

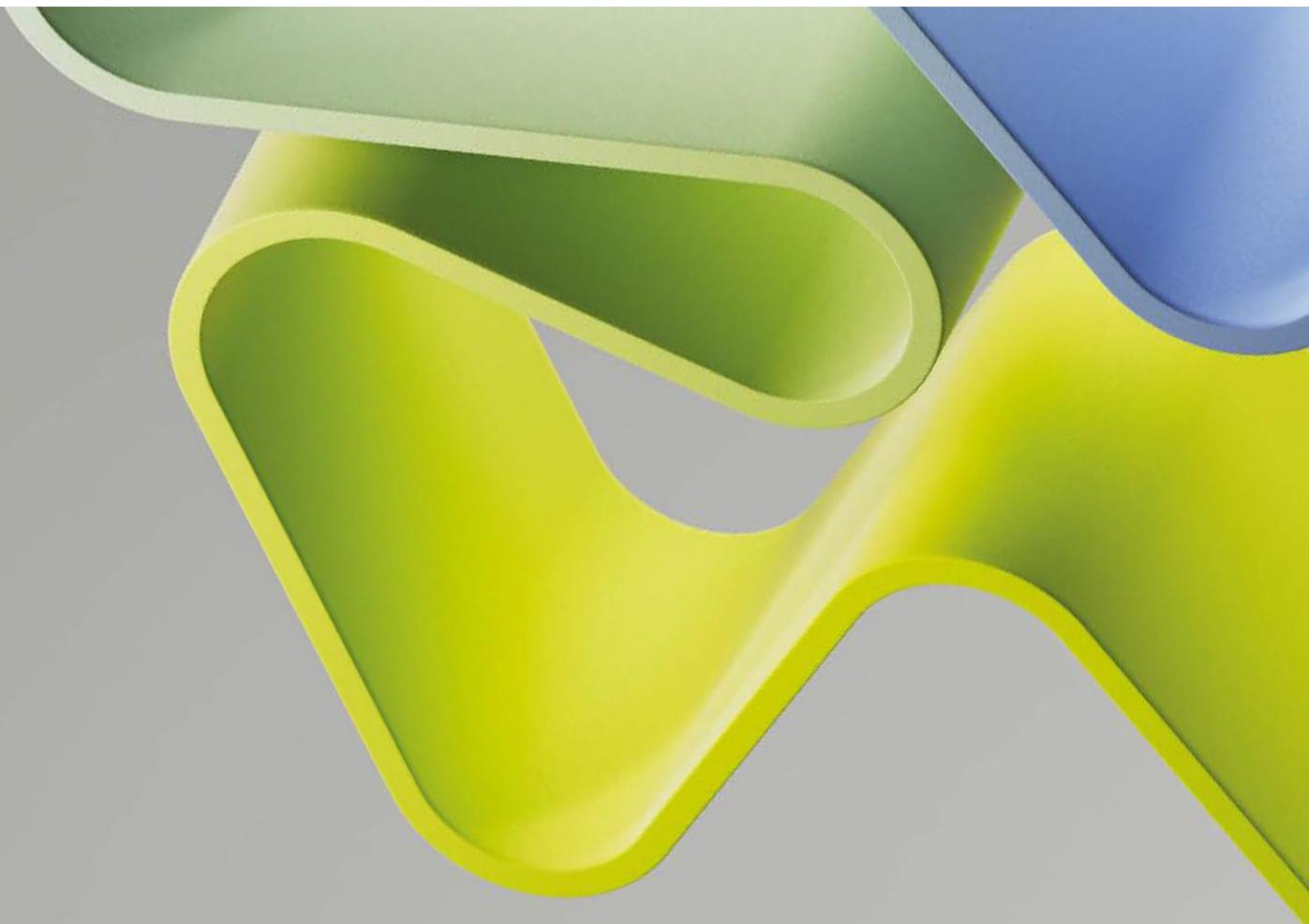
Evaluation of Life Sciences 2022-2024

Evaluation of medicine and health 2023-2024

Evaluation report

ADMINISTRATIVE UNIT: Akershus University Hospital
INSTITUTION: Akershus University Hospital (AHUS)

December 2024



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Statement from Evaluation Committee Health Trusts 3

This report is from the Evaluation Health trusts 3 Committee which evaluated the following administrative units representing the hospital trust in the Evaluation of medicine and health 2023-2024:

- Akershus University Hospital, Akershus University Hospital (AHUS)
- Haukeland University Hospital, Haukeland University Hospital
- Division of Laboratory Medicine, Oslo University Hospital and University of Oslo
- Division of Medicine, Oslo University Hospital and University of Oslo
- Division of Radiology and nuclear medicine, Oslo University Hospital and University of Oslo
- Division of Surgery, Inflammatory Diseases and Transplantation, Oslo University Hospital and University of Oslo
- Division of Technology and Innovation, Oslo University Hospital and University of Oslo
- St. Olavs University Hospital, St. Olavs University Hospital
- Stavanger University Hospital, Stavanger University Hospital (SUH)

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 health trusts 3. All members of the committee have agreed with the assessments, conclusions and recommendations presented here.

Evaluation health trusts 3 consisted of the following members:

Professor Jørgen Frøkiær (Chair)
Aarhus University

Professor Geoff Bellingan
University College London Hospitals

Associate Professor Dirk Bender
Aarhus University

Professor Tomas Jernberg
Danderyd Hospital

Associate Professor Tuomo Meretoja
Helsinki University Hospital

Professor Shakila Thangaratinam
University of Liverpool

Professor Marie Wahren-Herlenius
Karolinska Institutet

Veerle Bastiaanssen, Technopolis Group, was the committee secretary.

Oslo, December 2024

Profile of the administrative unit

Akershus University Hospital (Ahus) is structured into 14 divisions, with division heads responsible for clinical operations, staff, budgets, and academic medicine. This also includes responsibility for research and innovation, which aligns with the hospital's overall organisation and funding. Each clinical division has its own research unit, overseen by a designated Head of Research. The Division of Research and Innovation has a dedicated overall responsibility for research and innovation at the hospital, with the Research Director responsible for the overall strategy for research at the health trust, as well as responsibility for central infrastructure and research support. The Institute of Clinical Medicine, University of Oslo, has a local administration and leadership (referred to as "Campus Ahus"). Ahus and Campus Ahus is tightly interconnected with the Research Director at Ahus having joint position between Ahus (hospital) and UiO (university). Conversely, the Head of Campus Ahus has a 20% position at the hospital. Most senior academic staff have joint positions at the hospital and UiO. In terms of research staff, Ahus consists of 240 senior researchers/researchers, 31 postdoctoral fellows, 66 PhD candidates, 79 research nurses/coordinators and 84 "researchers support". Women represent a majority in all categories except senior researchers/researchers where they occupy 43 percent of positions.

In total, 12 research groups from Ahus/Campus Ahus submitted self-evaluation reports for this review of research: Microbiol and Infection Diseases, EpiGen, PAEDIA, Obsteric and Gynaecology research group (OGR), Surgical Research Group (SRG), ClinRad, Translational Cancer Research Group, Clinical Neuroscience Group (CNG), Cardiovascular Research Group (CRG), Orthopaedic Research Group (ORG), HØKH and Clinical mental health research group.

The focus on overarching research and innovation strategies at Ahus/Campus Ahus, mainly surrounds five important documents with strategic importance for research at Ahus/Campus Ahus 2012-2022: (1) The strategy for Life Science at UiO from 2014, (2) Strategic plan for the molecular laboratory (EpiGen) and clinical trial unit from 2014, (3) Strategic plan for Akershus University Hospital 2035 from 2017, (4) Self-assessment on the hospital-level (level 1) during internal review of research from 2019, and (5) Strategic plan for Akershus University Hospital 2040 from 2022 with relevant sub-documents, including for research and innovation.

How Ahus works in relation to its sector is illustrated through its share of publications with national and international co-authors. The share of co-authors is 79,9% nationally and 52,3% internationally. An example of international collaboration is the project on *proteomic signatures to identify pathways underlying the progression to heart failure* with Harvard University/Brigham and Women's Hospital. The project involves using state-of-the-art blood proteomics methodology to analyse samples from two major epidemiological studies, the ARIC study in the US and the HUNT study in Norway, to identify new biomarkers and pathophysiological pathways associated with high heart failure risk. Ahus has also collaborated in the NEOLETRIB-trial together with the Memorial Sloan Kettering Cancer Center in New York. The collaboration regarded providing competence in cell cycle regulation and cancer dormancy.

Based on its self-assessment, in the future, the administrative unit might take advantage of its relatively younger staff. The younger staff produces an ambitious and progressive research environment, which is also demonstrated by sustained growth during the period. Moreover, the quality of research has improved for several groups, including translational research and health service research, and Ahus holds a prominent position for clinical

interventional trials in Norway. The administrative unit might also take advantage of external opportunities such as the greater Oslo area being among the fastest growing regions in Norway and Ahus being close to other strong research institutions, such as the University of Oslo, Oslo University Hospital, Oslo Metropolitan University, and Life Science industry in Norway. However, an external threat for the administrative unit is that research talents and senior researchers gravitate towards other institutions which may impact the future situation of the administrative unit.

Overall evaluation

The Administrative unit presents clear strategic plans and priorities, in which making use of the large patient cohorts of the catchment area for clinical research and trials, as well as a laboratory for translational studies and biomarker investigations are priorities. The academic organisation of the administrative unit is clear and purposeful, serving to integrate patient care, research and education for beneficial synergies. Ahus has successfully followed their plans to meet institutional and secretarial purposes, not least in increasing scientific output and increasing the number of interventional clinical trials. Translational and clinical projects at Ahus/Campus Ahus have improved diagnostics and clinical care for large patient groups both locally, nationally and internationally. Innovation is an integral and supported part of the administrative unit activities. Research quality is mirrored by the fact that Ahus/Campus Ahus have attracted substantial amounts of external funding for both clinical and basic projects, with further increasing amounts during the last few years.

Career development programs are in place, and mobility is encouraged. Ahus has active recruitment and exchange nationally and internationally and the external collaborations and networks are mirrored by a steadily increasing share of publications with international coauthors. Academic time is regulated and protected via collaborative agreements for senior staff with combined positions. The joint clinical and academic positions contribute to the integration of clinical care, research and education.

Ahus/Campus Ahus participates in national infrastructures to support clinical and basic research at the administrative unit. Other useful facilities are available locally, and it has been part of the strategy to establish them with the result that Ahus is an attractive collaboration partner both for academic institutions and industrial entities. Open science and data sharing policies are implemented as far as possible. Privacy concerns regarding patient-derived data complicates full access at Ahus, but registration of clinical trials is well established and de-identified datasets can be provided. There are procedures in place for regulating data access and use in collaborations with external parties.

Ahus/Campus Ahus expresses a thought-through and substantiated policy for diversity and equal opportunities.

Notable strengths of the administrative unit includes visionary and strategically strong leadership, clear plans for development, strong position for clinical research and trials, high-quality research support systems, competent academic staff with high output of good quality and strong ability to attract external funding.

Weaknesses are few, and mostly related to unproportionally low basic funding. Areas for development include engaging all clinics in research and having more full-time scientists

Recommendations

The clear strategy and strong leadership at Ahus/Campus Ahus has resulted in academic growth and development. A solid research organisation has been established during the 20 years Campus Ahus has been in operation. Research activity is high in many divisions, with high output and success in attracting external funding. However, other divisions are less active, and a future goal could be to further engage these in academic activities to use the full potential of the patient cohorts at Ahus. External collaboration, both national and international, and with partners of different character is important for a leading scientific environment and to follow novel development in different fields, wherefore we advise Ahus to continue building strong partnerships and support active external collaborations. For a next level of development, systematically increasing international collaboration or exchange with high level clinical research institutes could be considered.

Ahus/Campus Ahus has a strong competitive edge and high success rate in securing external funding, and it is important that basic funding is proportionally increased by the regional entities as to provide the infrastructure for performing the scientifically prioritised high-quality projects. Strengthening research at Ahus and other high-performing hospitals should thus be considered at the national level, to take full advantage of the available infrastructure and systems for including large patient-groups into clinical interventional trials. This will generate knowledge for the benefit of patients and support national and international Life Science industry.

Ahus/Campus Ahus participates in relevant national infrastructures to support research directions at the administrative unit. The national infrastructures are complemented by local facilities to enhance activities. Ahus has strategically built infrastructure to support integration of clinical care into research and vice versa. The research-oriented clinical environment feeds into education for high quality, and students have possibilities for participating in research. Productive results are obvious, with benefits for patients, other stakeholders and society. The committee recommends following development in the field of sharing patient-derived data to promote collective benefit when possible.

Statistics for gender balance at different positions and other measures for diversity and equal opportunities should be regularly followed up and evaluated. Related to this matter, the committee recommends Ahus to reflect on the underrepresentation of female researchers at the professor II positions and associate professor level and its reasons and consider actions for future recruitment.

1. Strategy, resources and organisation of research

1.1 Research strategy

Akershus Hospital (Ahus) is Norway's largest acute hospital with a catchment area of >600,000 inhabitants representing >10% of the Norwegian population. Ahus/Campus Ahus has built its research strategy on this fact and make use of the large cohorts available to perform clinical research to improve care for patients locally, nationally and internationally. Ahus is also major teaching hospital educating all categories of health care professionals.

During the period 2012-2022, several strategic documents as detailed in the self-assessment report have been guiding for priorities, including general documents at Ahus and UiO for which Campus Ahus represents the local node. Both Ahus and UiO enforce freedom for researchers to study areas of interest and the overarching strategies provide direction for research focus.

From the start of Ahus as a teaching hospital affiliated with UiO in 2001, the molecular laboratory EpiGen was a focus and highlighted as a core infrastructure to develop research at Ahus. Another early focus of strategic work was to build large-scale, universal research infrastructure for clinical trials at Ahus. Next steps have included health service research for communication models with patients and their relatives which is now used throughout Norway, and the ambition to utilise the full potential of the data warehouse Ahus represents for novel designs in clinical interventional trials, especially pragmatic electronic health record-based randomized controlled trials. Improved use of the major biospecimen repositories at Ahus is on-going work.

The current strategic document for research at Ahus is the "Strategic plan for Akershus University Hospital 2040" authored in 2022. Here, emphasis is on EpiGen laboratories and other universal research infrastructures at Ahus, collaboration with the university sector, prioritizing translational medicine by improving systems for collected biospecimens and to use data warehouse Ahus for pragmatic clinical trials. In addition to strategic documents, Ahus has had "to strengthen Ahus as a University Hospital" as a top strategic aim. The specific criteria to evaluate this aim were defined as a) increment in the number of published peer-reviewed original research articles and b) increment in number of clinical interventional trials. This was followed up systematically, and during the period 2012-2022, research output from Ahus has doubled, the amount of active clinical interventional trials has increased 10-fold and external funding reached levels close to 200 MNOK indicating the impact of the carefully worked-out strategies and visionary leadership.

The committee's evaluation

The Administrative unit presents very clear strategic plans and priorities, in which one wants to make use of the large patient cohorts of the catchment area for clinical research and clinical trials. One has also aimed and succeeded to establish a laboratory for biomarker investigations and building interactions with the UiO campus for additional experimental studies. The strategies are described in strategic documents building on each other as the strategy has developed over the years.

The committee's recommendations

The clear strategy and strong leadership has resulted in academic growth and development at Ahus/Campus Ahus. For a next level of development, systematically increasing

international collaboration or exchange with high level clinical research institutes could be considered.

1.2 Organisation of research

The Administrative unit is formed by two organisations, Ahus (hospital) and Campus Ahus (university) which however are closely integrated through common research groups and with the majority of senior researchers having shared positions between the two organizations. Clinical divisions and academic divisions are grouped to match each other, and activities are steered through a joint research committee. Several additional contact points in form of cross representation in different bodies ensure high integration of organisations and purpose.

Ahus is organised into 14 divisions and the responsibility for clinical operations, employees, budget and academic medicine lies with the division head. The responsibility for research and innovation, including funding, follows the division organisation. All divisions have a research unit in their organisation, which is lead by the head of research in each division. Reimbursement for academic publishing is returned to the clinical divisions, and Ahus also allocates >8 MNOK/y for research projects on a competitive basis with external review. The head of research at the hospital can also allocate some funding, based on overhead, to start prioritised projects like infrastructure for molecular or clinical research.

Campus Ahus is organised with a local head and in three division which each has a division leader. Campus Ahus provides fixed funding to all professors (100 000 NOK/y) and postdocs (25 000 NOK/y), and administrative support to those affiliated with UiO.

All research is performed in the research groups, and it is mandatory for researchers to be part of a research group. The research groups have internal meetings, such as research meetings and journal clubs for academic discussion, coordination and strategic discussions. Ahus and Campus Ahus have agreements for combined positions, which are crucial for integrating education, research and innovation between Ahus and UiO. Most academic clinical researchers hold an MD degree, although there is a growing body of non-MD scientists.

The importance of structures and practices for training early career researchers is recognized by both Ahus and Campus Ahus, and courses and programs for this purpose have been established. PhD and postdoctoral fellowships are available,

Research time for senior academic staff in combined positions is regulated in a collaborative agreement between Ahus and campus Ahus, ensuring that a minimum of 40% time, but often 50%, is reserved for academic work. There are few full-time professors at Ahus, and they are combined with 20% position at the hospital. Most PhD positions are full time, but UiO-funded clinical doctoral fellowships also include teaching.

Mobility options include sabbaticals, and national and international recruitments are encouraged at all career stages.

The committee's evaluation

The academic organisation of the administrative unit is clear and purposeful, serving to integrate patient care, research and education for beneficial synergies. Career development programs are in place, and mobility is encouraged. Academic time is regulated and protected via collaborative agreements for senior staff with combined positions.

The committee's recommendations

A solid research organisation has been established at Ahus during the 20 years Campus Ahus has been in operation. Research activity is high in many divisions, with high output and success in attracting external funding. However, other division are less active, and a future goal could be to further engage these in academic activities to use the full potential of the patient cohorts at Ahus.

1.3 Research funding

Ahus and Campus Ahus receive basic funding for research, and also obtain competitive external research funding from national and international funding bodies. Ahus and UiO has an agreement related to distribution of externally funded project so that clinical projects are hosted by Ahus (hospital) and basic science projects are hosted by Campus Ahus (UiO). Basic funds to Ahus from the Ministry of Health and Care Services are channelled through the South-Eastern Regional Health Authority. The budget is currently at 152 MNOK. Campus Ahus receives its basic funding from the Faculty of Medicine, UiO, at a current budget of 25 MNOK.

Competitive external funding to Ahus/Campus Ahus has had a strong development during the last 5 years and currently sits at 200 MNOK annually with a likely increasing trajectory. Funding sources for grants includes Research Council Norway, Regional Health Authorities, the European Union, NIH, and the K.G. Jebsen Foundation.

The committee's evaluation

Ahus/Campus Ahus have been successful in writing grant applications and scientists at the administrative unit have attracted substantial amounts of external funding for both clinical and basic projects. As a result, they have managed to increase their external funding especially during the last few years.

The committee's recommendations

The strategy has been successful, and the committee recommends keeping working along this line. With a strong competitive edge and high success rate in securing external funding, it is important that basic funding is proportionally increased as to provide the infrastructure for performing the scientifically prioritised high-quality projects.

1.4 Use of infrastructures

Ahus participates in infrastructures relevant to clinical research and basic research performed at Campus Ahus listed in the Norwegian roadmap for research infrastructures such as NorCRIN, which has been central to the network of university hospitals in Norway and establishing SOPs for clinical research, as well as ELIXIR Norway and Sigma2.

Other main national infrastructures in which Ahus participates include a Genomics core facility, the Norwegian sequencing centre, Flow cytometry core facility and proteomics core facility.

Local infrastructural support is available for clinical research in terms of statistics, health economy assessments, large scale biomarker facility, and full-scale clinical trial support. Ahus also offers dedicated research support for economy, data protection and security

assessments, research contracts, human resources and to organise and run biospecimen repositories.

Researchers with Campus Ahus affiliation can also get research support from UiO with pre- and post-grant support, project support, compliance related matters, data management and privacy, contracts and collaboration agreements as well as advice on various aspects of the publication process. HR services related to recruitment and employment contracts are available, as well as IT services, library, innovation and commercialization support.

The committee's evaluation

Ahus/Campus Ahus appears to have adequate involvement in national infrastructures by participating in several national infrastructures to support clinical and basic research at the administrative unit. Other useful facilities are available locally, and it has been part of the strategy to establish them. There is no participation in international infrastructure, which could be considered as the administrative unit expands its field of operation.

The committee's recommendations

Ahus/Campus Ahus participates in relevant national infrastructures to support research directions at the administrative unit. The national infrastructures are complemented by local facilities to enhance activities.

1.5 Collaboration

Ahus/Campus Ahus has established collaborations with regional, national and international partners. Partners are both academic units and industrial entities. The output from Ahus has increased during the assessed period, and also the number and share of publications with national or international coauthors; in 2012 32% of publications included an international coauthor, while 52% of publications included an international coauthor in 2022. In the same year, the collaborations were most frequently linked to the US, UK or Sweden and included partners such as Harvard Medical School, Memorial Sloan Kettering Cancer Center, Amsterdam University Medical Center, Uppsala university and Karolinska Institutet.

At Ahus, international collaboration often relate to international recruitments or international postdoc periods or clinical rotations. These bring training and skills to Ahus that is not available locally, as well as provide networks for access to eg databases and specimen repositories.

Collaboration with industry partners enables Ahus to offer patients new and innovative diagnostics and new therapeutic approaches as part of clinical trials, and reciprocally, Ahus can improve Norwegian translational medicine and be relevant for industry partners by combining large-scale biospecimen repositories and clinical databases in addition to the large patient cohorts.

The committee's evaluation

Ahus is an attractive collaboration partner both for academic institutions and industrial entities. Ahus has active recruitment and exchange nationally and internationally and the external collaborations and networks are mirrored by a steadily increasing share of publications with international coauthors.

The committee's recommendations

External collaboration, both national and international, and with partners of different character is important for a leading scientific environment and to follow novel development in different fields, wherefore we advise Ahus to continue building strong partnerships and support active external collaborations.

1.6 Research staff

Ahus was established as an academic unit only in 2001. Most clinical academic staff have an MD, but there is also an increasing group of non-MDs in the EpiGen molecular laboratories and in the Health Service Research group. Data from Statistics Norway give at hand that Ahus has an overall balanced research personnel with regard to sex and a relatively young faculty with a mean age of <50 years for both men and women.

The Administrative unit includes 5 full professors (60% women), 26 professor II (24% women), 24 associate professors (25% women), 249 researchers/senior researchers (43% women), 34 postdoctoral fellows (65% women) and 85 PhD students (64% women). There are 91 research support personnel employed, whereof 84% are women, and 79 research nurses whereof 91% are women.

The committee's evaluation

Ahus is a young faculty, both in terms of time passed since establishment and age of research staff. The largest difference in proportion female to male staff is among research support personnel and research nurses, with only 16% and 9% men, respectively. While females are well represented as full professors, they are less so among professor II positions and at the associate professor level, which may influence future balance at the full professor level.

The committee's recommendations

The committee recommends Ahus to reflect on the underrepresentation of female researchers at the professor II positions and associate professor level and its reasons and consider actions for future recruitment.

1.7 Open Science

Ahus endorses open-access publishing and emphasises adherence to PlanS and specific requirements of funding agencies even if institution-wide policies have not currently been implemented. The internal Ahus procedure for the mandatory registration of clinical trials at ClinicalTrials.gov also encourages open-access publications of results. There are some funds to support open access publishing in addition to PAR publishing agreements. The library handles inquiries regarding open access publishing according to current transformative agreements.

Ahus describe that their focus on FAIR principles and open access to research data is limited, in part due to concerns regarding privacy as the vast majority of data generated at Ahus are patient derived. There is also a lack of infrastructure and expertise for evaluating data suitability for sharing. UiO aims to manage data according to FAIR and CARE principles and other international standards. Courses are available for students and scientists with whom the responsibility lies to manage data according to the guidelines.

Ownership of data is regulated by current legislation, and Ahus/Campus Ahus requests and supports in establishing agreements between in-house scientists and external parties and collaborators to regulate access and rights to research data.

A template for a data management plan is available on the website of Ahus. Deidentified and or anonymized data sets are provided upon request according to Norwegian legislation and approval for the special project.

The committee's evaluation

Open science and data sharing policies are implemented as far as possible. Privacy concerns regarding patient-derived data complicates full access at Ahus, but registration of clinical trials is well established and de-identified datasets can be provided. There are procedures in place for regulating data access and use in collaborations with external parties, and data management plan templates are accessible via the homepage of Ahus.

The committee's recommendations

The committee recommends following development in the field of sharing patient-derived data to promote collective benefit when possible.

2. Research production, quality and integrity

Akershus university hospital is a large teaching hospital with a catchment area of <600,000 inhabitants representing >10% of the Norwegian population. Research at Ahus/Campus Ahus is both clinical experimental, with publications primarily within the subjects “Public, environmental and occupational health”, “Neurology”, Biomedicine”, “Surgical sciences”, “Cardiovascular and respiratory systems”, and “Psychiatry”. Citation indicators give at hand that 12.2% of publications from Ahus were among 10% top cited works 2019-2021. The impact cases highlight many high impact publications in journals like N Engl J Med, Cell, Nature Neuroscience, Circulation etc.

Scientific integrity is guided by a set of policy documents, and preventive measures include teaching on subjects related to research ethics in PhD courses, supervisor courses and courses available to other personnel. Questions on research integrity and ethics are also regularly discussed at meetings at different levels of the organization, and there is an appointed Research Ombudsman for advice.

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 overall assessment of the research group(s).

Cardiovascular Research Group (CRG)

The CRG has an internationally high reputation in the small field of cardio-oncology. High-quality clinical and translational research projects have successfully been carried out over the years and received high international recognition. A solid infrastructure has been established, which has enabled the group to conduct and organise large clinical trials. A structured career plan is established facilitating translational research over the next years. Funding from competitive sources is high and ensures long-term continuity of high-quality research activities. The CRG has demonstrated good societal impact, but this could be much more widely disseminated and more co-creation/participation of users within projects.

Clinical Mental Health Research Group

This is a strong, well-organised, and ambitious research group with a clear view of future challenges and potentials in the prevention and treatment of mental health and substance use disorders. Important assets of the RG include an overall open science approach, access to large comprehensive routine care datasets, and a strong focus on the training of health professionals, patients, and PhD and master's students. The RG has a strong focus on Patient and Public Involvement (PPI). For this rather large research group, there is only one full-time professor, which may make the group vulnerable in terms of future leadership and policy development. Given the national and international ambitions of the RG, future growth of the project and financial budget portfolio is a precondition. The scientific quality of the RG is very good, but a point of attention is the publication portfolio, which could be increased by incorporating more members of the group as (co)authors.

Clinical Neuroscience Group (CNG)

The Clinical Neuroscience Group (CNG) produces high-quality work, which is strong at a national level and reaches international recognition in some areas. The organisational structure and strategy are good, supporting the production of this high-quality research. A drawback is the diversity of research areas that are undertaken by this group. A more focused approach would further enhance the quality of research undertaken. We note that a separate self-assessment has been completed for the work of the headache group within this organisation, which has been graded independently of this evaluation.

Clinical Radiology (ClinRad)

This is a high quality and well established but relatively small group to supervise such a high number of PhD students. The team has 4 professors, 1 postdoc and 1 research fellow (3/6 women; 2 part of other research groups) with 12 PhD students. All the research is heavily weighted toward all aspects of clinical radiology with opportunities for translational research as they collaborate with researchers from physics, molecular biology, mathematics, AI, genetics, radiogenomics and others focusing on endpoints towards better diagnostics. The overall strategy is, with other groups, to establish 3-4 research groups 1) Oncology imaging, 2) Thoracic radiology, 3) Muscle-skeletal radiology, 4) Neuro-, interventional-, and gynaecological radiology. The limited core funding comes from their own institution. There is no possibility for advanced experimental work as they lack infrastructure to do so but have access to infrastructures at the Universities of Oslo and Ahus. Their contribution to education is high in relation to the size of the group and n°1 in Norway regarding PhD education. Regarding number of PhD students, radiologists, publications (1st/ senior author) they are n°4 in Norway behind 3 other institutions (OUS (UiO), Haukeland (UiB) and St Olav (NTNU) but per radiologist and per equipment unit available, they score better than them. In general, the research projects and publications are very diverse (in many different domains like musculoskeletal, brain, lung, breast and rectal cancer, cardiac safety of cancer therapy) and of moderate international quality, but some are outstanding. There is no list with the research group's monographs/scientific books and the research group's societal impact is rather poor.

Department of Clinical Molecular Biology (EpiGen)

EpiGen is an outstanding group engaged in advancing knowledge on the clinical and molecular basis of complex diseases from a precision medicine perspective. The quality of research and publications is outstanding. The listed publications in particular are of an excellent, international scientific quality. The number and quality of research publications exemplify EpiGen's substantial contribution to the international research in the field of clinical molecular basis of important civilization diseases and has thereby, largely strengthened Norway's research landscape in the South-East region and beyond. Results from EpiGen's research have the potential to reduce disease burden and costs and are directed at influencing clinical decision making in the long run which is of significant benefit for the society. Due to excellent performance across all evaluation criteria and outstanding contribution to translate groundbreaking discoveries into patients' diagnosis and care the research group stands out at the national and the international level.

Health Services Research Unit

The research group has, despite several part-time positions (12/33), a large contribution of scientific publications and every year conducts a large amount of clinically relevant research projects. The research group produces several publications (90 scientific papers in 2022), and they finalise between 2 - 4 PhD students per year. The research group has a strong portfolio of international collaboration. The organisational environment is very strong in supporting the research group in production of excellent research of international standards; however, funding support seems to be needed in order to reach their goals. As mentioned in the self-assessment a large amount of time goes into writing applications for funding (especially senior researchers) and the number of part-time positions could have a negative impact on the production of research. However, it does not seem to affect the number of publications a year so far. The research groups contribution to the societal development in clinical practice in Norway and internationally is considerable from a group of this size aiming to integrate epidemiological, sociological, economic, and other analytic sciences in the study of health services. The societal partners are considerably involved in research, but it is not clear if and how the panel group is having impact on the research and if the panel group has influenced the research quality.

Microbiology and Infectious Diseases

The members of the research group are mainly clinicians and other health care professionals, and/or involved in the daily management of the hospital. As people can join the research group based on their interest in infectious disease-related research, a focus is lacking. The research group lacks a clear vision and strategy to achieve their benchmark. The group receives most of their funding from the HSQ (Regional Health Authority) for PhD students and innovation in diagnostics and biomarkers. The group has not obtained any international funding and very limited external funding, with no substantial funding received since 2020, which is of concern. The focus on clinical research within infectious diseases fits well with the ambitions of the hospital to obtain the profile of a University Hospital. The research of the group is advancing the state of the art in the areas of Medical Microbiology and Infectious Diseases on a national level, but the research output has modest impact on an international level.

Obstetric and Gynecology Research Group (OGR)

Despite the limited funding, the group's small size, and the competing clinical duties, OGR's research output is high, original, and clinically relevant. The group requires additional funding to safeguard more privileged research time and employ administrative and other support staff. Also, international collaborations and active involvement of patient advocacy groups may increase the OGR's visibility and their chances of obtaining competitive funding.

Orthopaedic Research Group (ORG)

The ORG is a well-organised, well-staffed department for clinical research, generating a substantial scholarly output. Especially valuable for clinical researchers seems to be the clinical trials unit and research support services. A local Division of Research and Innovation (DRI) provides impressive administrative support, and Oslo University gives excellent infrastructural support and know-how. Research is at top national level. The development of the projects shows an accelerating activity curve and seems to be in harmony with the overall strategy. Weaknesses concern relatively modest external funding and a lack of international grants. The key strategy is not likely to give the ORG an

international standing and funding. There is also still room for improvement in the societal impact of ORG's work.

Pediatric Research Group (AHUS PAEDIA)

The group's description of strategy comes across very general instead of parsing how to implement new technologies into the strategy e.g. integrating epigenetics into a study design. The group leader obtained a PhD degree on chronic fatigue syndrome (CFS/ME) already in 2007. He is an internationally, renowned and respected expert in the field for over a decade. Nevertheless, the existing diagnostic vagueness and thus difficult differentiation from other diseases hinder needs-based care. While this is a world leading expert group, they should have been able to address the persistence of this knowledge gap with reflective interest.

Surgical Research Group (SRG)

The group has an appropriate structure for clinical research and, importantly, the interaction between research and clinical work. The group is, however, quite large in terms of a wide range of research areas. It is not clear to what extent the group structure promotes interdisciplinary work. The relatively new research department will facilitate interdisciplinary work within the group as well as more experimentally oriented projects. Increased funding and research output are noted and reflected in the grading. Quality is good but there is potential for improvement. The scores for societal dimension are, as for many other groups being evaluated, low. Apart from a project that may lead to new guidelines and a pending patent there are no convincing examples or documentation of the group's efforts.

Translational Cancer Research Group

This is a high quality and well established but relatively small group with a very competent leadership. Of the 2 professors and 2 postdocs working with 3 funded PhD students, 3 study nurses, and an engineer 7 belong to Akershus University Hospital and 4 belongs to University of Oslo Campus Akershus. They study factors driving the development and progression of breast cancer in a clinical setting. Endocrinological and molecular data from different "omic" levels are applied together with biobank studies. The overall strategy is to design clinical trials that provides immediate good treatment options as well as collection of biobanks for translational follow-up projects. The limited funding stated is increasing over time. The contribution to education is high in relation to the size of the group. The research projects and publications are of high international quality, but the contributions of the group leader are very dominating. It seems that the relevance of the research group is more in line with the hospital than the university even if many stated projects involve major components of basic research. High quality user-oriented publications and other media contribute to the research group's societal impact.

3. Diversity and equality

Ahus/Campus Ahus has established a document with the long-term strategic plan for diversity, equity and migration health. The policy entails goals for work within diversity and migration health, specifying focus areas and initiatives. A specific goal for research at Ahus is that it should “contribute to research and innovation which safeguards the diversity perspective so that the hospital is better equipped to meet the needs of patients and their families”. The three strategic focus areas identified to achieve this, and other goals are a) Competence, knowledge and research; b) Communication and language; c) Recruitment and representativeness.

The administrative unit also adheres to several other strategic and governing documents at UiO, the Regional Health Authority, national strategies and action plans as specified in the self-assessment, to protect against discrimination and to promote diversity.

The NIFU analysis of Ahus reveals a reasonable sex balance within or almost within a 40-60% interval for the positions described. The faculty is rather young, and even within the senior physician group only 50% are older than 62 years. Within the postdoc/research group, 18% have been internationally recruited/are not of Norwegian nationality.

The committee’s evaluation

Ahus/Campus Ahus expresses a thought-through and substantiated policy for diversity and equal opportunities. The Administrative unit also in a thought-through way brings in the perspective of their patients, their diversity and needs in relation to language and ethnicity, and how personnel and study-set up need to prepare for and take these factors into account.

The committee’s recommendations

Statistics for sex balance at different positions and other measures for diversity and equal opportunities should be regularly followed up and evaluated. With the population of the catchment area, studies to understand which performed or planned interventions that help their personnel most to meet the needs of patients and their families could be performed as part of the strategy.

4. Relevance to institutional and sectorial purposes

Ahus has four regulated responsibilities: Patient treatment, education, research and transfer of knowledge to patients and relatives. Research and education are thus basic objectives for Ahus, and “to strengthen Ahus as University Hospital” is an outspoken top aim since 2019. Scientific output has increased from Ahus 2012-2022, wherefore the overall impact by Ahus to Norwegian science has increased during the period.

Sector-specific aims such as increasing the number of clinical interventional trials have been a focus of Ahus, at which the number has increased 10-fold during the period 2012-2022. Another sector-specific aim met is the introduction of gene sequencing diagnostics prior to inclusion in clinical precision cancer trials.

Policies for innovation and business development are in place, and an innovation network has been established to strengthen the field of innovation at Ahus. Ahus also has a contract with Inven2, and support from the UiO Growth House for maturing early-stage ideas to commercialisation. Ahus presents many researchers active in research-driven innovation and around 10 disclosures of invention have been submitted to Inven2 during recent years, with several projects reaching the commercialisation phase. Notably, Ahus reported the highest number of innovation activities among Norwegian hospital during the last two years.

The committee’s evaluation

Ahus has successfully followed their plans to meet institutional and secretarial purposes, not least in increasing scientific output and increasing the number of interventional clinical trials. Ahus has also established genetic diagnostics prior to inclusion in precision cancer trials. For innovation and commercialisation, Ahus has support from UiO but has also built in-house infrastructure.

The committee’s recommendations

Strengthening research at Ahus and other high-performing hospitals should be considered, to take full advantage of the available infrastructure and systems for including large patient-groups into clinical interventional trials. This will generate knowledge for the benefit of patients and support national and international Life Science industry.

4.1 Health trusts

Researchers at Ahus/Campus Ahus have led identification of and clinical implementation of biomarkers for cardiovascular and neurodegenerative diseases both locally and worldwide. Ahus/Campus Ahus also collaborated intimately to establish high-throughput gene sequencing to enable inclusion of patients in precision medicine clinical trials.

Clinical interventional trials have been a special focus area for Ahus/Campus Ahus. The Administrative unit has invested in and strengthened infrastructure for initiating, conducting and analysing clinical interventional trials. For industry-initiated trials, the goal is to offer patients safer and better treatments and to offer improved and more tailored treatments for the individual patient. Ahus also encourages and supports investigator-initiated academic trials, which also help build competence and capacity in different areas of the hospital such as cardiology, orthopaedics and most recently paediatrics/adolescent medicine through a

grant enabling employment of a “Medical lead” to spearhead the development of clinical interventional trials in this section.

Innovation is an important and integral part of the research activities at Ahus, where an innovation network to support such activities is established. Several spin-off start-ups have formed based on innovations at Ahus. Contribution to innovation may also be seen in the possibility for industrial partners to access the large patient cohorts at Ahus thanks to the infrastructure for clinical trials that has been established.

The academic leaders at Ahus/Campus Ahus add their expertise to patient care, stimulating the professional environment, and also participate in and advance teaching. As a large teaching hospital, most clinical disciplines have academic position contributing to the integration of clinical care, research and education, which follows the Education Strategy and Action plan at Ahus.

For medical students, there is an established research program via the Faculty of Medicine at UiO, and Ahus also collaborates with OsloMet through which many employees perform a master's degree.

The committee's evaluation

Translational and clinical projects at Ahus/Campus Ahus have improved diagnostics and clinical care for large patient groups both locally, nationally and internationally. Innovation is an integral and supported part of the administrative units' activities. The joint clinical and academic positions contribute to the integration of clinical care, research and education. Research opportunities are available for students via several programs.

The committee's recommendations

Ahus has strategically built infrastructure to support integration of clinical care into research and vice versa. The research-oriented clinical environment feeds into education for high quality, and students have possibilities to for participating in research. Productive results are obvious, with benefits for patients, other stakeholders and society.

5. Relevance to society

The administrative unit consists of an academic research part (Campus Ahus/UiO) which is highly integrated with the health care service provider (Ahus hospital). Research at Campus Ahus is important to improve clinical care for the patients at Ahus hospital. Ahus hospital is also a major teaching hospital for all categories of health care professionals in Norway. The high degree of integration and functional structures established allows substantial contribution towards the Norwegian long-term plan for research and higher education and societal challenges as well as the UN sustainable development goals.

The Administrative unit has built an infrastructure to support innovation and promote clinical trials, and both investigator-initiated and industry-initiated clinical trials are performed at the administrative unit. Leading researchers at different levels of career development are recruited and together with performed clinical studies and experimental research these factors lead to high quality and accessibility in research and higher education which are overall objectives of the Norwegian long-term plan for research and higher education.

The Administrative unit has also been successful in translating generated knowledge into national and international enterprises/industry, working together in clinical trials or with focus on diagnostics or drug development as exemplified by the impact cases. Spin-off companies have been established from results and discoveries made within the administrative unit, contributing to new business opportunities.

Activities also align with and contribute to UN sustainable development goals 3 to ensure healthy lives and promote well-being for all at all ages; and 4 to provide inclusive and equitable quality education and promote lifelong learning opportunities for all.

Several presented academic projects already contribute to personalized medicine within the health care provider, and more can be expected from ongoing studies.

Comments on impact case 1 - Cardiac biomarkers

Cardiovascular disease and myocardial dysfunction are among leading causes of death in the Western world. Biomarkers are imperative for guiding clinical decisions and follow up principles in care of cardiovascular disease. The cardiovascular research group at Ahus hospital and Campus Ahus perform clinical and experimental studies of cardiac biomarkers, and as examples have demonstrated high-sensitivity cardiac troponin I and T to identify subclinical and clinical myocardial injury, and the novel biomarker secretoneurin as a novel cardiac biomarker for heart failure. The administrative unit offers large clinical cohorts and state-of-the-art laboratories, collaboration with international enterprises as well as national diagnostic companies are established.

Key references include several articles in highly prestigious journals as J Am Coll Cardiol and Circulation.

The impact of the research group in developing biomarkers for severe cardiac disease to guide clinical decisions is of direct relevance for patient care. Several clinical trials have been conducted using the biomarkers. The observations in the group have also generated intellectual property rights and led to establishment of two spin-off biotechnology companies underlining the quality and societal relevance of the research performed.

Comments on impact case 2 - Cardio-oncology

Advances in cancer therapy has improved cancer outcomes and contributes to increasing numbers of long-term survivors, but also emphasises the need to manage and prevent serious side effects of the therapy. Adjuvant breast cancer therapies may induce chronic myocardial injury, and studies at Ahus hospital and Campus Ahus pioneered this field using advanced imaging and biomarkers in clinical trials of potentially cardioprotective protective drugs.

Key references include papers in leading journals Eur Heart J, Circulation, JACC CardioOncol, J Am Heart Assoc, Cardiology and Cardiooncology.

The impact of the research applies to clinical care and prevention of cardiac tissue injury during cancer treatment and has had widespread importance. It led the way to enhanced collaboration between oncologists and cardiologists for the benefit of vulnerable patient groups and saw the establishment of Norway's first cardio-oncology outpatient clinic. Work from the Administrative unit has been at the international forefront of this developing field and is cited in guidelines for both European and US cardiology associations highlighting its importance. It has also attracted considerable attention from the research community, health politicians and the public. For continued clinical and experimental studies several large grants for clinical investigations have been secured by researchers at the administrative unit, including funds for establishing a K.G. Jebsen Centre for Cardiac Biomarkers.

Comments on impact case 3 - Investigator-initiated prospective randomized controlled trials in orthopedic trauma surgery

Skeletal fractures and tendon injuries are common. Developing best practise for treatment calls for high-quality, well-powered, randomized controlled trials with minimal loss-to-follow-up. The Orthopedic Research Group at Ahus hospital and Campus Ahus has conducted several such clinical trials for conditions including hip, wrist and clavicular fractures, and Achilles tendon ruptures. These defined indications for internal fixation, hemiarthroplasty and total hip replacement for femoral neck fractures, defined optimal implant choice for displaced wrist fractures and demonstrated advantages of volar plate fixation over traditional cast treatment. Their studies also established that there is no difference in results between operative and non-operative treatment of Achilles tendon rupture.

Key references include papers in highly prestigious journals such as N Engl J Med and several papers in J Bone Joint Surg Am.

The impact of the research is direct on clinical procedures and influences treatment choices for orthopedic surgeries such as hip fracture treatment, radius fracture treatment and Achilles tendon rupture treatment. The results are reported in editorials and systematic reviews published by others, and several of the group's papers are cited in guidelines of the American Academy of Orthopedic Surgeons. Studies have also evoked general media interest highlighting the societal impact and interest of new evidence-based knowledge for treatment of these conditions.

Comments on impact case 4 - Dementia Disease Initiation: predictors for dementia, biomarkers and novel drug candidates

Dementia can be caused by several different underlying mechanisms but is progressive. This impact case describes the formation, follow-up and use of a unique at-risk cohort with matched controls to identify bio- and image markers for early differential diagnosis, prediction and prognosis and future precision interventions. Deep phenotyping is performed

of the >1000 included individuals with biennial follow-up including neuropsychological testing, image, and molecular characterisation of blood and CSF as well as genetic characterization at inclusion. Potential drug candidates are also investigated.

Key references include papers published in PLOS ONE, J Proteome Res and Alzheimers Dement, and four patent applications (two granted, two applications ongoing).

The impact of the research relates to establishing a unique, prospectively followed cohort with biennial assessment by neuropsychological testing, MRI imaging, and molecular characterisation of individuals at-risk and controls. The investigators introduced fluid biomarkers for neurodegenerative diseases in Norway, several patents are being sought and two have been granted. Commercialization via licensing to biotech companies is established. Future additional impact can be expected as power for analysis builds regarding image and biomarkers for dementia development.

Comments on impact case 5 - The NAD⁺-mitophagy pathway in human ageing and its broad clinical applications

Mitochondrial dysfunction occurs both in neurodegenerative disease and ageing. In this impact case, the investigators develop their initial observation of reduced NAD⁺-related signalling in healthy ageing and discovered that impaired removal of damaged mitochondria (mitophagy) is an accelerator of ageing. This underlies their hypothesis in going forward to explore NAD⁺ and increased mitophagy as potential treatment for neurodegenerative diseases.

Key references include papers in leading journals Cell, Cell Metabolism, Nat Comm, Nat Neuroscience and Trends Neurosci.

The impact of the research relates to translating the basic discoveries into several clinical trials with NAD⁺, one concluded with positive outcome, and establishing interaction and collaboration with industrial partners. Obtained knowledge has also provided the basis for training 40 students from different parts of the world in the lab, developing educational material and a PhD training course.

Appendices

Evaluation of Medicine and health 2023-2024

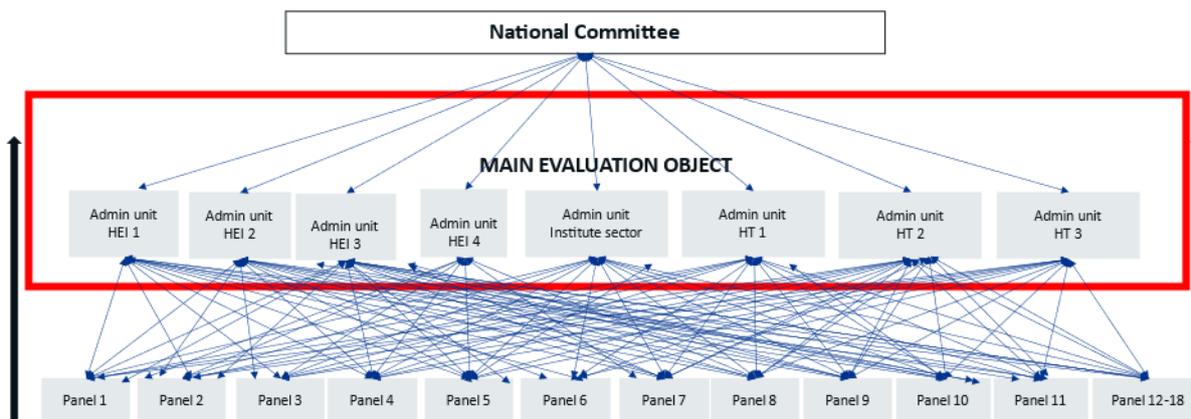
By evaluating Norwegian research and higher education we aim to enhance the quality, relevance, and efficiency. In accordance with the statutes of the Research Council of Norway (RCN), the RCN evaluates Norwegian professional environments to create a solid and up-to-date knowledge base about Norwegian 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: [Evaluation of medicine and health sciences \(forskingsradet.no\)](https://forskingsradet.no)

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 (hovedevalueringssubjektet 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 etter 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: [Fagevaluering av medisin og helsefag \(EVALMEDHELSE\) - Digitalt informasjonsmøte \(pameldingssystem.no\)](#) .

Nettsider

Forskningsrådet vil opprette en nettside på www.forskningsradet.no for EVALMEDHELSE hvor informasjon vil bli publisert fortløpende. [Her](#) 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
avdelingsdirektør
Helse

Hilde G. Nielsen
spesialrådgiver
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
3. Erfaringer med oppfølging av fagevaluering av biologi, medisin og helsefag 2010/2011
4. Fagevaluering av livsvitenskap 2022-2024 – Evalueringsprotokoll
5. Tentativ panelinndeling EVALMEDHELSE mai 2023
6. Skjema 1 – Innmeldingsskjema Administrative enheter
7. Skjema 2 – Innmeldingsskjema Forskergrupper
8. Skjema 3 – Forslag til internasjonale eksperter til evalueringskomiteene og ekspertpanelene
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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Oslo, 5 April 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.

<i>Administrative unit</i>	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.
<i>Research group</i>	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 (RHF) in Norway. They are responsible for the specialist health service in their respective regions. The RHF 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 (HF), 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 main 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.

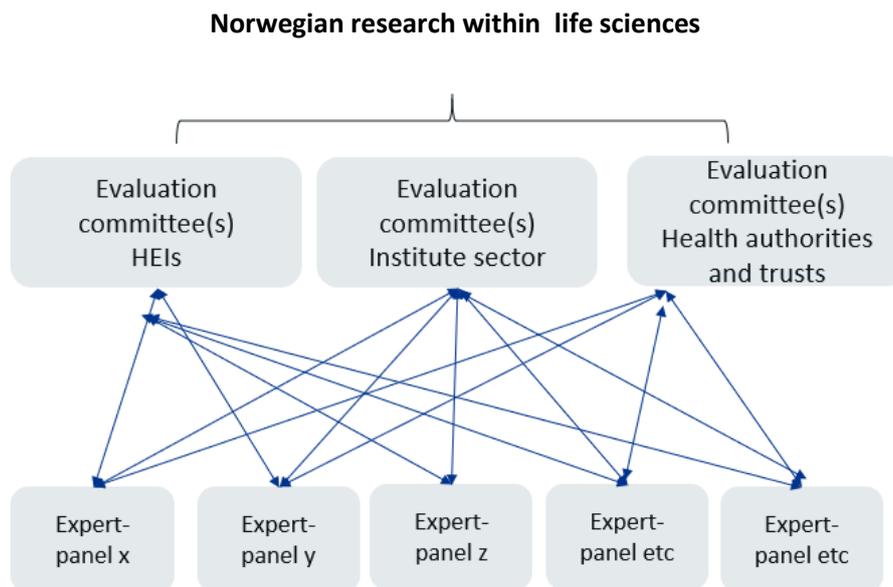


Figure 1. Evaluation committees and expert panels

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

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



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 [evaluation protocol](#). In order to be evaluated on all criteria, the administrative unit must answer all 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 **ONLY** be answered by administrative units responsible for the Cand.med. degree programme, cf. [Evaluation of the Professional programme in Medicine \(NOKUT\)](#).
- It is possible to extend the textboxes when filling in the form. **NB!** 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 **might not** 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. Please delete lines which are not in use.

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. Please delete lines which are not in use.

Table 2. Research staff

	Position by category	No. of researcher per category	Share of women per category (%)	No. of researchers who are part of multiple (other) research groups at the admin unit	No. of temporary positions
No. of Personell by position	Position A (Fill in)				
	Position B (Fill in)				
	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&D¹	
For Research Institutes and Health Trusts: Direct R&D funding from Ministries (per ministry)	
Name of ministry	NOK

National grants (bidragsinntekter) (NOK)	
From the ministries and underlying directorates	
From industry	
From public sector	
Other national grants	
Total National grants	
National contract research (oppdragsinntekter)² (NOK)	
From the ministries and underlying directorates	
From industry	

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 (forvaltningsoppgaver) or (if applicable) funding related to special hospital tasks, if any	
Total funding related to public management/special hospital tasks	
Total all R&D budget items (except basic grant)	

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. Please delete lines which are not in use.

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. Please delete lines which are not in use.

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	

Impacts 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 roadmap	Name of research infrastructure	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.

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

c) Participation in European (ESFRI) infrastructures

Describe the most important participation in European (ESFRI) infrastructures (Norske medlemskap i infrastruktur 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.	Name	Valid period	Link
1			

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 [evaluation protocol](#).

- 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. Please delete lines 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.

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

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) **ONLY** for administrative units responsible for the Cand.med. degree programme, cf. [Evaluation of the Professional programme in Medicine \(NOKUT\)](#).

- 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.

Short version

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:

<p>1. Summary of the impact (indicative maximum 100 words) This section should briefly state what specific impact is being described in the case study.</p>
<p>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:</p> <ul style="list-style-type: none"> - 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. <ul style="list-style-type: none"> - 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.
<p>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:</p> <ul style="list-style-type: none"> - 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). <p>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.</p>
<p>4. Details of the impact (indicative maximum 750 words) This section should provide a narrative, with supporting evidence, to explain:</p> <ul style="list-style-type: none"> - How the research underpinned (made a distinct and material contribution to) the impact; - The nature and extent of the impact. <p>The following should be provided:</p> <ul style="list-style-type: none"> - 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	Administrativ unit	Name of research group	Expert panel
AHUS	AHUS	Cardiovascular Research Group	3b-2
AHUS	AHUS	Clinical mental health research group	5a
AHUS	AHUS	Clinical Neuroscience Group	3b-1
AHUS	AHUS	Clinical radiology	3a-2
AHUS	AHUS	Department of Clinical Molecular Biology (EpiGen)	2c
AHUS	AHUS	HØKH: Health Services Research Unit	4c
AHUS	AHUS	Microbiology and Infectious diseases	2a
AHUS	AHUS	Obstetric and Gynecology research group	3a-1
AHUS	AHUS	Orthopedic Research Group	3b-3
AHUS	AHUS	Pediatric research group AHUS PAEDIA	3a-1
AHUS	AHUS	Surgical Research Group (SRG)	3a-1
AHUS	AHUS	Translational Cancer Research Group	3a-2

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 hour-long 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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