

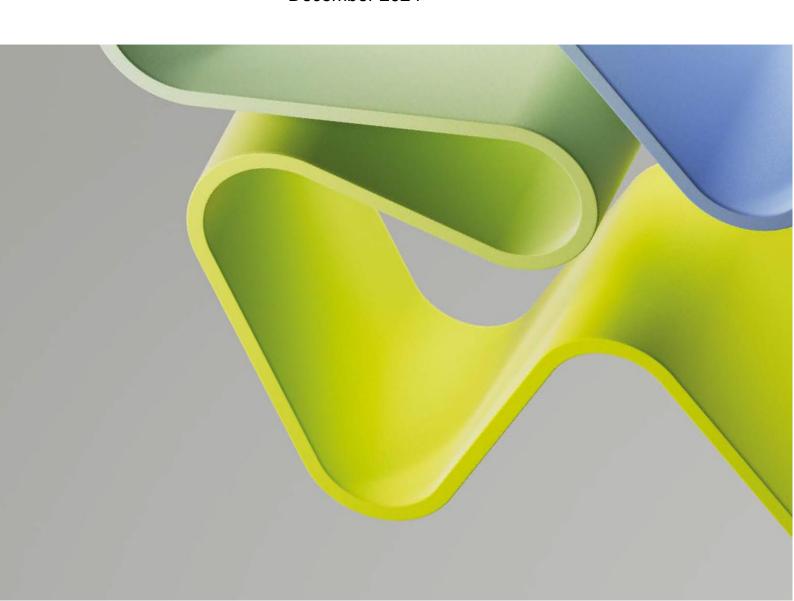
Evaluation of Life Sciences 2022-2024

Evaluation of medicine and health 2023-2024

Evaluation report

ADMIN UNIT: Faculty of Health Sciences and Social Care INSTITUTION: Molde University College (HiMolde)

December 2024



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Statement from Evaluation Committee Higher Education Institutions 4

This report is from Evaluation Committee Higher Education Institutions 4 which evaluated the following administrative units representing the higher education sector/institute/hospital trust in the Evaluation of medicine and health 2023-2024:

- Faculty of Health Sciences and Social Care, Molde University College
- Faculty of Medicine and Health Sciences, NTNU
- Department of Clinical Dentistry (IKO), UiT Arctic University of Norway
- Department of Community Medicine, UiT Arctic University of Norway
- Department of Medical Biology (IMB), UiT Arctic University of Norway
- Faculty of Health and Sport Sciences, University of Agder (UiA)
- Department of Global Public Health and Primary Care, University of Bergen (UiB)

The conclusions and recommendations in this report are based on information from the administrative units (self-assessment), digital meetings with representatives from the administrative units, bibliometric analysis and personnel statistics from the Nordic Institute for Studies of Innovation, Research, and Education (NIFU) and Statistics Norway (SSB), and selected data from Studiebarometeret (NOKUT). The digital interviews took place in Autumn 2024.

This report is the consensus view from committee Higher Education Institutions 4. All members of the committee have agreed with the assessments, conclusions and recommendations presented here.

Evaluation committee Higher Education Institutions 4 consisted of the following members:

Professor Anja Krumeich (Chair) Maastricht University

Professor John de Wit Utrecht University

Professor Paul Hatton University of Sheffield

Professor Marialuisa Lavitrano Milano-Bicocca University Professor Patrik Midlöv Lund University

Professor Louise Torp Dalgaard Roskilde University

Rebecca Babb, Technopolis Group, was the committee secretary.

Oslo, December 2024

Profile of the administrative unit

The Faculty of Health Sciences and Social Care is part of Molde University College, a specialized university in logistics, which is located in the neighbouring cities of Molde and Kristiansund on the Northwest coast of Norway and was founded in 1994. Research staff in 2021 included 12 full professors (66.7% women, 4 temporary positions), 22 associate professors (65.4% women, 4 temporary positions), 10 PhD candidates (80% women, 2 temporary positions), and 1 Postdoc (male, temporary position). Other staff with some research time include 6 college teachers (66.7% women, 5 temporary positions), 30 college lecturers (93.3% women, 1 temporary position), 5 senior lecturers (80% women, 1 temporary position), and 2 docent (100% women, no temporary positions).

The research of the Faculty is mainly organized in eight research groups: Interaction with vulnerable groups from a phenomenological perspective, Nursing: Research and professional development, Physiology, Disability and habilitation, Professional ethics, Mental health work, Digital collaboration and service development in health and care services, and Interprofessional collaboration in practice and education. Two of the eight research groups participated in the evaluation: Physiology, and Nursing: Research and professional development. All research groups aim to optimise health and quality of life for people with different diagnoses, age, and health status, and contribute to the Faculty's aim of meeting health-related challenges associated with the growing proportion of elderly.

Molde University College's strategic plan 2025 has four goals regarding Research with Reach: 1) Top level publications; 2) Ambitious projects; 3) International research with regional relevance, and 4) Internationalization. The Faculty of Health Sciences and Social Care has a related research strategy and action plan specifying targets related to, among others, increasing publication activity, increasing the share of competition-based external funding and projects with external funding, developing internal quality assurance systems, familiarizing employees with research ethics, and further developing collaborations.

Activities at the administrative unit are aimed at achieving the sector specific objectives and goals for higher education institutions, including: high quality in research and education; research and education for welfare, value creation and innovation; access to education; and efficiency, diversity and solidity of the higher education sector and research system. The Faculty supports researchers who conduct research with innovation and commercialisation in mind, and several research groups aim to be innovative in their strategies to meet the health care challenges of the future. The Faculty's academic staff are well positioned and motivated to participate in not only researching the existing structures of current public healthcare sector and standard treatment strategies, but also how new approaches may improve patient-centred care and cost-effective clinical care. The research activity of the Faculty's staff is crucial to teaching and supervision in the master's degree and in the PhD programme that are research-based and provided by active researchers. The Faculty's master's programs are anchored in the competency areas of each of the research groups.

The Faculty's research strategy 2020-2025 specifies that it will work to develop further and ensure the quality of its core tasks: teaching, research, and communication related to professional education. The Faculty is committed to a close integration of its research and

education, ensuring that its research is clinically, pedagogically and socially relevant, and developed in collaboration with the public sector, working life and society. Maintaining and further developing research expertise remains an important focus.

Overall evaluation

The Faculty of Health Sciences and Social Care has a detailed research strategy that is aligned with the strategic plan of Molde University College. The general, wide-ranging and ambitious framing of strategic goals and the lack of robust research strategy raises concerns regarding the feasibility of goals. The current structure of research groups aligned with teaching programs does not seem optimal to strengthen the research of the faculty. There is little support to successfully acquire external research funding. A notable increase in senior researchers and PhD students was achieved, but senior research capacity remains limited, and the number of PhD students is modest. The share of female research staff is high, but some senior researchers do not have a PhD degree. The synergies between research and patient treatment and the funding obtained through collaborative schemes are notable strengths. Over half of the research budget in 2022 was from external funding, but little funding is from the public sector or the EU.

In recent years, most external funding was acquired by two research groups. The research groups make use of several collaborative and national infrastructures, but not international or European infrastructures. The network of collaborators established is extensive but is uneven across research groups. Open access publishing is enabled but other pillars of open science do not seem to be addressed. The faculty does not seem to have a specific policy and practice to promote working with FAIR principles. The College has a broad ranging action plan to structurally address equality, discrimination, harassment and other inappropriate behaviours on which the faculty has based its policy and actions. The faculty contributes to the objectives and goals for higher education institutions, albeit that its specific and unique contributions are not addressed. The faculty is committed to the integration of teaching and research and involves partner researchers in master's and PhD programs.

Recommendations

The evaluation committee wishes to extend the following recommendations to the administrative unit.

- Make explicit the research vision and mission of the College and the Faculty and
 identify appropriate standards of comparison to guide the development of the College's
 strategies and priorities as well as the strategic goals and targets of the faculty.
- Identify specific focus areas for research and societal impact that reflect the faculty's research expertise, strategic priorities and local challenges that can be successfully developed to international standards, taking into account limited resources.
- Restructure the research groups to reflect research expertise, strategic priorities, local challenges and available resources, rather than alignment with teaching programs.
- Continue investing in the PhD program and the recruitment of senior researchers and ensure support for staff to develop expertise in research and researcher training.
- Ensure senior research staff on temporary positions can be retained and develop career pathways for PhD students who have completed, including through postdoc positions.
- Strengthen the capacity to attract external funding from other national sources than ministries and underlying directorates, and from the EU and other international funders.
- Strengthen and extend collaborations with private sector organizations and with public and private organizations in a broader range of European countries and consider establishing collaborations with organizations outside Europe, including in the USA.
- Develop and implement policies and strategies and make available resources to enable researchers to engage with all pillars of open science, aligned with state-of-the art open science approaches, such as that of the European Union.
- Ensure staff providing teaching and supervision in the master's and PhD programs are active researchers and that active researchers provide teaching in these programs.

1. Strategy, resources and organisation of research

1.1 Research strategy

Molde University College's strategic plan 2025 has four goals regarding 'Research with Reach': 1) Top level publications; 2) Ambitious projects; 3) International research with regional relevance, and 4) Internationalisation. The Faculty of Health Sciences and Social Care has a detailed research strategy that describes the faculty's research goals and its action plan specifies targets related to the Molde University College research goals.

The ToR of the Faculty of Health Sciences and Social Care include two specific aspects the administrative unit requests are evaluated:

- 1) To assess the research landscape of the faculty and whether the structure is appropriate in relation to the strategy and action plans.
- 2) To evaluate outcomes and benefits from the launch of the PhD program in 2014 and recruiting senior researchers to establish and strengthen research groups from 2019.

The main research fields and focuses of the Faculty of Health Sciences and Social Care are related to health and social sciences, organised in eight research groups in the fields of nursing (Interaction with vulnerable groups from a phenomenological perspective, and Nursing; Research and professional development), physiology, disability and habilitation, professional ethics, mental health work, digital collaboration and service development in health and care services, and interprofessional collaboration in practice and education. The research groups have a common denominator in aiming to optimise health and quality of life for people with different diagnoses, age, and health status. The faculty aims to meet the expected increase in health-related challenges associated with the growing proportion of elderly through novel and noteworthy discoveries in the application of exercise as medicine.

Researchers at the Faculty of Health Sciences and Social Care collaborate closely with several actors in society to implement findings into practice. For instance, the physiology research group has a wide network of partners, and their findings are incorporated in rehabilitation practices in Norway.

The launch of the PhD program in 2014 and recruitment of senior researchers from 2019 were done in an effort to work toward the goals in the faculty's action plan. The action plan notes specific measures, in particular related to publishing at the highest level, which entails that resources should be allocated per researcher output, taking into account publication level, international collaboration, and language (English). The allocation of internal PhD positions is based on the research group or researcher's project description as well as track record regarding publishing in distinguished journals, previous successful completion of PhD candidates and record of external funding.

The committee's evaluation

The Faculty of Health Sciences and Social Care has clear strategic goals that are well aligned with research-related strategies and scientific priorities of Molde University College.

The College's strategies and the faculty's strategic goals are framed in general terms and seem wide-ranging and ambitious, raising concerns regarding their feasibility in view of limited financial and human resources. The committee wonders what the research vision is for the College and the Faculty and what would be an appropriate standard of comparison to guide the research strategies, priorities and goals. The Committee guestions whether it is realistic that all staff should be active researchers, in view of varying expertise and experience. The main fields and focuses of research and innovation are diverse and are historically rooted in teaching programs, with a loose overarching aim. While the committee fully supports the importance of integrating education and research, the current structure of research groups in combination with limited research expertise and experience, as well as limited financial and human resources to support the research, does not seem suited to optimally strengthen the research of the faculty. The committee commends the faculty's focus on international research with local relevance. The committee also commends the faculty's commitment to research that is clinically, pedagogically and socially relevant in the fields of health and social sciences, and that is developed and undertaken in collaboration with the public sector, working life and society. The committee, however, wonders how this commitment is reflected in specific targets regarding the balancing and valuing of scientific and societal impact.

The committee's recommendations

- Make explicit the research vision and mission of the College and the Faculty and identify appropriate standards of comparison to guide the development of the College's strategies and priorities as well as the strategic goals and targets of the faculty.
- Identify specific focus areas for research and societal impact that reflect the faculty's research expertise, strategic priorities and local challenges that can be successfully developed to international standards, taking into account limited resources.
- Ensure a balancing of the valuing of scientific and societal impact, taking into account the San Francisco Declaration on Research Assessment (DORA).
- Restructure the research groups to reflect research expertise, strategic priorities, local challenges and available resources, rather than alignment with teaching programs.
- Reconsider that all staff should be active researchers and enable differentiation of positions while ensuring that teaching and research are closely integrated.
- Continue investing in the PhD program and the recruitment of senior researchers and ensure support for staff to develop expertise in research and researcher training.

1.2 Organisation of research

Research or innovation projects are organised within or across the research groups. The College has a small research administration, including a vice principal for research who leads the research committee and assists research groups and PhD programs if needed.

Many research projects, including those involving PhD students and the Postdocs, are related to patient treatment. Half of PhD students are funded through a collaborative scheme involving a practice-based partner and RCN. The research groups are pivotal to researcher training.

The number of full professors has increased from three to eight between 2013-2021, and in this period the number of associate professors increased from four to 19. The introduction of the PhD program in 2014 is likely part of the reason for this increase in research staff.

All academic staff can develop a career and competence plan that specifies goals and actions and is followed up periodically. A career plan for PhD students is being developed and early-career PhD supervisors get supervision from more experienced researchers.

All staff is involved in research, with research time allocated based on research staff category. More research time can be granted upon application.

Full and associate professors can apply for research leave/sabbaticals, preferably at a foreign institution, such as international partners in Africa, Europe, Asia, and the USA. PhD students should spend time abroad during their PhD training, including as part of well-established research projects in collaboration with international institutions.

The committee's evaluation

The College and Faculty have a clear organisational structure for research and innovation, and research time is allocated in a transparent way. The organisation of research in eight groups differing substantially in their expertise does not seem optimal. Successfully acquiring external research funding requires substantial financial and human resources, and the committee is concerned about the available support. The committee is pleased to note the synergies between research and patient treatment, the funding obtained through collaborative schemes, and the extension of the career development approach to PhD students. The research mobility opportunities for staff and PhD students are commendable.

The committee's recommendations

- Reconsider the structure of the research in eight research groups and establish fewer
 collaborative research groups that bring together expertise around strategic priorities
 and locally relevant issues that can be developed to international standards.
- Assess what is needed to optimally support successful acquisition of external research funding related to strategic priorities, locally relevant issues and the potential to achieve international standards. Put in place appropriate structures and strategies to support funding success and ensure adequate financial and human resources.
- Ensure the availability of practical career services to support the career opportunities of PhD students as well as research staff and maintain sufficient mobility opportunities.

1.3 Research funding

The research budget of the Faculty of Health Sciences and Social Care in 2022 was about 52 MNOK, of which about 24 MNOK were from basic funds and about 28 MNOK were from external funds. External funds were mostly national grants; 2,3 MNOK was funding from the EU. Substantial external funding is acquired by the physiology research group and the mental health research group. Some external funding is also acquired by the nursing research group and the disability and habilitation research group.

The committee's evaluation

Somewhat over half of the faculty's research budget in 2022 was from external funding, mostly national grants, which is a commendable achievement. Most of this external funding was from ministries and underlying directorates, with little funding from other national

grants, the public sector and the EU. In recent years most external funding was acquired by two research groups; no external funding was noted for four of the eight research groups.

The committee's recommendations

- Strengthen the capacity to attract external funding from other national sources than ministries and underlying directorates, and from the EU and other international funders.
- Identify strategic priorities regarding the main fields and focuses for research funding across research groups, including opportunities for collaboration and capacity building.

1.4 Use of infrastructures

The Faculty of Health Sciences and Social Care uses data archives such as the Cancer registry of Norway, Norwegian Patient registry, and the Norwegian Death Cause Registry. It also uses services to collect, store, and analyse sensitive data. The faculty has not participated in the ESFRI infrastructures.

The physiology research group manages two laboratories and benefits from access to laboratory and training resources provided by partner organisations. The nursing research group has reciprocal research cooperations with partner organisations that provide research data.

The faculty's commitment is first and foremost to GDPR and privacy, rather than making research data publicly available. However, many researchers are committed to sharing their data upon request, as often stated in publications.

The committee's evaluation

The research groups in the faculty make use of several national infrastructures listed in the Norwegian roadmap for research infrastructures. They have limited experience in making use of some of the international infrastructures funded by the ministries. No use is made of European (ESFRI) infrastructures. The physiology research group and the mental health research group have their own and collaborative research infrastructures in place. The faculty has no specific policy and practice to promote working with FAIR principles.

The committee's recommendations

- Ensure access to research infrastructures is maintained for all research main fields and focuses and that any infrastructure needs resulting from possibly shifting focus are met.
- Explore opportunities to make more use of international and European research infrastructure, including as part of international collaborations and funding applications.
- Develop policies and procedures and provide training and resources to enable, promote and monitor consistently working with FAIR-principles.

1.5 Collaboration

The Faculty of Health Sciences and Social Care actively seeks opportunities for collaboration with educational institutions and research organisations worldwide. The faculty has established Memorandums of Understanding (MoUs) with 15 national and international partners that foster long-term relationships that go beyond individual projects.

Through these partnerships, the faculty aims to create a network of shared expertise and resources that benefit the academic community and the broader global society.

There are two Faculty-wide Framework agreements for collaboration on education and research and innovation with regional partners. In addition, several research groups have established collaborations with other regional and national universities, research institutes and hospitals and municipalities relevant to their main fields and focuses of research. Several research groups also have ongoing collaboration with international institutions, mostly universities but also (corporate) research organisations and ministries, including in the United Kingdom, Denmark, Switzerland, Italy, Spain, Ethiopia and Tanzania.

The faculty and research groups have established collaborations with large numbers of public sector organisations, including universities, research institutes, health authorities, hospitals and hospital trusts, and municipalities. In addition, collaborations are ongoing with a few private sector organisations, in particular private health service providers, corporate R&D facilities and technology startups.

The committee's evaluation

The Committee is impressed by the extensive network of national and international, public and private collaborators of the faculty and the research groups. The extent and type of collaborators differs substantially across research groups and some research groups seem especially networked, while others seem to have few or no ongoing collaborations.

The committee's recommendations

- Map existing collaborations and identify gaps in strategic collaborations from a facultywide perspective and for the research groups.
- Develop and implement a strategy to address gaps in collaboration and to ensure fostering ongoing collaborations.
- Strengthen and extend collaborations with private sector organisations and with public and private organisations in a broader range of European countries and consider establishing collaborations with organisations outside Europe, including in the USA.
- Focus on establishing and maintaining collaborations with leading organisations recognised for their excellence.

1.6 Research staff

The faculty's self-assessments counts 88 research staff members, about half of whom are teachers, lecturers, senior lecturers with limited research time. About two thirds or more of the staff in all positions are female, except for the one male postdoc.

Senior research staff encompasses 12 full professors and 22 associate professors, of whom 75% and 84 % held a PhD degree in 2021, respectively. The share of women full professors and associate professors increased from 25-33% to 62-74%. The average age of Professors and Associate professors has decreased somewhat, and the average age of PhD students has been steady at around 40 years. The faculty has 10 PhD students and one postdoc.

The committee's evaluation

The Committee commends the faculty with the increase in senior researchers that has been achieved. Nevertheless, senior research capacity remains relatively limited, the number of PhD students is modest, and postdoc positions are nearly absent. The share of female research staff is very high. It is of concern that not all full and associate professors have a PhD degree and that quite a few are on temporary positions.

The committee's recommendations

- Facilitate all senior researchers (full and associate professors) to obtain a PhD degree.
- Continue efforts to build senior research staff, including through external recruitment and internal development and internal career pathways, and continue to extend the enrolment into PhD program.
- Ensure senior research staff on temporary positions can be retained and develop career pathways for PhD students who have completed, including through postdoc positions.

1.7 Open Science

Molde University College has a fund for article processing charge (APC) for qualifying open access publications. The College also participates in open access publishing agreements.

The researchers at Faculty of Health Sciences and Social Care contribute toward open access to science by publishing in open access journals when available and suitable.

There are guidelines for the protection and exchange of personal and health research data.

The committee's evaluation

The committee is pleased that the College has open access publishing agreements and provides funding towards APCs of (other) journals. Engagement with open science seems to be focused on open access publishing and apparently does not address other pillars of open science. The committee wonders how it is ensured that all researchers are aware of and adhere to data protection guidelines.

The committee's recommendations

- Continue participating in open access funding agreements and maintain funding of article processing charges for (other) qualifying open access publications.
- Develop and implement policies and strategies and make available resources to enable researchers to engage with all pillars of open science, aligned with state-of-the art open science approaches, such as that of the European Union.
- Develop and implement policies and strategies and make available resources to ensure and monitor that all researchers are aware of and adhere to data protection guidelines.

2. Research production, quality and integrity

Introduction

All research conducted at the faculty is related to health and how to improve health. The goal of the faculty's research is knowledge for a long, healthy life and translation of findings to relevant patient populations. With diverse research groups, the faculty covers a large specter of health and social sciences, including the physiology of aging and disease, disability and habilitation, mental health, and nursing and clinical care. The number of publications involving faculty research staff has increased from 36 in 2016 to an estimated 76 in 2023, and in this period publication points have increased from 26.94 to 57.96.

The faculty's policy for research integrity is available through Research Ethics. Each researcher has an independent responsibility to ensure that research is conducted in accordance with scientific and ethical principles, and within established frameworks and national and international regulations. All research collecting personal data needs to be reported to SIKT (Norwegian Agency for Shared Services in Education and Research). Approval must be sought from the Regional Committees for Medical and Health Research Ethics for all medical and health-related research involving humans, human biological material, or health information. The College has a Data Protection Officer, who contributes to ensuring that the faculty complies with the Personal Data Act and its regulations and evaluates and recommends research and student projects in accordance with the provisions of the GDPR. The Data Protection Officer guides and informs individual researchers and students about the GDPR and identifies the need for data protection impact assessments and prior consultations with the Norwegian Data Protection Authority.

2.1 Research quality and integrity

This part includes one overall evaluation of each research group that the administrative unit has registered for the evaluation. The overall assessment of the research group has been written by one of the 18 expert panels that have evaluated the registered research groups in EVALMEDHELSE. The expert panels are solely behind the evaluation of the research group(s). The evaluation committee is not responsible for the assessment of the research group(s).

Research group: Nursing

The research group is clear in its focus on its two main research topic areas. However, perhaps the biggest challenge for group's research appears to be around resourcing, as group members have a significant role in teaching and limited time for research activity. The group would benefit from clarity, consistency and fairness in workload allocation. Also, the group lacks both a robust research strategy and external funding, and therefore the level of activity of the research group is perhaps less than other similar national and international research groups. The involvement of inexperienced researchers by experienced researchers in projects appears to be a useful means to improving overall research competence. The members of the group have initiated several projects, which have resulted in published output, although a larger joint project (perhaps prompted by an agreed research strategy) might serve to enhance research quality and increase the likelihood of external funding.

Research group: Physiology

The strength of the Physiology research group is the link between basic, mechanistic discoveries and translation to clinical care. They do this through widely collaborating and partnering with many different disciplines and stakeholders – hospitals, training clinics, industry, scientists. Another strength is the mentoring of PhD students to enable them to complete on time and their development into independent researchers. Also, recognising mobility and time spent abroad in collaborators' labs as a key strategic priority. Weaknesses include poor administrative support, limited contribution to education (Master's and Bachelor level), limited strategy for capacity building and strategy for increasing research income and quality. In their self-assessment, the table detailing the sources of R&D funding was misleading with inflated income compared to funding described in the list of projects.

The committee's comment to the assessment of the research group(s)

The expert panels' evaluations of the research groups highlight key strengths and weaknesses across the research groups. As exemplified in the assessment of the physiology research group, collaboration and partnering across disciplines and stakeholders are strengths, as is the mentoring of PhD students. The lack of poor administrative support is a weakness, as is limited involvement in teaching. The assessment of the nursing research group underscores the importance of a robust research strategy and external funding, as well as human resources for research as this group has substantial involvement in teaching and limited time available for research activity that should be based on clear, consistent and fair workload allocation. The assessment also underscores that involving both inexperienced and experienced researchers in projects contributes to building overall research competence, and the potential for a larger joint project to enhance research quality and increase the likelihood of external funding.

3. Diversity and equality

The faculty adheres to Molde University College's action plan for equality that aims to ensure all employees are treated equally when it comes to, among others, sex, gender, nationality, cultural background, race and sexual orientation. Equality must be integrated into all operations at all levels and professional fields. The main focus of the action plan is on equality in research and teaching, and there is also a focus on equality in personnel policy, the study environment and student recruitment. The faculty has a strict policy and firm actions regarding sexual harassment or discriminating behaviour.

The committee's evaluation

The Committee notes with approval that the College has a broad ranging action plan to structurally address equality, discrimination, harassment and other inappropriate behaviours on which the faculty has based its policy and actions. It is not explicitly mentioned whether the action plan, policies and actions pertain to staff as well as students.

The committee's recommendations

- Clarify that the College's equality action plan and the faculty's related policies and actions pertain to all staff as well as students.
- Ensure that the process of reporting issues and lodging complaints regarding unequal treatment, discrimination or other forms of inappropriate behaviour is widely known, easy to access, transparent and trusted by all staff and student parties involved.
- Periodically monitor staff and students' experiences regarding unequal treatment, discrimination or other forms of inappropriate behaviour, the process of reporting issues and lodging complaints, and satisfaction with actions taken and their outcome.

4. Relevance to institutional and sectorial purposes

All activities at the administrative unit are noted to be aimed at achieving the sector specific objectives and goals for higher education institutions:

- High quality in research and education: the faculty aims to provide education at all levels at high international level, and to publish and conduct research at a high international level.
- Research and education for welfare, value creation and innovation: The faculty's
 research in diverse ways focuses on welfare. Giving patients and health care workers a
 voice is of importance to the faculty's research, as is the dissemination of research
 results to general, professional and scientific audiences through diverse communication
 strategies.
- Access to education: The Faculty increased its capacity for all levels of education to
 ensure capacity of the welfare system and closely collaborates with the public
 healthcare sector.
- Efficiency, diversity and solidity of the higher education sector and research system:
 The College's quality control system is approved by the Ministry of Education and Research. The faculty and the academic staff perform research and education in line with the system.

The faculty supports researchers who conduct their research with innovation and commercialisation in mind. The faculty has several research groups who aim to be innovative in their strategies to meet the health care challenges of the future.

The faculty's academic staff are well positioned and motivated to participate in not only researching the existing structures of current public healthcare sector and standard treatment strategies, but also how new approaches may improve patient-centred care and cost-effective clinical care. The motivation for innovation other than related to healthcare and to engage in commercialisation activities varies considerably.

The faculty supports participation in innovation and commercialisation research initiated by researchers or research groups. This is seen as an aspect of academic freedom and the initiative should be bottom up. However, the faculty also recognises the funding potential.

The committee's evaluation

As a higher education institution, the faculty contributes to achieving the sector specific objectives and goals for higher education institutions. While this is noted in a general sense, the specific and unique contributions the faculty makes to achieving these goals relative to other higher education institutions and partner organisations at the regional and national level are not addressed. The Committee notes unused potential to promote innovation and commercialisation more broadly, which need not interfere with academic freedom.

The committee's recommendations

- Identify and showcase the unique strengths of the faculty and its contributions to the goals of the higher education sector and the healthcare sector, regionally and nationally.
- Develop a strategy, goals and actions to inform, motivate and facilitate research staff regarding innovation and commercialisation activities, aligned with broader societal impact beyond healthcare.

4.1 Higher education institutions

The research activity of the faculty's staff is crucial to teaching and supervision in the master's degree and in the PhD programme that are research-based and provided by active researchers. Also, the research groups are responsible for developing projects with PhD positions. National and international collaborating researchers actively contribute to the programmes (e.g., as teachers, supervisors, research stays, assessment committees).

The faculty's master's programs are anchored in the competency areas of each of the research groups and master's theses are aligned with these research areas. Joining a research group provides students with the opportunity to immerse themselves in a research environment, experience collegial support, have access to relevant resources and gain an overview of related research activities. The master's thesis can be an independent project or part of an ongoing research project and draw on collected data or be a systematic literature review. There are a growing number of results in national and international journal publications.

The committee's evaluation

The faculty is committed to ensuring teaching and supervision in the master's programmes is research-based, as it would expected to be in the PhD program. It is, however, not clear to what extent the researchers in the various research groups are involved in teaching and supervision in the master's program relative to the PhD program, and to what extent staff involved in teaching and supervision on the master's and PhD programmes are active researchers. Furthermore, it is not clear whether it is optional for students to join a research group, what proportion opt to join, if there is a selection process and to what extent access to support and resources is equitable for students who do and do not join a research group. The Committee commends the faculty for involving partner researchers in the master's and PhD programs and wonders if the faculty's research staff make (reciprocal) contributions to the master's and PhD programs of other institutions, including of partner researchers.

The committee's recommendations

- Ensure research staff actively contribute to teaching and supervision in the master's and PhD programmes and that active researchers provide teaching in these programs.
- Ensure staff providing teaching and supervision in the master's and PhD programs are active researchers.
- Enable research staff to contribute to teaching and supervision in the master's and PhD programs of other institutions, notably of partner researchers.
- Ensure all students have an opportunity and are encouraged to join a research group, that any criteria and procedures to join are clear and transparent, and that students who do not join a research group benefit from equal support and resources.

5. Relevance to society

Introduction

The Norwegian long-term plan for research and higher education (long-term plan) and the UN sustainable development goals (SDGs) underscores that "good health and quality of life are prerequisites for a good life and for being able to contribute to and participate in society". The faculty's research is closely aligned with the noted importance of health by its overall aim to enhance health, by investigating the health and physical function of patients and older populations, patients' experiences with diverse treatments, or health personnels' experiences with the health care system or unique situations in their profession. The faculty's research also aligns well with the importance of addressing inequalities in health also noted in both the long-term plan and the SDGs. Related research includes a project to increase equality for persons with disabilities. This focuses on promoting equal access to higher education and lifelong learning without discrimination through genuine involvement enabling the exercise of rights that can have health promoting impacts. Research projects in Tanzania and Ethiopia shed light on the inequality in the health care and school systems in African countries compared to those in Norway. Enhancement and dissemination of knowledge from these projects contributes to mitigating these inequalities and their impacts. especially with respect to the rights of children with special needs and the development of more comprehensive, competent, and respectful maternal care services in rural areas. The faculty also adds value through their higher education courses, which educate the health care workers of the future. After the Covid-19 pandemic, which highlighted the importance of sufficient nurses and other health personnel, admission rates have increased substantially. This has been rewarding as well as a challenge, and the faculty has managed to balance between increased research productivity and increased number of students.

The committee's comments on impact case 1 – Maximal strength training: from basic discoveries to clinical practice

This impact case describes the translation of physiological discoveries to implementation in clinical care. It shows the importance of maximal strength training for the older, healthy population to maintain and improve neuromuscular characteristics, and how this can be applied to enhance muscular strength and quality of life in patients in a clinical setting. The impact case is based on a program of research undertaken between 2019-2022 by the physiology research group, with the aim of meeting the expected increase in health-related challenges associated with the growing proportion of elderly in our society through novel and noteworthy discoveries in the application of exercise as medicine. Six papers by the research group published in international journals are listed. The research of the physiology research was the basis for implementation into clinical practice in collaboration with the Training Clinic. Here, patients with numerous and diverse diseases and conditions receive training based on the principles identified in basic research. Between 2019 and 2022 the Training Clinic treated around 400 patients. Two publications are listed that show the impact of maximal strength training in patients with inflammatory rheumatic disease and people with schizophrenia.

The committee's comments on impact case 2 – SAFE Pilot study

The research is related to the study of mental health problems, violence and aggression and substance abuse. More specifically, the main aim of the research was to find predictors of violence following discharge from forensic mental health. The research encompassed

risk assessment and management of patients discharged from high and medium security psychiatric facilities. The safe pilot study was concerned with the evaluation of criterion-triggered preventive interventions related to indicators of increased risk in individual patients, which appeared to be protective against violence in naturalistic evaluation. Three papers by the research group published in international journals are listed that report relevant research findings. The impact case also encompassed research regarding the predictive validity of three psychotic symptom scales and on the role of three potentially important but understudied dynamic protective factors. A further 10 papers are listed that report on various aspects of the research program, but they do not seem to detail its impact.

The committee's comments on impact case 3 – Children with disabilities & UN rights conventions

Research undertaken between 2012-2021 produced enhanced knowledge on collaboration, co-creation, innovation, and interventions for children and youth with special needs. In Tanzania, awareness and knowledge of the rights of children and persons with disabilities increased, as did the proportion of children with disabilities whose right to education was fulfilled, while use of corporal punishment in schools reduced. Collaboration between academia and schools for children with disabilities in Tanzania also increased. The research provided the basis for the development of methods for a well-functioning and productive collaboration between partners in Norway and Tanzania, including staff, students, practitioners as well as children and youth with psychosocial difficulties and/or various disabilities. Six papers by the research group published in international journals are listed, which address issues related to children with disabilities, rights and involvement. There is still a way to go to achieve the goal of implementing UN conventions, but there are plans for more project rounds in the coming years. An edited book and eight of its chapters are listed to document the impact of the research. These publications seem to document the findings of the research program and contribute to knowledge translation, but it is not clear if the publications also explicitly detail the impact of the research.

The committee's comments on impact case 4 – ADHD in a life course perspective – associations with chronic pain and ADHD

Epidemiological studies demonstrate that attention deficit hyperactivity disorder (ADHD) is heritable and associated with somatic complaints such as chronic pain. Genes act at many levels to shape the experience of chronic pain, influencing emotional, behavioural, and biological processes. This project involved parents of children with ADHD, and encompassed clinical and epidemiological components, including child and adolescent psychiatry and the general population. The underpinning research includes findings from six studies related to the research program that are published in international journals. Several aspects of the research program are summarised that have made a cumulative impact on the development of the research. This included research with the parents of children with ADHD, cooperation with child and adolescent outpatient clinics, and with psychoeducational parental programs to validate questionnaires in preparation of a future RCT. Studies on parents of children with ADHD were developed and carried out in collaboration with user representatives and ADHD-Norway. Other studies also involve service organisations. including clinics, and funding is obtained from issue-specific organisations. A further 10 papers are listed that report on various aspects of the research program, but they do not seem to detail its impact.

Appendices

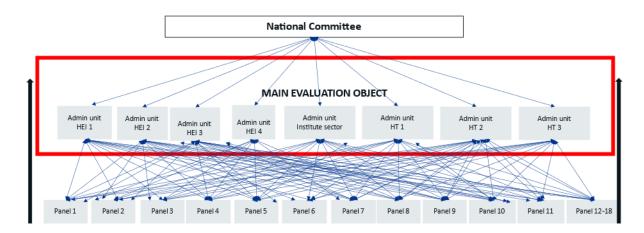
Evaluation of Medicine and health 2023-2024

By evaluating Norwegian research and higher education we aim to enhance the quality, relevance, and efficiency. In accordance with the statutes of the Research Council of Norway (RCN), the RCN evaluates Norwegian professional environments to create a solid and up-to-date knowledge base about Norwegian research and higher education in an international perspective.

The evaluation of life sciences is conducted in 2022-2024. The evaluation of medicine takes place in 2023-2024. The evaluation of biosciences was carried out in 2022-2023. The primary aim of the evaluation of life sciences is to reveal and confirm the quality and the relevance of research performed at Norwegian Higher Education Institutions (HEIs), the institute sector and the health trusts. The evaluation shall result in recommendations to the institutions, the RCN and the ministries.

Evaluation of medicine and health (EVALMEDHELSE) 2023-2024

The evaluation of medicine and health includes sixty-eight administrative units (e.g., faculty, department, institution, center, division) which are assessed by evaluation committees according to sectorial affiliation and other relevant similarities between the units. The administrative units enrolled their research groups (315) to eighteen expert panels organised by research subjects or themes and assessed across institutions and sectors.



Organisation of evaluation of medicine and health 2023-2024

The institutions have been allowed to adapt the evaluation mandate (Terms of Reference) to their own strategic goals. This is to ensure that the results of the evaluation will be useful for the institution's own strategic development. The administrative unit together with the research group(s) selects an appropriate benchmark for each of the research group(s).

The Research Council of Norway has commissioned an external evaluation secretariat at Technopolis Group for the implementation of the evaluation process.

Each institution/administrative unit is responsible for following up the recommendations that apply to their own institution/administrative unit. The Research Council will use the results from the evaluation in the development of funding instruments and as a basis for advice to the Government.

The web page for the evaluation of medicine and health 2023-2024: <u>Evaluation of medicine and health sciences (forskningsradet.no)</u>



Se vedlagte adresseliste

Vår saksbehandler / tlf. Vår ref. Deres ref. Sted

Hilde G. Nielsen/40922260 23/3056 [Ref.] Lysaker 28.4.2023

Invitasjon til å delta i fagevaluering av medisin og helsefag (EVALMEDHELSE) 2023-2024

Vi viser til varsel om oppstart av nye evalueringer sendt institusjonenes ledelse 9. november 2021 (vedlegg 2).

Porteføljestyret for livsvitenskap har vedtatt å gjennomføre fagevaluering av livsvitenskap 2022-2024 som to evalueringer:

- Evaluering av biovitenskap (EVALBIOVIT) (2022-2023)
- Evaluering av medisin og helsefag (EVALMEDHELSE) (2023-2024)

Hovedmålet med fagevalueringen av livsvitenskap 2022-2024 er å vurdere kvalitet og rammebetingelser for livsvitenskapelig forskning i Norge, samt forskningens relevans for sentrale samfunnsområder. Evalueringen skal resultere i anbefalinger til institusjonene, til Forskningsrådet og til departementene. Den forrige fagevalueringen av biologi, medisin og helsefag ble gjennomført i 2010/2011 (vedlegg 3).

Fagevaluering av livsvitenskap retter seg mot UH-sektor, helseforetak og instituttsektor (vedlegg 4). Forskningsrådet forventer at aktuelle forskningsmiljøer deltar i evalueringene, selv om beslutning om deltagelse gjøres ved den enkelte institusjon. Videre ber vi om at deltakende institusjoner setter av tilstrekkelig med ressurser til å delta i evalueringsprosessen, og at institusjonen oppnevner minst én representant som kontaktperson for Forskningsrådet.

Invitasjon til å delta i fagevaluering av medisin og helsefag (2023-2024)

Fagevaluering av medisin og helsefag er organisert over to nivåer (vedlegg 4, side 11). Internasjonale ekspertpaneler vil evaluere forskergrupper på tvers av fag, disiplin og forskningssektorer (UH, institutt og helseforetak) etter kriteriene beskrevet i kapittel 2 i evalueringsprotokollen (vedlegg 4).

Panelrapporten(e) for forskergruppene vil inngå i bakgrunnsdokumentasjonen til forskergruppen(e)s administrative enhet (hovedevalueringsobjektet i evaluering), og som vil bli evaluert i internasjonale



sektorspesifikke evalueringskomiteer. Evalueringskriteriene for administrative enheter er beskrevet i kapittel 2 i evalueringsprotokollen (vedlegg 4).

Innmelding av administrative enheter og forskergrupper – frist 6. juni 2023

Administrative enheter (hovedevalueringsobjektet i evalueringen) – skjema 1

Forskningsrådet inviterer institusjonene til å melde inn sine administrative enhet/er ved å fylle ut skjema 1. Definisjonen av en administrativ enhet i denne evalueringen er å finne på side 3 (kap 1.1) i evalueringsprotokollen (vedlegg 4). Ved innmelding av administrativ/e enhet/er anbefaler Forskningsrådet institusjonene til å se innmelding av administrativ enhet/er i sammenheng med tilpasning av mandat for den administrative enheten (Appendix A i evalueringsprotokollen).

Forskergrupper - skjema 2

Forskningsrådet ber de administrative enheter om å melde inn forskergrupper i tråd med forskergruppedefinisjonen (kap 1.1) og minimumskravene beskrevet i kapittel 1.2 i evalueringsprotokollen. Hver administrative enhet melder inn sin/e forskergruppe/r ved å fylle ut Skjema 2. Vi ber også om at forskergruppene innplasseres i den tentative fagpanelinndelingen for EVALMEDHELSE (vedlegg 5).

Forskningsrådet vil ferdigstille panelstruktur og avgjøre den endelige fordelingen av forskergruppene på fagpaneler <u>etter</u> at alle forskergrupper er meldt inn. Mer informasjon vil bli sendt i slutten av juni 2023.

Invitasjon til å foreslå eksperter – skjema 3

Forskningsrådet inviterer administrative enheter og forskergrupper til å spille inn forslag til eksperter som kan inngå i evalueringskomitéene og i ekspertpanelene. Hver evalueringskomité vil bestå av 7-9 komitémedlemmer, mens hvert ekspertpanel vil bestå av 5-7 eksperter.

Obs. Det er to faner i regnearket:

- FANE 1 forslag til medlemmer til evalueringskomitéene. Medlemmene i
 evalueringskomitéene skal inneha bred vitenskapelig kompetanse, både faglig kompetanse
 og andre kvalifikasjoner som erfaring med ledelse, strategi- og evalueringsarbeid og
 kunnskapsutveksling.
- FANE 2 forslag til medlemmer til ekspertpanelene. Medlemmene i ekspertpanelene skal være internasjonalt ledende eksperter innen medisin og helsefaglig forskning og innovasjon.

Utfylte skjemaer (3 stk):

- innmelding av administrative enhet/er (skjema 1)
- innmelding av forskergruppe/er (skjema 2)
- forslag til eksperter (skjema 3)

sendes på epost til evalmedhelse@forskningsradet.no innen 6. juni 2023.

Tilpasning av mandat – frist 30. september 2023

Forskningsrådet ber med dette administrative enheter om å tilpasse mandatet (vedlegg 4) ved å opplyse om egne strategiske mål og andre lokale forhold som er relevant for evalueringen.



Tilpasningen gjøres ved å fylle inn de åpne punktene i malen (Appendix A). Utfylt skjema sendes på epost til evalmedhelse@forskningsradet.no innen 30. september 2023.

Digitalt informasjonsmøte 15. mai 2023, kl. 14.00-15.00.

Forskningsrådet arrangerer et digitalt informasjonsmøte for alle som ønsker å delta i EVALMEDHELSE.

Påmelding til informasjonsmøtet gjøres her: <u>Fagevaluering av medisin og helsefag</u> (<u>EVALMEDHELSE</u>) - <u>Digitalt informasjonsmøte</u> (<u>pameldingssystem.no</u>).

Nettsider

Forskningsrådet vil opprette en nettside på <u>www.forskningsradet.no</u> for EVALMEDHELSE hvor informasjon vil bli publisert fortløpende. <u>Her</u> kan dere lese om Fagevaluering av biovitenskap (EVALBIOVIT) 2022-2023. Fagevaluering av medisin og helsefag vil bli gjennomført etter samme modell.

Spørsmål vedrørende fagevaluering av medisin og helsefag kan rettes til Hilde G. Nielsen, hgn@forskningsradet.no eller mobil 40 92 22 60.

Med vennlig hilsen Norges forskningsråd

Ole Johan Borge Hilde G. Nielsen avdelingsdirektør spesialrådgiver

Helse Helse

Dokumentet er elektronisk godkjent og signert og har derfor ikke håndskrevne signaturer.

Kopi

Helse- og omsorgsdepartementet Kunnskapsdepartementet

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- 2. Nye fagevalueringer varsel om oppstart november 2021
- Erfaringer med oppfølging av fagevaluering av biologi, medisin og helsefag 2010/2011
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- 9. Appendix A word format



Evaluation of life sciences in Norway 2022-2023

LIVSEVAL protocol version 1.0

By decision of the Portfolio board for life sciences April 5., 2022

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1 Introduction

Research assessments based on this protocol serve different aims and have different target groups. The primary aim of the evaluation of life sciences is to reveal and confirm the quality and the relevance of research performed at Norwegian Higher Education Institutions (HEIs), and by the institute sector and regional health authorities and health trusts. These institutions will hereafter be collectively referred to as Research Performing Organisations (RPOs). The assessments should serve a formative purpose by contributing to the development of research quality and relevance at these institutions and at the national level.

1.1 Evaluation units

The assessment will comprise a number of *administrative units* submitted for evaluation by the host institution. By assessing these administrative units in light of the goals and strategies set for them by their host institution, it will be possible to learn more about how public funding is used at the institution(s) to facilitate high-quality research and how this research contributes to society. The administrative units will be assessed by evaluation committees according to sectoral affiliation and/or other relevant similarities between the units.

The administrative units will be invited to submit data on their *research groups* to be assessed by expert panels organised by research subject or theme. See Chapter 3 for details on organisation.

Administrative unit	An administrative unit is any part of an RPO that is recognised as a formal (administrative) unit of that RPO, with a designated budget, strategic goals and dedicated management. It may, for instance, be a university faculty or department, a department of an independent research institute or a hospital.
Research group	Designates groups of researchers within the administrative units that fulfil the minimum requirements set out in section 1.2. Research groups are identified and submitted for evaluation by the administrative unit, which may decide to consider itself a single research group.

1.2 Minimum requirements for research groups

1) The research group must be sufficiently large in size, i.e. at least five persons in full-time positions with research obligations. This merely indicates the minimum number, and larger units are preferable. In exceptional cases, the minimum number may include PhD students, postdoctoral fellows and/or non-tenured researchers. In all cases, a research group must include at least three full-time tenured staff. Adjunct professors, technical staff and other relevant personnel may be listed as group members but may not be included in the minimum number.

- 2) The research group subject to assessment must have been established for at least three years. Groups of more recent date may be accepted if they have come into existence as a consequence of major organisational changes within their host institution.
- 3) The research group should be known as such both within and outside the institution (e.g. have a separate website). It should be able to document common activities and results in the form of co-publications, research databases and infrastructure, software, or shared responsibilities for delivering education, health services or research-based solutions to designated markets.
- 4) In its self-assessment, the administrative unit should propose a suitable benchmark for the research group. The benchmark will be considered by the expert panels as a reference in their assessment of the performance of the group. The benchmark can be grounded in both academic and extra-academic standards and targets, depending on the purpose of the group and its host institution.

1.3 The evaluation in a nutshell

The assessment concerns:

- research that the administrative unit and its research groups have conducted in the previous 10 years
- the research strategy that the administrative units under evaluation intend to pursue going forward
- the capacity and quality of research in life sciences at the national level

The Research Council of Norway (RCN) will:

- provide a template for the Terms of Reference¹ for the assessment of RPOs and a national-level assessment in life sciences
- appoint members to evaluation committees and expert panels
- provide secretarial services
- commission reports on research personnel and publications based on data in national registries
- take responsibility for following up assessments and recommendations at the national level.

RPOs conducting research in life sciences are expected to take part in the evaluation. The board of each RPO under evaluation is responsible for tailoring the assessment to its own strategies and specific needs and for following them up within their own institution. Each participating RPO will carry out the following steps:

- 1) Identify the administrative unit(s) to be included as the main unit(s) of assessment
- 2) Specify the Terms of Reference by including information on specific tasks and/or strategic goals of relevance to the administrative unit(s)

¹ The terms of reference (ToR) document defines all aspects of how the evaluation committees and expert panels will conduct the [research area] evaluation. It defines the objectives and the scope of the evaluation, outlines the responsibilities of the involved parties, and provides a description of the resources available to carry out the evaluation.

- 3) The administrative unit will, in turn, be invited to register a set of research groups that fulfil the minimum criteria specified above (see section 1.2). The administrative unit may decide to consider itself a single research group.
- 4) For each research group, the administrative unit should select an appropriate benchmark in consultation with the group in question. This benchmark can be a reference to an academic level of performance or to the group's contributions to other institutional or sectoral purposes (see section 2.4). The benchmark will be used as a reference in the assessment of the unit by the expert panel.
- 5) The administrative units subject to assessment must provide information about each of their research groups, and about the administrative unit as a whole, by preparing self-assessments and by providing additional documentation in support of the self-assessment.

1.4 Target groups

- Administrative units represented by institutional management and boards
- Research groups represented by researchers and research group leaders
- Research funders
- Government

The evaluation will result in recommendations to the institutions, the RCN and the ministries. The results of the evaluation will also be disseminated for the benefit of potential students, users of research and society at large.

This protocol is intended for all participants in the evaluation. It provides the information required to organise and carry out the research assessments. Questions about the interpretation or implementation of the protocol should be addressed to the RCN.

2 Assessment criteria

The administrative units are to be assessed on the basis of five assessment criteria. The five criteria are applied in accordance with international standards. Finally, the evaluation committee passes judgement on the administrative units as a whole in qualitative terms. In this overall assessment, the committee should relate the assessment of the specific tasks to the strategic goals that the administrative unit has set for itself in the Terms of Reference.

When assessing administrative units, the committees will build on a separate assessment by expert panels of the research groups within the administrative units. See Chapter 3 'Evaluation process and organisation' for a description of the division of tasks.

2.1 Strategy, resources and organisation

The evaluation committee assesses the framework conditions for research in terms of funding, personnel, recruitment and research infrastructure in relation to the strategic aims set for the administrative unit. The administrative unit should address at least the following five specific aspects in its self-assessment: 1) funding sources, 2) national and international cooperation, 3) cross-sector and interdisciplinary cooperation, 4) research careers and mobility, and 5) Open Science. These five aspects relate to how the unit organises and actually performs its research, its composition in terms of leadership and personnel, and how the unit is run on a day-to-day basis.

To contribute to understanding what the administrative unit can or should change to improve its ability to perform, the evaluation committee is invited to focus on factors that may affect performance.

Further, the evaluation committee assesses the extent to which the administrative unit's goals for the future remain scientifically and societally relevant. It is also assessed whether its aims and strategy, as well as the foresight of its leadership and its overall management, are optimal in relation to attaining these goals. Finally, it is assessed whether the plans and resources are adequate to implement this strategy.

2.2 Research production, quality and integrity

The evaluation committee assesses the profile and quality of the administrative unit's research and the contribution the research makes to the body of scholarly knowledge and the knowledge base for other relevant sectors of society. The committee also assesses the scale of the unit's research results (scholarly publications, research infrastructure developed by the unit, and other contributions to the field) and its contribution to Open Science (early knowledge and sharing of data and other relevant digital objects, as well as science communication and collaboration with societal partners, where appropriate).

The evaluation committee considers the administrative unit's policy for research integrity and how violations of such integrity are prevented. It is interested in how the unit deals with research data, data management, confidentiality (GDPR) and integrity, and the extent to which independent and critical pursuit of research is made possible within the unit. Research integrity relates to both the scientific integrity of conducted research and the professional integrity of researchers.

2.3 Diversity and equality

The evaluation committee considers the diversity of the administrative unit, including gender equality. The presence of differences can be a powerful incentive for creativity and talent development in a diverse administrative unit. Diversity is not an end in itself in that regard, but a tool for bringing together different perspectives and opinions.

The evaluation committee considers the strategy and practices of the administrative unit to prevent discrimination on the grounds of gender, age, disability, ethnicity, religion, sexual orientation or other personal characteristics.

2.4 Relevance to institutional and sectoral purposes

The evaluation committee compares the relevance of the administrative unit's activities and results to the specific aspects detailed in the Terms of Reference for each institution and to the relevant sectoral goals (see below).

Higher Education Institutions

There are 36 Higher Education Institutions in Norway that receive public funding from the Ministry for Education and Research. Twenty-one of the 36 institutions are owned by the ministry, whereas the last 15 are privately owned. The HEIs are regulated under the Act relating to universities and university colleges of 1 August 2005.

The purposes of Norwegian HEIs are defined as follows in the Act relating to universities and university colleges²

- provide higher education at a high international level;
- conduct research and academic and artistic development work at a high international level;
- disseminate knowledge of the institution's activities and promote an understanding of the
 principle of academic freedom and application of scientific and artistic methods and results
 in the teaching of students, in the institution's own general activity as well as in public
 administration, in cultural life and in business and industry.

In line with these purposes, the Ministry for Research and Education has defined four overall goals for HEIs that receive public funding. These goals have been applied since 2015:

- 1) High quality in research and education
- 2) Research and education for welfare, value creation and innovation
- 3) Access to education (esp. capacity in health and teacher education)
- 4) Efficiency, diversity and solidity of the higher education sector and research system

The committee is invited to assess to what extent the research activities and results of each administrative unit have contributed to sectoral purposes as defined above. In particular, the committee is invited to take the share of resources spent on education at the administrative units into account and to assess the relevance and contributions of research to education, focusing on the master's and PhD levels. This assessment should be distinguished from an

² https://lovdata.no/dokument/NLE/lov/2005-04-01-15?q=universities

assessment of the quality of education in itself, and it is limited to the role of research in fostering high-quality education.

Research institutes (the institute sector)

Norway's large institute sector reflects a practical orientation of state R&D funding that has long historical roots. The Government's strategy for the institute sector³ applies to the 33 independent research institutes that receive public basic funding through the RCN, in addition to 12 institutes outside the public basic funding system.

The institute sector plays an important and specific role in attaining the overall goal of the national research system, i.e. to increase competitiveness and innovation power to address major societal challenges. The research institutes' contributions to achieving these objectives should therefore form the basis for the evaluation. The main purpose of the sector is to conduct independent applied research for present and future use in the private and public sector. However, some institutes primarily focus on developing a research platform for public policy decisions, others on fulfilling their public responsibilities.

The institutes should:

- maintain a sound academic level, documented through scientific publications in recognised journals
- obtain competitive national and/or international research funding grants
- conduct contract research for private and/or public clients
- demonstrate robustness by having a reasonable number of researchers allocated to each research field

The committee is invited to assess the extent to which the research activities and results of each administrative unit contribute to sectoral purposes and overall goals as defined above. In particular, the committee is invited to assess the level of collaboration between the administrative unit(s) and partners in their own or other sectors.

The hospital sector

There are four regional health authorities (RHFs) in Norway. They are responsible for the specialist health service in their respective regions. The RHFs are regulated through the Health Enterprises Act of 15 June 2001 and are bound by requirements that apply to specialist and other health services, the Health Personnel Act and the Patient Rights Act. Under each of the regional health authorities, there are several health trusts (HFs), which can consist of one or more hospitals. A health trust (HF) is wholly owned by an RHF.

Research is one of the four main tasks of hospital trusts.⁴ The three other mains tasks are to ensure good treatment, education and training of patients and relatives. Research is important if the health service is to keep abreast of stay up-to-date with medical developments and carry out critical assessments of established and new diagnostic methods,

³ Strategy for a holistic institute policy (Kunnskapsdepartementet 2020)

⁴ Cf. the Specialist Health Services Act § 3-8 and the Health Enterprises Act §§ 1 and 2

treatment options and technology, and work on quality development and patient safety while caring for and guiding patients.

The committee is invited to assess the extent to which the research activities and results of each administrative unit have contributed to sectoral purposes as described above. The assessment does not include an evaluation of the health services performed by the services.

2.5 Relevance to society

The committee assesses the quality, scale and relevance of contributions targeting specific economic, social or cultural target groups, of advisory reports on policy, of contributions to public debates, and so on. The documentation provided as the basis for the assessment of societal relevance should make it possible to assess relevance to various sectors of society (i.e. business, the public sector, non-governmental organisations and civil society).

When relevant, the administrative units will be asked to link their contributions to national and international goals set for research, including the Norwegian Long-term Plan for Research and Higher Education and the UN Sustainable Development Goals. Sector-specific objectives, e.g. those described in the Development Agreements for the HEIs and other national guidelines for the different sectors, will be assessed as part of criterion 2.4.

The committee is also invited to assess the societal impact of research based on case studies submitted by the administrative units and/or other relevant data presented to the committee. Academic impact will be assessed as part of criterion 2.2.

3 Evaluation process and organisation

The RCN will organise the assessment process as follows:

- Commission a professional secretariat to support the assessment process in the committees and panels, as well as the production of self-assessments within each RPO
- Commission reports on research personnel and publications within life sciences based on data in national registries
- Appoint one or more evaluation committees for the assessment of administrative units.
- Divide the administrative units between the appointed evaluation committees according to sectoral affiliation and/or other relevant similarities between the units.
- Appoint a number of expert panels for the assessment of research groups submitted by the administrative units.
- Divide research groups between expert panels according to similarity of research subjects or themes.
- Task the chairs of the evaluation committees with producing a national-level report building on the assessments of administrative units and a national-level assessments produced by the expert panels.

Committee members and members of the expert panels will be international, have sufficient competence and be able, as a body, to pass judgement based on all relevant assessment criteria. The RCN will facilitate the connection between the assessment levels of panels and committees by appointing committee members as panel chairs.

3.1 Division of tasks between the committee and panel levels

The expert panels will assess research groups across institutions and sectors, focusing on the first two criteria specified in Chapter 2: 'Strategy, resources and organisation' and 'Research production and quality' The assessments from the expert panels will also be used as part of the evidence base for a report on Norwegian research within life sciences (see section 3.3).

The evaluation committees will assess the administrative units based on all the criteria specified in Chapter 2. The assessment of research groups delivered by the expert panels will be a part of the evidence base for the committees' assessments of administrative units. See figure 1 below.

The evaluation committee has sole responsibility for the assessments and any recommendations in the report. The evaluation committee reaches a judgement on the research based on the administrative units and research groups' self-assessments provided by the RPOs, any additional documents provided by the RCN, and interviews with representatives of the administrative units. The additional documents will include a standardised analysis of research personnel and publications provided by the RCN.

Norwegian research within life sciences

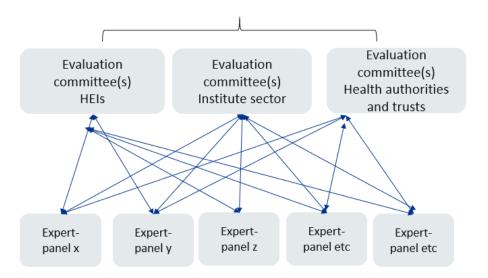


Figure 1. Evaluation committees and expert panels

The evaluation committee takes international trends and developments in science and society into account when forming its judgement. When judging the quality and relevance of the research, the committees shall bear in mind the specific tasks and/or strategic goals that the administrative unit has set for itself including sectoral purposes (see section 2.4 above).

3.2 Accuracy of factual information

The administrative unit under evaluation should be consulted to check the factual information before the final report is delivered to the RCN and the board of the institution hosting the administrative unit.

3.3 National level report

Finally, the RCN will ask the chairs of the evaluation committees to produce a national-level report that builds on the assessments of administrative units and the national-level assessments produced by the expert panels. The committee chairs will present their assessment of Norwegian research in life sciences at the national level in a separate report that pays specific attention to:

- Strengths and weaknesses of the research area in the international context
- The general resource situation regarding funding, personnel and infrastructure
- PhD training, recruitment, mobility and diversity
- Research cooperation nationally and internationally
- Societal impact and the role of research in society, including Open Science

This national-level assessment should be presented to the RCN.

Appendix A: Terms of References (ToR)

[Text in red to be filled in by the Research-performing organisations (RPOs)]

The board of [RPO] mandates the evaluation committee appointed by the Research Council of Norway (RCN) to assess [administrative unit] based on the following Terms of Reference.

Assessment

You are asked to assess the organisation, quality and diversity of research conducted by [administrative unit] as well as its relevance to institutional and sectoral purposes, and to society at large. You should do so by judging the unit's performance based on the following five assessment criteria (a. to e.). Be sure to take current international trends and developments in science and society into account in your analysis.

- a) Strategy, resources and organisation
- b) Research production, quality and integrity
- c) Diversity and equality
- d) Relevance to institutional and sectoral purposes
- e) Relevance to society

For a description of these criteria, see Chapter 2 of the life sciences evaluation protocol. Please provide a written assessment for each of the five criteria. Please also provide recommendations for improvement. We ask you to pay special attention to the following [n] aspects in your assessment:

- 1. ...
- 2. ...
- 3. ...
- 4. ...

...

[To be completed by the board: specific aspects that the evaluation committee should focus on – they may be related to a) strategic issues, or b) an administrative unit's specific tasks.]

In addition, we would like your report to provide a qualitative assessment of [administrative unit] as a whole in relation to its strategic targets. The committee assesses the strategy that the administrative unit intends to pursue in the years ahead and the extent to which it will be capable of meeting its targets for research and society during this period based on available resources and competence. The committee is also invited to make recommendations concerning these two subjects.

Documentation

The necessary documentation will be made available by the life sciences secretariat at Technopolis Group.

The documents will include the following:

- a report on research personnel and publications within life sciences commissioned by RCN
- a self-assessment based on a template provided by the life sciences secretariat
- [to be completed by the board]

Interviews with representatives from the evaluated units

Interviews with the [administrative unit] will be organised by the evaluation secretariat. Such interviews can be organised as a site visit, in another specified location in Norway or as a video conference.

Statement on impartiality and confidence

The assessment should be carried out in accordance with the *Regulations on Impartiality and Confidence in the Research Council of Norway*. A statement on the impartiality of the committee members has been recorded by the RCN as a part of the appointment process. The impartiality and confidence of committee and panel members should be confirmed when evaluation data from [the administrative unit] are made available to the committee and the panels, and before any assessments are made based on these data. The RCN should be notified if questions concerning impartiality and confidence are raised by committee members during the evaluation process.

Assessment report

We ask you to report your findings in an assessment report drawn up in accordance with a format specified by the life sciences secretariat. The committee may suggest adjustments to this format at its first meeting. A draft report should be sent to the [administrative unit] and RCN by [date]. The [administrative unit] should be allowed to check the report for factual inaccuracies; if such inaccuracies are found, they should be reported to the life sciences secretariat no later than two weeks after receipt of the draft report. After the committee has made the amendments judged necessary, a corrected version of the assessment report should be sent to the board of [the RPO] and the RCN no later than two weeks after all feedback on inaccuracies has been received from [administrative unit].

Appendix B: Data sources

The lists below shows the most relevant data providers and types of data to be included in the evaluation. Data are categorised in two broad categories according to the data source: National registers and self-assessments prepared by the RFOs. The RCN will commission an analysis of data in national registers (R&D-expenditure, personnel, publications etc.) to be used as support for the committees' assessment of administrative units. The analysis will include a set of indicators related to research personnel and publications.

- National directorates and data providers
- Norwegian Directorate for Higher Education and Skills (HK-dir)
- Norwegian Agency for Quality Assurance in Education (NOKUT)
- Norwegian Agency for Shared Services in Education and Research (SIKT)
- Research Council of Norway (RCN)
- Statistics Norway (SSB)

National registers

- 1) R&D-expenditure
 - a. SSB: R&D statistics
 - b. SSB: Key figures for research institutes
 - c. HK-dir: Database for Statistics on Higher Education (DBH)
 - d. RCN: Project funding database (DVH)
 - e. EU-funding: eCorda
- 2) Research personnel
 - a. SSB: The Register of Research personnel
 - b. SSB: The Doctoral Degree Register
 - c. RCN: Key figures for research institutes
 - d. HK-dir: Database for Statistics on Higher Education (DBH)
- 3) Research publications
 - a. SIKT: Cristin Current research information system in Norway
 - b. SIKT: Norwegian Infrastructure for Bibliometrics (full bibliometric data incl. citations and co-authors)
- 4) Education
 - a. HK-dir/DBH: Students and study points
 - b. NOKUT: Study barometer
 - c. NOKUT: National Teacher Survey
- 5) Sector-oriented research
 - a. RCN: Key figures for research institutes
- 6) Patient treatments and health care services
 - a. Research & Innovation expenditure in the health trusts
 - b. Measurement of research and innovation activity in the health trusts
 - c. Collaboration between health trusts and HEIs
 - d. Funding of research and innovation in the health trusts
 - e. Classification of medical and health research using HRCS (HO21 monitor)

Self-assessments

1) Administrative units

- a. Self-assessment covering all assessment criteria
- b. Administrative data on funding sources
- c. Administrative data on personnel
- d. Administrative data on the division of staff resources between research and other activities (teaching, dissemination etc.)
- e. Administrative data on research infrastructure and other support structures
- f. SWOT analysis
- g. Any supplementary data needed to assess performance related to the strategic goals and specific tasks of the unit

2) Research groups

- a. Self-assessment covering the first two assessment criteria (see Table 1)
- b. Administrative data on funding sources
- c. Administrative data on personnel
- d. Administrative data on contribution to sectoral purposes: teaching, commissioned work, clinical work [will be assessed at committee level]
- e. Publication profiles
- f. Example publications and other research results (databases, software etc.) The examples should be accompanied by an explanation of the groups' specific contributions to the result
- g. Any supplementary data needed to assess performance related to the benchmark defined by the administrative unit

The table below shows how different types of evaluation data may be relevant to different evaluation criteria. Please note that the self-assessment produced by the administrative units in the form of a written account of management, activities, results etc. should cover all criteria. A template for the self-assessment of research groups and administrative units will be commissioned by the RCN from the life sciences secretariat for the evaluation.

Table 1. Types of evaluation data per criterion

Evaluation units	Research groups	Administrative units	
Criteria			
Strategy, resources and	Self-assessment	Self-assessment	
organisation	Administrative data	National registers	
		Administrative data	
		SWOT analysis	
Research production and quality	Self-assessment	Self-assessment	
	Example publications (and other	National registers	
	research results)		
Diversity, equality and integrity		Self-assessment	
		National registers	
		Administrative data	
Relevance to institutional and		Self-assessment	
sectoral purposes		Administrative data	
Relevance to society		Self-assessment	
		National registers	
		Impact cases	
Overall assessment	Data related to:	Data related to:	
	Benchmark defined by	Strategic goals and specific tasks	
	administrative unit	of the admin. unit	



Evaluation of Medicine and Health (EVALMEDHELSE) 2023-2024

Self- assessment for administrative units

Date of dispatch: **15 September 2023**Deadline for submission: **31 January 2024**

Institution (name and short name):	
Administrative unit (name and short name):	
Date:	
Contact person:	
Contact details (email):	

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Introduction

The primary aim of the evaluation is to reveal and confirm the quality and the relevance of research performed at Norwegian Higher Education Institutions (HEIs), the institute sector and the health trusts. These institutions will henceforth be collectively referred to as research performing organisations (RPOs). The evaluation report(s) will provide a set of recommendations to the RPOs, the Research Council of Norway (RCN) and the responsible and concerned ministries. The results of the evaluation will also be disseminated for the benefit of potential students, users of research and society at large.

You have been invited to complete this self-assessment as an administrative unit. The self-assessment contains questions regarding the unit's research- and innovation related activities and developments over years 2012-2022. All submitted data will be evaluated by international evaluation committees. The administrative unit's research groups will be assessed by international expert panels who report their assessment to the relevant evaluation committee.

Deadline for submitting self- assessments to the Research Council of Norway – 31 January 2024

As an administrative unit you are responsible for collecting completed self-assessments for each of the research groups that belong to the administrative unit. The research groups need to submit their completed self-assessment to the administrative unit no later than 26 January 2024. The administrative unit will submit the research groups' completed self-assessments and the administrative unit's own completed self-assessment to the Research Council within 31 January 2024.

Please use the following format when naming your document: name of the institution and short name of the administrative unit, e.g. NTNU_FacMedHealthSci and send it to evalmedhelse@forskningsradet.no within 31 January 2024.

For questions concerning the self-assessment or EVALMEDHELSE in general, please contact RCN at evalmedhelse@forskningsradet.no.

Thank you!

Guidelines for completing the self-assessment

- Please read the entire self-assessment document before answering.
- The evaluation language is English.
- Please be sure that all documents which are linked to in the self- assessment are in English and are accessible.
- The page format must be A4 with 2 cm margins, single spacing and Calibri and 11-point font.
- The self-assessment follows the same structure as the <u>evaluation protocol</u>. In order to be evaluated on all criteria, the administrative unit must answer <u>all</u> questions.
- Information should be provided by link to webpages i.e. strategy and other planning documents.
 - Provide information provide documents and other relevant data or figures about the administrative unit, for example strategy and other planning documents.
 - Describe explain and present using contextual information about the administrative unit and inform the reader about the administrative unit.
 - Reflect comment in a reflective and evaluative manner how the administrative unit operates.
- Data on personnel should refer to reporting to DBH on 1 October 2022 for HEIs and to the yearly reporting for 2022 for the institute sector and the health trusts. Other data should refer to 31 December 2022, if not specified otherwise.
- Questions in 4.3c should <u>ONLY</u> be answered by administrative units responsible for the Cand.med. degree programme, cf. <u>Evaluation of the Professional programme in Medicine</u> (NOKUT).
- It is possible to extend the textboxes when filling in the from. <u>NB!</u> A completed self- assessment cannot exceed 50 pages (pdf file) excluding question 4.3.c. The evaluation committees are not requested to read more than the maximum of 50 pages. Pages exceeding maximum limit of 50 pages <u>might not</u> be evaluated.
- Submit the self- assessment as a pdf (max 50 pages). Before submission, please be sure that all text are readable after the conversion of the document to pdf. The administrative unit is responsible for submitting the self-assessment of the administrative unit together with the self-assessments of the belonging research group(s) to evalmedhelse@forskningsradet.no within 31 January 2024.

Please note that information you write in the self- assessment and the links to documents/webpages in the self- assessment are the only available information (data material) for the evaluation committee.

In exceptional cases, documents/publications that are not openly available must be submitted as attachment(s) to the self- assessment (pdf file(s)).

1. Strategy, resources and organisation

1.1 Research strategy

Describe the main strategic goals for research and innovation of the administrative unit. You may include the following:

- How are these goals related to institutional strategies and scientific priorities?
- Describe how the administrative unit's strategies and scientific priorities are related to the "specific aspects that the evaluation committee should focus on" indicated in your Terms of Reference (ToR)
- Describe the main fields and focus of research and innovation in the administrative unit
- Describe the planned research-field impact; planned policy impact and planned societal impact
- Describe how the strategy is followed-up in the allocation of resources and other measures
- Describe the most important occasions where priorities are made (i.e., announcement of new positions, applying for external funding, following up on evaluations)
- If there is no research strategy please explain why

Table 1. Administrative unit's strategies

For each category present up to 5 documents which are most relevant for the administrative unit. <u>Please delete lines which are not in use.</u>

Research strategy			
No.	Title	Link	
1			
2			
3			
4			
5			
	Outreach strategies		
No.	Title	Link	
1			
2			
3			
4			
5			
	Open science policy		
No.	Title	Link	
1			
2			
3			
4			
5			

1.2 Organisation of research

a) Describe the organisation of research and innovation activities/projects at the administrative unit, including how responsibilities for research and other purposes (education, knowledge exchange, patient treatment, researcher training, outreach activities etc.) are distributed and delegated.

b) Describe how you work to maximise synergies between the different purposes of the administrative unit (education, knowledge exchange, patient treatment, researcher training, outreach activities etc.).

1.3 Research staff

Describe the profile of research personnel at the administrative unit in terms of position and gender. Institutions in the higher education sector should use the categories used in DBH, https://dbh.hkdir.no/datainnhold/kodeverk/stillingskoder.

RCN has commissioned reports from Statistics Norway (SSB) on personnel for the administrative units included in the evaluation. These reports will be made available to the units early November 2023.

Only a subset of the administrative units submitted to the evaluation is directly identifiable in the national statistics. Therefore, we ask all administrative units to provide data on their R&D personnel. Institutions that are directly identifiable in the national statistics (mainly higher education) are invited to use the figures provided in the report delivered by Statistics Norway. <u>Please delete lines which are not in use</u>.

Table 2. Research staff

	Position by	No. of	Share of women	No. of researchers	No. of
		researcher per category	per category (%)		temporary positions
				research groups at	
				the admin unit	
No. of	Position A (Fill in)				
	Position B (Fill in)				
position	Position C (Fill in)				
	Position D (Fill in)				

1.4 Researcher careers opportunities

- a) Describe the structures and practices to support researcher careers and help early-career researchers to make their way into the profession.
- b) Describe how research time is distributed among staff including criteria for research leave/sabbaticals (forskningstermin/undervisningsfri).
- c) Describe research mobility options.

1.5 Research funding

- a) Describe the funding sources of the administrative unit. Indicate the administrative unit's total yearly budget and the share of the unit's budget dedicated to research.
- b) Give an overview of the administrative unit's competitive national and/or international grants last five years (2018-2022).

Table 3. R&D funding sources

Please indicate R&D funding sources for the administrative unit for the period 2018-2022 (average NOK per year, last five years).

For Higher Education Institutions: Share of basic grant (grunnbevilgning) used for R&D ¹			
For Research Institutes and Health Trusts: Direct R&D funding from Ministries (per ministry)			
Name of ministry	NOK		

National grants (bidragsinntekter) (NOK)		
(NOK)		

¹ Shares may be calculated based on full time equivalents (FTE) allocated to research compared to total FTE in administrative unit

² For research institutes only research activities should be included from section 1.3 in the yearly reporting

From public sector	
Other national contract research	
Total contract research	
International grants (NOK)	
From the European Union	
From industry	
Other international grants	
Total international grants	
Funding related to public management (forvaltr	ingsoppgaver) or (if applicable) funding related to
special hospital tasks, if any	
special hospital tasks, if any	
special nospital tasks, if any	
Total funding related to public	

1.6 Collaboration

Describe the administrative unit's policy towards national and international collaboration partners, the type of the collaborations the administrative unit have with the partners, how the collaboration is put to practice as well as cross-sectorial and interdisciplinary collaborations.

- Reflect of how successful the administrative unit has been in meeting its aspirations for collaborations
- Reflect on the importance of different types of collaboration for the administrative unit: National and international collaborations. Collaborations with different sectors, including public, private and third sector
- Reflect on the added value of these collaborations to the administrative unit and Norwegian research system

Table 4a. The main national collaborative constellations with the administrative unit

Please categorise the collaboration according to the most important national partner(s): 5-10 institutions in the period 2012-2022. <u>Please delete lines which are not in use.</u>

National collaborations

Collaboration with national institutions – 1 -10		
Name of main collaboration or collaborative project with the admin unit		
Name of partner institution(s)		
Sector of partner/institution(s)/sectors involved		
Impacts and relevance of the collaboration		

Table 4b. The main international collaborative constellations with the administrative unit

Please categorise the collaboration according to the most important international partner(s): 5-10 international institutions in the period 2012-2022. <u>Please delete lines which are not in use.</u>

International collaborations

Collaboration with international institutions – 1-10		
Name of main collaboration or collaborative project with the admin unit		
Name of partner institution(s)		
Sector of partner/institution(s)/sectors involved		

Ir	mpacts and relevance of the
	collaboration

1.7 Open science policies

- a) Describe the institutional policies, approaches, and activities to the Open Science areas which may include the following:
- Open access to publications
- Open access to research data and implementation of FAIR data principles
- Open-source software/tools
- Open access to educational resources
- Open peer review
- Citizen science and/or involvement of stakeholders / user groups
- Skills and training for Open Science
- b) Describe the most important contributions and impact of the administrative unit's researchers towards the different Open Science areas cf. 1.7a above.
- c) Describe the institutional policy regarding ownership of research data, data management, and confidentiality. Is the use of data management plans implemented at the administrative unit?

1.8 SWOT analysis for administrative units

Instructions: Please complete a SWOT analysis for your administrative unit. Reflect on what are the major internal Strengths and Weaknesses as well as external Threats and Opportunities for your research and innovation activities/projects and research environment. Assess what the present Strengths enable in the future and what kinds of Threats are related to the Weaknesses. Consider your scientific expertise and achievements, funding, facilities, organisation and management.

Internal	Strengths	Weaknesses
External	Opportunities	Threats

2. Research production, quality and integrity

2.1 Research quality and integrity

Please see the bibliometric analysis for the administrative unit developed by NIFU (available by the end of October, 2023).

- a) Describe the scientific focus areas of the research conducted at the administrative unit, including the unit's contribution to these areas.
- b) Describe the administrative unit's policy for research integrity, including preventative measures when integrity is at risk, or violated.

2.2 Research infrastructures

a) Participation in national infrastructure

Describe the most important participation in the national infrastructures listed in the Norwegian roadmap for research infrastructures (Norsk veikart for forskningsinfrastruktur) including as host institution(s).

Table 5. Participation in national infrastructure

Please present up to 5 participations in the national infrastructures listed in the Norwegian roadmap for research infrastructures (Norsk veikart for forskningsinfrastruktur) for each area that were the most important to your administrative unit.

Areas in	research	Period (from year to year)	Description	Link to website

b) Participation in international infrastructures

Describe the most important participation in the international infrastructures funded by the ministries (Norsk deltakelse i internasjonale forskningsorganisasjoner finansiert av departementene).

Table 6. Participation in international infrastructure

Please describe up to 5 participations in international infrastructures for each area that have been most important to your administrative unit.

		Period (from	Description	Link to
Project	Name	year to year)		infrastructure

c) Participation in European (ESFRI) infrastructures

Describe the most important participation in European (ESFRI) infrastructures (Norske medlemskap i infrastrukturer i ESFRI roadmap) including as host institution(s).

Table 7. Participation in infrastructures on the ESFRI Roadmap

Please give a description of up to 5 participations that have been most important to your administrative unit.

Social sciences and the humanities				
Name	ESFRI-project	Summary of participation	Period (from year to year)	Link

d) Access to research infrastructures

Describe access to relevant national and/or international research infrastructures for your researchers. Considering both physical and digital infrastructure.

e) FAIR- principles

Describe what is done at the unit to fulfil the FAIR-principles.

3. Diversity and equality

Describe the policy and practices to protect against any form of discrimination and to promote diversity in the administrative unit.

Table 8. Administrative unit policy against discrimination

Give a description of up to 5 documents that are the most relevant. If the administrative unit uses the strategies, policies, etc. of a larger institution, then these documents should be referred to. Please delete lines which are not in use.

No	Valid period	Link

4. Relevance to institutional and sectorial purposes

4.1 Sector specific impact

Describe whether the administrative unit has activities aimed at achieving sector-specific objectives or focusing on contributing to the knowledge base in general. Describe activities connected to sector-specific objectives, the rationale for participation and achieved and/or expected impacts. Please refer to chapter 2.4 in the <u>evaluation protocol</u>.

 Alternatively, describe whether the activities of the administrative unit are aimed at contribution to the knowledge base in general. Describe the rationale for this approach and the impacts of the unit's work to the knowledge base.

4.2 Research innovation and commercialisation

- a) Describe the administrative unit's practices for innovation and commercialisation.
- b) Describe the motivation among the research staff in doing innovation and commercialisation activities.
- c) Describe how innovation and commercialisation is supported at the administrative unit.

Table 9. Policies for innovation including IP policies, new patents, licenses, start-up/spin-off guidelines Describe up to 5 documents of the administrative unit's policies for innovation, including IP policies, new patents, licenses, start-up/spin-off guidelines, etc., that are the most relevant. If the administrative unit uses the strategies, policies, etc. of a larger institution, then present these documents. <u>Please delete lines</u> which are not in use.

No.	Name	Valid period	Link
1			

Table 10. Administrative description of successful innovation and commercialisation results Please describe up to 10 successful innovation and commercialisation results at your administrative unit in the period 2012-2022. Please delete lines which are not in use.

	Name of innovation	Link	Description of successful innovation and
No.	and commercial		commercialisation result.
	results		
1			
1	results		

4.3 Higher education institutions

- a) Reflect how research at the administrative unit contributes towards master and PhD-level education provision, at your institutions and beyond.
- b) Describe the opportunities for master students to become involved in research activities at the administrative unit.
- c) <u>ONLY</u> for administrative units responsible for the Cand.med. degree programme, cf. <u>Evaluation of the Professional programme in Medicine (NOKUT).</u>
 - Reflect on how research at the administrative unit contributes towards the quality of the Cand.med. degree programme at your institutions and beyond.
 - Describe the different opportunities for students on the Cand.med. degree programme to become involved in research activities at the administrative unit, and the extent to which students use those opportunities.

4.4 Research institutes

- a) Describe how the research and innovation activities/projects at the administrative unit contribute to the knowledge base for policy development, sustainable development, and societal and industrial transformations more generally.
- b) Describe the most important research activities with partners outside of research organisations.

4.5 Health trusts

a) Reflect on how the administrative unit's clinical research, innovation and commercialisation contribute towards development, assessment and implementation of new diagnostic methods, treatment, and healthcare technologies.

- b) Reflect on how research at the unit contributes towards the quality of relevant education programme at your institutions or beyond.
- c) Describe the different opportunities for students on relevant educational programmes to become involved in research activities at the administrative unit, and the extent to which students use those opportunities.

5. Relevance to society

Reflect on the administrative unit's contribution towards the Norwegian Long-term plan for research and higher education, societal challenges more widely, and the UN Sustainable Development Goals.

5.1 Impact cases

Please use the attached template for impact cases. Each impact case should be submitted as an attachment (pdf) to the self-assessment.

Impact case guidelines

Each case study should include sufficiently clear and detailed information to enable the evaluation committee to make judgements based on the information it contains, without making inferences, gathering additional material, following up references or relying on members' prior knowledge. References to other sources of information will be used for verification purposes only, not as a means for the evaluation committee to gather further information to inform judgements.

In this evaluation, impact is defined as an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia.

Timeframes

- The impact must have occurred between 2012 and 2022
- Some of the underpinning research should have been published in 2012 or later
- The administrative units are encouraged to prioritise recent cases

Page limit

Each completed case study template will be limited to **five pages** in length. Within the annotated template below, indicative guidance is provided about the expected maximum length limit of each section, but institutions will have flexibility to exceed these so long as the case study as a whole remains no longer than **five pages** (font Calibri, font size 11). Please write the text into the framed template under the sections 1–5 below. The guiding text that stands there now, can be deleted.

Maximum number of cases permitted per administrative unit

For up to 10 researchers: one case; for 10 to 30 researchers: two cases; for 30-50 researchers: three cases; for 50-100 researchers: four cases, and up to five cases for units exceeding 100 researchers.

Naming and numbering of cases

Please use the standardised short name for the administrative unit, and the case number for the unit (1,2,3, etc) in the headline of the case. Each case should be stored as a separate PDF-document with the file name: [Name of the institution and name of the administrative unit] [case number]

Publication of cases

RCN plans to publish all impact cases in a separate evaluation report. By submitting the case the head of the administrative units consents to the publication of the case. Please indicate below if a case may not be made public for reasons of confidentiality.

If relevant, describe any reason to keep this case confidential:

Please write the text here	

[Name of the institution and name of the administrative unit] [case number]

Institution:

Administrative unit:

Title of case study:

Period when the underpinning research was undertaken:

Period when staff involved in the underpinning research were employed by the submitting institution:

Period when the impact occurred:

1. Summary of the impact (indicative maximum 100 words)

This section should briefly state what specific impact is being described in the case study.

2. Underpinning research (indicative maximum 500 words)

This section should outline the key research insights or findings that underpinned the impact, and provide details of what research was undertaken, when, and by whom. This research may be a body of work produced over a number of years or may be the output(s) of a particular project. References to specific research outputs that embody the research described in this section, and evidence of its quality, should be provided in the next section. Details of the following should be provided in this section:

- The nature of the research insights or findings which relate to the impact claimed in the case study.
- An outline of what the underpinning research produced by the submitted unit was (this
 may relate to one or more research outputs, projects or programmes).
- Dates of when it was carried out.
- Names of the key researchers and what positions they held at the administrative unit at the time of the research (where researchers joined or left the administrative unit during this time, these dates must also be stated).
- Any relevant key contextual information about this area of research.

3. References to the research (indicative maximum of six references)

This section should provide references to key outputs from the research described in the previous section, and evidence about the quality of the research. All forms of output cited as underpinning research will be considered equitably, with no distinction being made between the types of output referenced. Include the following details for each cited output:

- Author(s)
- Title
- Year of publication
- Type of output and other relevant details required to identify the output (for example, DOI, journal title and issue)
- Details to enable the panel to gain access to the output, if required (for example, a DOI or URL). All outputs cited in this section must be capable of being made available to panels. If they are not available in the public domain, the administrative unit must be able to provide them if requested by RCN or the evaluation secretariate.

4. Details of the impact (indicative maximum 750 words)

This section should provide a narrative, with supporting evidence, to explain:

- How the research underpinned (made a distinct and material contribution to) the impact;
- The nature and extent of the impact.

The following should be provided:

- A clear explanation of the process or means through which the research led to, underpinned or made a contribution to the impact (for example, how it was disseminated, how it came to influence users or beneficiaries, or how it came to be exploited, taken up or applied).

- Where the submitted administrative unit's research was part of a wider body of research that contributed to the impact (for example, where there has been research collaboration with other institutions), the case study should specify the particular contribution of the submitted administrative unit's research and acknowledge other key research contributions.
- Details of the beneficiaries who or what community, constituency or organisation has benefitted, been affected or impacted on.
- Details of the nature of the impact how they have benefitted, been affected or impacted on.
- Evidence or indicators of the extent of the impact described, as appropriate to the case being made.

- Dates of when these impacts occurred.		
5. Sources to corroborate the impact (indicative maximum of ten references)		

Institution	Administrative unit	Name of research group	Expert panel
Molde University	Faculty of Health Sciences and		
College	Soial Care	Nursing	Panel 4d
Molde University	Faculty of Health Sciences and		
College	Soial Care Physiology Panel 1a		Panel 1a

Scales for research group assessment

Use whole integers only - no fractions!

Organisational dimension

Score	Organisational environment
5	An organisational environment that is outstanding for supporting the production of excellent research.
4	An organisational environment that is very strong for supporting the production of excellent research.
3	An organisational environment that is adequate for supporting the production of excellent research.
2	An organisational environment that is modest for supporting the production of excellent research.
1	An organisational environment that is not supportive for the production of excellent research.

Quality dimension

The quality dimension consists of two judgements: 1) Research and publication quality, and 2) Research group's contribution. The first judgement is defined as follows:

Score	Research and publication quality	Supporting explanation
5	Quality that is outstanding in terms of originality, significance, and rigour.	The quality of the research is world leading in terms of quality, and is comparable to the best work internationally in the same area of research. The publications submitted provide evidence that the work of the group meets the highest international standards in terms of originality, significance, and rigour. Work at this level should be a key international reference in its area.
4	Quality that is internationally excellent in terms of originality, significance and rigour but which falls short of the highest standards of excellence.	The quality of the research is internationally excellent. The research is clearly of an international standard, with a very good level of quality in terms of originality, significance, and rigour. Work at this level can arouse significant interest in the international academic community, and international journals with the most rigorous standards of publication (irrespective of the place or language of publication) could publish work of this level.
3	Quality that is recognised internationally in terms of originality, significance and rigour.	The quality of the research is sufficient to achieve some international recognition. It would be perceived nationally as strong and may occasionally reach an internationally recognised level in terms of originality, significance and rigour. Internationally recognised journals could publish some work of this level.
2	Quality that meets the published definition of research for the purposes of this assessment.	The international academic community would deem the research to be nationally acceptable, but below world standards. Legitimate nationally recognised peer-reviewed journals could publish work of this level.
1	Quality that falls below the published definition of research for the purposes of this assessment ¹ .	The quality of the research is well below international level, and is unpublishable in legitimate peer-reviewed research journals.

¹ A publication has to meet all of the criteria below:

Societal impact dimension

The societal impact dimension is also composed of two judgements, defined as presented in the table below.

Score	Research group's societal contribution, taking into consideration the resources available to the group	Score	User involvement
5	The group has contributed extensively to economic, societal and/or cultural development in Norway and/or internationally.	5	Societal partner involvement is outstanding – partners have had an important role in all parts of the research process, from problem formulation to the publication and/or process or product innovation.
4	The group's contribution to economic, societal and/or cultural development in Norway and/or internationally is very considerable given what is expected from groups in the same research field.	4	Societal partners have very considerable involvement in all parts of the research process, from problem formulation to the publication and/or process or product innovation.
3	The group's contribution to economic, societal and/or cultural development in Norway and/or internationally is on par with what is expected from groups in the same research field.	3	Societal partners have considerable involvement in the research process, from problem formulation to the publication and/or process or product innovation.
2	The group's contribution to economic, societal and/or cultural development in Norway and/or internationally is modest given what is expected from groups in the same research field.	2	Societal partners have a modest part in the research process, from problem formulation to the publication and/or process or product innovation.
1	There is little documentation of contributions from the group to economic, societal and/or cultural development in Norway and/or internationally.	1	There is little documentation of societal partners' participation in the research process, from problem formulation to the publication and/or process or product innovation.



Methods and limitations

Methods

The evaluation is based on documentary evidence and online interviews with the representatives of Administrative Unit.

The documentary inputs to the evaluation were:

- Evaluation Protocol Evaluation of life sciences in Norway 2022-2023
- Administrative Unit's Terms of Reference
- Administrative Unit's self-assessment report
- Administrative Unit's impact cases
- Administrative Unit's research groups evaluation reports
- Panel reports from the Expert panels
- Bibliometric data (NIFU Nordic Institute for Studies of innovation, research and education)
- Personnel data (Statistics Norway (SSB))
- Funding data The Research Council's contribution to biosciences research (RCN)
- Extract from the Survey for academic staff and the Student Survey (Norwegian Agency for Quality Assurance in Education (NOKUT))

After the documentary review, the Committee held a meeting and discussed an initial assessment against the assessment criteria and defined questions for the interview with the Administrative Unit. The Committee shared the interview questions with the Administrative Unit two weeks before the interview.

Following the documentary review, the Committee interviewed the Administrative Unit in an hourlong virtual meeting to fact-check the Committee's understanding and refine perceptions. The Administrative Unit presented answers to the Committee's questions and addressed other follow-up questions.

After the online interview, the Committee attended the final meeting to review the initial assessment in light of the interview and make any final adjustments.

A one-page summary of the Administrative Unit was developed based on the information from the self-assessment, the research group assessment, and the interview. The Administrative Unit had the opportunity to fact-check this summary. The Administrative Unit approved the summary without adjustments. (Adjust the text if the AU asked for corrections. Include the AU request and explain what adjustments were made).

Limitations

(Choose one of the three options below and delete the others. Feel free to elaborate slightly if necessary. For example, if you choose option 3, explain the missing information. Note that the Committee can provide detailed feedback and suggestions on improving the evaluation in the Memorandum to the RCN. This section has to remain concise and only summarise whether the information was or was not sufficient.)

(1) The Committee judged the information received through documentary inputs and the interview with the Administrative Unit sufficient to complete the evaluation.

- (2) The Committee judged that the Administrative Unit self-assessment report was insufficient to assess all evaluation criteria fully. However, the interview with the Administrative Unit filled gaps in the Committee's understanding, and the information was sufficient to complete the evaluation.
- (3) The Committee judged that the Administrative Unit's self-assessment report was insufficient to assess all evaluation criteria fully, and some information gaps remained after the interview with the Administrative Unit.



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