well as international, field of Media and Communication Studies.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

The Unit works together with stakeholders across several different areas, from corporate partners to the public sector and news outlets. It is worth noting that outreach may take various shapes. Some are more easily recognized, for example collaborative projects with corporate partners or public bodies such as Swedish Civil Defence and Resilience Agency. The Unit also points toward a set of different stakeholders and knowledge transfer to non-academic audiences.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The Unit works systematically with questions of regulations, ethics and sustainable practice, both within the department and by participating in university-wide initiatives.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The Unit has established itself within two of the strategic research platforms at the university, *Food and Health* and *Crisis and Transformation,* and have benefitted from university wide efforts for strategic research support.

However, as a result of changes in university-wide research funding, the Unit has lost one faculty-funded doctoral student, leaving them with only three funded students. Given the size of the department, this makes the Unit vulnerable in several ways. Primarily by jeopardizing a sustained research culture among doctoral students. Second, if doctoral students become a too-scarce "resource," there is a risk of conflicts related to the distribution of doctoral students between research groups and potential supervisors. Finally, doctoral students are crucial to any teaching and research environment in that they often bring new perspectives and contribute to acacemic reproduction.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

The Unit has engaged in sustained and systematic efforts to use the feedback from ORU2020, while some areas remain to be addressed. Among the recommendations within the Unit's own mandate was the need to strengthen the MISC group, which has been addressed by recruitment as well as the promotion of a female docent. The SCOM group have widened their research areas, and team leaders in each research group have been more active in developing research themes. Some initiatives, such as co-authoring and publishing strategies have been developed, while not necessarily as a result of an explicit strategy.

Areas that remain to be developed further include addressing the gender gap, development of a strategic research plan, and strategies for research dissemination and involvement of stakeholders. Similarly, the Unit mentions joint projects (across research groups) and large-scale research programs in the self-assesment as well as during the on-site meeting, but work remains to be done in these areas as well. The Unit has worked towards all these goals but recognize the need for continued efforts.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The Unit has formulated an ambitious vision statement. It covers four main areas, from developing the research culture at the department, profiling the department's research and increasing the external funding, to working more systematically with research dissemination. These priorities are, based on the visit and interviews, anchored within the department, and addressing them at three different levels (individual, research group, department) will increase chances of realizing these priorities.

It is notable that the vision is limited to what can be described as internal factors or processes. The vision statement and operalizations thereof are directed in their entirety towards actions of the Unit, and could be expanded to involve outside actors in order to fulfill the vision. Such actors could be other parts of Örebro University, but also collaboration with national and international partners or stakeholders. Such collaborations already exist but could be highlighted as part of the vision statement.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The Unit presents a plan that is detailed, focused and realistic. Each of the areas identified in the vision is followed up and operationalized by two to five concrete tasks.

The Unit identifies the need to improve the seminar culture at the department. A well-functioning seminar culture is crucial in order to sustain a creative and innovative research environment. As noted, attendance and engagement may wane under everyday demands. The plan to introduce a less formal "side-seminar" is promising and could potentially lower the threshold for participation and discussion. The Higher seminar will remain important still, and the Unit should make sure to organize it in such a way that it is relevant to each of the three research groups and faculty should be encouraged to participate in seminars even if not of immediate interest to their own research.

The Unit notes that external funding is unevenly distributed and point to a particular need to attract external funding for PhD positions that have been declining.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

Three areas stand out as the most pressing in terms of future needs for improvement: *doctoral education and academic reproduction*, *structural differences between teaching and research*, and *equal opportunities and equality*. The below points tries to suggest strategies that can be employed by the Unit themselves, or at the University wide level by the Faculty board and University management.

1. *Strengthen the PhD programme*. The Unit has suggested a number of actions to recruit more PhD students, primarily by projects and external funding. The Unit may extend this ambition and develop applications for larger grants, such as the Swedish Research Foundation's *Doctoral programme grant within Humanities and Social Sciences*. While the Unit has noted the risk of a diminishing doctoral education, the plan and the vision limits itself to actions taken by members of the department. The issue is important enough for the Unit to consider engaging the faculty and university leadership in order to gain support.

2. *Improve the research culture*. The impression is that the Unit is somewhat strained (previously understaffed, now by financial constraints), and efforts to develop and consolidate the seminar culture are crucial. The Unit already recognizes this and are about to establish measures to counter the risk of low attendance and engagement. These efforts are promising and should be supported. A thriving seminar culture is difficult to induce top-down, but the Unit should (and does) encourage participation in seminars even beyond one's immediate research interests.

3. *Increase visibility and recognition*. The Unit is engaged in a number of university-wide research initiatives and included in the research profile Food *and Health*. However, the Unit could likely benefit from becoming more visible at the university. Media and Communication Studies could arguably contribute to the university wide *AI, Robotics and Cybersecurity Center,* not least through the emerging research environment *Geopolitics and Media*. The department is also well positioned to attract "high stakes" external funding and is encouraged to continue working with the Grants office.

4. *Balancing teaching and research to promote equal opportunity*. A reoccurring theme in the self-evaluation and during the interview was the risk of imbalance between teaching and research. These structural differences often reproduce gender imbalances. Over time this may develop into, and to some extent already has, a division of labour between staff that teach and staff that research. Some measures can be taken at the department itself: working actively to distribute resources more evenly by making strategic decisions when applying for external funding; or making sure that "academic household work" is distributed equally between senior and junior staff. Other measures may have to be taken by the Faculty or University Management, for instance by reconsidering the ban on promotion to full professor and/or changing the allocated research time in order to allow for a more equal distribution.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

Media and Communication Studies is an internationally oriented department that also plays an important role in the national research field. The Unit actively works towards attracting external research funding, and its publication record is matching the allocated research time. The self-assessment is reflective and identifies key areas for development with an ambitious vision and detailed plan. The overall impression is that the Unit is working hard to address difficult problems such as a diminishing doctoral education, gender imbalance and structural differences between those who teach and those who research. The impression is also that the Unit has been dedicated to the task of using the self-assessment as a tool in the process of developing and improving the research at the department. In doing so, they are also very well positioned to take advantage of any university or faculty initiatives that are implemented in order to support research environments.

ORU2025 Review Report: Musicology

Review Team: Kai Arne Hansen (main reviewer), Michael Bom Frøst and Eva Lindgren

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The unit is organized as an interdisciplinary research environment that encompasses several sub-fields (e.g., music education, ethnomusicology, sociology of music), which allows for dialogue and mutual exchange across disciplines and thematic areas while maintaining a clear research focus. The academic staff includes two professors, one docent, and five senior lecturers, as well as one post-doctoral researcher and a stipendium-financed researcher (both on fixed-term contracts ending in 2026 or 2027). Teaching spans all levels and encompasses both musicology and other music subjects. The unit hosts a doctoral programme, with four doctoral students enrolled at the time of reporting. Two of the doctoral students are shared with other research environments, which further strengthens interdisciplinarity. There are two research groups that specialize in different sub-areas of music research, which is appropriate given the breadth and complexity of the research fields in question. The unit appears to actively strive for balance in valuing academic freedom and individuals' expertise, on the one hand, and building a close-knit and supportive research community through shared research interests and priorities, on the other. Overall, the unit appears well-organized and in a good position to promote quality research.

1.2 Are the main research areas appropriate for the unit and its development?

The two research groups, ACCLAIM and MOVE, complement each other well, with the former focusing on the cultural and social dimensions of music and music education while the latter addresses individuals' musical experiences and artistic creativity. Much of the unit's research is developed around the research profile "Music, Power, and Inequity" (MPI), which has been a strategic focus area funded through the Faculty of Humanities and Social Sciences' research environment consolidation initiative. The MPI focus area is well-aligned with both contemporary priorities in international music research and current societal developments and needs. The MPI initiative has strengthened international networks, led to new collaborations, and provided a clearer thematic focus for research, even as retaining academic freedom remains a priority. The MPI profile has reportedly also ensured closer collaboration among staff (e.g., resulting in a cultural shift from writing individual grant applications to making this more of a collective effort). In sum, the research areas in the unit ensure both close collaboration among academic staff and a clear collective research focus while making room for individual researchers to pursue their own interests and expertise.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

Please provide specific comments on the unit's research funding, publications and productivity.

The unit demonstrates a thoughtful approach to creating an open and collaborative academic culture, with a clear emphasis on collegiality, collective responsibility, and equal opportunities. Regular seminars ensure critical dialogue between scholars at different career stages and with varying research specializations, and the unit documents productive collaboration in terms of both co-authored publications and collaborative project development. Notably, professors and senior researchers actively support early- and mid-career scholars through regular seminars and ongoing collaborative processes.

Senior lecturers without external funding reportedly have only 15% research time/competence development time, which is lower than what appears common for other units at Örebro University (20%). Given that senior lecturers make up the largest group of permanent academic staff, this poses challenges for the development and long-term sustainability of an ambitious research environment. Leadership roles are distributed among academic staff, which ensures leaders' familiarity with the local research culture, internal processes, and staff needs but might exacerbate challenges related to time management and work pressure – especially for senior lecturers whose research time is already restricted.

Researchers within the unit participate in a range of national and international networks. Collaboration with external partners is usually initiated by individual researchers rather than through a more collective strategy, which ensures flexibility in collaborations but potentially risks the fragmentation of research across smaller projects. The unit mitigates this challenge through collegial fora and seminars where ongoing collaborations are discussed.

The unit has a diversified funding strategy that combines major national funders, smaller foundations, and internal faculty support. External funding fluctuates, covering 4-17% of total funding in recent years. Major international grant applications (e.g., ERC) are at the planning stage. Grant-writing is supported through seminars and collegial collaboration and feedback. The unit's strategy going forward involves further diversifying its funding portfolio, finding new funding sources outside of the major national and international funding schemes while seeking to become more competitive in these arenas.

Productivity appears high and publications have increased significantly compared to the previous assessment period. The unit's publications span a range of themes across sub-fields including critical musicology, music education, music and society, and music and gender. There is clear evidence of research collaboration among researchers in certain areas, with some potential to develop broader and closer collaboration among staff. This could help ensure a more collective approach to publication, which could alleviate some of the pressures placed on individual researchers. According to the unit's self-assessment, closer research collaboration is already a priority and concrete plans are in place to ensure this (seminars, planned collaboration in grant applications etc.).

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

Publications generally appear in renowned journals and anthologies, and several researchers have edited journal issues and/or books. The research groups work actively to ensure quality in research through feedback on work-in-progress and discussion of ideas and ongoing projects in regular seminars, and researchers are specifically encouraged to publish open access. The strategic MPI research profile in recent years appears to have had positive effects on consolidating the research environment, strengthening the unit's credibility and impact by raising its profile in this area. External funding secured from several different sources also speaks to the quality and credibility of research, and the unit is committed to diversifying its funding portfolio through increased collaboration and a clearer focus on international funding schemes. Procedures are in place to ensure that early-career researchers and doctoral students are supported in developing their research profiles and included in collegium meetings and discussion fora, ensuring that early-career perspectives inform strategic discussions and decision-making.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

The unit demonstrates significant contributions to interdisciplinary music research. Researchers publish in leading national and international channels, and a key strength concerns the unit's citation numbers: publications are cited on average more often than other articles in the field of musicology, with some publications cited more than twice as often than the global average. This speaks to both the credibility and impact of the unit's research. The international visibility and impact of the research environment is also demonstrated through a high number of invitations for lectures and keynote speeches. Several researchers are editors or editorial board members of international peer-reviewed journals, and they have also been trusted with expert assignments in quality assurance in higher education, research assessment, promotion assessment, and more. Researchers are also active peer reviewers, participate in the evaluation of PhD theses and doctoral defenses both nationally and internationally, serve on the board of Swedish research committees and chair international scholarly societies. Overall, the unit appears to have earned a high level of trust as scholars and experts and has considerable impact on the research field in Sweden and beyond.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

Societal impact is ensured through widespread participation at various "popular science" events and cultural events, as well as through regular contributions to public debates (e.g., interviews in newspapers and radio). The unit's research has also been cited in the media. Researchers have served as experts for governmental agencies and institutions, for example influencing curriculum

development and advising on music teacher-education programs. Researchers have also contributed to public events in collaboration with volunteer associations in the field of gender equality in musical life, and the unit disseminates research through regular updates in social media and on its website. A potential area of improvement concerns a developing a more deliberate strategy to identify and engage with stakeholders outside of academia: it is evident that the unit's research has potential to benefit local communities, practitioners and NGOs, influence policy, and shape cultural conversations, but the self-assessment is not entirely clear on how or whether efforts to ensure this are planned and coordinated or left up to individual researchers. Developing a clearer strategy for societal impact could be beneficial.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The unit demonstrates a thoughtful approach to research ethics, and ethical perspectives are integrated in its practices of research, supervision, and education. A strong commitment to formal requirements and guidelines is shown through clear procedures for ethical approval, and a supportive collegial culture surrounding ethical dilemmas and challenges is developed through research seminars, supervision fora (*handledarkollegium*), and transparency in research processes. Doctoral students develop relevant ethical knowledge through mandatory coursework, supervision, and participation in seminars and collegial fora. The unit's emphasis on collegial dialogue and intentional integration of ethics across all stages of research are notable strengths, and sustainability is ensured through a research culture that centers transparency and shared responsibility for upholding ethical standards. It is suggested by the unit that institutional learning and long-term sustainability could be further strengthened through systematic documentation and follow-up of ethical discussions across different research projects, and the reviewers support this.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The faculty support for research environment consolidation has allowed for closer collaboration and increased quality in research, given that the MPI research profile has made it possible to boost collegial exchange, expand networks, and develop new projects and grant applications. The unit has also benefited from faculty funding for two junior researcher positions (2023) and additional research time for senior lecturers (2023-2025), which led to the development of grant applications, a stipend-financed postdoctoral position, and an increase in publications. The self-assessment notes a lack of overlap between the unit's research and Örebro University's main strategic profile areas. During the campus visits in April 2026, the reviewers were informed that the strategic areas

identified in the self-assessment have since been abandoned. The unit is positive about the opportunity to contribute to shaping new strategic profiles at the university/the faculty, but it is noted that meaningful involvement from research environments requires interdisciplinary discussion fora and a bottom-up dimension to strategy development.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

There were five main recommendations raised by external reviewers during ORU2020: (1) *finding ways to balance teaching load in comparison to research time*; (2) *working toward a strategic thematic focus*; (3) *developing international networks*; (4) *working to secure funding in collaboration with junior researchers*; and (5) *working with other forms of communication and outreach.* The unit demonstrates active engagement with all of the above points and have succeeded well with points 2-5. The faculty-funded research profile has been especially significant with regard to points 2-4, ensuring a clear research profile for the broader milieu and creating new opportunities for collaboration and networking. Point 1 remains a considerable challenge. Senior lecturers bear the brunt of the burden when it comes to teaching, something that is exacerbated by them having only 15% competence development time. The issue needs to be addressed in the upcoming evaluation period.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The vision clearly builds on the unit's existing strengths and the MPI focus, and the emphasis is on intellectual refinement, increased visibility and impact, and strengthened collaboration and dialogue. The vision entwines societal relevance and theoretical development, and it shows holistic thinking concerning research objectives and results (e.g., increased publications and grant applications, increased participation in conferences, greater public outreach). The vision acknowledges that the unit is small and has limited potential for expansion in terms of personnel but nonetheless asserts considerable potential for intellectual and strategic growth. Overall, the vision appears ambitious but realistic. The reviewers note that it is worth reflecting carefully about how increased effort in certain areas might affect other activities. Expansion and development cannot be indefinite when it is clearly constrained by factors such as funding, time, and sustainability.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The plan is well-aligned with the vision, with concrete measures and strategies that complement each other well. Building on the positive effects of the faculty-funded research consolidation around the MPI profile appears especially fruitful. Even though faculty funding for the MPI profile ends in June 2026, concrete plans are in place to further strengthen the unit's work in this area (e.g., the development of new workshops and seminars, a potential ERC grant application, organizing a national symposium). The recruitment strategy appears sound, and we commend the plan to recruit postdoctoral researchers through external funding (e.g., Marie Curie fellowships). The plan is extensive, and we would recommend that the unit reflects on and clarifies the level of priority ascribed to each of the points and sub-points. A clearer statement about the importance and priority of the different objectives can help the unit plan and carry out necessary steps in practice.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

Based on our assessment, the reviewers have the following recommendations:

Address imbalance between teaching load and research time for senior lecturers

The reviewers are puzzled by the fact that senior lecturers only have 15% research time/competence development time (compared to 20% in other units). Senior lecturers describe high teaching loads and significant work pressure, to the extent that even utilizing the allocated 15% competence development time is often difficult in practice. The situation affects the productivity, stability, and sustainability of the research environment as a whole, placing unreasonable pressure on senior lecturers especially. The small size of the research environment makes it especially vulnerable to these challenges. The reviewers recommend that the situation is addressed promptly, and we are of the opinion that the responsibility of ensuring that senior lecturers are awarded the same amount of competence development time as in other units should be placed at the faculty level and not on individual researchers or the unit itself.

Build on the positive effects of the MPI profile

The unit documents considerable positive effects from the faculty-funded research consolidation around the MPI research profile, and we recommend that the unit works strategically to maintain the collaborative practices, critical dialogues, and networking initiatives surrounding this area of research. In particular, the MPI profile should provide a fruitful basis for developing new grant applications and increasing the unit's external funding.

Closer research collaboration

There is some potential for even closer research collaboration in the unit, specifically when it comes to publications, project development, and grant applications. The plans to build on the MPI research profile will ensure this to some extent, but collaboration should also be considered in other areas. In particular, we would encourage a more active approach to collaboration across career stages. We

acknowledge that the unit has made progress in this area since the previous evaluation period but nonetheless recommend a continued focus on the issue.

Consider developing a strategy for societal impact

It is evident that the unit's research has potential to benefit local communities, practitioners, and NGOs, influence policy, and shape cultural conversations, but there does not appear to be a collective approach or strategy in place when it comes to dialogue and collaboration with non-academic stakeholders. Developing a clearer strategy for societal impact could be beneficial to the unit's work in this area.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

The unit represents a small but well-organized and ambitious research environment. There is a clear research profile, a supportive research culture, and a considered approach to securing external funding (even though external funding fluctuates). The unit appears very productive relative to its size, and the credibility, quality, and impact of research is high. Small research environments are vulnerable, and the unit has certain challenges related to resources and work pressure. The unit's vision and plan appear ambitious yet realistic. Overall, there is clear potential for the unit to carve out a clear niche within their research field and strengthen their position as a highly trusted authority on issues related to music's many functions and meanings in culture and society.

ORU2025 Review Report: Education

Review team: Kirsten Sivesind (main evaluator), Çiğdem Haser, Lars Lundgren, and Jill Manthorpe

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The unit and its four research environments stand out as an active and well-established research community involving senior and junior researchers, as well as academic staff engaged in doctoral education.

The staff comprises 28 researchers holding doctoral degrees (18 women and 10 men) and 12 doctoral candidates (7 women and 5 men). The Head of Subject is the formal leader but has delegated significant responsibilities to five professors. Research is guided by a representative Research Commission including professors, docents, and doctoral candidates, reflecting a collegial decision-making model. Leadership appears well structured, with process evaluations informing two strategic plans since ORU 2020.

Key challenges:

There is a structural gender imbalance across academic positions and access to research time. Professors, who are mostly men, have significantly more research allocation than lecturers and associate professors, where women constitute the majority, affecting participation, career development, and perceptions of fairness.

The unit's staffing profile is closely linked to teacher education programs, making it vulnerable to anticipated declines in student teacher enrolment. This raises concerns about long-term sustainability, with indirect implications for research conditions through the competence time allocated to lecturers and associate professors.

In addition, increasing external pressures to prioritize cognitive sciences in teacher education pose a strategic challenge to the unit's academic profile, with potential implications for research. Moreover, the absence of a master's program in education constrains internal doctoral recruitment and weakens coherence in training pathways, thereby also shaping research conditions.

Finally, governance structures include limited representation from external stakeholders, potentially constraining the integration of broader societal perspectives.

While these issues stem from systemic conditions that are not easily altered, they require proactive strategic foresight, inclusive processes, and clear prioritization to address recurring challenges and perceived conflicts of interest in reconciling education and research.

1.2 Are the main research areas appropriate for the unit and its development?

The unit conducts high-quality research with a clear and distinctive profile of strong relevance to the educational sciences. The breadth of ongoing activities and the demonstrated commitment to interdisciplinary and transdisciplinary collaboration, both with other units at the Örebro University and with external partners, further substantiate this assessment.

The seven research areas (p. 5) address distinct research fields with partly overlapping topics. Together, they cover historical, empirical, and philosophical research in education, with clear relevance to teacher and special education, emphasizing both educational and moral dimensions and using cross-disciplinary approaches to address current crises and problems.

Comments:

Balancing thematic breadth with sufficient depth across seven research areas may be challenging, though the organization into four research environments appears appropriate and strategically justified. At the same time, there is scope to further articulate and systematize cross-cutting themes, and to consolidate research areas in ways that could inspire new directions for future development and research. This also implies to actively approach external policy pressures that challenge the unit's academic research profile.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

The unit demonstrates a clear and well-developed awareness of relevant conditions related to international recruitment and the strengthening of internationalization (p. 6).

The identification of the departure of four docents as creating gaps in expertise and research capacity, along with the acknowledgement of limited ethnic diversity and gender imbalance at the professorial level, reflects a insightful and forward-looking understanding of structural challenges. These could only be addressed through long-term capacity-building efforts.

The range of activities supporting career development and competence building is relevant and well structured, with a clear division of tasks between the Higher Seminar and research environments activities. Mentoring, annual research dialogues, methodological and grant-writing seminars, and access to internal and external funding reflect clearly identified priorities.

A collegial climate that values contributions from both junior and senior researchers, supports research quality, complemented by steering group functions that contribute to career development. The unit's emphasis on conference participation, research visits, and active engagement in international networks is a major strength (p. 9).

Comments:

While the collective orientation and rotating leadership model support shared responsibility, limited attention to external societal representation may constrain engagement with external partners and reduce societal relevance. Similarly, although gender and ethnic imbalances are acknowledged, their implications are not fully developed, particularly regarding how diversity informs collaboration and connections with stakeholders.

Reflection on collaboration between research environments is also somewhat limited, with three groups appearing more closely aligned and a fourth more loosely connected, suggesting uneven integration.

In addition, subject didactical research receives limited attention as a research topic, as it is largely situated in other faculties, and integrated in mainly, practical competence work, related to teacher education, which may restrict opportunities for intra-institutional collaboration in research.

Finally, while the emphasis on long-term research and participation in the Swedish Research Council-funded research school represents a clear strength, further development of such initiatives, including a stronger focus on generic research capacities in doctoral education, could enhance research quality, methodological capacity, and intergenerational exchange.

Please provide specific comments on the unit's research funding, publications and productivity.

The unit reports a solid funding model combining internal and external resources, with external funding rising to SEK 10.5 million in 2024 (39% of the total budget, up from 28% in 2020). Most external funding is from the Swedish Research Council (around 80%), with minor contributions from municipalities (8%). Other sources remain low and less stable, with limited international funding. Internal funds are used strategically to initiate projects and strengthen competitiveness through proposal review, grant development, and writing support. The unit also acknowledges the need to increase the share of senior researchers with international backgrounds and to improve gender and ethnic balance, particularly at professorial levels.

Comments:

Grant applications are concentrated among a small group of researchers, contributing to uneven research capacity. Our interviews indicated unequal prioritization of lecturers and docents in these activities. The unit's funding remains largely national, suggesting a need to expand engagement with European calls. While recruiting doctoral candidates through appointing lecturers without PhDs is appropriate, this pathway is limited as most already hold a PhD, indicating a greater need for postdoctoral opportunities.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

Strengths

The research areas are interconnected through interdisciplinary collaboration within and beyond Örebro University. The unit demonstrates strong and sustained scholarly output in internationally recognized outlets, with high citation coverage and stable impact, alongside increased Open Access publishing that enhances accessibility. A growing share of publications in high-impact journals, supported by international rankings, seems to strengthen the unit's research credibility.

A diverse publication profile, including books and conference contributions, reflects the field's breadth and supports varied research traditions and collective, scholarly work. A strategic emphasis on quality and long-term research is evident, supported by an intergenerational structure that enables continuity and knowledge transfer.

Around one third of WoS-indexed articles are co-authored by both female and male researchers, and co-authorship is prioritized by most professors, including international partners. Publications in Swedish further sustain engagement with national audiences and reinforce local relevance.

Weaknesses

Total publication volume has declined, which, although partly strategic, may affect overall capacity, alongside variability in international collaboration. Female researchers contribute substantially to WoS-indexed output despite limited research time, achieving similar overall outputs as men, but with less even distribution at the individual level.

Quality assurance is less consistent for DiVA publications, particularly reports and book chapters. While only a limited number of academic books were produced, these remain substantial contributions to the research field.

There is potential to broaden the pool of active WoS-publishing researchers. The environment supports continuity through an intergenerational profile, but gender imbalance remains a concern for long-term sustainability.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

Strengths

The unit makes a solid and credible contribution to the field through sustained engagement in key scholarly debates and recognized research arenas. It demonstrates strong visibility across diverse areas, including curriculum, general didactics, sustainability, democracy and human rights, educational policy, educational history, and special education. It also addresses contemporary societal challenges through philosophically, psychologically, and historically informed perspectives relevant to academia and practice.

Bibliometric indicators show broad uptake, with high citation rates and stable impact, while international engagement through networks, collaborations, joint publications, and editorial roles further supports visibility and scholarly exchange.

Weaknesses

Citation impact of WoS-indexed articles is stable but remains slightly below international benchmarks, and the decline in publication volume raises concerns about long-term output and capacity. While practitioner-oriented publications in Swedish are important for outreach, they should be balanced with sustained peer-reviewed international publishing, requiring a clearer strategic focus. In addition, strengthening recruitment at senior levels, such as associate professors, appears necessary to sustain and further develop scholarly impact.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

Strengths

The unit demonstrates strong societal engagement through collaboration with regional preschools and schools via RUC, as well as with municipalities and organizations such as UNICEF Sweden, supporting school-relevant research, subject didactic networks, and practitioner-oriented seminars. Researchers contribute to informed public debate through active engagement in media, opinion pieces, blogs, and social media. A strong record of textbook production for teacher education, together with involvement in ASSET Sweden, supports knowledge dissemination and the development of research-informed teaching materials. Overall, these activities strengthen the connections between research, practice, and public discourse.

Weaknesses

Increasing demands for evidence-based policymaking are not fully matched by explicit reflection on how different forms of evidence are weighted and communicated. While the research environments possess relevant expertise, there is limited clarification of how quantitative, qualitative, historical, and theoretical evidence are valued and translated in policy-oriented contexts. Greater reflexivity and transparency in navigating between analytical scholarship, advisory roles, and normative positions would strengthen the credibility and independence of the unit's societal and critical engagement.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

Strengths

The unit has well-established mechanisms for ensuring research ethics and regulatory compliance, including training, dedicated support for data management and ethics, and systematic use of formal review procedures. Ethical responsibility is treated as an integral and ongoing aspect of research practice, reinforced through doctoral training and continuous reflection within research environments.

Weaknesses

Research data management remains a challenge, as secure storage and long-term archiving, although improved, are still difficult to manage in practice. The growing use of generative AI introduces additional challenges, given the lack of clear norms and guidelines, requiring coordinated efforts to ensure responsible application in research.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The unit offers a balanced and reflective assessment of how university and faculty initiatives have shaped the UoA, highlighting both supportive structures and funding constraints affecting its research capacity.

Positive

The unit has benefited from university- and faculty-level initiatives, including a centrally funded associate senior lecturer position (2019–2023) and faculty-managed funding for teacher education research that supported two doctoral students.

Faculty support schemes between 2020 and 2025 enabled ten senior lecturers to increase their research time by approximately 11–12% for one year each, and one research environment received targeted faculty environment funding of 200,000 SEK annually for three years.

Negative

Faculty funding policies have had negative effects on the unit, as prioritization of smaller disciplines has resulted in reduced baseline funding for larger units, including Education.

The equal allocation of research time funding across disciplines regardless of size has limited the unit's capacity to support research activities in proportion to its scale.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

The ORU2020 evaluation identified several challenges that remain relevant, but the current report shows that substantial and sustained efforts have been made to address them and strengthen the research environment. In response, the unit developed a five-year strategy covering research, doctoral education, collaboration, and the research–education nexus, with a mid-term evaluation in 2025 providing a basis for consolidating effective practices and addressing remaining gaps. Measures to improve research time allocation have been introduced, though tensions between teaching and research persist, and initiatives to strengthen external funding and balance publication patterns have been implemented across the research environments.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The development plan outlines a clear vision emphasizing core values, research excellence, and externally funded research with societal relevance. However, its reliance on traditional indicators such as recognition and citation impact may limit its pluralistic ambitions and would benefit from complementary measures. This is particularly relevant for doctoral candidates, who are expected to develop as independent and critical researchers within diverse and less consolidated fields, making clearer links between goals and actual research conditions important.

While the plan appropriately highlights collaboration, operational targets, and the research–education nexus, including partnerships with public institutions, it gives limited attention to potential tensions related to accountability and academic autonomy. Finally, ambitions for a sustainable personnel structure appear high, especially expectations of strong performance in both teaching and research, which may challenge long-term sustainability without further differentiation or support.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward? Is it realistic in terms of resources and organisation? Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The development plan is structured around four strategic priorities for the next five years, focusing on strengthening research quality and publication, enhancing leadership and the research environment, concentrating collaboration with strategic partners, and securing protected research time. The strategies are coherent and logically sequenced, drawing on prior evaluations and integrating both substantive and organizational dimensions.

Overall, the plan is clear, concrete, and forward-looking. However, its implementation may be constrained by systemic conditions, including funding structures and the demands of teaching. An overabundance of activities risks diverting attention from core research tasks, underscoring the importance of protected research time.

Although collaboration within ULF and RUC is emphasized, its implications for academic autonomy and long-term capacity remain underexplored; broader engagement with civil society actors could strengthen societal relevance while maintaining independence.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

Address the uneven distribution of teaching, administrative responsibilities, and academic service tasks to ensure equitable access to research time, particularly for female staff, supported by transparent workload models and protected competence development time.

Reduce structural disparities in research capacity across staff categories and strengthen career pathways, including progression to docent and professor levels, if possible, to support retention and long-term development.

Strengthening the integration of doctoral candidates into research projects, maintain open recruitment, and broaden doctoral training to include generic research competence.

Clarify and consolidate the structure of research areas, including their rationale, possible integration, and how they are enacted and sustained.

Maintain a balance between measurable performance and broader forms of knowledge production and complement bibliometric indicators with open-ended queries and wider criteria for assessing research.

Address uneven patterns of individual research output, including gender-related differences, and expand the pool of active researchers.

Further develop the research profile by strengthening attention to non-state actors, market dynamics, and comparative perspectives in education.

Develop proactive strategies to respond to external pressures, including declining student numbers and shifting policy priorities, while safeguarding academic autonomy and long-term research capacity.

Address structural limitations in doctoral recruitment and academic coherence by considering the implications of the absence of a master's programme in education.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

Education is characterized by paradoxes and dilemmas requiring moral, critical, and reflexive analysis of diverse research sources. However, some measures in the self-assessment report do not fully reflect a second-order perspective on what matters most in academic work in times of multiple societal crises.

The unit demonstrates a strong collegial research environment with solid organisational structures, collaborative traditions, and clear awareness of its strengths and challenges. Its research addresses timely and globally relevant issues, supported by environments that foster exchange, supervision, and quality development, with a clear emphasis on research quality and societal relevance.

At the same time, systemic challenges constrain the unit's ability to fully realise its ambitions. These include imbalances between teaching and research roles, gendered labour distributions, diversity issues, limited integration of junior scholars, constrained career pathways, and increasing external policy pressures.

While many of these lie beyond the unit's control, they affect sustainability, competitiveness, and perceptions of fairness. Addressing them requires systemic priorities and commitments at both unit and institutional levels to safeguard quality, inclusion and long-term development of education research.

ORU2025 Review Report: Psychology

Review team: 3 Karin Brocki (main reviewer), Ruth Mannelqvist, Katarina Eckerberg and Janne Kivivuori.

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The Psychology unit's research is mainly organized within two research environments, the Center for Health and Medical Psychology (CHAMP) and the Center for Lifespan Developmental Psychology (LEADER). Some researchers from the unit are active in a third environment, Center for Environmental and Sustainability Social Science (CESSS), which is more interdisciplinary.

The Psychology UoA shows several strong structural features that support high-quality research. There is seminar series at both unit and research-group level, and regular project meetings create continuity in scientific exchange. Junior researchers describe being encouraged to build international networks, travel abroad, and engage with other disciplines, which strengthens the research culture. The introduction programme and the new mentorship structure are positive developments that contribute to the integration and support of new researchers and PhD students.

However, both junior and senior staff point to challenges related to the small size of the UoA and the difficulty of achieving critical mass in sub-disciplines. Attendance at the department varies (typically 2–3 days/week), and the lack of clear institutional expectations from the university leadership affects informal academic exchange.

Overall, the environment is functional and supportive, but its capacity for high-quality research would benefit from clearer institutional frameworks and a continued strengthening of everyday academic interaction.

1.2 Are the main research areas appropriate for the unit and its development?

The Psychology unit encompasses research across a wide range of psychological subfields, focusing on psychological processes in relation to mental and physical health, adaptation, well-being and developmental processes. According to the self-assessment, the research is intradisciplinary and employs a multi-method approach, integrating experimental, longitudinal, correlational, and qualitative methodologies across laboratory, clinical, educational, and occupational contexts. Nonetheless, the main emphasis lies in health and clinical psychology as well as developmental psychology. The unit's focus on health, clinical, and developmental psychology is well suited to its profile and has societal relevance. The research demonstrates methodological breadth and potential for

interdisciplinary collaboration. However, given the unit's small size, sustaining links across thematic areas and external collaborators will continue to be important to strengthen its development and reach.

1.3 Please comment on the unit's reflective analysis of their environment.

Given its small size, the unit has built a relatively strong research environment, demonstrated by its success in attracting and retaining highly competent national and international researchers. These recruitments have strengthened the unit's expertise and contributed to high-quality output and research productivity. The self-assessment notes that language requirements in teaching—particularly the predominance of Swedish—pose a challenge in recruitment, potentially limiting the pool of international applicants. However, this is a structural feature of Swedish higher education rather than a university-specific issue, and the unit's recognition of this context shows awareness of the broader conditions shaping recruitment.

The unit's leadership appears to function effectively, with the head of unit and the head of subject serving as the central leadership figures. A key weakness identified in the self-assessment concerns the scope of the head of subject's responsibilities, which are described as highly complex and not commensurate with the limited allocation of time for the role—currently set at only 20 percent, which seems insufficient.

A persistent structural challenge, as identified in the self-assessment, concerns the balance between research, teaching, and administration. Increasing administrative demands have progressively reduced the time available for research. Nevertheless, targeted measures have been introduced to mitigate this effect, including the reallocation of funds to extend research time for senior lecturers from approximately 20% to 30%. This development represents a positive step toward strengthening the research capacity of the UoA.

A further structural limitation, that was noted in the on-site interviews, is the absence of an internal promotion pathway to professor at the university. This risks losing promising early-career researchers, including those in BUL (Biträdande Universitetslektorat) positions, and may prompt senior staff with professorial competence to seek opportunities elsewhere. Addressing this would be important for long-term retention and capacity-building.

Another critical challenge relates to the limited number of PhD students (currently four) and the restricted opportunities for senior academic staff to engage in doctoral supervision. To address this, a prioritization strategy has been introduced, giving supervisory opportunities to staff members who have not yet supervised a PhD student to completion. Faculty-level funding is appreciated, but it is not sufficient to support long-term strategic initiatives. The limited amount available primarily covers ongoing activities rather than sustained developmental investments, and this shortfall affects the unit's ability to fund PhD positions and maintain a stable cohort of doctoral researchers over time. Securing funding for these positions remains a significant challenge. Additional institutional backing, including greater financial support from university leadership, would enhance competitiveness in

programmes such as Horizon and Marie Skłodowska-Curie Actions, which would allow for recruiting more PhD Students.

Interviews with senior staff indicate that recruitment of PhD students is often dependent on flexible and opportunistic funding strategies. Current practices include initially employing promising research assistants who can later transition into PhD positions when additional funding—often a combination of external grants and faculty resources—becomes available. Internal funding, while modest, is said to be decentralized in a way that allows departments to allocate resources strategically, including support for PhD students and initiatives that strengthen international engagement. Strategic internal funds, for example, have been used to enable lecturers' research development and to support international conference participation (8–10 staff members in the most recent year).

The unit holds seminars for all staff as well as more focused sessions within the environments. To strengthen cohesion, seminars are also held in connection with the unit meetings, which take place every six weeks during the spring and fall semesters and provide opportunities for everyone to meet. At the research-group level, groups meet regularly, usually at least once a month, and that structure works well.

The on-site interviews with the junior staff emphasize the importance of engaging beyond their immediate group to gain broader methodological input and foster wider academic discussions. Some researchers, particularly those working in health, take additional responsibility for organizing seminar topics. While many researchers concentrate on specialized areas, they view it as essential to broaden their networks, including through international visits, acknowledging that such networks take time to develop. Junior researchers also report regular exchanges with colleagues in other disciplines, such as sociology, and note that supervisors actively encourage them to build international connections and avoid becoming dependent on a single mentor. The on-site interview also indicate that new researchers are introduced to and supported in expanding their networks from an early stage.

While the research groups seem to function well, integration of clinically active consultants remains a challenge. These consultants contribute valuably to teaching but have limited participation in research activities. Although the unit has made efforts to involve them through seminars and shared initiatives, further are needed to strengthen their inclusion and fully utilize their professional expertise within the research environment. under constrained conditions, although long-term growth in PhD enrolment will likely require increased structural funding and more predictable resource allocation.

The UoA demonstrates a strong track record in securing external research funding from both national and international agencies, with external sources accounting for roughly 50% of all research income. EU applications have progressed far in competitive evaluation processes, including one ranked highly last year.

The UoA has maintained strong research productivity despite structural challenges, including a limited number of senior researchers and restricted research time. The publication record is both consistent and robust across the unit's research areas, with outputs frequently appearing in high-impact journals. Citation metrics are strong, and the CNCI has exceeded the global average in most years. International collaboration has also increased, with a noticeable rise in publications co-authored with international partners from 2021 onward.

These outcomes indicate that the unit's efforts to enhance research productivity have been effective, such as providing structured support for grant applications through workshops, fostering collaborative initiatives, and maintaining an environment that enables researchers at all career stages to succeed—.

2. QUALITY OF RESEARCH

2.1 Credibility.

The strong publication record, including articles in highly prestigious psychology journals, together with high impact metrics and citation counts, provides clear evidence of the high quality, credibility, and international competitiveness of the research produced by the unit.

Open Access publishing has expanded sharply, reaching approximately 90 percent in 2024. The university has an overarching policy supporting open science, and several practices—such as data-sharing upon request and preregistration—are well established within the unit. However, there are specific challenges related to the nature of the research. Much of the data involves sensitive patient or mental-health information, which limits the feasibility of fully open data sharing. While individual researchers follow guidelines for responsible sharing, the unit does not yet have a formal policy for publishing code. Implementing comprehensive open-science practices remain demanding due to the time and administrative effort required, even though many elements have become routine in daily research practice.

2.2 Contribution to the research field.

Strengths

A strong and consistent publication record, with outputs in prestigious psychology journals and citation metrics (including CNCI) above global averages, demonstrates significant scholarly impact.

Recognized expertise in developing innovative psychological and internet-based treatments, as well as research on youth adjustment, inter-ethnic relationships, and parenting interventions, contributes important knowledge to key areas of applied psychology.

Strong methodological competence underpins the quality and credibility of the unit’s research outputs.

Increasing international co-authorship strengthens global visibility and integration into international research networks.

High levels of Open Access publishing support broad dissemination and accessibility.

Effective internal structures—such as grant-application workshops, collaborative initiatives, and support for researchers at all career stages—enhance productivity and capacity-building within the field.

Weaknesses

Limited senior staffing and restricted research time constrain the unit’s potential to expand its influence further. In relation, the absence of an internal promotion pathway to professor limits career progression and poses a risk for retaining both promising early-career researchers and senior staff with professorial competence.

Challenges in fully implementing open-science practices, particularly concerning sensitive data and lack of formal policies on code sharing, limit transparency and broader research reuse.

Insufficient long-term internal funding hampers sustained strategic development, including maintaining a stable cohort of PhD students who are essential for long-term impact.

2.3 Contribution to society.

Given the applied nature of the UoA's research, the unit clearly contributes to society through work on treatments for chronic medical conditions, common mental-health problems, and early-life factors shaping healthy development—areas that directly inform policymakers and practitioners. The research is frequently cited and has recognized influence beyond academia, though a key challenge is to more systematically track, evaluate, and demonstrate long-term societal impact. This also raises the question of what university-level initiatives and funding opportunities exist at ORU to support and strengthen collaborative societal engagement projects, as expanded institutional support could further enhance the unit's societal contributions.

2.4 Regulations, ethics and sustainable practice.

The UoA works in a sustainable and responsible manner to ensure that research complies with relevant regulations and ethical standards. Given the nature of the research conducted, ethical approval is typically required, and ethical considerations are continuously discussed within the unit, including through regular seminars and ongoing supervision practices. Doctoral students receive mandatory training in research ethics, ensuring that they develop the necessary competencies to conduct ethically sound research. However, there is currently no dedicated course on Open Science for PhD students, which may become increasingly important as open-science requirements expand.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

University-, faculty- and school-level initiatives have had a clearly positive impact on the UoA. Faculty funding has strengthened research environments, provided research time for lecturers, supported doctoral students' conference participation, and enabled targeted subject-specific activities. Structured doctoral introductions and faculty-wide seminars have improved cohesion in doctoral education. University initiatives such as the BUL recruitment program, interdisciplinary centers,

research schools, and grant-writing support have further enhanced competence, collaboration, and long-term research capacity.

3.2 Initiatives after ORU2020

The unit's reflections show that feedback from ORU2020 has been actively and constructively implemented. Key measures include the introduction of an annual research report to improve transparency, communication, and strategic planning; and a strategic shift toward treating psychology as a unified research subject rather than separate environments. The unit has strengthened lecturer development through dedicated internal research time and has expanded opportunities for junior researchers through international visits funded by both the Unit and Faculty.

Doctoral education has been enhanced through a formal mentorship program, the introduction of a Deputy Head of Unit responsible for PhD training, and improved clarity regarding the use of internal research funds. Additionally, new websites for the main research environments (CHAMP and LEADER) have increased visibility and communication. Collectively, these actions demonstrate a clear and effective response to the ORU2020 recommendations.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

The five-year vision is realistic and provides a clear direction for the Unit's development. It builds on existing strengths—high-impact research, external funding success, and strong societal partnerships—and sets achievable goals for maintaining publication quality and securing competitive grants. The focus on intradisciplinary integration, lifespan-oriented research, and evidence-based interventions fits well with the Unit's expertise.

Given the strong presence of early-career researchers, the emphasis on leadership, mentoring, and career development is appropriate and feasible. Strengthening internal cohesion, especially across CHAMP and LEADER, is a timely and realistic priority. Continued collaboration with regional partners and expansion of international networks strategically valuable.

Overall, the vision is credible, actionable, and suitable as a guide for the coming five years.

4.2 The plan

The plan is realistic in terms of resources and organisation. The emphasis on mentoring, leadership development, and internal cohesion reflects an accurate understanding of the Unit's demographic structure, particularly the high proportion of early-career researchers. The proposed actions, such as strengthening intradisciplinary collaboration and maintaining partnerships with schools, municipalities, and healthcare providers, are feasible within current structures.

Areas of strength that could be further developed:

The ambition to integrate research across CHAMP and LEADER is strong; specifying concrete mechanisms (e.g., joint research applications, shared PhD courses, cross-environment project groups) would enhance operational clarity.

Plans for international networking could be expanded with explicit targets, such as recurring visits, co-authorships, or participation in large consortia.

The plan could benefit from more explicit prioritisation to ensure sustainability, especially given the workload pressure on early-career researchers.

While leadership and mentoring initiatives are highlighted, more detail on how senior researchers will be supported in these roles could strengthen implementation feasibility.

4.3 Recommendations

The Psychology Unit has established a strong foundation, and the following recommendations could further support its development over the coming years:

Strengthen internal cohesion with concrete structures.
Building on the ambition to integrate CHAMP and LEADER, the Unit would benefit from formal mechanisms that bring researchers together across environments. Joint seminar series, shared PhD-level courses, cross-environment project groups, and coordinated funding calls could help develop a clearer shared identity.

Expand and stabilise doctoral education.
Given the very limited number of PhD students, the Unit should work with faculty and university leadership to secure more predictable funding models for doctoral recruitment. Establishing multi-year commitments or co-funded doctoral positions would increase long-term stability and research capacity.

Strengthen support for senior researchers' leadership roles.
As the plan emphasises mentoring and leadership development for early-career staff, additional structural support for senior researchers is essential. This includes formal leadership training, clearer time allocations, and recognition systems. A significant structural limitation is the absence of an internal promotion pathway to professor at the university. This presents a strategic risk: promising early-career researchers, including those in BUL positions, may seek career progression elsewhere, and staff who already meet professorial criteria may be drawn to other institutions. Addressing this limitation—through university-wide policy development or complementary retention strategies—would strongly enhance the Unit's long-term research capacity, leadership continuity, and ability to retain talent.

Enhance internationalisation with clearer targets.
The Unit already has strong international potential; setting explicit benchmarks for international collaborations (e.g., co-authored publications, recurring visits, participation in large consortia) would make progress more measurable and support strategic planning.

Increase institutional support for applied societal collaborations.
The Unit contributes significantly to society, but more structured university-level funding and incentives for long-term societal partnerships would enable larger collaborative projects and clearer documentation of societal impact.

4. CONCLUDING REMARKS

In summary, the Psychology UoA demonstrates a strong and productive research environment with clear strengths in health, clinical, and developmental psychology. Despite operating under structural constraints related to size, staffing, and limited long-term resources, the unit has achieved a high level of scientific quality, international visibility, and societal relevance. The publication record is strong and consistent, with outputs in highly regarded journals, citation impact above global averages, and increasing international collaboration. The unit also demonstrates strong methodological competence and a supportive research culture, particularly through active seminar structures, collaborative initiatives, and support for junior researchers and international networking.

At the same time, several structural challenges limit the unit's long-term sustainability and development potential. These include the limited number of senior researchers and PhD students, restricted research time due to increasing administrative demands, and the absence of an internal promotion pathway to professor, which may affect recruitment and retention of talented researchers. In addition, the limited on-site presence of staff appears to reduce participation in seminars and informal academic exchange, which may weaken collegial interaction and the broader research environment over time. Addressing this issue may require clearer expectations and guidance from university leadership regarding workplace presence and engagement in shared academic activities.

The unit's research has clear societal relevance and contributes important knowledge in areas such as mental health, developmental processes, parenting interventions, and psychological treatments. Ethical standards are well integrated into the research culture, and open science practices are increasingly established, although further development of structured support in this area would strengthen future preparedness.

Overall, the Psychology UoA is a scientifically credible and well-functioning research environment that performs strongly relative to its size and resources. With continued strategic development and strengthened institutional support, the unit is well positioned to further enhance its research capacity, long-term sustainability, and international standing.

ORU2025 Review Report: Legal Science

Review team: Ruth Mannelqvist (main reviewer), Karin Brocki, Katarina Eckerberg and Janne Kivivuori.

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

Is the environment well organised to promote quality research?

The unit of legal science is formally organised as decided by the university, with a Head of unit (mostly responsible for education and teaching staff, except professors) and a Head of subject, who is, inter alia, responsible for doctoral studies, higher seminars, and chair of the Board of Supervisors. It is not entirely clear how the Head of unit and the Head of subject coordinate their responsibilities, nor how these align with the decision-making mandates of the Head of School (prefekt), the Dean and the Faculty Board. In particular, the division of roles and decision-making authority appears insufficiently defined. This lack of clarity risks weakening strategic dialogue and may hinder the efficient allocation of resources at the unit level.

The research is not in general organised into specific sub-units; instead, it is carried out within the framework of one shared research environment. But just recently the research environment "Law, Digitalisation and AI" was formally established, with the purpose to explore the interplay between law and technologies such as digitalisation and AI. There is also an established and well-functioning collaboration – primarily within doctoral education – with Karlstad University, Linköping University, and Gävle College (KÖL).

The unit has many doctoral students. A great effort has been done to strengthen doctoral education, with more emphasis on close reading and the review of manuscripts throughout the programme. However, based on the interviews, the level of physical presence among both doctoral students and senior researchers appears to be limited. And there is a lack of internal collegial processes for (senior) researchers, such as peer review of articles or grant application. This may reduce opportunities for continuous scholarly exchange, informal peer interaction, and the development of a stronger research culture.

Are the main research areas appropriate for the unit and its development?

The unit of legal science is relatively small, yet it carries responsibility for the law programme, which requires both professional and academic expertise. The teaching workload is substantial for many staff members.

Strong research areas within the unit include tax law, constitutional law, and international law. However, research activity is unevenly distributed across the unit, largely due to the concentration of internally funded research time among professors. This structure risks reinforcing already strong research areas, while limiting opportunities for associate professors and other staff to contribute to the development and diversification of the research profile.

1.3 Please comment on the unit's reflective analysis of their environment.

A large teaching commitment, increasingly extensive administrative duties, and limited staffing pose challenges. The division of responsibilities between the Head of unit and the Head of subject presents a challenge for the development and strengthening of research (and education), since it implies a separation between research-focused and teaching-focused staff. The workload for Head of research appears to be primarily related to administrative tasks. Overall discussions of research-strategic issues at the unit level ought to take place within the Board of Supervisors; however, as emerged from the interviews and the self-evaluation, the board's work primarily focuses on doctoral education.

The self-evaluation repeatedly emphasises the need for additional professors, which may reflect that professors are the main recipients of faculty research funding and funding for doctoral positions. At present, two of the five professors' positions are filled, and recruitment for one or two additional professors is currently underway.

In the self-evaluation, both national (e.g. the KÖL collaboration) and international collaborations are highlighted, which is very positive, as it strengthens research quality, and reduces vulnerability in a small research environment.

The unit is successful in terms of both publications and external funding. The self-evaluation indicates that professors account for the greatest research output, but have also, as mentioned, the largest share of internally funded research time. Therefore, an internal discussion on research orientation and allocation of research time would be beneficial. If the intention is to enable a broader disciplinary research base, an adjusted allocation of research time between professors and associate professors may be worth considering at the faculty level.

EU funding currently accounts for only a small proportion of external funding. Increasing this proportion could be an important next step in strengthening the external funding base.

2. QUALITY OF RESEARCH

2.1 Credibility.

The credibility of the research is high. Even if it covers many central areas of legal science, some areas are more prominent nationally as well as internationally. Researchers publish in high quality journals and with reputable academic publishers, participate in peer-review activities, and present at and organise national and international conferences.

2.2 Contribution to the research field.

As stated in the self-evaluation, the unit has a wide range of teaching and efforts are made to reflect this in the legal research. The unit holds a strong position in tax law and public international and constitutional law. An emerging area is AI and digitalisation. There are also other areas of legal

research within the unit that demonstrate high quality (e.g. criminal law, procedural law, juridical studies of violence and legal theory). The wide scope implies that subject-specific specialization is often pursued individually, while groupings within the unit are organised around thematic questions.

The ambition to further develop research and secure external funding is high, but the unit's size and financial conditions make it difficult to expand in terms of subject areas and staff numbers.

2.3 Contribution to society.

The recipients of legal research are not only the academic community, but also the legal system. From that perspective, the unit demonstrates a strong impact, through participation in public inquiries, reviews of national law in the context of international assignments (e.g. the EU), and the preparation of legal commentaries for practitioners etc.

However, other parts of society, beyond the traditional legal actors, might also be important stakeholders. This may, for example, involve contributing knowledge to non-governmental organizations, other academic disciplines, or to the public. Engagement in broader public debate appears to be limited, both at the unit and more generally within legal academia. Expanding such engagement could strengthen the societal relevance and visibility of the unit's research beyond traditional legal audiences.

2.4 Regulations, ethics and sustainable practice.

Overall, the research at the unit complies well with regulations, standards and ethical requirements, even though the current legal requirements for ethical review of research involving public material can be perceived as frustrating. The unit works intentionally and systematically with ethical and legal approaches within doctoral education, when addressing issues of methodology, materials, publication, open science etc. Ongoing competence development and a conscious effort to raise awareness among supervisors and senior researchers takes place within the Board of Supervisors.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Unclear decision-making pathways and top-down determined funding models constrain the unit's room for manoeuvre regarding disciplinary and research-related considerations that would benefit legal research at the unit. Predetermined and specifically allocated research time for professors, including funding for doctoral students, creates a lock-in effect at the unit level that does not always promote research development.

Since opportunities for promotion to professor are absent, this could risk that highly skilled and driven researchers will leave. There are several highly qualified associate professors who make high-quality contributions to both the research environment and the legal discipline. To retain them, the university

should consider providing opportunities to be assessed for promotion to professor based on the needs of (and conditions at) the unit.

Furthermore, the reduction of administrative support and growing administrative burden placed on the unit negatively affects the time available for research and development.

3.2 Initiatives after ORU2020

The recommendations from the previous evaluation largely concerned creating sub-units or subgroups based on different areas of legal research, as support for both researchers and doctoral students. As noted in the self-evaluation, the legal research environment at the unit is small, and on that basis, establishing smaller subunits was not considered feasible. Subgroups or subunits may also lead to additional administrative tasks and might have the opposite effect in a small environment. Instead, the unit has chosen to work on a project basis, which on the one hand can be more focused on a specific subject area or study design, but on the other hand may limit participation from other researchers within the unit.

Other recommendations concerned increasing external funding, which the unit has worked on very deliberately. Several new externally funded projects have made research possible for both senior researchers and doctoral students. However, it should be emphasized that internally funded research time exceeding 20% is generally granted only to professors, which means that it is primarily professors who have the time to apply for external funding. This reduces the opportunities for broadening the range of subject areas.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

In short, the vision is to support and shape successful and creative research environments and develop new research projects linked to societal challenges that also include more staff. This is both desirable and feasible. This should primarily be achieved by ensuring that all vacant professorships are filled and that “non-professor researchers” are more clearly engaged in the research activities. However, if the aim is to increase collaboration and interaction – to support and develop research and researchers – the emphasis and responsibility placed on professors needs to be reduced. A professor can be a strong and driving force in building a research environment, but in a small and relatively young unit a dynamic and vibrant environment can also emerge from the bottom up.

4.2 The plan

The plan is focused, providing a clear path forward in four overarching key points. First, to continue what already works well with an increased focus on collaboration – both within and beyond the unit. Professors and associate professors should continue to be encouraged to apply for research funding for

doctoral students. However, considering the uneven distribution of research time between professors and associate professors, the allocation of time likely needs to be reviewed.

Second, strategic reinforcement of broad capacity in the unit primarily concerns involving more researchers (mainly associate professors) in activities that contribute to building the research environment. The ambition is commendable, and more junior researchers could also be involved here.

Third, support an innovative environment of curiosity and idea generation through various activities, such as the KÖL-collaboration, inviting practitioners from the legal field, and providing possibilities for seed-founded research meetings when applying for larger research projects. Collaboration and cooperation can be one way to broaden both research questions and methods. Increased collaboration with other academic disciplines is also recommended in this regard, since both inter- and multidisciplinary approaches enrich the field of legal research.

Fourth, continue support for writing high-quality applications. Increasing support for research applications through input from professors (and senior researchers) is very positive. Experience shows that applications are often improved in a collegial process, involving not only subject specialists but also researchers from other disciplines. As an increasing number of research councils require multidisciplinary projects, collaboration with other academic fields, as well as support from the university's grants office, can be highly beneficial.

4.3 Recommendations

Based on the written material and the interviews, the evaluation team has three main recommendations. In the plan, commented in 4.2, a few additional recommendations or comments can also be found that may be helpful.

The first recommendation is that a more explicit and inclusive strategic discussion is needed regarding the scope and direction of legal research within the unit. While individual initiatives are important, a clearer collective orientation would help ensure that resources are used in a way that strengthens both quality and breadth in research. Such a process should involve all staff (bottom-up) and result in a shared and actionable research strategy.

The second recommendation is to align calls for applications for professors, teachers and doctoral students with the unit's research and teaching needs, based on the first recommendation. An open call is often motivated by two reasons, 1) there are several internal candidates eligible to apply for a position, and 2) open calls are considered more likely to attract a larger pool of excellent applicants. However, it should be noted that the absence of one or more clearly defined research orientations may result in already well-functioning research environments being further strengthened, even where such reinforcement is not necessarily needed.

A call for applications can be delineated in several ways, including by specifying which research areas are considered particularly meritorious. This does not exclude generally qualified applicants, but the

disciplinary focus provides the university with an opportunity to take this into account when ranking multiple candidates. By identifying one or more subject areas as meritorious, the unit can achieve greater breadth in its research.

The third recommendation concerns increasing collaboration with a focus on the research environment. Presence at the workplace leads to both increased creativity and a better collaborative climate, and it can be influenced in various ways (through more in-person joint seminars, room allocation policies, or by emphasizing expectations of presence in recruitment processes). Peer-review-seminars, in which researchers present draft articles or ideas for research proposals foster engagement, gives everyone an opportunity to participate in the discussion. And inviting researchers from other disciplines to speak on methodology, theory, or current societal issues enhance a deeper understanding of legal research at the same time as opportunities for interdisciplinary collaboration may occur.

4. CONCLUDING REMARKS

The unit of legal science operates within a small but generally productive and credible research environment. It demonstrates high research quality, with strong output in publications and external funding, and a clear impact on both academic scholarship and legal practice. Established strengths include areas such as tax law, constitutional law, and international law, alongside emerging fields like digitalisation and AI. Researchers are active in peer review, international collaboration, and engagement with public institutions.

At the same time, the unit faces structural and organisational challenges. These include unclear leadership roles, limited staffing, heavy teaching and administrative workloads, and an uneven distribution of research time – largely favouring professors. This creates risks of concentration in already strong areas, reduced disciplinary breadth, and limited opportunities for staff to contribute fully to research development.

The development plan is focused and realistic, emphasising collaboration, stronger research environments, and improved support for funding applications. Its key strengths lie in promoting interdisciplinary work, collegial processes, and broader participation in research activities. However, achieving these goals will require rebalancing responsibilities and research time across staff categories.

The evaluating team has three main recommendations:

Clarify strategic research direction, balancing individual initiatives with coordinated planning.

Align recruitment and calls with identified research and teaching needs to enhance breadth.

Strengthen collaboration and research culture, including increased presence, seminars, and interdisciplinary engagement.

To fully realise its potential, the unit should prioritise a more balanced allocation of resources and broader inclusion of researchers in shaping the research environment. Addressing current structural

challenges will be essential. By combining clearer strategic direction with stronger collegial processes and increased collaboration, the unit is well positioned to further enhance both the quality and diversity of its legal research.

It must be emphasized that the university's organisation and funding model are complex and partly unclear, which was also evident in interviews with all the groups that the evaluation team met. This affects the unit's ability to make strategic decisions regarding research and research-based education. Decision pathways and control over resources are divided in a way that becomes inefficient and counteracts strategic considerations. Clear delegation and optimal funding must accompany responsibility and development at faculty and unit level.

ORU2025 Review Report: Social Work

Review team: Jill Manthorpe (main reviewer), Çiğdem Haser, Lars Lundgren and Kirsten Sivesind

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

This UoA has the potential to be a flourishing research environment, drawing on Faculty and ORU support to maximise its research efforts and external awards. It is productive and ambitious. It plans to further develop strategically after this evaluation. Several suggestions were made about taking forward fresh approaches, revisiting Research Groups' (RGs) rationale, stakeholder engagement and furthering impact.

The staffing complement is growing; since 2019 six long-standing senior lecturers were promoted to associate professorships, there are (April 2026) two professors, with a third being recruited, 17 senior lecturers, 13 lecturers and seven PhD students. With a strong representation of female staff at all levels (the profession also), the UoA acknowledges a need for greater staff diversity to enhance research and teaching. It follows inclusive recruitment practices although staff must be willing and able to undertake professional education and research.

The SVS (social violence studies) RG works productively with the large multi-disciplinary international Centre for Violence Studies (one of Humanities and Social Sciences Faculty's 15 Research Environments). GLOMISCO (global migration) is part of ORU's Crises and Transformation profile area. The potential for engagement with ORU's two new major research fields was discussed (Food & Health, AI). This could enhance visibility and be of mutual benefit.

The embryonic research plan/strategy mentions ongoing Faculty negotiations about recruitment/retention, teaching/research balance. Faculty funding enables 20% of lecturers' time to be spent on competence time (usable for unfunded research).

Within the ORU environment, the UoA works well with the Grants Office. More active engagement with librarians might assist evidence reviewing. Engagement with ORU communications staff could enhance media skills.

Research sharing environments such as the Higher Seminars are valued, especially by early career researchers/PhD candidates, although some experienced researchers seem less engaged. It may be time to explore such seminars' effectiveness or alternatives.

The Unit contributes to Faculty activities and understands Faculty/ORU imperatives. Minor problems, eg slow appointments of replacement staff as backfill, needing Faculty attention. Researchers face pressure for studies to start promptly without unnecessary delay from university processes. There are some problems with rising research costs if not covered by an award; this could be addressed with Faculty/ORU to access contingency funding or underspends perhaps.

1.2 Are the main research areas appropriate for the unit and its development?

This UoA runs a large professional teaching programme and research. There are five RGs; with publications clustered into four areas. RGs differ in size and composition. SVS receives external funding while GLOMISCO receives internal funding. A new RG (Interaction and Learning in Higher Education Pedagogy Practice (ILHP) is ORU-internally funded (currently 2 small studies); the rationale for this was unclear in respect of social work research plans. SAOL (life-course) and VASA (labour market/welfare) are smaller voluntary collaborations reflecting individual interests, prior RGs, and funding opportunities, with some overlap. The UoA could reflect on these latter three's viability.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

Please provide specific comments on the unit's research funding, publications and productivity.

We agreed with the Unit's self-assessment that international research collaboration could be developed and that the national professional imperatives may not always enable such collaboration or are less relevant to stakeholders than Swedish contexts. Nonetheless, learning from the two current international projects will be valuable to future applications (eg Horizon/EU) if curated.

Although the research environment seems supporting, teaching workload (undergraduate mostly) was reportedly 'extensive' and limiting research activity. The UoA organises staff activities to increase research productivity (eg, teaching commitments are consolidated). Doctoral students undertake some teaching (up to 20%); benefitting them and colleagues.

Some UoA members are less active in research than others with reasons for this hard to discern and probably not just related to competence time. The UoA provided helpful quantitative data about this split. This should be regularly maintained for use in UoA/Faculty/ORU discussions.

Currently the success rate of external funding applications is 11.9% (SEK378k applied for, SEK45k awarded). While low, this may indicate developing experience.

This UoA chose to not benchmark itself. In future this may be helpful.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

Publications are in social work journals and in other subject areas such as family violence, disability, health, etc. These are well-regarded publications relevant to social work and wider social concerns. Curiously it was difficult to link to publications of current/ previous projects on the Unit's webpages. This should be amended.

The UoA has increased its quality research publications according to ORU metrics. While inclusion in Web of Science (WoS) confirms that publications are in peer-reviewed journals of some credibility, the panel did not think it useful to compare WoS with non-WoS publications. This is because 1), professional visibility and credibility (in Swedish language accessible outlets) are important for professional teaching and inspiring change or implementation; 2) non-WoS publications form essential stepping-stones for early researchers, particularly in disciplines where researchers often come from professional practice (so are credible, effective teachers): 3) several other international research assessment exercises do not rely on WoS or Q1/Q2 metrics.

Social work journals generally lack high impact factors compared, eg, to health. Publication processes are generally longer (affecting citations). However, in terms of influence it is likely that their readerships will turn to social work outlets. This presents an inevitable tension in social work research. Nonetheless, we all often publish in 'familiar' journals and so greater ambition to publish in globally leading journals might be advisable.

It was not clear if reports were later developed into articles, which could be considered. We could not see accessible reports and summaries for non-professionals, illustrated by infographics or UTube animations. Links with ORU's communications and media departments might enhance visibility.

Some PhD students are productive and offer good role models. The 4th year of internal funding enables the UoA to admit more PhD students than would otherwise be possible and is commended. It might be worth exploring if this has led to greater productivity among these students (and their supervisors).

There is ambition to publish more with international collaborators (presently a commendable 24% of papers). Again, there is a tension between publishing to influence Swedish stakeholders or more

widely. A research strategy may encourage collaboration within an overall framework and set out some priorities.

The self-assessment (or website) lacked many examples of impact or influence overall. Publications are only part of this. There is value in recording policy engagement and practice /organisational change as part of strategy development and research culture. This could be prioritised.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

The quantity and the quality (and variety of outlets) of publications have increased since 2020. A research strategy may expand skills and increase impact.

Many publications relate to social work students/professionals and NGOs. More could be made of their impact (eg, in guideline development). We recommend constructing a 'living' stakeholder map and developing ambitions about impact.

Variation in WoS publications probably reflects unevenness of research time, awards, and publications (eg more for professors) and doctoral supervisors being co-authors of their students' work.

The UoA might reflect on its overall reputation as research active; with evidence of leadership roles in the discipline and profession. The European Social Work Research Association (and Special Interest Groups) and Nordic/international social work activities offer opportunities; such relationships need continual fostering. Currently staff undertake constructive disciplinary activities, eg, reviewing, which are essential for early career researchers and fostered by mentorship.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

There is evidence of communications and collaborations with different stakeholders often from individual efforts. Further examples are needed of engagement and impact. There is little evidence of stakeholders' influence on research ideas or as research advisors. Social work research necessitates engagement and communication with professionals, clients, policymakers and wider society; such engagement needs evidence and strategy. We recommend greater attention to stakeholders from formulation of research questions onwards.

Stakeholder diversity (in several meanings) is important for partnerships and governance, beyond employers. The UoA has no standing group of service users/caregiver advisors nor network of social worker advisors. These would help shape research approaches and the dissemination among practitioners and public. Social work (and health) research emphasises co-production of research. The UoA could provide training and support for public contributors to research, including PhDs.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

Ethics processes are followed and updated. It may be helpful to outline how concerns are brought to public authorities' or regulators' attention. Since areas of social work are potentially distressing, it would be appropriate to outline the availability of support and counselling for researchers/students. AI's implications for research and teaching activities need addressing.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The 2020 evaluation suggested appointment of more senior leaders. It referred to the tension between teaching and research activities. The additional associate/professorial positions and faculty research funding have assisted.

It suggested incentivising productivity by publication requirements; however, this seems redundant within the strong current publication culture.

At ORU2020 there were four RGs; with doubts expressed about the Ageing theme's viability, subsequently discontinued but present in the new SAOL RG.

Grant increases (2015-19) were observed - mainly commissioned research council or municipality funded (currently municipalities' funding is 3%). Grants were seen as meeting society's needs with findings 'used' and communicated. Outputs were mainly in books/chapters (33/53 items) with increasing peer-reviewed papers and citations. Related to publications and research activities this UoA was then judged less productive than other units, eg psychology and sociology. Publications

were nonetheless described as creative and methodologically sound. A question was posed about whether research focused on professionals' needs rather than service users'. The present RGs appear variably to address this comment.

ORU2020 recommended a publications or communications strategy. This remains outstanding. We recommend this as part of a wider overall research strategy, including stakeholder engagement.

The 2020 five-year plan was judged as containing realistic high-level goals (eg more publications and funding, maintaining academic culture and encouraging RGs). ORU2020 recommended maintaining NGO and municipality links but improving links with other ORU departments (eg social sciences and law) (as seen in RG SVS). It advised focusing on current strengths to seek collaborations beyond ORU. These have developed to some degree.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

We saw positive developments in external funding, publications and international collaborations. Faculty funding assists SVS and GLOMISCO with joint publications and visits. The annual Faculty call for research proposals funds SAOL and VASA.

Faculty investment enables staff appointments and promotions, and internal research funding. Associate professors increased from two to eight, and a third professor is arriving. There seem greater expectations of staff discussing plans and ideas for research at the Higher Seminars and with experienced colleagues.

The RGs have changed, with Ageing recast as SAOL. More cross-department working comes through GLOMISCO and SVS.

The development of a 4th year for PhDs is welcome; and has probably helped completion. However, recruitment challenges need addressing.

The use of competence time for research remains varies, as permitted. The effects of changes to proportions should be monitored.

Ambitions to increase publication numbers by 10% have been realised.

Some elements of ORU2020 feedback were unaddressed by the UoA (see above). However, there have been organisational changes to limit teaching obligations and enable more research activities.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The five-year vision seems well-grounded but some parts (eg PhD recruitment) may depend on cultivating recruitment, possibly offering professional doctorates or part-time routes, making use of practice-researcher developments, and supporting more associate professors to take supervisory roles. Overall, it is a good guide for development and implementation.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The plan (with a strategy planned) is rather general as yet. It is organized under major areas following the progress observed in ORU2020. Many developments are underway and should continue but some consolidation may be advisable. A timeline might be useful.

The UoA outlines some elements needed for implementation. Some require University/Faculty funding (eg of professors' research time; PhD studentships; subject funding; and separate funding for senior lecturers). Others may be more under the UoA's control and could be sustained or fostered. There is mention of needing more staff but it is not clear why. The Unit is developing a case for a fourth professor since one professor's faculty activity reduces UoA work. This may be considered after the new professor's arrival and a staffing structure refresh.

There is ambition for more 'top' impactful publications – although WoS is only one indicator of this. Impact should be prioritised.

The ambition for more 'applied' research is unclear. With funders keen on mixed-methods and comparative research designs the Unit's largely qualitative research may need reconsiderating (eg in recruitment). This could enable research on, eg population cohorts or similar, which might be developed with other parts of ORU or the Office for National Statistics/municipalities' data. Ambitions to 'do more' necessitate consideration of what 'not to do'.

This UoA called for greater autonomy or flexibility in allocating competence development time. It requested less administration (unspecified). It sought funding for proof-reading, open access fees, and registering of publications with DIVA and PRISMA. These need to be costed and addressed with Faculty/ORU.

For many UoA staff ORU is generally their final employer. This has continuity benefits presumably. However, there is a case for refreshing staffing and appointing those with ambitions that can be met at ORU. This may need considering as the UoA expands and other research communities are more mobile. Temporary visiting staff do not overcome risks of stagnation and to reputation. One unresolved tension is whether senior staff have a promotion pathway to a professorship. The panel understood they could apply to an advertised professorship, but lack of a promotion pathway has negative retention and morale consequences; it could be revisited by ORU.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

Greater focus on impact and influence; and collecting evidence of this – through planning, mentorship and communications (building 'pathways to impact' plans at development stage).

Greater routine stakeholder engagement through constructing a 'living map' and activities prioritised.

Consideration of research co-production with public members assisted by stakeholder engagement and standing advisory groups.

Continuing international applications through strategic RG initiatives.

Linking professionally-focused activities to research ideas, studies, and implementation.

Maximising resources through aligning PhD proposals to RGs; continuing candidates' teaching opportunities and 4th year funding.

Greater participation in policymaking, professional developments, media and advisory bodies to evidence impact.

Consideration of reasons for comparing WoS publications with others through engagement with ORU research office.

Consideration of promotion pathways to professorships through discussion with ORU.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

With inevitable tensions from balancing teaching /research /administration (all ORU imperatives) this UoA has developed its research since 2020, as evident from increased awards and publications; and in staffing. Research is largely qualitative; skills in other designs and methods could be usefully part of a recruitment strategy or linking with others at ORU. Some RGs are multi-disciplinary and collaborative, but others lack similar rationale and focus. We recommend a professorial pathway to promotion for ORU's consideration.

Stakeholders' engagement needs developing to add relevance, insights and impact. This should be part of a research (and teaching) strategy. Higher Seminars are useful vehicles with many purposes which could be addressed in such a strategy.

International research collaborations, eg, over Horizon and Chanse/Norface and visits, are commendable. Prioritising of partners within ORU, in Sweden, and beyond could be considered for applications to Forte, EU and Nordforsk.

ORU2025 Review Report: Sociology

Review team: Johanna Esseveld (main reviewer), Lars Jalmert and Eeva-Kaisa Prokkola

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

Is the environment well organised to promote quality research?

Research at the Unit of Assessment (Unit) is well organized. It contains two well-established groups: Environmental Sociology (ES) and Work, Family and Intimate Relations (WFIR), as well as research on other topics of importance to sociology. The research groups are described as "bottom-up constructions and dependent on the members' research activities" (Self-assessment, p 4). Each has a research leader who has a facilitative supportive function. The Unit has a Committee of Supervisors of which all professors and docents are members and a higher seminar with rotating chairpersons. There are also seminars and workshops to promote the writing of grants and publications and annual retreats with paper presentations. All help stimulate and promote quality research.

Are the main research areas appropriate for the unit and its development?

The main research areas are of central importance to the Unit. They came into existence in 2012 and developed further over the years. Both have a distinct profile, also when compared to the research at other sociology departments in Sweden, and their research is well recognized nationally and internationally. The scope and themes of the research have shifted over time, following changes in societal problems and advances in sociological knowledge.

The research carried out at the Unit is broader then the two main research areas, clearly showing the possibility for other research themes to develop and thrive. All contribute to the development of sociology as a discipline.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

Leadership and a stimulating and supportive academic culture are closely connected at the Unit. According to the self-assessment, participation and collaboration are encouraged and leaders have a facilitative and supportive role. The researchers collaborate in research projects, publications and teaching. The head of the Unit conducts regular dialogues with the staff about working situations and plans. At present, the staff consists of four professors, one senior professor, fifteen senior lecturers (of which six are docents), one associate senior lecturer and one researcher. Seventeen are employed full-time. The unit has two postdocs and five PhD students. All those permanently employed teach at undergraduate and graduate levels, temporarily employed staff and PhD students are included in the teaching as well.

Researchers at the Unit also cooperate with researchers from other units at Oru. The WFIR researchers collaborates closely with colleagues from Gender Studies, and the ES researchers initiated the Centre for Environmental and Sustainability Social Science (CESSS) with colleagues from psychology and political science. Researchers from ES are also involved in WATCH (Water challenges in sustainable planning and the built environment), a multidisciplinary and transdisciplinary research school. WATCH is a collaboration between Oru and Karlstad University, with seven doctoral students, one of which is enrolled in the Unit.

There are collaborations with sociologists with similar research interests at other Swedish universities, as well as with researchers at several universities in Europe, amongst them Bielefeld, Vienna and Wageningen. Guest researchers are invited and participation in national and international conferences and research networks is encouraged (also for doctoral students). Staff members at the Unit present papers at conferences organized by the Swedish, Nordic, European and International Sociological Associations; they participate in/coordinate research committees of these Associations and are represented on their boards and steering committees.

Please provide specific comments on the unit's research funding, publications and productivity.

The Unit has a good publication record, with slightly over 100 publications on the Web of Science and the percentage of publications in Q1 and Q2 journals has been stable over the years. Publications are cited frequently, and the citations are higher than the global average of 1.

The Unit has received large grants from research funding bodies in Sweden, such as Formas, VR, and Forte as well as a smaller grant from the European Research Council (ERC), over the past five years. The grants received have varied between 21% and 37% between 2019 and 2024. In 2024 the percentage was 28%, the Unit intends to increase the amount of research funding in the coming years. Slightly over 70% of the budget was spent on teaching in 2024. Apart from pedagogics, sociology presently has the largest educational assignment in the faculty (with over 400 full-year achievements). Teaching assignments make up more than 10 full-time teaching positions, providing stability to the Unit.

The unit has five doctoral students: three of which are financed by the faculty. The number of doctoral students is low considering the number of professors and docents at the unit. In the self-assessment and the interview, a preference for hiring postdocs over doctoral students on grant money was mentioned. A strategy where both are funded was also discussed and during the evaluation interview, it was revealed that a research application funding a postdoc was awarded a large grant just a few days before.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality? Please identify strengths and weaknesses in their work.

The Unit produces research of high quality. Individual researchers participate in all aspects of writing and publishing: presenting papers at workshops and conferences, editing journals and anthologies, carrying out peer reviews and writing articles and monographs. The democratic climate of the Unit, collective decision-making processes and collaborations all contribute to the quality of the publications. The Unit's record with over 100 publications in Web of Sciences and a stable number of publications in Q1 and Q2 journals over the years, is very good. Close to two thirds of the publications are written in English and one third in Swedish.

Researchers collaborate within the unit, with others at Oru, nationally and internationally. This includes exchanges in forms of guest lectures, research visits and involvement in research committees. Half of the publications are co-authored, but only one-fifth of these (10% of the total list) are co-authored with international scholars. This is quite low. We support the Unit's plans to do something about this in the future.

Both research groups received grants as did researchers whose main area of interest lies in other topics. External funding is however, under the university's 50% target. To bring in more external funding, the unit provides some financial support for grant writing.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field? Please identify strengths and weaknesses in their contributions to the research field.

Both research groups ES and WFIR have made important contributions to their respective fields of study as well as sociology and both have made changes over time by taking in new topics. Researchers in ES study environmental problems at societal, interactional and individual levels with a purpose achieve transformative change in society. They focus on climate change, biodiversity, risk and sustainability and engage in development of the field of environmental sociology with colleagues in Sweden and internationally. They also study the roles of science and politics in environmental governance and regulation, and study engagements of individuals and social movements in transformations towards sustainability. Much of the research is carried out with colleagues in CESSS at Oru.

Researchers in WFIR make important contributions to a broad range of topics including the organisation of family life, transition to parenthood, single motherhood, relations between parents and children, generational aspects of care, negotiations on housework and work, and intimate relations. Some of the research is carried out with colleagues from Gender Studies at Oru and there is collaboration on organizations and family-work balance with SCORE, Stockholm University. New research topics are created as well. One such topic is hybrid welfare practices, making use of the concepts of automation and digitalisation.

We see no weaknesses here. The two research groups make important contributions to their respective fields and sociology, and the Unit is flexible and creates opportunities for new topics to be included and researched.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders? Please identify strengths and weaknesses in their contributions to society.

Research at the department is important for policy development. The topics studied, are about social issues such as sustainability, environmental practices, gender and caring relations and family practices. All have relevance for society and individuals within it. In the research school WATCH, there is a direct connection between academia and society as researchers work together with representatives from agencies and municipalities. Researchers of the Unit also participate in discussions with audiences outside of academia through popular science publications and open seminars. In addition, many of the publications from the Unit are textbooks and/or written for students.

According to the Self-assessment, it is difficult to prioritise research communication with society as there is no specific time allocated in the budget (of the Unit, Faculty and University) for this activity. This also means that this aspect becomes individualised and is chosen away by the staff. We find communications with individuals, groups and organisations outside of academia an important aspect of knowledge production and would like the Unit to find collective solutions that move beyond the choices of individual researchers.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The Unit is responsible for a doctoral course on research ethics for the whole faculty and sustainability is also of central importance to the research at the Unit. Research ethics is a recurrent topic at the Unit and is included in seminars and workshops. Challenges of new technology and sustainability are continuously discussed as well. Doctoral students are included in the discussions. We found the Unit's mention of working with 'slow science' at staff meetings a very enticing example. It provides the possibility for discussions of sustainable practices in academia that could become a practice at other institutes of learning.

As far as other regulations are concerned, the social environment and inclusive policies at the Unit help promote equality between women and men. They also help in widening recruitment to higher education.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the unit.

Collaborations take time and money, lack of both is presented as a problem. Despite this, researchers at the Unit collaborate with colleagues in Gender Studies and other units in the HS Faculty and with colleagues at other faculties at Oru. Researchers from ES collaborate in cross faculty projects such as WATCH and researchers with an interest in automation and digitalization recently joined a research cluster "The Rule of AI – AI, Regulation and Society" funded by Wallenberg AI, Autonomous Systems and Software Program.

The Unit has a division of internal and external funding of about 30/70 %. To reach Oru's target of 50/50%, the Unit needs to receive more funding. The Unit plans to continue applying for research grants and would like continued financial support for the writing of proposals.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

The evaluators suggested that the Unit continues to give priority to the two research groups ES and WFIR while also continuing support for other topics and staying in touch with more general developments in sociology. The evaluators also suggested "a lesser focus on individually based research" (p 5), i.e. research that falls outside of ES and WFIR sphere of interest. The Unit chose the first suggestion, where there is space for different topic areas in research together with an adherence to the two research groups.

The evaluators recommended that doctoral students and their research be placed at the centre of the research strategy of the Unit and that more doctoral students could be taken in through research grants. The Unit agrees that doctoral students and doctoral education should be at the core of the Unit and suggests that there is capacity at the Unit to take in more doctoral students as far as the staff is concerned and are willing to pursue the strategy of enrolling more doctoral students. Simultaneously, the Unit plans to continue the strategy of investing in externally funded postdocs.

The evaluators also suggested that the Unit adopt a new publication strategy that focuses on articles in English aiming for top-level international journals instead of a broad publication strategy. Here, the Unit does not agree and continued their publications strategy of combining articles in high-ranking journals with other forms of publications including popular science articles and monographs as they find communication with people outside of academia important.

The evaluators recommended that the Unit continues applying for research funding including ERC grants. The Unit has applied for and received new grants from Swedish funding agencies as well as an ERC grant between 2019-2024.

4. DEVELOPMENT PLAN

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The vision as provided in the Self-assessment is to develop the existing research culture and practices with a focus on the two research groups, carry out high quality research, and contribute to conceptual development and empirical research. Maintaining societal relevance of the research is also part of the vision. The vision also encompasses continued collaborations with colleagues and participation in sociological networks and organisations as are increased applications to funding agencies for high level research projects.

The vision means a continuation of the Unit's present-day practices and is realistic.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward? Is it realistic in terms of resources and organisation? Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The two research groups are of central importance to the Unit. There is also room for sociological research more broadly defined. The text on how the Unit plans to realize the vision is very well written: making clear which activities are to be maintained and which can be developed through concrete examples. The suggestions for improvement cover all aspects of research at the Unit, and when carried out would make for more quality research and an even better collegial environment.

The Developmental Plan however only focuses on the two research groups, there is mention of a strategic focus on these groups, and which of the different practices can be maintained and which can be improved. The suggestions for development with more joint seminars, increased external research funding and more international exchanges and co-operations are good. A particular interesting aspect here is the suggestion for sustainable internationalization and how this can be followed up. Still, these suggestions are presented and exemplified through the two research groups only.

The professors at the Unit, have their expertise in the research groups. The same goes for the Docents and most of the senior lecturers. Faculty supported doctoral students are also connected to the two research groups as are the two paid through grants. Only a few of the staff have their domicile in other areas of sociology. Most of the research grants focus on areas of importance for ES and WFIR. Extra funding for amongst others, writing of grants and publications, are channelled through the two groups as well. If the Unit wishes to continue with a three-legged strategy which includes other areas in sociology, this needs to be followed up with plans and decisions on how to deal with hiring, promotions and channels for funding of grant applications and writing time for researchers with expertise outside of ES and WFIR. Providing funding for grant applications and time for writing is also helpful for staff with heavy teaching loads and little time for research.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

The Unit is doing well, partly due to the large amount of teaching at all levels and in different faculties at Oru, provided by its staff. The Unit has a good publication record, also in Q1 and Q2 ranked journals, and many research collaborations. The list of publications also includes publications directed towards an audience outside of academia. Worrying, however, is that there is few permanent faculty and a lack of promotion for senior lecturers and little space in the budget for internalization and grant writing.

Grants are important for the Unit but also for the number of PhD students at the Unit. The number of doctoral students supported by the faculty are set, meaning that research funding is needed and research applications need to be prioritized. To create more flexibility and hire younger academics for a shorter period is considered by the Unit, suggesting a double strategy with applications for funding for both postdocs and doctoral students. With little space in the budget for grant writing, grant writing could be made more of a priority for the faculty (and maybe the university as a whole) together with the hiring of permanent faculty.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

The Sociology Unit produces research of high quality; its research is recognized in Sweden and Internationally. The unit's publication record is very good and includes publications in high impact English journals. Researchers at the Unit collaborate closely with other researchers locally, nationally and internationally. The climate at the Unit, consisting of collegiality and sharing of knowledge, contributes positively to research activities and output. More research funding, including funding for doctoral students, might make the Unit even better.

ORU2025 Review Report: Political science and social studies

Review team: Katarina Eckerberg (main reviewer), Karin Brocki, Janne Kivivuori and Ruth Mannelqvist

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

Is the environment well organised to promote quality research?

The organisation of the unit's research is decided by ORU some decades ago. The unit is an administrative construction largely geared to implement teaching rather than research. The Head of Unit conducts the development talks except for the professors, allocates the teaching for the Social Studies Education and attends management meetings at faculty level, while the Deputy Head of Unit allocates teaching in political science. All major decisions over research rests with the Dean of the Faculty of Humanities and Social Science. The unit's research is conducted with a shared responsibility between the Head of Subject, the Deputy Head of Unit, and the Supervisory Committee, consisting of all permanent staff beyond PhD. The Head of Subject leads and decides upon the PhD education together with the Supervisory Committee and allocates a small amount of strategic 'seed money' for staff to attend conferences, write research applications etc. New recruitments of professors and allocation of professorial research time is decided at faculty and department level. . The Prefect (Head of School) conducts the annual development talks with the professors and thus influences how they use their faculty funded research time. If a professor receives external funding, or an administrative position, the Prefect can decide to re-distribute professor's faculty-funding following an application from the Head of Subject. Hence, the most important decision-making in terms of allocating ORU-funded research time rests with the faculty/department rather than the research unit. However, to compensate for the strategic work with the research environment expected of a professor and to find constructive uses of the freed resources can be a challenge, especially as all senior lecturers are already bound with teaching duties and finding competent temporary personnel can be difficult.

This means limited possibilities for the unit to prioritise and promote high quality research. In particular, the evaluation team noted that newly employed professors are given less research time than those who have been around for longer, and with no possibility for the unit to encourage upgrading from lecturer/docent to professor for its excellent research staff. Neither does ORU apply the associate professor title as a career step. This has implied that the unit cannot keep some of the best researchers – namely those who seek an academic research career. Still, the unit tries its best to promote high quality research under the current quite awkward decision-making circumstances.

The evaluation team was puzzled that a small number of staff in social studies also belong to this unit but understood the rationale during the interviews as they are mainly political scientists specialised in teaching and research on educational policy issues, and their PhD students belong to other subjects. The research environment is vivid and supportive. Internal research discussions are formally organised in the higher seminar. Research ideas and proposals, draft articles and other research presentations are discussed regularly, adjusted to the various needs and currently led by one of the professors. Guests are also invited. All researchers take part, with the PhD students' attendance as part of their studies,

and required to present at least 3 times (plan, half-way, and final) before their defense. Doors are open for ongoing consultation between colleagues, with adequate on-site attendance to allow such interaction. Internationalisation is encouraged and promoted by the unit's 'seed money' as well as by established collaborations with partner universities. PhD studies collaboration takes place with Linköping, Karlstad and Mälardalen universities, while senior researchers mostly rely on individual networks. The unit's researchers are also active in the general Swedish and international well-established political science conference networks. Currently there are 7 active students in political science and 2 in social studies education, of which 3 are internally funded. The evaluation team appreciates the plan in the unit's self-assessment to extend the junior research group with more externally funded PhD as well as postdoc positions. This will require major efforts from the senior research staff to make this happen by seeking appropriate funding specifically as part of new applications.

1.2 Are the main research areas appropriate for the unit and its development?

The unit's research covers the main areas within political science, which allows for offering a fully-fledged teaching portfolio. Historically, the unit is well known for its contribution to political science research in several sub-areas of the discipline. It was emphasised by the unit's research leadership that its ambition to cover many such fields remains, even if there are some stronger 'profile areas' that emerge including in (1) citizen participation and democracy and (2) public policy, governance and political institutions. The social studies research is focused on (3) schools as a social and teaching/learning environment. Given the research unit's small size, we find this choice appropriate for the time being. There is, however, potential to reconsider whether a stronger research profiling and thematic/methodological cohesion could be fruitful in future recruitments. Also, the unit is seeking to enlarge its interdisciplinary research engagement by attracting external research funding to this end. Indeed, the unit's research is excellently profiled for that purpose. Moreover, it might be considered to review the unit's teaching portfolio and content to reflect and stress the unit's current research strengths, allowing for better integration between teaching and research.

1.3 Please comment on the unit's reflective analysis of their environment

As mentioned, the current structure is functioning despite the current organisational flaws as given by ORU. Two main problems remain: (1) the division of responsibility between the Head of Unit and the Head of Subject, with unclear employer responsibility since they provide leadership for the staff's research and teaching respectively; and (2) the absent career development opportunity above lecturer/docent. The evaluation team recommends that both problems should be addressed as they appear as major constraints in all the UoAs. Teaching is performed by all staff, including professors and PhD students. Still, the political science unit has been understaffed for a long time, due to several unfortunate professorial losses. Also, one professor has served as Dean, and one has been on a year's leave, but there has been no pay-back from ORU for those. Hence, the unit suffers from a continuous need for temporary lectures to fill the teaching needs. This has serious implications on the remaining research staff's aspirations to conduct their research and initiate new. In the worst cases, external research funding must be postponed, creating a lose-lose situation for all.

In addition, the unit's current gender distribution with 3 male professors requires further action, which demands resourceful implementation of the ORU gender strategy at large. Without a possibility for strategic recruitment of new professors, and no possibility for promoting excellent (in this case female) lecturers to become professor, the unit's gender inequality will likely stay unresolved.

The unit's research is in very good condition with concern to rising quality and quantity of publications, success in attracting prestigious external funding and notable outcomes of research collaborations in both PhD education and publishing. These achievements should be praised considering the unit's small size and its current constraints for research as described above. Nevertheless, there is room of further improvement, both in expanding the scope for research funding and in collaborating with other research environments and societal actors. For instance, further efforts could be made to address EU funding possibilities anew as well as targeting further Swedish (and Nordic) sources. Examples thereof are Marie Skłodowska-Curie fellowships, ERC grants, partnership in EU research projects, and Mistra, Vinnova, Forte and relevant public agencies. Calls that require interdisciplinary and policy relevant research consortia could be particularly rewarding in making it possible to expand the research staffing, not least in acquiring more PhD and postdoc positions, which would strengthen the unit's capabilities to further develop.

2. QUALITY OF RESEARCH

2.1 Credibility.

The unit's research spans over many methodological approaches and thematics and is considered academically credible. It has suffered from several professorial losses but has recovered and remains strong. The unit is active in Swedish and international political science networks and many of the researchers have commissions of trust for journals, publishers and research funders.

2.2 Contribution to the research field.

Due to unforeseen circumstances as explained above, the professorial research leadership has recently diminished. The unit's six associate professors provide stability (50% female) whose further career should be supported. Both the unit's list of publications, the bibliometric report and recent benchmarking against other Swedish political science environments show that the unit is performing well. High quality and impact of the research is particularly noted within the unit's two above-mentioned 'profile areas' and in its policy-relevant research orientation. The research production is internationally well connected and reasonably spread among the staff according to their available time for research work. Also, most PhD candidates write compilation theses and publish in peer-review journals. The publishing takes place both in general political science journals and in interdisciplinary journals where the specific topic of the research takes place. Some of the research is communicated in ways that are not reflected in the bibliometric assessment data, such as certain books, book chapters and teaching literature, but those are nonetheless important venues for scientifically based knowledge production. The unit's main weakness concerns the vulnerability of a small and currently understaffed research environment which leads to high workload pressure and to some extent hinders it to grow and become even more productive. Particularly, this limits the available time for new initiatives despite the unit's high ambitions.

2.3 Contribution to society.

The unit's research thematics are strongly related to societal goals and much of the research is conducted in close collaboration with stakeholders. Also, the outcome of the research is communicated in ways that target various societal actors according to relevance. However, the share of research publications that target non-academic audiences has diminished as those are less awarded in academia, even if they may be appreciated from some research funders. Teaching materials remain important for the unit's contribution to higher education and the unit's researchers are also active in various media as far as time allows. There is high potential for further interaction with society, but current university support and reward mechanisms restrict such activities. For example, support would be fruitful to establish large-scale and long-lasting research cooperation with local, regional and national public bodies. Hence, the weakness lies primarily in available resources and support from ORU central.

2.4 Regulations, ethics and sustainable practice.

As legal requirements have altered the requirements for ethical considerations within social science, the unit's practices in this regard have changed. Awareness is now high among the staff, but the requirements have also created frustration (alike all over Sweden). PhD students are required to take a research ethics course, and all staff encouraged to do so too as part of competence development. Open Science practices regulations have also changed, which is less emphasised in this evaluation but nevertheless a very important aspect of replicability, collaborative technology and knowledge spreading. The management, storage, and sharing of documents, datasets, and other information is part thereof, thus not only Open Access to published research. The unit's staff are aware of the need to boost the awareness and usage of Open Science when applicable, which our evaluation team suggests should become a general educational effort across the entire university.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

As already mentioned, decision-making over resources for research at ORU lies at central and faculty level, with little room for bottom-up strategic initiatives. Funds for recruitment and replacement of senior researchers who serve the university administration for longer periods are absent. Moreover, rigid interpretations of university guidelines and centralisation of administrative functions with high administrative charges not least on external research funding hollow out the unit's time and restrict decisions on what is most appropriate to foster high quality of research and teaching. Furthermore, the complete halt of promotions to professor is a major constraint to the unit's further development, as it limits both internal career development and has led to that the best suited external candidates chose to abstain from taking up a lecturer position.

3.2 Initiatives after ORU2020

The higher seminar has become even more used than before for improving research manuscripts and applications, including those that were not accepted, which has helped refining research quality. ORU 2020 also encouraged applying for external research funding from new sources, which has

materialised to certain extent. The support from the university towards the unit's strategic goals has, however, only been realised to limited extent through the Head of Subject's 'seed money', which is found useful but not sufficient. Further support to facilitate cooperation within the university, as proposed by ORU2020, such as obtaining Knowledge Foundation funding, has not become realised. As for becoming more visionary, and investing in the 'Big Ideas', the discussion with the unit shows that they are currently doing their best. We find, however, that future recruitments could become more strategic to further boost the unit's present research strengths rather than maintaining the idea of having to cover all political science thematic and methodological areas.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

The unit's vision is applauded as a general ambition, however, with its current small size environment there could be room for making some more strategic choices particularly when/if given opportunity to enlarge the research staff. While diversity is in principle a desired pathway, current gender inequality and a small size research environment could benefit from some further cohesion of the unit's strengths in the 2(3) 'profile areas' as well as in promoting more ambitious and interdisciplinary applications for research funding. Hence, any new research investments from central university/faculty level should take such bottom-up priorities into account. Visions are good to have, but they do require funding to materialise, and so far, this kind of additional funding is largely absent.

4.2 The plan

The unit's plan ahead mentions well-functioning collegial support structures and meetings, which can help researchers develop more ambitious ideas. It also stresses more collaborative writing between junior and senior research staff, support to new applications for funding, using faculty 'seed money' for such purposes and boosting research collaborations with different types of partners. Going more for EU funding, including multidisciplinary projects, is another wish. The plan is also to focus on getting external funding to be able to offer postdoctoral opportunities. All those actions are either already happening but could be further strengthened given that the faculty and central university provide adequate support and fills in on the unit's current staff deficits. The unit has so far been reasonable happy with the help from the Grant's office, especially from certain individuals, but more could be done to streamline the Grant's office support with the specific needs from UoAs. Special Calls for research funding are particularly important to address but also widening the search for funding to smaller grants from public agencies that can function as pilot and/or testing grounds for larger, transdisciplinary research applications. These ambitions from the unit are well suited to further strengthen research quality and impact.

4.3 Recommendations

A general problem for all UoAs concerns the rising administrative costs, which eat up an increasing share of the available time for research. This is a significant issue for the university to address. An oversight is needed of which administrative measures could be reduced without negative implications to research and teaching quality, and which ones are beneficial to this end. Savings on the running costs for university premises as well as on unnecessary management requirements, such

as excessive internal monitoring and evaluation, is a way forward. We recommend that university-wide external evaluations of this kind should not remain every 5 years but rather at 10-year intervals since little change can be otherwise be detected and addressed.

4. CONCLUDING REMARKS

The political science and social studies unit is well-functioning, lively and delivers high quality research and PhD training. However, it suffers from several constraints and could benefit from further action in certain areas as described above. We end by summarising our major points for improvements:

We find a mismatch between the research unit and department/faculty/university level in decision-making on key issues that impact on research quality and quantity. Most importantly, the recruitment as well as allocation of research time to its professors is decided higher up in the university organisation.

The absence of a university strategy for promoting excellent lecturers to professor is a serious problem as it refrains them from a further career at ORU. This implies a great risk for maintaining high quality research.

The unit may consider strengthening its current research profiles in future recruitments to create a critical mass of researchers with more similar research interests.

It may be considered to review and update the unit's teaching content to better reflect the research interests of the teaching staff, allowing them to integrate the students' theses work with the unit's current research as far as possible.

The PhD programme works well, but further efforts should be made to increase the number of PhD students through external funding.

Widening the targeting of external research funding towards more different types of sources is commendable. Current ambitions to create larger and long-lasting research collaborations both within and beyond ORU as well as with societal partners are praised.

ORU2025 Review Report: Occupational therapy

Review Team : Gunilla Isaksson (Chair), Dimitris Michailakis, Klavs Madsen and Marie Friedel

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

Is the environment well organised to promote quality research?

The faculty management consists of a dean and deputy dean. The dean has appointed two vice-deans, one for undergraduate and advanced level education and one for research education, and since April 2026 one for research. The faculty includes two schools, School of Health Sciences (HV) and School of Medical Sciences (MV), with research organized in research groups. It is the schools that appoint new research groups and follow up the research, and the faculty is responsible for monitoring quality. At HV, the head of school has appointed a vice-prefect for research. The faculty has three research education subjects: 1. Medical Science with four specializations, one is Healthcare Sciences, 2. Sport Science and 3. Disability Research. Occupational therapy (OT) as a subject area is connected to both Health Care Science and Disability Research. The PhD students in the UoA of OT will have a PhD in Medical Sciences with specialisation in Health Care Sciences or in Disability Research.

The faculty of Medicine and Health have changed since 2023 as the organized form with research environment was abolished, something that decreased the well-established cooperation that united the research groups with researchers in physiotherapy at RÖL and other subjects. The organization described above is not open for an official appointment for Subject Heads for research at faculty level, although the two other faculties have that. This gives unclear messages about responsibilities for how the UoA can promote research quality. With this organization the UoA has difficulties planning for future research development, they have ideas and plans for the research groups but limited responsibility to act.

The head of school identifies competence needs and, in consultation with the dean, plans recruitment. A review of the strategic competence supply plan with school management takes place at least once/semester. Planning of the competence supply plan for adjunct and associate professors with the region (FOU director) takes place at least once/year. The faculty finances professorships, and the school takes responsibility for research and postgraduate education. This includes the need for strategic recruitment and conditions for research. From the report and from the conversation with the employees, it seems that there is a great distance from faculty and school to UoA and this makes development difficult in general. This has an impact on the working environment, and it seems that the working conditions for most researchers generally make it difficult to achieve high research quality. The UoA has difficulties recruiting at all levels and as they have no responsibility for recruiting the possibilities to act are limited. A strategy that has been effective is to recruit local master students to start PhD training, although the recruitment of senior researchers is still a challenge. The faculty states that when it comes to recruitment, one of the weaknesses is that the need for education takes precedence over research, since the implementation and quality of education needs to be

ensured. It is therefore difficult to work strategically based on research. This is in line with the UoAs experiences describing the challenges with the teaching burden.

Are the main research areas appropriate for the unit and its development?

The main research areas are appropriate and according to research credibility, strengths is the strong alignment to clinical relevance, the UoAs methodological rigor, and ethical awareness. The researchers (11) and PhD students (9) in the UoA is organized in three research groups at the school of Health Science.

TUMA: a small but well-established research group and connected with one of the four highly specialized units for limb difference care in Sweden. They have collaboration and agreements with several international universities. The group received a grant from Swedish research council to coordinate this research group 2024. The research area contributes with impactful research for persons with congenital malformations or upper limb amputation.

TOVA: a national research group focusing on time management interventions for people with cognitive impairments, such as adolescents and adults with neurodevelopmental impairments. This is the only group in Sweden targeting this topic and involves researchers in occupational therapy and psychology and have received grant from Forte.

WELLCET: a newly established research group with focus on promotion in dementia care and home environments related to new technologies, for example eye tracking assisting technologies. This involves researchers in occupational therapy and AI researchers.

There are also some other more freestanding projects.

The UoA have several collaborations established through ongoing projects with different universities in Sweden and with universities in other countries. Although, the collaboration could be more formalized and stronger connected to the research areas, to reach long-term strategies and development of the UoAs research. To develop as researchers, it is also important that the researchers and PhD students have opportunities to international exchanges with other universities. A strength is the UoAs collaboration with non-academic associations such as regions, municipalities and health care services to ensure the clinical relevance, data accessibility, and societal impact on research.

Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

The UoA highlight the difficulties to recruit on all levels. A strategy that has been effective is to recruit local master students to start PhD training, four are now recruited as researchers to ORU. Although, the recruitment of senior researchers is still a challenge, and the university are not replacing persons who are retiring. The UoA have several good ideas; recruit associate/senior lecturer (those profiles have more research time) or guest professors, and recruit adjunct professors from the region, with no costs for the university. To be attractive as a university the UoA reflect that ORU needs to be braver in how they employ people.

The teaching program in the UoA is understaffed, indicating that the gap between theoretical allocated time for research and teaching does not show the correct gap. To handle that, they suggest more coherent administrative services and a seamless connection with the region regarding registration of students. However, they have observed that also the administrative team at ORU is understaffed. They further reflect on how ORU with the common vision promote teaching, not research and to reach credibility in research there is a need to change the culture and vision with a stronger focus on research.

Concerning leadership, as the head of school and the dean identifies and plan for recruitment for the UoA the strategic competence plan should be discussed and planned together with the informal academic leader headed by the full professor. The UoA have an unclear leadership with an informal academic leader and project leaders for the research groups. A structural weakness is that the informal academic leaders carry substantial workloads and have no mandatory right to allocate time to research and thereby the UoAs plans for high-quality research can be limited.

The UoA has in a good way developed an open, respectful, and a collegial academic culture. To support work-life balance, seminars are planned on family friendly times. To support younger researchers, mentors have been provided through a mentorship program. The PhD student highlight the inclusive environment and how they receive invitations to attend at conferences and mentorship. To find larger network research groups and strengthen research culture the UoA have recently together with Disability Research developed common seminars (DAFFI) for exchanging knowledge around proposal and grant writing. The UoA have been rather successful with grants (2020-2024, from 11 % to 60 %), and they described the success through how they work together to write proposal. At the same time, they emphasize that many applications do not result in any grants and a great deal of time has been spent on searching external fundings.

A structural weakness is that there is no current leader that are responsible over the researcher's time and with a substantial workload for teaching and administrative tasks that limit the UoAs development of high-quality research. As research quality is closely linked to sufficient time, the current working conditions are a strong limitation for research development for the UoA.

Please provide specific comments on the unit's research funding, publications and productivity.

The proportion of external funding related to governmental funding has increased from 11% to 60% and are now over 4 million SEK which is a remarkable change, although from a low starting point. The strategy has been to search for funding from smaller funding agencies as well as making intensive attempts both as main applicant and co-applicants from national funding agencies (Forte, VR). Through these external grants the UoA have had the opportunity to allocate time to research and employ two PhD students.

The bibliometric report show that the researchers produced 91 articles between 2019 and 2024, although a decline from 22,3 to 15.2 publications per year since ORU2020. This decrease can be attributed to the generation shift over the last five years. The UoA almost exclusively publish in peer-reviewed journals, though a clear weakness is how the citations per year have decreased dramatically and very few studies are published in top-ranking journals.

Research productivity is limited by the staff shortages and a high working load for teaching. As a general example, senior lecturer has 70% teaching, 10% administrative, 20% competences development and a professor have 50% funded research time and 50 % teaching and other responsibilities such as leadership roles. Although, the time they have for research can be even more limited and as a reviewer it would have been of value to have more detailed information of how each person in the staff use their research time. The PhD students with a position at ORU have full-time research and those employed by RÖL or Örebro municipality 50% clinical work.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

Based on how the UoA is organised and the heavy workload they have on teaching they produce appropriate research of high quality. A strength according to research credibility is the strong alignment to clinical relevance, the methodological rigor and ethical awareness. The UoA follows the universities publication strategy and have publications in high quality journals; however, the number of publications has decreased since 2020. The explanation for that is that several of the senior professors have retired and a weakness is that recruitment of senior researchers has not been prioritized by the school.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

The research contributes to the field through tangible societal benefits in several areas and in close engagement with municipal and clinical practice. The UoA also contributes through high level of citations (905 citations between 2019-2024 by 11 researchers and 9 PhD students), 13 keynote lectures, expert appointments, review boards, scientific committees and regional funding committees. A weakness is the UoAs limited conditions to recruit senior researchers that can have a positive impact on the research field and open for more national and international collaboration.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

The UoA highlights the collaboration with The National Association of Occupational Therapists and practicing OTs as the main strength according to contribution to society. An intervention (Let´s Get Organized group intervention) developed and evaluated by the UoA has been trained in clinical use by over 600 OTs. A research area that can develop further is reaching to the wider community with the UoA´s research, especially social stakeholders outside the profession.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The UoA have a satisfying and sustainable way to ensure that the research complies with regulations, ethics and sustainable practice with high expertise, as well as securing that the PhD student develop relevant knowledge about ethics and regulations. Ethical and methodological issues in research are continuously addressed and discussed.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The universities declining of real funding due to inflation and rising salaries forces the staff to do more with less, a problem that are nationwide. The university's strategic initiatives (AI and Robotics, Food and Health) and the dissolution of research environments with ended annual funding have affected the UoA in a negative way as the funding have been redirected elsewhere. The financial constrains within RÖL and the ALF system has increased, although the possibilities for obtaining funding for PhD-students have decreased. These changes have laid an increasing pressure on the UoA to secure external funding in parallel with higher workload. However, the UoA highly values initiatives such as competitive grants for junior researchers, infrastructure funding, internationalization, and conference grants, as these are important for future development. The Grants Office is also much appreciated and has benefited both research groups and individual researchers.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

The UoA´s reflection gives a rather clear picture of how they worked to implement the feedback from the earlier reviewers. Although not all activities have been solved and some are still important to continue to focus on to reach the goals. Most important is still to recruit senior researchers for example a guest professor, associate senior lecturers and to identify key researchers for a formalized international collaboration.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

In general, yes. A suggestion to the UoA is to clearer point out the vision, then use these bullet points for the description of action plan, and internal and external support needed to reach the ambitious vision. For example:

Maintain an open and fruitful academic culture

Systematically support junior researchers in their research career

Increase international collaboration

Secure more external funding

Recruit PhD students and postgraduate students

Having more long-term funded projects

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The description of the plan has not a clear path forward as it now focusses on academic culture and grant applications, and the vision have a lot more ideas for the future. The UoA should use the same structure as in the vision and with more details describe how the resources and organisation open for a realistic plan of actions to reach the visions bullet points.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

The recommendation to the UoA is to maintain and develop an open and fruitful academic culture, this culture can be the way to succeed with recruitment of both senior and junior researchers. Continue to support junior researchers in their research career with mentorship program, invite them to be part of the research areas, participate in grants writing and other activities that support them in their development.

The UoA have the potential to improve and develop the research areas. To reach that, they need a long-term plan, build the applications on the ongoing research areas and develop their collaboration with researcher from other research areas, universities and countries.

Further recommendations for the UoA are to be active and open for how they can be part of ORUs overarching strategic plans according to infrastructure for research, such as the research centres and the alliance NEOLAiA.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

The UoA have several strengths even do the conditions for research is limited. They have been successful with external grants and through these grants the researchers can allocate more time to the research areas and connect the recruited junior researchers to the areas to enhance as a research unit. Although, they still need more external funding and long-term plans to develop as a UoA. To achieve that, the UoA need support from the School and Faculty to recruit senior researchers, and to allocate more of their time to research instead of teaching.

The researchers publish in high qualitative journals and contribute to research productivity as keynote speakers, in expert appointments, review boards, scientific committees and at regional funding committees. These actions show that the researchers in the UoA are valued and assessed both in academia and society. These activities are important to continue to be engaged in to show quality improvement as a UoA and contribute to the research field both national and international.

The UoA has developed good collaborations with several other universities and in several other countries. To reach continuity with research collaboration the UoA´s researchers need to have time and mandate to achieve quality improvement. Although, to develop and strengthen the UoAs research they need support. The University, School and the Faculty can offer more administrative support to the UoA and support the UoA to formalize their collaboration with RÖL and with national and international researchers.

ORU2025 Review Report: Biomedicine

Review Team: Annelie Brauner (Main reviewer), Mats Brännström, Karl Michaëlsson

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

Is the environment well organised to promote quality research?
The UoA is located in a modern building close to the Örebro university hospital and not far from Örebro campus. The location promotes interaction between clinicians and basic scientists and quality translational research. The offices and the laboratories are functional large.

Strengths

New and modern building nicely located close to the hospital and the other UoA of MH, Medicine and Surgical sciences with mainly clinical scientists.

Expensive equipment is available as core facility, to no cost for the researchers.

Clinically active PhD students, can be paid up to 40% of the salary from RÖL . Lately, the PI must have money for at least one year of the PhD.

Biomedicine researchers receive good administrative support in grant application processes through local administration at MV and HV and central Grants Office at ÖRU and RÖL.

Weaknesses

Although there is some interaction between Biomedicine, Medicine and Surgical research, this part could be strengthened so that it permeates the activities.

Some of the projects are mainly focused on basic science but could still improve by getting closer to the other UoA.

There are no animal facilities. Instead, models like organoids and C elegans are used.

Most of the research groups are small. More people and a bigger critical mass, for discussions and seminars would have a positive impact on scientific questions raised and projects carried out.

1.2 Are the main research areas appropriate for the unit and its development?

The main research areas, Immunology, Infection and Host-Parasite interaction are appropriate. The STD (Sexually Transmitted Diseases) Group is distinguished by having a national and international network and support from the WHO. The units' contemporary research is supported by platforms like genomics, SciLifeLab links, imaging, biobanks. The observed breadth in research is supported by the groups we met. It may though mask the limited number of senior researchers and may signal the inability to go in depth to clarify specific issues. Strategic recruitments could improve this.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

The self-assessment is balanced, covering recruitment, leadership, academic culture, collaboration, funding, publications, and productivity. The skewed gender balance is discussed, showing a male dominance among professors and only females among PhD students. Moreover, the small size of the school is emphasized being positive as it is close to researchers from clinics and other disciplines but can also be negative, since research areas are not covered. Seminars are carried out jointly, but the structure and how often is not mentioned. Research time is often consumed by heavy educational duties, with teaching up to 80 %. Research would benefit from a clearer governance from ORU-RÖL, tracking specific, well-defined indicators. Many of the professors are close to retirement and there is no strategy for replacement.

Please provide specific comments on the unit's research funding, publications and productivity.

Research funding

The UoA has large and important platforms funded e.g. by external grants and strategic funding from the Knowledge Foundation (KKS) and local funding e.g. Nyckelfonden for capacity building, recruitment, and infrastructure. They describe less external funding 2019 - 2024 from e.g. national councils, EU programs and strategic foundation. A key risk —explicitly recognized — is dependence on a limited number of large funders, suggesting a need for diversification. Seed money was also discussed as an alternative.

Strengths

Strategic and external funding supporting recruitment, capacity building and infrastructure.

External grants and strategic grants from KKS and Nyckelfonden

Weaknesses and risks

To concentrate funding in a few sources increases vulnerability to shifts in funder priorities.

Few external grants from e.g. the Swedish Research Council, the Swedish Heart Lung Foundation, and the Swedish Cancer Society.

No dedicated budgets for larger strategic recruitments aimed specifically at strengthening research. Strategic recruitments have therefore largely depended on central university initiatives and external funding.

The number of fully employed doctoral students has decreased and the international master's program in biomedicine has recently been discontinued

Publications

The bibliometric summary indicates high output and impact. When papers with no affiliation to Örebro university are omitted, there are still many interesting original articles

Many of the publications in very high impact journals are review articles, which contribute less to promote innovative high impact science in the future. To give a better overview of publications, we suggest dividing original and review articles.

Publication in open-access journals increases international visibility and citation.

Weaknesses and considerations

Several publications with high impact factors have no clear affiliation to Örebro university, and most of these publications don't have a researcher from Örebro in leading positions of the author list. Document publications in a more accurate way, for example, using DIVA.

Several of the higher-ranked publications include authors from Örebro who share affiliations with other universities, e.g., KI and UU. It is therefore difficult to disentangle contributions from those universities and from Örebro University. Many of the highly cited articles in high impact journals are review articles. While they're good, it says less about future upcoming ground-breaking science. Please divide review and scientific original work from each other.

Rewarding publications should be linked to original scientific work, author position and journal impact factors to promote quality and not quantity.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

The UoA declares that the credibility within Biomedicine is grounded in hypothesis-driven experimental design, methodological transparency, continuous external peer review and competitive funding. We have not had the opportunity to go through lab notebooks, but looking at some of the papers the methodology seems to be sound, in order and up to date.

Strengths

Strong doctoral governance and supervision structures with quality control across the PhD cycle. Access to well-defined clinical materials through ORU–RÖL collaboration, strengthening validity and translational relevance.

Academic culture and credibility are sustained through regular seminars, journal clubs and internal research meetings within research groups.

Collaboration with several national and international universities.

Weaknesses and risks

Decreasing numbers of fully funded university-employed PhD positions, which may impact continuity and renewal in laboratory-intensive areas.

Clinical material and collaboration between the laboratory-intensive biomedicine and clinical medicine and surgery are not fully explored and used.

Collaboration between the clinical departments and Biomedicine can be improved. By increasing translational research, underlying mechanisms could be understood, and results would become more relevant and with more impact.

Overall assessment

Credibility appears solid; sustaining it will require investment in early-career pipelines and clearer articulation of integrity/open-science practices.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

Strengths

The research appears in international journals and reflects sustained citation impact and strong international collaboration, but both journal impact and citations vary.

Publications contribute to evolving understanding of disease mechanisms, diagnostics and prevention-oriented research.

Biomedicine researchers contribute actively to the research field also through editorial work, peer review of international journals and expert assignments.

Weaknesses and risks

A recognized challenge is that major contributions are concentrated within a limited number of strategically strong research areas, reflecting the current distribution of senior competence and doctoral resources. Several senior researchers are about to retire, and a plan for this transition is missing.

Laboratory-based research often involves long project timelines and high costs. Researchers might therefore prefer doing shorter, less costly projects, thereby not reaching full understanding or the higher impact journals. Possibility of applying for extra grants from the university in specific cases might encourage the researchers to prolong the time until submission and do additional experiments.

The self-assessment is less explicit about open science and reproducibility practices (e.g. methodology, result interpretation) and how these are taught to doctoral students.

Overall assessment

The UoA contributes to several fields; clearer translational approaches would strengthen science substantially.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

Societal contributions are closely linked to the UoA's core research areas on sexually transmitted infections and antimicrobial resistance.

The structured collaboration with industry partners within strategically funded research programs, particularly those supported by the KKS further contributes to societal impact.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

Ethics approval is needed for human and animal studies, according to Swedish regulations. Örebro University does not operate its own animal housing facility. Researchers instead use alternative model systems such as organoids and Caenorhabditis elegans, where ethics permission is not needed.

Virus and bacterial work are performed in BSL2 laboratories. Pathogenic bacteria in need for BSL3 cannot be handled in Örebro, since no such facilities are available.

The self-assessment points out that the strengths of the UoA include a high level of ethical awareness, proportionate use of experimental models, strong integration of ethics into doctoral education, and well-established support structures for biosafety and data management.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

As mentioned below, some of the recommendations were not fully adopted while other solutions were instead tried.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

Both university-based and clinically affiliated researchers have lowered barriers to participation and scientific interaction. However, this is still not optimal use of clinical and basic science resources.

Stronger formal thematic steering or consolidation into centrally defined research clusters, were deliberately not fully adopted. Instead, development based on existing productive research areas and

investigator-driven collaboration was prioritized. It is of course tempting to continue as a small group, but the critical mass and the hands are needed to perform ground-breaking research.

Clear strategic goals and how to obtain them are missing.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The 5-year vision is shared across Biomedicine, Medicine and Surgery and is coherent, reasonable and realistic, but not specific enough. It focuses on funding, succession and expansion of the major medical areas, strengthening laboratory-based medicine and bioinformatics and sustaining expertise in relevant areas making experimental research attractive as well as AI and machine learning. An important part is the deeper integration between the university hospital and the university.

Strength

More emphasis should be placed on using internal resources to develop to the point, where projects and results are strong enough to successfully compete for significant external funding.

The importance of improving the conditions for experimental research environments is recognized. Recruiting talented collaborators would further strengthen the department.

Recognizing that Biomedicine could be better integrated in the clinical disciplines and that Biomedicine would strengthen translational research.

Weaknesses and risks

The vision is broad and lacks clear prioritization and measurable milestones. It risks remaining wishes rather than guiding investment and recruitment.

Overall assessment

The specific goals and strategies for Biomedicine are not clear. A strong strategic direction should be helpful in selecting a limited number of top priorities with explicit success criteria.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The plan brings up relevant issues impacting research but without specifying top priorities, nor giving a timeline or how to reach the goals. Instead of multiple goals, few top topics carefully analysed and described including milestones would be more beneficial. Stronger joint forces between ORU and RÖL would further strengthen the plan.

Strengths

Increased structural collaboration between ORU and RÖL regarding personnel and equipment, as well as experimental medicine and bioinformatics, would be mutually beneficial for research and economics, reduce duplicates and increase translational research.

The recruitment strategy is important both for keeping the academic leadership in RÖL and attracting talented national/international scientists at different levels to build a dynamic research center.

Weaknesses and risks

The proposed plan has many advantages, but it would be stronger with priorities, goals and milestones.

Local and internal funding are proposed to be intended for PhD students, but post docs and junior researchers need to form their own groups and try their own ideas and have initially little chances to compete about the national grants. If not recognized, talented post docs may move on to other institutions.

Overall assessment

The proposed measures are appropriate; feasibility will depend on governance clarity, prioritization, and a robust implementation framework.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

The recommendations have partly been included above but are further given below.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

We recognize the great potential of Örebro with its unique closeness of the university hospital and the university. The hospital follows the patients' over longer time. This can open up for epidemiological projects and collection of various samples to support in vitro experiments.

To form thematic research subjects instead of the current three, Biomedicine, Medicine and Surgical sciences, would increase the natural interaction between researchers, promote translational research and avoid duplicate costs.

A change to thematic groups has been suggested also in ORU2020 and is being emphasized again. Such change of structure would allow more and better interaction between clinical and basic science groups.

It is understandable that there is a desire to preserve the scientific breadth while at the same time giving room for individual scientific freedom. Despite this, breadth tends to only superficially touch on important areas. We therefore recommend giving more space to research that goes in-depth with questions.

To promote good science, a large critical mass is needed. This can partly be achieved by merging small groups into larger units.

Strategic plans for long-term funding are needed. Defining the goals and which national and international funds to apply for is necessary and could be facilitated by extending and synergising collaboration between researchers from Biomedicine, Medicine and Surgical sciences.

Currently, there are two Grants Offices, at URO and RÖL respectively. By merging these units, unnecessary duplication of work can be avoided, freeing up time for active support of research applications.

More focus should be on quality and not quantity when publishing. Papers should originate from ORU and optimally have both first and last authors from ORU. Longer time for projects should be allowed, encouraged and supported if the data are solid, promising and with a sound scientific hypothesis.

The annual publication award should be based on quality rather than quantity, originating from ORU. One strong paper is worth more than several small papers.

Help post docs and junior researchers to stay at ORU. We have been informed that talented researchers move on to other institutions. We therefore suggest planning a clear career path for scientists to stay and contribute to advancing science.

To fill the gaps within the medical field, it is important to recruit academically active professors. By recruiting junior scientists with a strong academic track record, new research groups can be formed.

ORU2025 Review Report: Disability research

Review Team: Dimitris Michailakis (main reviewer), Klavs Madsen, Gunilla Isaksson, and Marie Friedel

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

UoA constitutes since 2022 a research group within the Unit for Activity and Health. Currently, there are 24 researchers and 6 doctoral students conducting research. The researchers are employed elsewhere, either internally within ORU or externally. It is stated that teaching is prioritized within the unit and that this has led to three researchers leaving UoA in 2024–2025. Until 2017, UoA had two full-time professors; since then, these positions have been “on hold.”

1.2 Are the main research areas appropriate for the unit and its development?

UoA has four core themes: Clinical audiology, Deafblindness, Disability and working life, and Neurodevelopmental disabilities. Research is conducted within six research groups on: Autistic children and adults, Combined hearing and vision impairment/deafblindness, Disability in society, Children’s and students’ language learning, Clinical audiology, and Social and individual aspects of aging and later life.

Within each of these research groups there are ongoing research projects. Information on oru.se shows that many projects span two, and sometimes three, research areas, most often within the Faculty of Medicine and Health, but there are also cross-faculty projects.

Four of the research groups fall within UoA’s profile as it has historically developed, while it is more questionable whether research fields such as Disability in society and Social and individual aspects of aging and later life, fit within it.

1.3 Please comment on the unit’s reflective analysis of their environment.

A mixed picture emerges when it comes to staff. UoA emphasizes that the recruitment of professors must be restarted, as this affects leadership, grant applications, and the ability to attract new doctoral students. UoA points out that the reorganization was detrimental, as it led to an unclear organizational structure and resulted in staff being scattered across other smaller research groups. The proportion of ORU employees conducting research at UoA is decreasing. The documentation states that UoA has 2 professors (80% and 100%, respectively). During the visit, it became clear that one of the professors has held a position in the faculty’s leadership since March 2025. There were 10 research-active lecturers/professors, this number has decreased to 7 as of December 2025.

ORU2020 had already highlighted the problem of staff fragmentation. The abolition of research environments as the primary organizational unit in 2022 appears to have had *only* negative consequences, contrary to the three other units under assessment. The consequences for UoA could possibly be viewed in the context of the fact that the three universities—ORU, LiU, and JU—discontinued funding for and collaboration on SIDR in 2021, which had been ongoing for more than two decades and served as a platform for UoA.

UoA actively encourages professional development. The “Docent School” initiative has yielded positive results. UoA strives to retain doctoral students after they complete their doctoral studies and has been successful in this endeavour.

Leadership within UoA has changed during the period and shared between different positions and groups. A steering group consisting of senior researchers meets three times per semester to discuss organizational issues and planning. Each research group is led by a group leader.

It is a challenge to create an academic culture within a research group that itself consists of several other research groups, where the researchers are dispersed internally and externally. UoA has nonetheless launched some positive initiatives: Seminars are organized so that researchers can participate in person or remotely. In 2026, joint seminars with occupational therapy were initiated. The imbalance in gender and age distribution remains though. When it comes to national and international collaboration, UoA sets an exemplary standard. For a long time, UoA has maintained a well-established collaboration with two research centers within RÖL (AudF, UFC). UoA also collaborates in several medical fields at the national, regional, and clinical levels. Following the abolishment of SIDR, collaboration regarding doctoral courses has continued with LiU and JU, a fact that the faculty also highlights as an example in its self-evaluation. UoA collaborates with government agencies, interest groups, and patient organizations and is represented in various networks. Internationally, UoA collaborates with some institutions and universities.

The data describing research grants is not entirely satisfactory. However, research grants during the period totalled approximately SEK 30 million, half of which were internal, which is likely an indication of the professional development time that ORU employees spent at UoA during the period. The largest external research funders during the period were, FORTE and VR. A quarter of the funds were allocated by non-profit organizations.

By 2024, approximately SEK 40 million in external funds had been spent.

There has been a significant increase in the proportion of external grants during the period: in 2020, the proportion was 12 percent, while in the following four years it exceeded 70 percent. UoA emphasizes that they have been successful in securing external grants, but also that many applications for research funding did not result in any grants.

Bibliometric data show that UoA had a total of 217 publications during the period, of which 192 were articles. Compared to the previous period, there has been a decrease in the total number of publications, but an increase in the proportion of articles (88 percent compared to 68 percent). An average of 32 articles and 5 reviews/conference papers were published per year.

Looking at the specified research areas, rehabilitation dominates (35 publications), followed by otorhinolaryngology (27, of which 12 are in audiology–speech-language pathology), nursing (24), and Health Care Science & Services combined with Health Policy & Services (23). 30 percent of the articles have an impact factor of 3 or higher.

There has been an increase in the number of documents published where at least two authors are affiliated with institutions in other countries (from 11 documents in 2020 to 22 documents in 2024).

Documents where all authors are affiliated with institutions in Sweden account for nearly 60 percent of the total.

The total number of citations for the period was 1,365 (excluding self-citations), of which 380 were in 2019, 270 in 2020, and 340 in 2021. The publications are below the global average for CNCI. In 2019, however, they were close to the CNCI average.

There has been an increase compared to ORU2020 in the number of publications in Q1 and Q2 journals. 27 percent were published in Q1 journals and 39 percent in Q2 journals.

A very high proportion of publications are made available via Open Access, approximately 90 percent every year except for 2019, which is higher than the ORU average.

During the period, there is 1 article in the Top 1% (2022, Usher syndrome, Audiology Research) and 12 articles in the Top 10%.

It should be noted that the selection criterion “ResearcherIDs of the current staff members” which forms the basis for the compiled publication list, is likely too broad given the interdisciplinary context.

When it comes to research output in relation to available research time, the picture is difficult to assess for several reasons. UoA researchers hold positions at ORU, in the region, or in the municipality, which leads to differences in both allocated and available research time. In 2024, research time averaged 35 to 50 percent across the various positions. There are no indications of gender differences between allocated and actual research time. In most cases, doctoral students have a balance between allocated and available research time, according to UoA. Notwithstanding the above-mentioned results show several improvements compared to the previous evaluation period. The fact that six doctoral students have defended their dissertations and two their licentiate theses during the period is also a positive result.

2. QUALITY OF RESEARCH

2.1 Credibility.

In addition to what has been noted above regarding publications and grants, UoA researchers are invited to participate in national and international collaborations and are appointed to serve as experts and evaluators. UoA safeguards research quality through several measures: by aiming to have articles published primarily in higher-ranking journals, by providing feedback on manuscripts at regular seminars, by assigning doctoral students two advisors—one of whom is in the relevant subject area—and by offering courses in academic writing, research methodology, research ethics, and more.

2.2 Contribution to the research field.

In addition to the contributions through publications, researchers have – considering their small number – made extensive academic contributions as external examiners, as members of degree committees, and as referees for many scientific journals.

2.3 Contribution to society.

UoA's research makes a valuable contribution to different groups. Stakeholders include government agencies, healthcare professionals, industry, and patient organizations. Researchers are invited to clinics and other workplaces to give lectures to professionals. Some researchers have collaborated with industry, for example in the development of hearing aids. Patient organizations request knowledge transfer in the form of lectures and popular science versions of UoA's research.

UoA was well-known under its former name, SIDR. It is noted that the new name is less recognizable, both nationally and internationally. UoA lacks the dedicated funding it had under the SIDR-collaboration to raise the unit's profile outside the academic field. In its self-evaluation, the university emphasizes that resources for research communication have increased significantly in recent years. The faculty emphasizes the importance of marketing researchers and research and points out that collaboration needs to be developed. Perhaps UoA could benefit from this.

2.4 Regulations, ethics and sustainable practice.

UoA continues to be highly committed to providing doctoral students with a solid foundation as researchers through courses and the requirements set for their dissertation work. Ethical and methodological issues in research are continuously addressed and discussed. UoA notes although that there are different administrative systems and procedures that distinguish RÖL from the university, therefore there is a need for administrative support.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

The UoA assesses that the elimination of research environments has had a negative impact on the unit, as researchers are scattered and lack a common structure for doctoral research.

The faculty has introduced a docent program, but there is no equivalent career step for advancement to full professor.

3.2 Initiatives after ORU2020

The 2022 faculty decision to increase external collaboration and clarify structures—what UoA refers to as a transition to a more "monodisciplinary model"—is highlighted as an obstacle. To maintain coherence, UoA has recruited doctoral students with diverse backgrounds invested in shared, interdisciplinary supervision, concentrated activities on a few core themes (see 1.2), and focused on joint projects and grant applications through informal networks.

A name change has been implemented, but it has resulted in a loss of identity for the UoA. The choice of name "Disability and Society" is not only generic; it is vague and overly broad.

UoA believes that the reorganization into six groups across four themes has increased fragmentation and reduced critical mass. UoA states that it prioritizes a balance between social science research on

disability and medicine/auditory science and utilizes cross-faculty ties (e.g., collaboration with social work) to maintain the social science perspective.

UoA continues its collaboration with LiU and JU in doctoral education, and a new mandatory doctoral course will be added.

Regarding the strategic plan and priorities in accordance with it, there are currently no tangible results, except for internal collaboration where UoA highlights collaboration with social work and special education. Developing an annual report that includes activities, grants et al. is still at the planning stage.

4. DEVELOPMENT PLAN FOR THE UoA

4.1-4.2 The vision and the plan

UoA's vision is ambitious. One of the goals within this vision is to establish an overarching organizational structure for research groups in disability research and to restore the potential of a research environment. UoA intends to request from the faculty to reintroduce UoA as a research environment. If that is not possible, UoA will investigate whether it is possible to establish this research environment at the Faculty of Humanities and Social Sciences instead. In order to strengthen the UoA, the vision, and plan, is a recruitment of a professor in disability research or, alternatively, in a combination of disability research and auditory science. UoA emphasizes that disability research at ORU has long maintained close collaboration with auditory science, which is also an interdisciplinary field. These are key questions – see Recommendations.

There a several good initiatives and ideas in the vision, and the plan, namely:

Increased collaboration, both with other units within ORU, and with LiU and JU on scholarship programs to recruit doctoral students from a broader field with an interdisciplinary background but also searching for external grants.

UoA wants to see more combined positions to support clinical research and strengthen ties with RÖL, UFC, and AudF.

In order to make the units research more visible externally UoA plan to appoint a working group tasked with organizing research seminars for the annual International Disability Day, including developing seminar programs, etc.

Initiate collaborative projects within UoA, e.g., authoring course materials on interdisciplinary disability research.

To design an annual work plan (this was proposed by ORU2020 and should have been implemented).

Some objectives are not wholly realistic, or necessary to prioritize for now given resources or other reasons, namely:

Recruiting international postdoctoral researchers.

The objective to expand research collaboration with organizations for people with disabilities raises several questions that need to be further clarified.

To make a study visit to University College Dublin to learn from the university that UoA considers most similar (benchmark).

4.3 Recommendations

Taking into account, on the one hand, the challenges described by UoA (organizational shortcomings, the absence of a full professor in the field, a heavy teaching load for researchers, a decline in the number of researchers over the past two years and a decrease in the number of ORU-employed researchers, fragmentation and a reduced critical mass) and the vision of becoming widely recognized nationally and internationally and having many publications in highly ranked journals, several strategic and practical choices are recommended for UoA:

UoA sees its hallmark as being interdisciplinary and covering the entire spectrum of disability research. However, allocating resources to research on, for example, aging—interdisciplinary and across faculty boundaries—divides both scarce resources and focus. UoA also highlights the fragmentation that has arisen with six research groups. UoA is therefore recommended, as a first step, to reduce the number of research groups to four. UoA is further recommended to deepen, in this work, what is specific to UoA at Örebro University namely the strong ties to audiology, hearing science, and research on deafblindness, as well as collaboration with the medical field.

UoA is recommended to remain within the Faculty of Medicine and to continue building on the established research collaboration with RÖL and its research centres.

It is important to recognize that that the government research grants are not expected to increase significantly over the coming years, as the university points out in its self-assessment, and that it is therefore necessary to increase external funding. The chances of securing funding may increase through high-quality, well-designed projects within the Faculty of Medicine.

UoA is recommended to accept the faculty's policy direction in the 2022 decision and seek alternative solutions to the described problems. Upon closer examination of the structure of educational programs and research, there is a lack of clarity on the part of the department: All programs have a corresponding research group, except for the audiology program and applied hearing science (two programs that are very similar). UoA, which historically has strong ties to audiology and hearing science, could become the research subject Audiology and Hearing Science (or simply Hearing Science; there is some ambiguity in the terminology). In this way, UoA would organically belong to the unit, have a foot in both education and research, and have some of its own staff (those who teach in the programs). Education and research are two core activities that interact, as the faculty emphasizes in its self-assessment. Perhaps it would as well facilitate recruitment to doctoral education if master's graduates in hearing science saw a pathway into doctoral education specifically in hearing science (compare the strategic initiative in occupational therapy aimed at recruiting local master's students into doctoral education)?

This recommendation does not solve all the problems of being a research group, but it provides certain building blocks for a better foundation.

The programs in question are already, as UoA also points out, interdisciplinary in their structure. There is no reason to emphasize the disability perspective in the name. What was once an eye-opener—that people with disabilities face barriers in everyday life and these must be minimized since they have the right to participate in society on equal terms—has, after more than two decades, gained widespread recognition thanks to research, politics, and the work of advocacy organizations.

It should be noted that UoA's new name relates more to social science research than to the research that has been and is currently being conducted within UoA.

UoA is recommended to work toward establishing a full-time professorship in the field of audiology/hearing science.

4. CONCLUDING REMARKS

During this period, UoA has undergone two major changes: first, becoming a research group, and second, no longer being part of a twenty-year university collaboration, which has had negative consequences for the staff. Despite this UoA has succeeded in contributing both to research and stakeholders. In several cases, the results are better than those from ORU2020. UoA has followed several of the recommendations from the previous evaluation, including a name change. The new name does not seem particularly successful. UoA's vision is ambitious but is characterized by a desire to return to the way things were. Instead, the recommendations focus on UoA finding a path within the changes that occurred in 2022 and working to become the research subject for audiology education and applied hearing science, thereby clearly linking the research to educational programs. This provides weight and, in combination with a full professor in audiology/hearing science, clearer leadership and a distinct profile, both internally and externally.

The proposed recommendations do not suggest that UoA would cease interdisciplinary work.

ORU2025 Review Report: Sport Science

Review team: Klavs Madsen (main reviewer), Gunilla Isaksson, Marie Friedel, Dimitris Michailakis

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The faculty's management structure and political work are crucial for promoting quality research and for the development of the individual units.

From the report and from the conversation with the employees, it seems that there is a great distance from faculty to unit and this makes development difficult in general. This has an impact on the working environment of the unit, and it seems that the working conditions for most researchers generally make it difficult to achieve high research quality.

The UoA is organised with a “head of subject” appointed by the faculty. It is not clear what qualifications are required for this position. Most successful institutions employ people with extensive experience and leadership skills in this central role, and with sufficient time to work on developing the quality of their research. ORU has clearly chosen a different organization of the faculty.

The UoA is organised in three research groups, ReShape, Exercise Physiology and Sports Medicine, Disease prevention, physical activity and diet. Although many different research topics and few researchers, there seems to be a good structure and culture in each of the research groups.

1.2 Are the main research areas appropriate for the unit and its development?

The research areas are highly relevant to society and have good potential for collaboration with sports organizations, clinics and industry. There are several possibilities for developing the present research areas further with a national and international perspective. The external collaboration with non-academic partners requires strong resources and a clear strategy for how this cooperation can be developed.

Since there is a good potential for academic and non-academic development, it is assessed that the development can create better quality in research, increase the level of activity, external funding and societal benefit if resources are invested in strategic work with UoA.

A review of the study programs offered in sport science shows that there is a good correlation between research environments and education programs. However, the research environments are

relatively small in relation to the programs, and most teachers have limited research time making it difficult meeting the requirement for research-based teaching.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

The UoA report highlight a period where the staff was reduced with 15% causing a turbulent and challenging period in terms of working environment, workload and academic production, which is clearly seen in the overview of publications and citations.

It seems that the situation has stabilized with good recruitment of staff the last year. Anyway, it is worth considering why this period was so turbulent and to consider whether the UoA is attractive for new employees.

It is pointed out, that there is a need to intensify the recruitment of PhD candidates. This is crucial for the development of the research group, and with a limited number of internal calls, recruitment becomes dependent on large external grants. It is a challenging task with ORU's high OH contribution and only two professors having reasonable time for research. To succeed, alternative solutions are necessary such as co-financing (UoA and the faculty).

The strength of the UoA's leadership strategy is the employee's autonomy and the opportunity to pursue own research ideas. A weakness is the heavy teaching load.

As written previously, the conditions for managing the unit are considered difficult to ensure good development and quality assurance overall.

Since most researchers at the UoA have 10-20% research time, this results in a lack of continuity and difficult conditions for the development of the unit. Research quality is closely linked to sufficient time, and interesting projects are generally very time-consuming. Therefore, the current working conditions are a strong limitation for development.

The model that external funding gives more research time has several drawbacks. With limited research time it is difficult to build a sufficiently good CV to compete for large external grants. If an employee succeeds in getting external grant other employees must take over teaching, which makes planning difficult and generally reduces the efficiency of the unit. Furthermore, it can be difficult to attract good researchers to the institution, and if an employee fails to get external funding, it weakens research-based teaching.

The three research groups organize activities in alignment with their respective research traditions and with expectations on PhD candidates to participate in group seminars and in requirements for authorship on scientific papers. The academic culture seems strong where data analysis, manuscripts and applications are reviewed in open seminars/workshops before they are submitted, ensuring good quality. Traditionally, this is a difficult task given the focus on many different research topics and the

academic freedom. The overall impression is that this is working very well and as a good example for other institutions.

The humanities and social sciences research field is less dependent on internal collaboration, and thus a structure with smaller research groups is a possible model. To ensure high quality in research, however, it is important to have national and international collaboration partners, participation in network groups, seminars and conferences. It seems to be supported well by the UoA and judged from the publications there are extensive international collaboration with good research environments.

The natural science research field is heavily dependent on well-functioning laboratories and methods to generate high-quality projects. The research group consists of few researchers, which generally makes high-level research difficult. The group has managed to focus on specific topics, and they have good facilities at ORU and strong competencies in this field. Furthermore, they collaborate with good external research environments. The research group seems small considering that the unit is responsible for the international master's program in sports physiology and medicine.

Overall, there are many research topics and few researchers employed. This makes internal sparring and development more difficult, but there are strong international partners who partially compensate for this. In this situation, it is important that the internationalization opportunities are significantly supported by the university.

However, as stated in the self-assessment, “the number of international visits both at the UoA and group members going abroad to visit other research institutions is currently relatively low”. Efforts should be made to promote increased collaborations through exchanges of competencies with international universities.

Please provide specific comments on the unit’s research funding, publications and productivity.

Research funding has increased during recent years and is now 5 to 6 million SEK annually. There is a very high success rate (>30%), but the total funding is relatively small considering the number of staff, the ORO OH, and how expensive is it to have a fully externally funded PhD studentship.

For a detailed evaluation and for the future perspective, it would be beneficial to see how grants are distributed between the research groups/individual researchers.

There is a dramtic reduction in government funding from 11 million SEK in 2020 to 6 million SEK in 2024. The interview panel was not able to explain this reduction, but this is important information for the overall assessment of the economy.

The bibliometric report for 2019-2024 shows a mean of 35 publications 2019-2021 reduced to a mean of 22 for 2022-2024. There is an explanation for this reduction as mentioned previously. The citations per year shows also a dramatic reduction in the period 2022-2024 which can be explained with both reduced and more recent publications. Anyway, the CNCI per year is still at a good level,

around 0.9-1.0 recent years compared to 1.2 in the period 2019-2021. The publication list shows an extensive internationally collaboration in around 50% of the papers.

Around 50% of the total papers are published in Q1 journals indicating high quality. There are also a substantial number of papers in top 10%, and one paper in top 1% for Sport Science (WoS).

Overall, the publications indicate strong international research groups at a good level.

It is not the intention to evaluate individual researcher at the UoA, but it would be beneficial with a yearly publication list to see 1) if the publication has main authors from ORU or if the ORU staff are co-authors, 2) which publications are from permanent staff, affiliated staff, PhD students, and 3) impact factors. The social science research group has also other traditions for publications which is not included in the present overview as I understand.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

An overall assessment is that sport science at ORU is doing well based on the premises.

The local organization in three research groups is clear, seems well thought out, and there seems to be a strong academic culture.

The strength is clearly the internal organization in research groups. The clear weaknesses are the conditions for internal development (leadership), and the staffs limited time allocated to research, better continuity in work tasks and better opportunities to develop the entire unit as explained earlier.

The self-assessment points out that Sport Science covers research topics that may favor an

interdisciplinary research approach, and the UoA should consider ways to optimize the use

of existing competencies in order to outline interdisciplinary research projects. This may have potential to attract larger research fundings and open for more collaborations with other units at ORU, and within and outside the academic world.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

The strength of the UoA is that they produce significant original articles belonging mostly to Q1 or Q2. Articles are published in a wide range of Sport Science subfields, illustrating a comprehensive set of competencies within the UoA. The topic of publications reflects the content of the educational programs held at the UoA.

Members of the UoA contribute to the scientific field through peer reviewing in

international journals as well as editorial work, and as invited guest editors for special issues in a high-impact journal. Members of the staff hold positions in scientific boards and working groups, and they also contribute to the field by frequently presenting research at high profile conferences.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

The UoA engages with society in different ways. One notable strength is the strong impact achieved through personal, one-to-one relations with stakeholders. Several researchers in the unit have well-established networks, which enable knowledge transfer to local sport clubs and national sport federations.

Several staff members collaborate directly with local schools and non-profit organizations as experts to advance research in School Physical Education.

The unit has a growing strategy for securing contracts with relevant partners which has helped to structure and formalize collaboration. However, the amount of external collaboration is not clear from the self-assessment, either if the UoA do research in collaboration with the external partners or it is more knowledge transfer, how this is integrated with the education programs and how the UoA ensure continuity and development.

There is a high potential for collaboration outside academia, sport institutions, healthcare institutions, and industry. It is suggested that the UoA allocate specific ressources and collaborate with the faculty for further developing this potential. This would increase visibility of research activities at the UoA with potential to bridge the gap between research output and societal impact, and it will also increase the possibilities for more external financing.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

The UoA works actively to ensure that all research follows ethical guidelines and relevant regulations. Ethical competence is built into routines at the Faculty and Unit level. All PhD supervisors in the

Faculty of Medicine and Health must complete mandatory training that includes research ethics and current legal requirements.

Ethical questions and regulatory updates are part of the doctoral education program, where students learn about the ethical review process, data protection and responsible research practices.

The UoA research collegium and the research groups provide spaces where researchers can raise ethical issues, ask questions and discuss challenges that arise in their projects.

The unit has therefore described procedures and other systematic work aimed at maintaining sustainable practices.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The collaboration with the central administration as very productive in terms of data security, regularly applications for internal funding and publication premiums, participation in forums for docents and professors, and grant funding seminars.

They specifically highlight the close collaboration with RÖL in research and research education, joint employment, and funds for infrastructure.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

The UoA has stated ten specific issues they have worked on in relation to the ORU2020. The topics seems very relevant for the development, but it is not related to/reflected to improvement in research production, research quality, external collaboration and funding, recruitment of international researchers, working environment, student production and student recruitment, program quality, student evaluations.

These benchmarks are important for evaluating the development of the UoA, where they have been successful and where there is still room for improvement.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The vision presented is ambitious and there are clear statements where the UoA want to develop in a broad perspective: increased number of doctoral candidates, research funding and collaboration with academia and other institutions in Sweden and internationally.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

There is a clear strategy for obtaining the stated vision with 8 specific goals. It is focused on the overall development in different areas, but there is a clear link between the different goals.

The strength is the existing internal academic culture and the expertise among the two professors that can be used to join the forces for further development of the UoA.

The weakness is that the strategy is very demanding in terms of manpower and apart from the ambition of increased external funding, there is no strategy for improving the UoA leadership or to improve the staffs' conditions for doing all the strategic work and the increased research activities. It can be advantageously described as a specific goal.

Another weakness is that it is not described how the collaboration with the faculty and university must be organised to get sufficient support for the present strategy.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

The recommendation is that the UoA in collaboration with the faculty

follows the described development plan where parameters are set to evaluate progress.

develop a strategy that strengthens the unit's management and opportunities to develop research groups, internationalization, external funding, external collaboration with organizations and industry, and political networking.

develop a concept that ensure better working conditions for the researchers, better working environment, and, in general, a plan for how the unit can strengthen its image and become an attractive workplace for strong international researchers.

set up a plan for dissemination of the UoA’s research competences in a broad sense, to strengthen external collaboration, recruitment of international researchers and and recruitment of students.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

An overall assessment is that sport science at ORU is doing well based on the premises. There is a particularly good potential for academic development and collaboration with sport organizations, clinical institutions and the society in general as seen at other sport science institutions in the Nordic countries.

However, there are fundamental structures that prevent the UoA from developing when it comes to improving the quality of research, increase the level of research activity, external funding, cooperation with the surrounding community, and becoming an attractive institution for new employees.

There was not sufficient time during the interview, but the evaluator would be interested in how the university and faculty support the leadership at the UoA, collaboration for marketing the UoA research and education activities in research environments, society and potential partners, innovation and entrepreneurship. There seems to be very little resources available at the UoA for these activities.

It is the reviewer's opinion that there are two clear limitations for sport science to be able to compete with international research institutions.

One limitation is the employees research time. The model of employing staff with a few percent research time weakens the quality. Several of the employees cannot get external grants and thus do not have sufficient research time to generate high quality. They become "leisure researchers". At the same time, it has a negative effect on the educational programs where there is not enough research-based teaching.

The second limitation is the management structure. Specific competences in strategic recruitment, development of research groups, internationalization, external funding, external collaboration with organizations and industry, political networking, is needed at the unit to quality assure the research and to develop the unit.

ORU2025 Review Report: Surgical Science

Review team: Mats Brännström (main reviewer), Karl Michaëlsson and Annelie Brauner

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The UoA of Surgery is together with Biomedicine and Medicine, one of three research interest within MV of the Medical Faculty.

Academic staff

The researchers of Surgery are both clinical academic and full-time academic.

Five professors belong to the Surgery UoA, with 4/5 above 62 years of age and 4/5 of male gender. Additionally, there is one adjunct professor of age 68 years.

There are 3 senior lecturers (all males; of ages 44, 53, and 66 years). Additionally, there are 4 adjunct senior lecturers, with a reasonable age structure.

There are also one lecturer and one adjunct lecturer, both of ages less than 35 years.

A long list of affiliated researchers/affiliated professors are provided. It is unclear to what extent they are affiliated and whether they also have Örebro Uni as one address in publications. The numbers of PhD students (total for MV) have been constant during the years for evaluation, and the gender balance of PhD students is acceptable.

Infrastructure

A key strength is the close integration between Örebro University School of Medical Sciences (Campus USÖ) and the University Hospital. The proximity and the fact that several of the academic staff have appointments and facilities for research both at the Campus USÖ and the adjacent University Hospital is a factor which facilitates translational research and cooperation within the UoA. The "home lab" core facility is a good example of cost sharing of infrastructure and is also a meeting hub for researchers. The facilities at Campus USÖ are very well designed and provide a modern and attractive working environment, with excellent opportunities for interactions both between research groups and between researchers and medical students (potential future researchers). The presence of a medical library and a clinical training centre within the facility are significant advantages. However, the separate location of teaching and research facilities for health paramedics at the main University Campus is a disadvantage and does not promote interdisciplinary research.

Strengths

- the proximity between Campus USÖ and the university hospital

- shared laboratory facilities (“home labs”) with low-cost user-fees

- shared office spaces that promote interactions between basic scientists and clinical/translational researchers

- strong collaborations across Medicine, Biomedicine, and Surgery, enabling interdisciplinary projects and efficient sharing of resources

- grant application support

Weaknesses

- the age structure of senior academic staff, with several upcoming retirements in a short period

- no experimental animal facility

- an unbalanced gender distribution among senior academics

- an unclear informal organizational structure into Surgery, Medicine and Biomedicine, where some research groups may be inappropriately placed in a field

- the physical separation of medical science (Camous UDSÖ) and health science (main Uni campus) does not facilitate interdisciplinary research collaborations

Opportunities

The very nice facilities at Campus USÖ, combined with the upcoming need to replace retiring senior academic staff, provide an excellent opportunity to recruit talented early- and mid-career researchers eager to establish and develop their own research groups in an open-minded and non-hierarchical environment

1.2 Are the main research areas appropriate for the unit and its development?

The main research areas were specified as being from basic experimental research to surgical procedures and treatments. The self-evaluation provides very broad descriptions of key areas such as orthopaedic prosthesis surgery, colon cancer, brain tumour and haemorrhagic/septic shock. To acquire some overview of the research topics and the role of Örebro Uni academic staff as principal project-PIs, some randomly picked research fields/senior academics were assessed.

Looking closely into one specific area, prosthesis surgery, and assuming that the lead Örebro researcher is P Wretenberg (PW), there are around 42 "PubMed-identified" articles with PW from 2021-today, but with PW as first/last author on only two. The research is well focused on orthopaedic prosthesis surgery, but is largely collaborative in nature, and the academic chair in orthopaedics at Örebro Uni appears to play a leading PI role in only a limited number of the subprojects.

Another senior academic staff, H Hjelmqvist (HH) in anaesthesiology, has only 12 "PubMed-identified" articles from 2021-today, and with no article as first/last author. The research topics span over a broad range from colon cancer surgery, over several medical teaching studies, to cytokine

expression in patients with atherosclerosis. The bulk of HH´s publications focus on medical education, which, while an important field, is generally less competitive for major national research grants such as those from the Swedish Research Council (VR)

In my own area (obstetrics and gynaecology) I note that professor J Brynhildsen has 18 "PubMed-identified" articles from 2021-today, with only 2 as first/last author. The papers are well-focused around contraception and menopausal hormone therapy.

Helena Backman, a professor of Preventive Health Care has many publications, also in high IF journals, such as Lancet. Her research is well focused in gestational diabetes.

Taken together, the research areas of Surgery cover a broad range of relevant topics, but the output of research articles with a clear Örebro Uni profile, and with Örebro Uni academics as first/last author, should be increased

Strengths

- research cover many relevant areas

- research is translational, with some co-authorship between Surgery and Biomedicine/Medicine

- platforms (bioinformatics/epidemiology, imaging, genomics, biobank, SciLifeLab) are well integrated into the UoA

- the Uni initiative on AI-and robotics is a future strength and can facilitate AI-integration into medical research

Weaknesses

- several main research areas of surgery seem to have Örebro Uni academic staff as coinvestigators rather than principal investigators

- Surgery, Biomedicine and Medicine and list together 53 independent research groups, which is a high number, considering the overall size

- several small research groups instead of larger collaborative groups (with research focus) may prevent attraction of larger grants

- research appears to lack focus among some senior academic staff, as their work spans a wide range of areas, making it difficult to achieve strong international recognition within a specific field.

Opportunities

Örebro Uni has a good position to attract young coming scientists and academic staff and should take the opportunity to create research groups that are internationally leading in focused research areas, where scientific strength already exists and in new areas possibly coupled to AI and robotics in surgery and clinical medicine. This would create some more focused research areas, enabling also methodology transfer to other research groups. Another opportunity would be to consolidate research groups with related scientific interests into stronger and more cohesive collaborative environments.

1.3 Please comment on the unit's reflective analysis of their environment.

The reflective analysis addresses several important areas, including protected research time and strategic recruitment. It also points out the negative impact of the COVID pandemic during the assessment period, particularly the adverse consequences for physical meetings and the initiation and progression of research collaborations.

The analysis further notes that strategic recruitment has largely depended on central university initiatives, including opportunities to recruit permanent academic staff as well as visiting professors. Structured career development plans for junior academic staff also appear to be in place. In addition, participation in both national and international research programmes is emphasized as an important strength of the research environment.

Opportunities

Based on the analysis, a more decentralized recruitment strategy could help fill existing gaps and open new research areas, particularly considering the substantial number of retirements in recent years. There is also an opportunity to recruit employed part-time international guest professors to strengthen research in promising and emerging fields. Given the limited external funding secured by the senior academic staff within the UoA (see below), such guest professors could additionally contribute by improving success rates in competitive national and international grant applications.

Research funding

The largest sources of funding are the local Nyckelfonden and unspecified Swedish non-profit organizations. Funding from major competitive national grant agencies, such as the Swedish Research Council (VR), Forte, the Swedish Cancer Society (Cancerfonden), and the Swedish Heart-Lung Foundation (Hjärt-Lungfonden), is very limited. An assessment of Örebro University's VR project applications within Medicine and Health (covering Surgery, Medicine, and Biomedicine) during the period 2019–2024 showed that only five grants were awarded, corresponding to a success rate of 8%, which is considerably below the national average. Funding from ALF is important, but in comparison to the other medical faculties this funding is low and should be increased.

Strengths

- very good regional/local funding support (Nyckelfonden) for researchers who have reached the associate professor level or above

- the presence of grants offices both at Uni and at Hospital

Weaknesses

- low funding from national and international funding bodies

- low national ALF funding

- the ease with which senior researchers can obtain Nyckelfonden support, may reduce the incentive to apply for national grants

Opportunities
The strong regional and local funding base provides a solid platform for building more competitive research environments capable of attracting national and international grants. Increased strategic support for grant writing, mentorship, and larger interdisciplinary collaborations could improve success rates in applications to agencies such as VR, Forte, and the major medical foundations. International guest professors of high scientific standard, and with profiles to fit into upcoming/growing research areas, could be recruited. There is also an opportunity to strengthen the university's national standing and increase future ALF allocations through more focused research profiling and enhanced academic leadership.

Publications

The overall publication output of the UoA is strong, with 1,184 published articles during the assessment period, including a substantial number of well-cited publications. Approximately 9% of the articles remain uncited, primarily among the more recent publications. It should be noted that several of the most highly cited papers consist of guidelines, reviews, and registry reports, where Örebro Uni authors are included among multiple co-authors but are not in first- or last-author positions. In addition, some listed publications originate from academic staff members' previous institutional affiliations or include co-authors whose affiliation with Örebro University could not be clearly identified. The annual publication output has remained relatively stable throughout the assessment period. See also 1.2 above on the publication record of individual senior academic staff, and the low ratio of leading author (first or last) versus other co-authorship.

Strengths

- overall research output is high
- publications in high IF journals
- high rate of articles published open access

Weaknesses

- a relatively low share of true research papers in the top category of cited papers
- low rate of leading (first/last) author for senior academic staff (professors)
- listed papers without Örebro uni as affiliation exist on the provided publication list

Opportunities
The acceptable overall publication output and proportion of publications in high-impact journals provide a solid foundation for strengthening the international visibility of the UoA. A greater emphasis on developing independent research profiles and increasing the proportion of first- and last-author publications among senior academic staff would enhance scientific leadership and competitiveness for external funding. There is also an opportunity to establish clearer affiliation strategies and more focused support for original research projects that can generate highly cited primary research articles rather than predominantly collaborative registry-reports, guidelines, and reviews.

2. QUALITY OF RESEARCH

2.1 Credibility.

The UoA demonstrates many of the characteristics expected of a modern medical research environment and, in line with Swedish medical faculties in general, produces research of overall high quality and clear relevance to both the international scientific community and society at large. Research findings are disseminated through peer-reviewed journals, including a substantial number of publications in high-impact international journals. The broad clinical anchoring of the research activities also strengthens the translational relevance and societal value of the work.

The PhD education programme appears to be well structured, with appropriate quality assurance procedures and formal checkpoints throughout the doctoral training process. In particular, the pre-admission evaluation of PhD projects is an important strength, as it helps ensure the scientific relevance, feasibility, and methodological quality of the proposed projects. It also provides assurance that doctoral students are supported by a sufficiently competent supervisory team with the expertise and capacity required to guide the student throughout the PhD process.

The collaborative research culture within the UoA is another strength and has contributed to a stable publication output and participation in national and international research networks. The relatively high proportion of open-access publications further supports transparency and dissemination of research findings.

At the same time, some weaknesses can be identified. A considerable proportion of the research output is based on collaborative studies, registry reports, reviews, and guidelines, where Örebro University researchers are not consistently represented in leading authorship positions. This may indicate limited scientific leadership in some research areas and may reduce the visibility of the UoA as a driving force behind internationally leading research. In addition, the relatively low success rate in obtaining competitive national research funding raises concerns regarding long-term competitiveness and the ability to build sufficiently strong and independent research environments. Greater strategic focus, stronger research profiling, and increased support for investigator-driven projects of high scientific standards may further strengthen the credibility and international impact of the UoA.

2.2 Contribution to the research field.

The UoA's research contributions are mostly clinical and translational. This is in line with the focus of the research conducted within the Surgery unit and the included academic specialties, such as Anaesthesia and Orthopaedics. Collaborative research activities exist within Biomedicine and Medicine, as well as across several clinical hospital departments. The strongest contributions to the international research field appear to be within the areas of orthopaedics (prosthesis surgery) and obstetrics and gynaecology (gestational diabetes).

<u>Strengths</u>

- strong integration between university-based and clinical research environments, supporting translational research

- participation in coordinated international initiatives, including registry-based research and the development of clinical guidelines

- several research groups with established international recognition

- good communication of research activities to the public and regional stakeholders

Weaknesses

- several research areas have relatively limited scientific output and societal visibility

- limited long-term external funding constrains the development of sustainable research programmes and broader societal impact

- scientific leadership in some collaborative research areas appears limited

- lack of animal experimental facility may prevent true translational research program (from mice to human), which could have central for many of the research topics within Surgery

Opportunities

The strong clinical integration provides excellent opportunities to further develop translational and patient-oriented research with direct societal relevance. Increased strategic investment in a smaller number of focused research areas with existing strengths could enhance both international visibility and societal impact. There is also an opportunity to strengthen collaboration with industry, healthcare providers, and international networks, particularly in emerging fields such as AI, digital health, and robotics in medicine. Improved access to long-term competitive funding would further support sustainable research environments capable of generating broader societal and clinical benefits.

2.3 Contribution to society.

The UoA appears to communicate its research activities effectively to the broader public. Media outreach and the annual open Research Day provide valuable platforms for presenting ongoing research and strengthening public engagement with science and healthcare. Research projects are also communicated through the Nyckelfonden homepage and the exposed hospital office, which further increases public visibility and transparency of research.

Several of the research activities have a clear translational and societal relevance through their close integration between the university and the healthcare system. In particular, the research on medical education conducted by Hjelmqvist and colleagues contributes to the development of teaching methodologies in clinical settings and may have long-term value for healthcare education and professional training. The participation of UoA researchers in international registry collaborations and the development of clinical guidelines also demonstrates meaningful contributions to evidence-based medicine and healthcare practice.

2.4 Regulations, ethics and sustainable practice.

Within the Surgery research environment, there appears to be an adequate understanding of the requirements for handling sensitive data, including compliance with ethical guidelines and regulatory standards.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Some key changes that have been implemented are stronger research interactions and collaborations, greater visibility, creation of annual research day, and increased integration between research at Uni and hospital.

3.2 Initiatives after ORU2020

The UoA state that a strategy involving thematic clustering and leadership for existing groups have been initiated. My comment is that this is difficult to evaluate from the material provided. However, I would encourage to continue with this strategy to develop high quality research and thereby acquiring advantages in application rounds for national grants as well as in recruitment.

Their evaluation state that the amount of translational research has increased with grouping in thematic areas such as "Diabetes, Endo and Metabolism" and "Nutrition-Gut-Brain". This thematic grouping is beneficial but is today highly dependent on certain strong senior academic staff and it important that succession plans exist for these established research areas.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

The presented vision is relatively lengthy and somewhat unfocused. Nevertheless, it contains several important and highly valuable elements, including:

- encouraging and supporting developing researchers in their progression toward full professorships, thereby capitalizing on prior investments in academic and research development

- increasing protected time for conducting high-quality research.

- further strengthening laboratory-based research as a foundation for both basic and translational research.

- establishing a stable pipeline of fully funded doctoral positions

- improving access to regional patient data, and opportunities for secure remote data access

- promoting stronger integration and collaboration between Örebro Uni and the hospital.

- emphasizing research quality, scientific rigor, and impact rather than publication quantity.

4.2 The plan

The plan outlines several relevant and constructive measures. However, to maximise feasibility and long-term impact, it should be translated into a joint Örebro uni–hospital implementation roadmap. Such a roadmap could define a limited number of strategic priority areas, for example the doctoral training pipeline, shared core research infrastructure, increased integration of AI. In addition, the roadmap should include measurable milestones and time-bound performance indicators, such as the number of co-funded PhD positions, grant funding, utilisation rates of biostatistics and bioinformatics core facilities, external grant submissions, and levels of protected research time

4.3 Recommendations

These are summarized in concluding remarks below.

4. CONCLUDING REMARKS

Surgery constitutes a clinically embedded research environment with strong translational and clinical potential. A major strength is the close integration between Campus USÖ and the university hospital, which facilitates interaction between clinical practice and research. A weakness, however, is the physical separation from the allied health science disciplines located at the main university campus, which may limit opportunities for interdisciplinary collaboration.

The principal challenge is the transition from a research environment associated with a relatively new medical school, initially supported by strategic funding for emerging universities (KK Foundation), to becoming fully established on the national research arena through success in competitive grant funding. Achieving this transition will require a clear long-term recruitment strategy aimed at attracting promising academics at stages of their careers where they can successfully compete for national and European research grants. In addition, Örebro University must provide a sufficiently strong academic and research environment to retain talented and successful young researchers and reduce the risk of recruitment to larger and more established medical faculties.

Strengths

- some strong research groups, which are well established in their respective fields

- excellent research infrastructure support, including statistics, epidemiology, biobank services, clinical trial unit, computational resources, and legal support

- modern, newly built facilities and premises

- strong ALF funding providing protected research time for PhD candidates with clinical affiliations

- relatively accessible funding opportunities through the generous local Nyckelfonden, but only for researchers who have reached the associate professor level

- an annual research day to promote research within and outside the faculty

Weaknesses

- non-clinical academics have limited time for research due to heavy teaching responsibilities

- the faculty attracts relatively few grants from major Swedish funding bodies such as Vetenskapsrådet (VR), Cancerfonden, and Hjärt-Lungfonden

- relatively accessible funding from the local Nyckelfonden may reduce incentives for senior researchers at the associate professor (docent) level to apply for highly competitive national grants and further strengthen their grant-writing skills

- the requirement of associate professor (docent) status to serve as the principal PhD supervisor limits the pool of eligible supervisors. There appears to be a shortage of active and research-driven docents willing to take on the long-term responsibility of supervising PhD students. Most other Swedish medical faculties apply more flexible supervision models, where only one member of the supervisory

team is required to hold docent competence. A possible way forward for Örebru Uni would be to allow researchers with more than three years of postdoctoral research experience after dissertation to serve as principal supervisors, but with at least one docent as assistant supervisor. Such chang could broaden the pool of supervisors with active and expanding research programs

- greater consolidation into larger and more competitive research groups would likely strengthen research quality, productivity, and external competitiveness

- a structured program for international guest professors is lacking

- emphasis of the importance of international postdoctoral experience, to build collaborations and to acquire advanced methodologies/knowledge, for PhD graduates is lacking in either written materials or interviews

- the faculty's current "Forskningsstrategi" does not provide sufficiently clear guidance for strengthening long-term research competitiveness and success

Opportunities

- structured guest professor program represents an important opportunity to strengthen academic excellence, international networks, and methodological expertise

- the Örebro Uni website could be further developed to better promote research activities, visibility, and international collaborations

- annual bibliometric reports to the faculty leadership would be valuable for monitoring the development and scientific strength of the unit. Such reports could distinguish between original research articles, review articles, and guideline papers. Bibliometric analyses should also separately identify publications where Örebro Uni researchers hold leading authorship positions (first or last author) versus co-author positions

- a stronger, more detailed, and better-anchored research strategy should be developed in collaboration with the academic staff

- the vice-chancellor emphasized increasing the number of publications and publications of high quality; however, a greater focus on fewer but more substantial publications with comprehensive data and rigorous methodology may be more beneficial. Increased emphasis should be placed on publications in high-impact journals and on strengthening the visibility of a distinct Örebo-uni profile through leading-author positions

- Örebro-uni could consider implementing an incentive structure (long-term economic resource allocation) that rewards high-quality publications with ÖRU researchers in leading positions

- strengthening collaboration between grant offices of Örebro Uni and Uni Hospital

- omission of the docent-requirement for major PhD supervision may boost research among young and hungry researchers, with the ambition to create independent research groups

- the current division of Medical Sciences into the three areas of Medicine, Biomedicine, and Surgery may limit interdisciplinary collaboration. This structure may also create unnecessary administrative barriers and reduce the critical mass needed for strong collegial decision-making

- creation of meeting places and research forums for clinical and academic staff could increase engagement in research among currently non-research-active paramedics and physicians

- there is a significant opportunity to strengthen research at the university hospital through closer collaboration with hospital leadership. Increasing the number of clinical section directors (verksamhetschefer) with academic qualifications (PhD) and active research engagement could substantially strengthen the clinical research environment and culture

Summary

Overall, the Surgery research environment at Örebro Uni demonstrates strong clinical integration, solid infrastructure, and clear translational potential, providing a strong foundation for future development. To strengthen its national and international competitiveness, the faculty should prioritize a sharper long-term research strategy, stronger incentives for high-quality external grant applications and publications, and improved conditions for recruitment, mentorship, and internationalisation. Greater interdisciplinary integration and a broader engagement of clinically active staff in research will be important for building a sustainable and competitive academic environment.

ORU2025 Review Report: Medicine

Review Team: Karl Michaëlsson (main reviewer), Annelie Brauner and Mats Brännström

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

1.1 Is the environment well organised to promote quality research?

The UoA Medicine is organised to support high-quality, clinically relevant, and translational research. A key asset is the close integration between Örebro University's School of Medical Sciences and Region Örebro County (RÖL), including physical proximity at Campus USÖ adjacent to the university hospital, which facilitates access to patients, samples, clinical data, and implementation pathways. In this context, the availability of research support functions is particularly important to maintain research quality and output despite competing demands on staff time.

Strengths

• Strong university–healthcare integration and shared infrastructures supporting compliance and efficient study execution.
• Institutional support functions that reduce friction in grant preparation and project delivery.
• A culture of cross-UoA collaboration across Medicine, Biomedicine, and Surgery, enabling interdisciplinary projects and shared resources.

Weaknesses and risks

• The highly distributed structure (many groups across two organisations, ORU and RÖL) increases coordination needs and can weaken strategic focus unless governance and communication are strong.
• Imminent retirements among professors create a continuity risk for research leadership and mentoring capacity.

Overall assessment

The environment is well-positioned for translation and collaboration, but would benefit from clearer joint governance with RÖL, strengthened succession planning, and mechanisms that protect research time for key personnel.

1.2 Are the main research areas appropriate for the unit and its development?

The main research areas are appropriate for a medical UoA and reflect a coherent translational ambition. The explicit attention to enabling platforms (biostatistics/epidemiology, genomics, imaging, biobank, SciLifeLab links, and collaboration with university-wide AI initiatives) is also well aligned with contemporary medical research.

Breadth may mask reliance on a limited number of senior individuals in some niches; this is amplified by upcoming retirements and budget constraints in strategic recruitment.

1.3 Please comment on the unit's reflective analysis of their environment.

The self-assessment is comprehensive and generally balanced, covering recruitment, leadership, academic culture, collaboration, funding, publications, and productivity. It is particularly reflective about the university–healthcare interface: clinical service pressures, variable research engagement among clinical leaders, and the need for deeper integration of identity, incentives, and resource use between the university and the hospital. Honest discussion of demographic patterns and equality issues (e.g., gender imbalance at the professorial level) and the implications of large upcoming retirements. Clear identification of bottlenecks that affect research quality (protected research time, doctoral recruitment, and access to methodological support). A mature self-reflection that would gain further value from a more operational 'action-and-metrics' layer, including joint ORU–RÖL governance points and a small set of tracked indicators (e.g., PhD recruitment, protected time, core-support usage).

Research funding

The UoA describes a strong reliance on external funding during 2019–2024 (national councils, EU programs, strategic foundations, ALF, and local funding such as Nyckelfonden). Large program platforms funded by the Knowledge Foundation (KKS) and Formas are portrayed as important for capacity building, recruitment, and infrastructure. A key risk —explicitly recognized — is dependence on a limited number of large funders, suggesting a need for diversification.

Strengths

• Demonstrated competitiveness in external funding and participation in coordinated programs that can provide scale and continuity.
• A relatively diversified funding profile within Medicine, reflecting methodological breadth, register-based and epidemiological work alongside clinically oriented projects.

Weaknesses and risks

• Concentration of funding in a few sources increases vulnerability to shifts in funder priorities.

• Few external grants from the Swedish Research Council, the Swedish Heart Lung Foundation, and the Swedish Cancer Society.

• Does the Region provide sufficient financial support for research, in addition to external and government funding, as well as ALF funding? Have you performed benchmarking against other university hospital regions (not only LiU)?

Publications

The bibliometric summary indicates high output and impact (3,205 publications and 82,425 citations; 94% cited). The UoA also notes the enabling role of Clinical Epidemiology and Biostatistics (KEB), which contributed to a high number of publications. However, the bibliometric analysis contains errors, and the publication counts are inflated relative to the actual numbers. See below for additional comments.

Strengths

• Strong citation uptake and a rising share of top-quartile publications signal international visibility.
• High open-access proportions likely improve reach and reuse

Weaknesses and considerations

• Several of the higher-ranked publications include authors from Örebro who share affiliations with other universities, e.g., UU and KI. It is therefore difficult to disentangle contributions from those universities and from Örebro University.
• The plan to reward publications could inadvertently incentivise quantity; attention to journal quality (discipline-specific ranking) and avoidance of predatory outlets are important.

Productivity

The UoA highlights a critical bottleneck: divergence between allocated and 'real' research time, especially for clinicians and staff with heavy teaching/administrative duties. Without stronger protection of research time and equitable access to enabling support, both funding success and publication quality may be constrained. A practical improvement would be to monitor protected time and core-support access, and to link internal support to clear external-funding or quality-output objectives.

2. QUALITY OF RESEARCH

2.1 Credibility.

The UoA describes credible research practice supported by external peer review (through competitive funding and publication processes), structured quality assurance in doctoral education, and strong integration of experimental, clinical, and translational research. Doctoral checkpoints (admission seminars, individual study plans, half-time review, and pre-defence evaluation) provide robust mechanisms for methodological scrutiny and progression.

Strengths
• Strong doctoral governance and supervision structures that embed quality control across the PhD lifecycle.
• Access to well-defined clinical materials and long-term data through ORU–RÖL collaboration, strengthening validity and translational relevance.
• Collegial scrutiny via seminars and cross-group methodological exchange.

Weaknesses and risks
• Limited numbers of fully funded university-employed PhD positions in laboratory-intensive areas may threaten long-term renewal and continuity.
• The self-assessment is less explicit about open science and reproducibility practices (data management, code sharing, preregistration where relevant) and how these are taught to doctoral students.

Overall assessment

Credibility appears solid; sustaining it will require investment in early-career pipelines and clearer articulation of integrity/open-science practices.

2.2 Contribution to the research field.

The UoA's research contributions span mechanistic and experimental studies, clinical diagnostics and treatment development, and translation toward implementation. Beyond publications, the unit describes academic service and field-building activities through participation in national networks, expert assignments, and editorial contributions.

Strengths

• Translation-oriented contributions that link mechanisms to clinically relevant questions and methods.
• Participation in coordinated national and international initiatives and infrastructures that can amplify field influence.
• Methodological and infrastructural contributions that enable collaborative outputs.

Weaknesses and risks

• Contributions may be concentrated in a limited number of areas and key individuals, increasing vulnerability to turnover.

• Many mid-position authorships are a concern, and it would be of value if researchers from Örebro could more frequently take the lead in designing and conducting research. There are some exceptions, but they are few.

Overall assessment

The UoA contributes meaningfully to several fields; clearer 'signature areas' and renewal strategies would strengthen its long-term impact across fields.

2.3 Contribution to society.

The UoA's societal contribution is primarily mediated through close integration with healthcare and a translational logic of evidence generation, diagnostics, prevention, and implementation.

Strengths

• Direct routes for uptake through clinical collaboration (including multicentre studies), professional training, and expert assignments.
• Sustained knowledge transfer via education and integration of research into clinical routines.

Weaknesses and opportunities

• Societal impact is often indirect and may be under-documented; systematic 'pathways to impact' case documentation would improve visibility.
• Patient and public involvement and broader communication beyond professional channels are not prominent and could be developed.

Overall assessment

Societal relevance is high due to clinical embedding; impact visibility and stakeholder engagement could be strengthened.

2.4 Regulations, ethics and sustainable practice.

Within Medicine, there seems to be satisfactory knowledge of compliance with data-handling practices of sensitive data, as well as with ethical and regulatory standards.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

The unit notes that some reviewer suggestions were not fully adopted; instead, collaboration was strengthened through bottom-up clustering and investigator-driven integration across Medicine, Biomedicine, and Surgery.

3.2 Initiatives after ORU2020

The UoA reports that ORU2020 feedback has been implemented mainly through enhanced translation and collaboration in already productive areas. The approach is largely investigator-driven rather than strongly top-down, thematically steered. Improved integration across the department has occurred through bottom-up clustering and shared translational projects. We still would like to see a clear strategy with goals.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

The five-year vision is coherent and broadly reasonable, but could be more specific. It focuses on succession planning and recruitment, stronger career pathways to retain talent, rebuilding the clinical PhD pipeline, sustaining laboratory-based biomedicine, and building capacity for AI/machine learning and larger datasets (including primary care data). The emphasis on deeper ORU–RÖL integration and diversification of funding sources is well justified.

Strengths

• Realistic recognition of constraints related to institutional scale, protected research time, and the need for critical mass in key disciplines.
• Forward-looking focus on data-intensive research and modern analytical approaches, but be aware that machine learning results cannot presently be transformed into causal inference conclusions.
• Recognition that experimental biomedicine and bioinformatics are essential enablers of translational medicine.

Weaknesses and risks

The vision remains broad; without prioritisation and measurable milestones, it risks becoming aspirational rather than guiding investment and recruitment.

Overall assessment

A strong strategic direction should be of benefit in selecting a limited number of top priorities with explicit success criteria. What is the specific strategy, and what specific goals does Medicine have?

4.2 The plan

The plan proposes relevant measures, but to maximise feasibility, the plan should be converted into a jointly owned ORU–RÖL implementation roadmap. This roadmap could specify a small number of prioritised workstreams (e.g., doctoral pipeline, shared cores, data/AI capacity), define owners and decision rights, and include time-bound milestones and indicators, e.g., number of co-funded PhD positions, utilisation of biostatistics and bioinformatics cores, grant submissions, and measures of protected time.

Strengths

• A comprehensive set of actions spanning people, infrastructure, methods, and external engagement.
• Practical focus on efficiency gains via shared ORU–RÖL methodological resources (biostatistics, epidemiology, bioinformatics) and reduced duplication.

Weaknesses and risks

• Implementation depends on joint governance with RÖL; responsibilities, financing and ownership are not yet fully specified.
• The plan would be stronger as a time-bound roadmap with sequencing, budgets and monitoring indicators.

Overall assessment

The proposed measures are appropriate; feasibility will depend on governance clarity, prioritization, and a robust implementation framework.

4.3 Recommendations

The recommendations (see below) are mutually reinforcing and target continuity (people), capability (methods), sustainability (funding), and demonstrable value (impact and quality assurance).

4. CONCLUDING REMARKS

Medicine at Örebro University is a clinically embedded research environment with strong translational potential and increasing international visibility. Its major strengths are the close ORU–RÖL integration, access to clinical materials and data, and a publication profile with high citation uptake, strong open-access proportions, and an increasing share of top-quartile outputs.

The principal challenges are sustainability and renewal: forthcoming retirements among professors, uneven protected research time, and the need to stabilise doctoral/postdoctoral pipelines—particularly for laboratory-intensive research and enabling bioinformatics. The development plan is convincing, but would benefit from sharper prioritisation, explicit joint governance with RÖL, and measurable milestones. With these additions, the UoA appears well placed to strengthen research quality and

societal contribution over the next five years. Decide where to go and how. We suggest performing the steering with economic incentives and accurate performance data.

Strengths

Several strong research groups exist.

Good research infrastructure support in statistics, epidemiology, biobank support, clinical trial knowledge, assistance from project managers, computational resources, and legal support.

Feeling of belonging to a “family” in the local research community is an important factor for a good working environment.

Relatively easy to get ALF (RÖL) funding for clinical PhDs, with a high likelihood of having 40 % funding of the research time from the second year as a PhD. Good doctoral courses

Limitations

Lack of research time, mainly because of clinical duties, but also due to a lack of economic resources for non-clinicians.

Some researchers had a feeling of being a regional hospital and not a university hospital. Part of this feeling stems from the researcher's description of an unfortunate lack of interest in research among some clinical department heads. This leadership attitude needs to be changed.

At present, ORU/RÖL researchers hold a few grants from major Swedish funders, e.g., the Swedish Research Council, the Swedish Cancer Society, and the Heart and Lung Foundation. The approval rate for grant applications submitted to VR's Medicine and Health area during 2018-2025 can definitely be improved (6% approval rate, with an average of one approved application per year). You have the capacity to accomplish this task.

Lack of bioinformatician support, especially for non-genomic omics data, is a limiting factor when we are now moving into an era of multiomics.

Modest research funding is awarded from the region. Other university hospitals have this opportunity, and it is strongly needed at a university hospital that is taking the lead in clinical development. Several other university regions contribute R&D funds at the same level as ALF funds (70 MSEK). Thus, Region Örebro County should contribute 70 MSEK per year to research funding. Note that the region's total annual turnover (total revenue) is about 15 billion SEK. The sum of 70 million SEK per year thus corresponds to 0.5 % of the total turnover, a modest share for a knowledge authority.

An associate professorship is presently required to be the main supervisor at ORU. This is not the case at KI, GU, and UU. This puts researchers from ORU at a relative disadvantage in their future qualifications compared to other higher education institutions, which in turn can lead to a worse position when qualifications are compared in competitive situations, e.g., funding evaluations. A professor can support as a thesis co-adviser.

What constitutes a research group, and are there any formal criteria for that? Having 53 research groups in the department seems excessive, given the department's size and its total research funding of 100 million SEK per year (Medicine, Biomedicine and Surgery). The number of professors is 8 in Medicine, 8 in Biomedicine, and 5 in Surgery, i.e., more than twice as many research groups as professor positions. Consolidation into larger research groups should improve research outputs.

Additional opportunities

The local researchers informed us that several local talents are lost, since they are not provided with sufficiently good opportunities in Örebro.

A guest professor program is one opportunity to boost knowledge

Several researchers emphasized that the ORU website should be improved.

The bibliometry provided by ORU can also be improved. How can we understand ORU's contribution in the publication case of multiple affiliations or publications without any ORU (or RÖL) affiliation? Approximately 20% of the articles with IF >30 in Medicine had no recognizable affiliation with ORU or RÖL in their PDFs. Moreover, according to a second bibliometry output (requested by us), a total of 1253 articles had an Örebro affiliation in the first or last author position (after removing duplicates). This corresponds to an average of 208 articles per year in Medicine, and the number should be compared with 165 researchers listed as personnel in Medicine. The total number of articles initially reported to us as linked to ORU/RÖL for the period 2019-2024 was 3206. Our recommendation is that the library annually quality-check which articles truly belong to Örebro and identify those with an Örebro-affiliated researcher as the last or first author.

The strategy going forward is not clearly articulated. What should be prioritised and how? What are the 5-year goals? Three to five approved VR grants in Medicine and Health each year is, e.g., a feasible goal given many very skilled researchers. What is ORU's recruitment strategy? What is the strategy for the interaction between research groups? What is the strategy to more effectively take advantage of local and national research infrastructures? In the ALF evaluation some years ago, the verdict was that the ALF region lacked stated ambitions on an overall level, and Örebro needs a clearer strategy for development. In essence, this was the same message as in ORU2020 – a message that still holds.

The vice-chancellor emphasised that a future goal is more publications and publications of high quality. We would instead suggest fewer publications, a clear ORU product (leading-author positions), and articles with rigorous methods and high quality. Can ORU implement an incentive structure that rewards high-quality publications with ORU researchers in leading positions?

The direction towards such an incentive culture could be an economic resource distribution model that clearly values the author's position, affiliation, and the journal in which the publication appears. The distribution model for external grants should prioritise grants from larger national donors, such as the Swedish Research Council, more clearly than it does now. The present small difference in the distribution model for local funding (6 points) compared with 8 points for VR grants is too modest.

The value of dividing the department into three sections is not clear. The division can even create unnecessary administrative obstacles to collaboration and fail to provide an adequate critical mass for thorough collegial decision-making. Moreover, having health education and the related health research distanced from the hospital is a disadvantage.

Create a common physical research environment for ORU and RÖL that enables researchers, guest professors, statisticians, epidemiologists, and bioinformaticians to learn from each other in terms of research ideas, analyses, the art of writing, and good applications. The environment should ideally be designed as an open office landscape, with a mix of junior and senior researchers.

ORU2025 Review Report: Nursing Sciences

Review Team: Marie Friedel (main reviewer), Gunilla Isaksson, Klavs Madsen and Dimitris Michailakis

1. RESEARCH ENVIRONMENT, RESOURCES AND OUTPUT

Is the environment well organised to promote quality research?

Yes, the research environment is partly well organised to promote quality research, but with notable structural and resource-related limitations**.**

The Nursing sciences unit demonstrates several features of a supportive research environment. It has a defined organisational structure with multiple research groups**,** interdisciplinary collaboration, and strong links to external partners such as the regional healthcare system, which provides important infrastructure and resources. There are also established processes that promote research quality**.** However, there are significant organisational weaknesses from the institutional level that limit the full effectiveness of the environment. Notably, there is no clear formal leadership specifically for nursing research, with responsibilities often delegated informally . In addition, high teaching workloads and limited protected research time constrain researchers' ability to fully engage in research activities . Recruitment is also primarily driven by teaching needs rather than research strategy, which can weaken long-term research capacity.

1.2 Are the main research areas appropriate for the unit and its development?

Yes, the main research areas are appropriate and well aligned with the Nursing unit's scope and future development**,** though there are some associated challenges.

The unit is firmly grounded in nursing science while being translational and multiprofessional**,** incorporating related fields such as physiotherapy, psychology, and health economics. This interdisciplinary approach is highly relevant for modern nursing research, which increasingly addresses complex healthcare needs across different contexts.

The identified research groups cover key areas across the life course and healthcare system**,** from prevention and treatment to end-of-life care. These areas are clearly aligned with the core mission of nursing: improving patient care, health outcomes, and quality of life. Additionally, the inclusion of topics such as implementation science, ethics, and health systems strengthens their relevance for both clinical practice and policy development. Importantly, some groups are described as internationally leading**,** indicating that the chosen research areas not only fit the unit but also support high-quality and competitive research development .

However, there are some limitations. The research landscape is somewhat fragmented**,** with several small independent research groups, which may hinder critical mass and long-term sustainability. There is also a reliance on a limited number of senior researchers, small number of PhD students (only from the region to be funded) and post-doctoral researchers.

1.3 Please comment on the unit's reflective analysis of their environment.

Do the structures and processes create good conditions for high-quality research concerning personnel, leadership, academic culture, and national and international collaborations?

Please provide specific comments on the unit's research funding, publications and productivity.

Overall, the structures and processes create partially good conditions for high-quality research, but there are several important weaknesses that limit their effectiveness and puts a risk on the well-being and quality of life of researchers who invest in research in their free time (evenings, week-ends).

There are some positive initiatives, such as career development opportunities (e.g., associate lecturer positions, mentorship, and research schools), and access to infrastructure through collaboration with regional partners.

However, recruitment is primarily driven by teaching needs rather than research strategy**,** and heavy teaching workloads significantly reduce time available for research. In addition, limited recruitment of senior staff and upcoming retirements pose risks to long-term research capacity. A key limitation has been the lack of a formal research leader in nursing science**,** with responsibilities often delegated informally. Recent appointments of leaders with PhDs and support roles at school level (e.g., deputy heads for research) are positive developments, but the leadership structure is still not fully clear or strategically aligned for research excellence.

The academic culture is a clear strength**.** There are numerous structured activities that support high-quality research, including seminars, manuscript discussions, mentorship programmes, regular meetings, and internal communication platforms. However, the effectiveness of this culture is constrained by limited time for participation due to high teaching loads and the small size of some research groups.

The UoA benefits from close ties with regional healthcare organisations, which provide infrastructure and research opportunities, and many researchers are involved in international collaborations, with a substantial proportion of publications including international co-authors. Some research groups have well-established global partnerships and strong collaborative networks.

The UoA was successful in increasing funding. However, the external funding is limited, (16%), which could be improved by applying for more European grants, which would need institutional support and dedicated time.

The UoA research's shows high scientific impact and recognition as demonstrated by an increasing number of publications, in high-impact journals (Q1/Q2), a presence of highly cited papers (Top 1% and Top 10%) and a strong bibliometric indicators (e.g., h-index 109).

In conclusion, the structures and processes provide a solid foundation for high-quality research**,** particularly through a strong academic culture and active collaborations and demonstrated by an increasing number of high quality publications and volume of grants obtained. However, constraints in personnel strategy, unclear leadership structures, and limited research time reduce their overall effectiveness. Strengthening these areas would significantly improve the research environment.

2. QUALITY OF RESEARCH

2.1 Credibility.

Does the unit work in an appropriate way to produce credible research of high quality?

Please identify strengths and weaknesses in their work.

Overall, the unit does work in an appropriate and largely effective way to produce credible, high-quality research, but this is achieved despite important structural constraints, particularly related to resources, leadership, and workload impacting the quality of life of academic staff.

The strengths are based on a strong well-established internal quality assurance processes, a high and improving research output over time in high ranked peer-reviewed journals supporting the credibility of the research, a strong supportive research culture (mentorship programmes, seminars, recognition of achievements,..), an active engagement in the scientific community (involvment in expert panels, conferences, organisations), showing external recognition, a robust established ethical framework and a strong clinical relevance and societal impact as findings are used in national and international guidelines.

The unit works in an appropriate and credible way overall, but its ability to sustain and further enhance high-quality research is at risk unless key structural issues—especially research time, leadership, and capacity building—are addressed.

2.2 Contribution to the research field.

Do the unit's research and other academic activities contribute to and impact the research field?

Please identify strengths and weaknesses in their contributions to the research field.

Yes, the unit's research and academic activities clearly contribute to and have a meaningful impact on the research field, with several strong indicators of influence. The unit's research addresses core areas of nursing science. This demonstrates a strong alignment with the discipline's knowledge base and societal needs, contributing both to theory and practice.

At least two research groups (e.g., wound care and early-life pain) are described as world-leading in terms of impact, citations, and collaboration. This is a major strength, showing that parts of the unit set the research agenda internationally, not just contribute to it.

The unit shows a strong academic engagement and leadership roles, as researchers frequently serve in expert groups and advisory boards, editorial roles and peer review, evaluation committees for grants and academic positions. This reflects recognition of expertise and influence on the direction and quality of research in the field.

Research findings are implemented in national and international guidelines (e.g., wound care, pain management) and show a strong clinical orientation ensures direct relevance to healthcare systems. This demonstrates real-world impact, extending beyond academia into practice and policy.

The integration of disciplines such as physiotherapy, psychology, and health economics with a focus on implementation, ethics, and health systems demonstrates the unit's ability to address complex healthcare challenges and increases its relevance and impact.

However, weaknesses are linked to the dependence on a small number of key researchers, a current limited engagement of junior researchers in leading roles, the fragmentation of research activities, the limited external funding, the absence of a clear doctoral programme in nursing and research time restrict.

2.3 Contribution to society.

Do the unit's research and other academic activities reach and contribute to society and relevant societal stakeholders?

Please identify strengths and weaknesses in their contributions to society.

The research is highly practice-oriented**,** directly targeting patients, relatives, and healthcare systems, which ensures immediate societal relevance. Findings are implemented in national and international clinical guidelines, demonstrating tangible impact on healthcare practice . Researchers are actively engaged with policy-makers, professional organisations, and expert committees**,** contributing to decision-making at multiple levels. There is also evidence of knowledge transfer and innovation**,** including collaboration with initiatives that translate research into public health interventions. The university's social impact lab has helped developing enterprises to widespread and implement research findings, e.g. Dance for Health https://en.dansforhalsa.se and Start Your Move https://startyourmove.se. Strong links with regional healthcare providers further enhance applicability and uptake.

Patient and public involvement (PPI) is encouraged but not consistently embedded across projects. Outreach activities rely heavily on individual researchers rather than structured strategies.

2.4 Regulations, ethics and sustainable practice.

Does the unit work in a satisfying and sustainable way to ensure that the research complies with regulations and standards, and nurtures sound ethical conduct?

Does the unit secure that doctoral students develop relevant knowledge about ethics and other regulations?

Overall, the unit works in a largely satisfactory and structured way to ensure compliance with regulations and ethical standards, and it effectively supports doctoral students in developing ethical competence, although some sustainability concerns remain.

The unit benefits from well-established institutional frameworks for research ethics, data management, and regulatory compliance, including adherence to FAIR principles and support from faculty and university services. Ethical conduct is actively promoted through regular seminars and discussions, and reinforced by clear publication practices (e.g., ICMJE criteria). Doctoral training is a strong area: all PhD students complete a formal research ethics course**,** and supervisors are also trained. In addition, mandatory thesis review processes and external seminars ensure that ethical and methodological standards are consistently applied. The involvement of staff in national ethics bodies further strengthens internal competence.

Despite strong frameworks, implementation is resource-intensive**,** and there is a risk that ethical and data management requirements may not always receive sufficient priority in practice. Sustainability is therefore partly dependent on improved resources and time allocation.

3. PROGRESS AND OUTCOME SINCE THE LAST RESEARCH EVALUATION ORU2020

3.1 University, faculty or school initiatives

Please comment on the unit's reflections on how university, faculty or school initiatives have affected the UoA.

The UoA identifies key institutional changes, particularly the removal of larger research environments and the transition to smaller research groups. It also highlights positive effects of faculty-level initiatives, such as small-scale funding, support for international collaboration, and infrastructure development, which appear to have contributed to maintaining research activity. Furthermore, the recognition that senior researchers hold influential leadership roles at university level demonstrates institutional integration and academic strength.

3.2 Initiatives after ORU2020

Please comment on the unit's reflections on how they have implemented feedback from reviewers in ORU2020.

The nursing unit didn't found the last reviewers report (ORU 2020) very insightful or helpful, because it was perceived as too general with few suggestions for improvement that the team members hadn't identified themselves. However, the Board of the Faculty of

Medicine and Health requested a development plan after ORU2020 and most of what was suggested in the plan has been implemented by the nursing unit, which is a great achievement.

4. DEVELOPMENT PLAN FOR THE UoA

4.1 The vision

Please comment on the vision presented – is the five-year vision reasonable and can it serve as a guide for development?

The vision demonstrates a clear strategic direction, centred on achieving and sustaining world-class nursing research. The vision is well articulated and structured around key priorities such as increasing publication impact, strengthening research infrastructure, improving staff competence, expanding collaboration and external funding, and reinforcing academic culture.

4.2 The plan

Please provide observations and reflections on the unit's development plan.

Does it have a focus and a clear path forward?

Is it realistic in terms of resources and organisation?

Please highlight areas of strength in the plan that could be further improved, as well as those requiring additional development.

The plan provides a logical alignment between vision and actions and builds on existing structures and ongoing initiatives, such as collaboration with regional partners, research schools, and internal support

systems. It acknowledges key constraints (e.g., lack of research time, need for better infrastructure, limited funding) and explicitly identifies support needed at institutional and external levels .

However, several aspects raise concerns about feasibility:

The plan depends heavily on increased institutional support and redistribution of workload, especially increasing research time beyond the current 20% model.

It assumes successful recruitment of senior staff and replacement of retiring professors.

Increased external funding and collaboration are expected, but current limitations are not fully resolved.

The development plan is strategically coherent, relevant, and well aligned with the unit's challenges and ambitions. It clearly identifies key development areas and proposes logical actions. With clearer execution mechanisms, and realistic resource alignment, the plan has strong potential to effectively guide the unit's future development.

4.3 Recommendations

In relation to, but not limited to, the vision and the plan, please provide suggestions and recommendations for further development and how this might be accomplished.

It is recommended to recruit new professor positions in the nursing discipline, assign a clear structured leadership role for nursing sciences research, acknowledge the time for current professors and other academic team members to research activities, including the supervision of PhD students, increase the joined funded PhD positions. Additionally, a specific course for nursing sciences within the doctoral programme would be an asset.

Patient and public involvement (PPI) is currently encouraged but not systematically implemented. This represents a missed opportunity for strengthening relevance and societal impact and should therefore be promoted in the future.

Institutional support would be needed to help researchers to apply for European grants (eg ERASMUS, HORIZON 2020,…) and to increase international collaborations.

4. CONCLUDING REMARKS

Please summarise your review and offer a concluding statement.

Overall, the current existing research structures, projects, collaborations and publications show a real effort to develop nursing sciences and research, and reaches in globally in terms of publications and funding. However, the most important weakness is the limited time to do research and apply for major grants, due to a heavy teaching workload, which impacts on the quality of life of researchers. This is the most critical constraint, affecting both quality and sustainability. Second, the lack of formal research leadership weakens the strategic coordination, prioritization and long-term development. Third, high productivity and impact relies on a limited group of senior staff. Some of them approaching retirement creating vulnerability and risks for continuity and sustainability. Forth, limited external funding and grant capacity is observed (only ~16% of funding is external). All these reasons constrains the ability to expand and sustain high-quality research.