Forskningsrådet

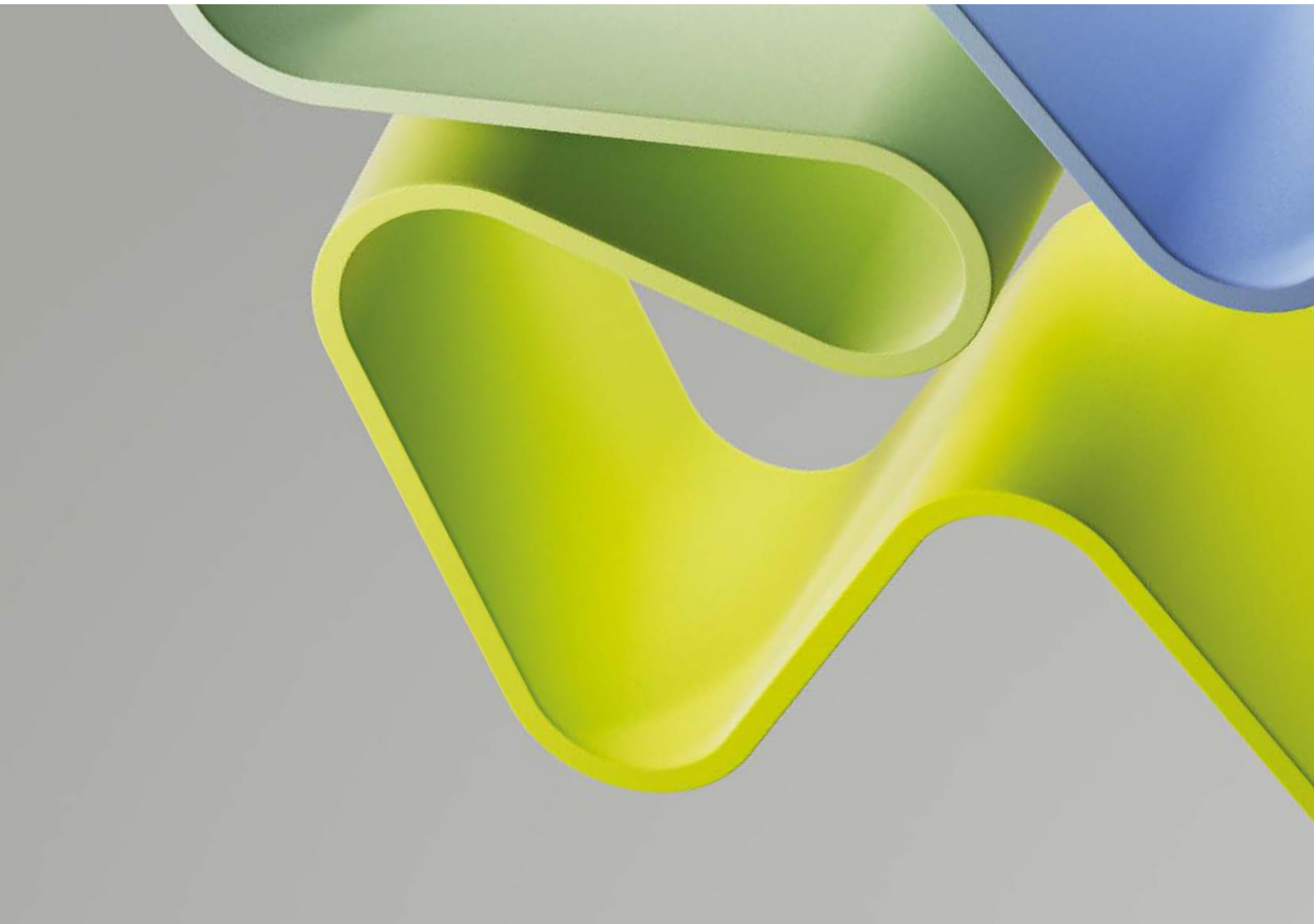
Evaluation of Life Sciences 2022-2024

Evaluation of medicine and health 2023-2024

Evaluation report

ADMIN UNIT: Department of Biomedicine

INSTITUTION: University of Bergen (UiB)



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Statement from Evaluation Committee Higher Education Institutions 3

This report is from Evaluation Committee Higher Education Institutions 3 which evaluated the following administrative units representing the higher education sector in the Evaluation of medicine and health 2023-2024:

- Department of Clinical medicine, UiT Arctic University of Norway
- Department of Pharmacy, UiT Arctic University of Norway
- Department of Biomedicine, University of Bergen (UiB)
- Department of Clinical Science I, University of Bergen (UiB)
- Department of Clinical Science II, University of Bergen (UiB)
- Department of Pharmacy, University of Oslo (UiO)
- Institute of Basic Medical Sciences, University of Oslo (UiO)
- Centre for Molecular Medicine Norway (NCMM), University of Oslo (UiO)

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

This report is the consensus view from Committee Higher Education Institutions 3. All members of the committee agree with the assessments, conclusions and recommendations presented here.

Evaluation Committee Higher Education Institutions 3 consisted of the following members:

Professor Søren Brunak (Chair)

Novo Nordisk Foundation Center for Protein Research, University of Copenhagen

Professor Jouni Hirvonen

University of Helsinki

Professor Ruth Palmer

University of Gothenburg

Professor Lea Sistonen

Åbo Akademi University

Associate Professor Simona Lodato

Humanitas University

Professor Ron Heeren

Maastricht University / Maastricht Multimodal Molecular Imaging Institute

Anoushka Dave, Technopolis Group, was the Committee Secretary.

Oslo, December 2024

Profile of the administrative unit

The research staff at the Department of Biomedicine (IBM) are currently organised into five research units, Basic and translational neuroscience, Structural biology and drug discovery, Translational cancer and vascular research, Metabolism and cancer, and Systems biology and translational cell signalling. Each research unit is led by a unit leader and deputy leader, with 4-6 faculty members and extensive technical support. Within these units, there are 21 research groups that manage their own funding, promoting collaboration and resource optimisation among researchers and technicians to enhance overall research efficiency. The department consists of 33 professors (including two adjunct professors), four associate professors, 21 PhD students, and 13 postdoctoral researchers. Additionally, there are 15 researchers affiliated with externally funded research projects. 51,6% of PhD students are women, while men are a majority in the other categories.

The main strategic research goal is to maintain and develop internationally leading research environments and produce scientific output with a high value for society. The Department expects to be international leaders in its prioritised research fields, which are related to fundamental human medical, biomedical and biological research questions. The research should form foundations for more optimised, personalised patient treatment, including faster and more accurate diagnosis, and aid in developing new treatments, therapies, and medical technologies. The Department contributes to the discovery and design of innovative drugs that can improve patient care, extend lifespans, and enhance the quality of life for individuals suffering from various diseases and medical conditions.

IBM researchers collaborate with other researchers, both internally at the faculty/university, and with other institutions, universities, and medical centres within Norway and internationally. These collaborations often involve joint research projects, data sharing, and the exchange of expertise. The administrative unit is also involved in several national and international research consortia focused on specific biomedical topics or technology. These collaborations often involve multiple universities and research institutions and are essential to secure funding for expensive infrastructure as well as for sharing expertise and methodology within advanced technology. The administrative unit collaborates with hospitals and healthcare institutions as their research often requires access to clinical data and patient samples. Collaboration with biotechnology companies further facilitates transnational research and the development of new medical technologies and therapies.

According to its self-assessment, in the future, the administrative unit may take advantage of its highly qualified staff, state-of-the-art research infrastructure, robust core facilities, reputable track record, effective internal and external collaborations, and efficient administration. Future challenges mentioned include the difficulty of recruiting and retaining staff due to the need to balance a broad teaching portfolio with limited funding, non-competitive salaries, and a significant number of retirements, which collectively threaten the research quality and infrastructure. Additionally, changes in government regulations or policies, and increased focus on IT security can impact research practices and add administrative burdens. Other challenges mentioned include insufficient core funding for equipment and infrastructure at IBM, potential reductions in national grants and university funding, and inadequate external funding for some faculty. There is, however, a potential to increase the focus on EU funding, thematic calls, and larger private and public sector calls. Increased collaborations could also enhance chances for larger funding applications and competitive consortia. Partnerships also create opportunities for translational research, clinical trials, technology transfer, and commercialisation of research findings, which can be further developed in the administrative unit.

Overall evaluation

The evaluation committee considered the Terms of Reference, self-assessment, and an oral interview provided by the Department of Biomedicine (IBM) at the University of Bergen (UiB), together with background documents provided by the Research Council of Norway (RCN) and evaluation reports of the research groups within this administrative unit for the assessment made in this report. The committee was overall positively impressed by the attitude of the Department of Biomedicine at the UiB. The committee acknowledges the significant efforts undertaken by the administrative unit to address recent challenges stemming from reduction in staff and resource constraints. The restructuring now in place from 2024 reflects a proactive approach to optimising available resources to sustain high-quality research and teaching. The administrative unit's strong research groups and unique scientific infrastructures remain core strengths, and its ability to maintain scientific excellence despite financial challenges is commendable. Its educational contributions, particularly to master's and PhD programmes, are substantial and integral to its mission.

However, the administrative unit faces several ongoing challenges. The prioritisation of teaching over research has constrained recruitment flexibility, while the discontinuation of competitive funding packages limits the ability to attract and retain top researchers. Rising infrastructure costs, compounded by reliance on ad hoc funding through university or RCN applications, place a significant strain on resources. The lack of a national safety net for top-tier grant applicants, including European Research Council (ERC) Starting Grant recipients with "A" rankings, is particularly concerning. Additionally, the RCN's no-deadline funding model risks delaying grant submissions and complicating project planning.

Increasing student numbers, while generating additional income, has also strained the administrative unit's physical capacity and teaching resources. The growing workload for academic staff and early-career researchers (ECRs) could ultimately impact productivity and grant competitiveness.

To address these issues and ensure long-term sustainability, the administrative unit needs to establish sustainable funding models, engaging both private and public sectors, to cover infrastructure costs and reduce reliance on competitive self-funding. Instruments and facilities should remain state-of-the-art and well-maintained, and it is critical that the area of Bergen remains attractive for excellent science and advanced technology. Competitive recruitment packages, including starting grants with reduced teaching loads, should be reinstated or modelled after successful international initiatives to attract top talent. Reducing teaching loads for ECRs would allow more time for grant applications and research development, supporting the establishment of strong research groups. Strengthening national mobility programmes would also help to stimulate researcher movement within Norway. Efforts to achieve gender balance and increase diversity should be intensified to foster an inclusive academic environment.

Overall, the committee considers the administrative unit well-managed, with a collegial and productive research culture. However, to ensure future growth, a greater focus on ECR recruitment, strategic investment in infrastructure, and a rebalancing of research and teaching priorities is essential. These steps will enable the administrative unit to continue nurturing the next generation of Norway's scientific community while maintaining its scientific and educational excellence.

Recommendations

- Consider investing in improving recruiting strategies to improve critical mass to face the recent decline in number of faculty and near approaching retirements in the administrative unit.
- Increase competitive international funding by proposing large projects in international calls e.g. Horizon Europe and take a leading role in them rather than only participating. Consider hiring scientific staff with experience in drafting and executing such international projects (besides their competence according to the needs of a programme). Consider incentivising applications from younger people while providing mentoring and training for grants.
- For national funding, consider establishing novel strategies to increase applications for research funding where there are no grant application deadlines.
- For infrastructure, make a clear, sustainable plan for keeping the facilities updated and invest in newer and more advanced technologies based on the common ground and interests of nearby departments/units. Also consider teaming up with the private sector to make it more sustainable. An example is Cryo-Electron Microscopy (Cryo-EM), currently missing at IBM but essential for the survival of some of the critical activities run in this administrative unit.
- Given the recent downsizing and restructuring, consider enhancing the interactions with other departments in Bergen, especially clinically oriented units, to promote innovative translational research.
- Increase efforts to recruit externally at the early independent career stage considering this as an investment for a dynamic future research environment, and securing research protected time with a teaching 'light' strategy to allow incoming researchers to establish groups and increase attractiveness of positions for outside applicants.
- Consider mechanisms to compensate efforts for highly ranked (but not funded) ERC grants.
- The committee commends the administrative unit's effective data management and accessibility, which are supported by a dedicated database and personnel, and recommend that these efforts be sustained and further developed.

1. Strategy, resources and organisation of research

1.1 Research strategy

The strategic vision of the IBM administrative unit at the Faculty of Medicine, UiB, relies on teaching and research in the basic biomedical disciplines. The main strategic goals, reported in their self-assessment document and in their strategy document 2024 with a yearly update, focus on maintaining and further developing a high-quality and international research environment with high-impact scientific production. They plan on continuing developing the scientific focus areas (neuroscience, cancer, structural biology, drug discovery, disease mechanisms and metabolism), while investing in structuring bioinformatics and AI for both research and teaching purposes.

Critical for the IBM administrative unit is the recent restructuring process (2023), which was owing to a drastic downsizing in research and teaching personnel, and core funding support. With a net loss in full professors and technicians since 2022, and with no replacements yet, the administrative unit opted for optimisation of resources and fusion of smaller groups with converging interests and complementary skills into larger and more dynamic groups.

It is a clear ambition of this administrative unit to continue investing in the education and formation of the newer generations of international leaders, including medical doctors, dentists, pharmacists and nutritionists, and other professions in academia and the health sector. It is an objective of their strategic plan to maintain a robust and stable teaching setting, while also focusing on efficiency. They aim to offering high standard teaching and basic research in the fields of focus and the administrative unit identifies essentially as a preclinical department of the Faculty of Medicine where basic science has a very important role in providing the foundation for every aspect of biomedical knowledge and clinical advancement that could eventually be beneficial for Norwegian society as whole. While international mobility programmes exist, it is IBM's ambition to improve student exchanges and secure sabbatical time for strengthening international collaboration and participation in international consortia/networks. It is therefore clearly stated in IBM's self-assessment that, while primed to extending their interest to innovation and clinical collaborations at both national and international level, a clear ambition of the administrative unit is to remain centrally focused on basic research in the future.

Strongly engaged in the preclinical teaching of the Bergen Medical School, the faculty members of the IBM administrative unit bear a substantial teaching responsibility, which creates a high workload that challenges a good work-life balance. Both established professors and ECRs are involved in the teaching duties, with only limited personnel fully dedicated to research. Since covering all the teaching obligations is important, teaching is also a critical aspect in the recruitment strategy, which in turn, might complicate the organisation of the research.

The administrative unit's research portfolio has progressively extended to having a more translational and clinical focus, with an innovative potential, as discussed in the self-assessment report and confirmed by the presence of spin-offs on campus and some of the selected cases. However, it is evident that the strategy is oriented towards a more diversified basic research profile, both experimental and theoretical, with the intention of attracting more international/European external and local funding. However, financial incentives to apply for external funding, such as rewards for example for high scoring but non-funded ERC applications are lacking.

Stimulating innovation and commercialisation remains an objective for IBM; however, the key is defining how to foster new initiatives beyond those that have proven to be valuable in the past. Scientific interactions with the clinical ecosystem in Bergen could boost the translation potential of the administrative unit's research and support novel opportunities for funding and innovation. The research includes cancer, physiology, neuroscience, drug discovery, metabolism, disease mechanisms, proteomics, biomarkers, cardiovascular research, molecular structural biology, and extracellular matrix biology and strongly relies

on institutional infrastructures and state-of-the art equipment organised within core facilities, requiring significant maintenance and updating. These facilities play a critical role in ensuring the quality of the research outputs and training: it is pivotal to find strategies to make the facilities sustainable and competitive both at the national and international level. While in the last few years no new recruitment was done, this scenario is fast changing. New strategic priorities are discussed in the department leadership group (appointed by the head of the department to represent all the pillars of the administrative unit such as research, innovation and teaching), and the administrative unit – with its new structure – is evaluating the addition of new group leaders/professors.

The committee's evaluation

The UiB Department of Biomedicine is a basic research administrative unit where the research is strongly rooted in basic science. Within its new organisational structure, it has highly qualified and experienced faculty members, committed to both excellence in research and teaching in the biomedical field. The teaching activities are significant given the extensive population of students served by IBM and the extensive teaching portfolio required. With the recent reduction in the faculty numbers paired with lack of recruitment policies, which are not explicitly defined and are bureaucratically challenging, and insufficient internal and external funding, especially for infrastructure and basic research, the administrative unit faces severe challenges to maintain and further develop its performance in the future. The administrative unit, however, is very productive as demonstrated by a remarkable publication output. Despite the progressive funding cuts, reduced personnel and teaching load, scientific production has remained high-quality and consistent. The committee praises the administrative unit’s efforts in driving excellence in science in all the different biomedical disciplines, which ensures high standard and visibility.

While no strategic priorities are defined in the present assessment of the administrative unit, it remains evident that maintaining a diverse research portfolio is critical for IBM to broaden its funding opportunities and attract a more robust funding portfolio, especially after the progressive reduction in institutional funding. Implementing specific hiring policies, with attractive starting offers and clear follow-up evaluations for career progression, is pivotal for maintaining the administrative unit’s competitiveness, while sustaining the overall Bergen biomedical area.

The committee's recommendation

Considering the recent reorganization, the administrative unit should develop a detailed institutional strategy to implement their vision and/or a roadmap to identify scientific priorities for research, recruitment and teaching. While consistently striving for scientific excellence, setting a specific strategy for basic and applied research will encourage greater involvement and ambition from top-class researchers in the administrative unit. This would also include strong and active efforts towards increased external research funding (e.g. ERC) and collaboration (e.g. networks and consortia), both nationally and internationally.

Give rewards, for example for high scoring but non-funded ERC applications, as part of the career development strategy for younger and early career scientists, thus helping retain talents to IMB. In addition, this can incentivise external funding applications while building a new positive and proactive attitude to face internal funding restrictions.

Consider nominating a scientific advisory board (SAB) to ensure the coherent direction of the administrative unit and to periodically monitor the activities.

Establish local programmes to stimulate collaboration across the administrative unit around specific topics, potentially fostering clinical and preclinical interactions. The committee is hopeful that the recent restructuring will promote synergies between basic and clinical scientists to foster a more dynamic and vibrant environment. This will not only generate a new framework for innovation but could provide new attractive scenarios for talent recruitment and retainment. The cooperation between clinical administrative units within

UiB's Faculty of Medicine could be improved to increase impact of the unique Bergen ecosystem, while ensuring that Bergen remains a competitive Norwegian scientific centre.

To ensure further development of the restructured administrative unit, think about making recruitment as a fundamental priority, especially in those areas where numerous members of the faculty are closer to retirement in the next few years.

1.2 Organisation of research

IBM is one of five departments at the Faculty of Medicine in Bergen and research activities are led by Professors and Associate Professors who run research groups. Until the beginning of 2024, IBM was comprised of 10 research groups. Due to a decline in the number of department employees and funding limitations, the administrative unit underwent a substantial reorganisation which now involves five research units, each with one leader and one deputy leader. The research units involve multiple principal investigators (PIs; 4-6 professor/associate professors) who share common research interests as well as complementary activities. Technicians, originally allocated to individual group leaders, are now assigned to the research unit and are under the supervision of the leader/deputy leader, promoting more effective use of the resources and constant growth of the technical personnel (21 technicians). Limited numbers of PhD students and early career scientists (i.e. postdocs) participate in the research activities. While IBM exploits the UiB career centre 'Ferd' and the Momentum Programme for early career scientists to support career development and competence, no detailed plans for talent retention or recruitment at the different career stages are in place. The leader/deputy is expected to support the development of the research unit and ensure the resources are optimised for its activities. In addition to the scientific personnel, each research unit also relies on the interaction with administrative officer for economy, contracts and personnel.

The Research portfolio spans across multiple fields of basic science such as neuroscience, cancer, structural biology, drug discovery, disease mechanisms and metabolism. Individual groups hold solid to excellent publication records, and the administrative unit as a whole, publishes regularly in highly respected journals. PIs are committed to both research and teaching. They spend up to 50% of time on teaching across the board. There are no 100% teaching roles and only a few 100% research roles. The teaching load is distributed by the Deputy Head of Education among PIs, postdocs and PhD students. According to a tacit policy, faculty members with less funding and research activities are encouraged (and do) to take on more teaching and administrative work. No structured plan is in place to coordinate the teaching distribution. Academics are entitled to sabbatical leave every 6 years, which is considered a protected time to focus on research and their teaching duties are covered by other colleagues within the same teaching field. While there is testimony of the great collegial spirit of IBM, this arrangement has proven to be challenging at times, like the present, when a reduction in the faculty size is significant, leaving no opportunity for sabbatical leave. In addition, the institutional financial support for sabbaticals for professors and associate professors has ceased given the current financial situation, and sabbaticals now depend on external funding sources. Mobility programmes are in place for the doctoral and postdoctoral candidates through UiB. However, both international hiring as well as staff exchanges are described as challenging and time consuming due to export regulation policies. This aspect detrimentally impacts on the research organisation and limits potential collaborations and exchanges.

The committee's evaluation

The committee praises the effort of the administrative unit to restructure itself with the goal of providing a new, more effective and dynamic set-up and research framework. Despite the many challenges faced, the atmosphere is collegial and supportive, which provides the necessary flexibility to address increasing teaching requirements due to the reduction of professors and the lack of recruitment. However, at the moment, the overall composition is

skewed toward the most senior scientists and attracting early career talents and PhD candidates, especially from the international community, seems difficult. Enhancing the diversity of academic roles and fostering closer collaboration among staff at different career stages could significantly improve the appeal of and opportunities in academic careers. Such efforts could, for instance, support and inspire junior researchers and associate professors, accelerating their progression into leadership positions. Also, scouting for mobility grants (i.e. Marie Curie, EMBO) at the junior levels could improve the exchange conditions and create broader visibility for the administrative unit.

The committee's recommendations

The committee suggests establishing a leadership programme where junior and senior staff collaboratively share responsibility for various organisational tasks, including organisation of mobility programmes and internal activities to promote IMB exposure, with the necessary administrative support.

1.3 Research funding

The overall budget for the Department of Biomedicine at the University of Bergen is 225 MNOK coming mainly from the Ministry of Education and Research (150 MNOK) and competitive grants (around 75 MNOK). In addition, the Faculty of Medicine provides a basic grant of 60-70 MNOK per year, which largely covers salaries of permanent staff and running costs associated with teaching and research. This amount remained constant (around 66 MNK/year) until 2021 despite the progressive increase in expenses related to general wages and price increases in that time period. In addition, a 10% reduction was applied in 2022, which has not been compensated for in the following years. This led to a drastic reduction in employees, including PhD and postdocs. Approximately 175 MNOK is allocated to research every year. This drastic reduction in basic funding poses important challenges to the future growth of the administrative unit. Competitive national and international funding including RCN and EU funding has been secured, but external funding also decreased in 2022, probably reflecting the difficulties faced by the administrative unit before the reorganisation.

The committee's evaluation

The committee recognises that current basic funding is not sufficient to cover all the costs for teaching and administrative personnel, as well as technical and research staff. Until 2022, the administrative unit successfully secured external national and international funding. EU funding was maintained until 2022 despite the difficulties faced. This is a commendable achievement for the administrative unit and highlights a commitment to attract international funding. However, infrastructural funding lacks a structural component to make it sustainable for the future and it is heavily dependent on soft funding, especially for infrastructures. This is a potential threat to the sustainability of the infrastructures administered by the administrative unit.

While the downsizing potentially will optimise the usage of resources and alleviate some of the difficulties faced in the previous years, budget constraints remain a critical challenge to the sustainability of the administrative unit and its competitiveness at both the local and international level, especially in terms of infrastructures and advanced technologies.

The committee's recommendations

Maintain investment in international funding calls with talent-driven personal funding schemes while offering grant writing support to young investigators, enabling them to pursue competitive applications even in the early stages of their careers. Additionally, it would be valuable to acknowledge and reward ERC applicants who receive high-quality evaluations, but are not funded.

Establish a more sustainable, long-term funding strategy for research infrastructure in close collaboration with faculty and other administrative units in the local territory to exploit shared technology platforms and enhance efficiency and accessibility.

1.4 Use of infrastructures

The IBM research infrastructure is primarily consolidated around core facilities that service several departments. The administrative unit has three core facilities, the Proteomics (PROBE), the Molecular Imaging Centre (MIC) and Biophysics, Structural Biology and Screening (BiSS), with highly qualified personnel that are made available widely to the research community as well as to private sector users. They serve the larger UiB community but also represent a valuable platform for the regional and national landscape. The administrative unit, including both the core facilities and the different research groups, also participates as a partner in six national infrastructures. The MIC participates in the NALMIN network for advanced light microscopy and the NORMOLIN, the national network for small animal imaging.

The Neuroscience group is a partner in NorBrain, a large-scale national infrastructure for basic neuroscience research. PROBE is a partner in the national network of advanced proteomics, and BiSS is a partner in NORCRYST, a Norwegian consortium of macromolecular crystallography. BiSS, however, does not have Cryo-EM technology which presents challenges in the administrative unit’s efforts to maintain excellence in the field of structural biology. IBM also participates in two large ESFRI (European Strategy Forum on Research Infrastructures) infrastructures, namely NOR-Openscreen (for discovering biologically active substances) and the Euro BioImaging, respectively involving the BiSS and the MIC. The Faculty of Medicine has developed a strategy for research infrastructure and its own roadmap for research infrastructure in line with the Norwegian Roadmap.

The committee's evaluation

The three core facilities and infrastructures play a pivotal role in supporting the administrative unit's outstanding research output. Additionally, researchers within this administrative unit benefit from access to other core facilities at the Faculty of Medicine, all of which are critical for advancing high-impact research. However, challenges persist in securing sustainable funding to future-proof the infrastructure and maintain the technological edge needed in the region, particularly in relation to Cryo-EM. Despite these challenges, the administrative unit remains motivated and committed to actively seeking funding opportunities to acquire new instrumentation, while ensuring the maintenance and periodic upgrading of existing equipment. This is commendable.

A structured access programme and economical plan for infrastructures/core facilities is currently lacking, posing a risk for its sustainability in light of the reduced core funding. The administrative unit adheres to the university’s guidelines, which promote open access to research data and the implementation of FAIR principles in national and international networks and collaborations. Data Management Plans (DMPs) are utilised to ensure good data handling practices throughout the research data life cycle, encompassing the management of ethical considerations and sensitive data.

The committee’s recommendations

The committee strongly advises developing a long-term strategy to invest in infrastructural innovation programmes, prioritising the upgrading and maintenance of equipment in existing core facilities, with particular attention to instrument updates and training and development of operational staff.

1.5 Collaboration

The administrative unit actively fosters collaborations at local, regional, national, and international levels, recognising their essential role in advancing modern medical and biomedical research. Their strategic goal is to expand and enhance collaborative projects across all these categories. The self-assessment highlights partnerships with prestigious biomedical institutions in the U.S., such as Harvard Medical School and Massachusetts General Hospital (MGH). Additionally, significant and long-lasting collaborations are established with European and Asian institutions, including Radboud University Medical Centre Nijmegen, VIB, Qilu Hospital of Shandong, and the Luxembourg Institute of Health. In Norway, the main collaborators are found with other administrative units of UiB and Haukeland University Hospital as well as the universities and university hospitals in Oslo and Stavanger, the University of Oslo and Norwegian University of Science and Technology. Strong partnerships with Nordic research institutions, such as Karolinska Institute, are also a cornerstone of the administrative unit's collaborative efforts. These collaborations have been instrumental in producing numerous high-impact publications and have significantly contributed to securing external research funding through successful grant applications.

The committee's evaluation

The administrative unit demonstrates a solid record of collaboration, both in scope and scale, with national and international partners, contributing to research output that highlights the multi- and interdisciplinary nature of its fields. The combination of national and international partnerships provides a strong foundation for advancing high-quality research.

However, collaborations with private companies appear to be limited and could be expanded to further enhance scientific impact within and beyond academia.

The committee’s recommendations

The committee recognises the significant role of the administrative unit’s long-term and extensive collaborations in driving its research success. Sustaining this approach is strongly recommended for the future. To further enhance impact, the committee suggests developing an internal strategy aimed at increasing collaborations with industry and other (international) private partners, particularly in medical technologies and clinical settings. A more centralised approach to these efforts could enhance the scale, influence, and visibility of such partnerships, which would, in turn, positively impact the ability to attract and retain talent.

1.6 Research staff

The administrative unit comprises 96 staff members from 31 countries, reflecting its commitment to fostering a positive and culturally diverse environment. Research groups independently manage their funding, encouraging collaboration and resource optimisation among researchers and technicians to boost overall research efficiency. The unit includes 33 professors (two of whom are adjunct), four associate professors, 21 PhD students, 13 postdoctoral researchers, and 15 researchers exclusively affiliated with externally funded projects. Gender balance is evident among PhD students (51.6% women); however, senior positions, such as postdoctoral researchers, associate professors, and full professors, remain predominantly male. The limited number of postdoctoral researchers (13) highlights challenges in attracting experienced researchers to the administrative unit for career development. This poses risks for sustaining research activities and retaining talent. The department's broad teaching portfolio requires nearly all positions to include teaching responsibilities, with PhD students dedicating their fourth year to teaching. Consequently, the research personnel possess a wide range of expertise, spanning fields such as

bioinformatics, medicine, molecular biology, and dentistry. While this interdisciplinary breadth promotes cross-disciplinary collaboration within the administrative unit, the limited number of researchers could hinder effective communication and interaction across disciplines, potentially affecting research cohesion.

The committee's evaluation

The composition of the research staff largely supports a competitive basic research environment, though the limited number of postdoctoral positions is a concern. However, the teaching load is heavy on some academic staff, which limits the time devoted to research and supervision. The underrepresentation of women in senior positions is also noteworthy, with no apparent active initiatives to encourage female colleagues to apply for these roles. The committee observes that the 25% teaching commitment for PhD students, while valuable for their training, could negatively impact on the research environment. It may be advisable to reduce this load for junior profiles in future recruitment plans to better balance training, teaching, and research responsibilities.

The committee's recommendations

Strive to maintain a well-balanced staff composition, prioritising improvements in gender balance within senior roles.

Reducing teaching commitments for all staff, particularly PhD students, could be beneficial as external recruitment alleviates workload pressures and provides more time for research activities.

Further develop initiatives aimed at recruiting postdoctoral fellows by actively participating in international competitive grants for ECRs. Emphasising that postdoctoral fellows can fully dedicate themselves to their research projects without teaching or administrative responsibilities could make these positions more attractive.

1.7 Open Science

By adhering to the principles established by the EU, RCN and Norwegian government, UiB’s policy for Open Science describes and encourages activities from publication in open access (OA) journals to open access to research data and educational resources. UiB also supports OA publishing by participating in OA publishing agreements and covers publishing costs through the Open Access Publication Fund. Researchers are encouraged to publish in OA journals whenever possible and they are trained by the UiB Library on OA publication and access to research data.

The committee’s evaluation

IBM is effectively adhering to Open Science policies, since a large part (about 90%) of research papers from the unit are published in OA journals (approximately 100-120 per year). In addition, the administrative unit has created specialised databases to share data produced at IBM for open public use, such as the CSF-PR database, and has contributed to the generation of user interfaces and tools to store raw data in public repositories and to reanalyse published data, like the PRIDE Converter and the PeptideShaker.

The committee’s recommendations

Uphold and further advance Open Science practices, ensuring that shared databases remain easily accessible to the public in a user-friendly manner. Additionally, expand the Open Science policy by incorporating open innovation strategies, by increasing, for example, funding opportunities through innovative public-private partnerships.

2. Research production, quality and integrity

The IBM administrative unit embeds a broad research portfolio across the medical sciences. Demonstrating its commitment to research excellence, the administrative unit has an impressive publication record in top-tier journals spanning various fields. The percentage of highly cited papers is above national average, reflecting the high impact of its clinical and fundamental research. Overall, the administrative unit's productivity and research quality can match internationally renowned institutions in the field. Ethical policies adhere to both national and international research ethics guidelines, supplemented by additional training initiatives, which include seminars on research ethics for PhD supervisors, courses for PhD candidates in Research Ethics, Laboratory Animal Science, and Good Clinical Practice. Preventive measures are in place to address and mitigate scientific misconduct, aligning with faculty and institutional guidelines to promote good research practices.

Overall, the administrative unit has made significant contributions to its research areas while effectively managing ethical training and oversight.

2.1 Research quality and integrity

This section presents the overall assessment of each research group that the administrative unit has entered in the evaluation. Each overall assessment has been written by one of the 18 expert panels that were responsible for evaluating the research groups entered in EVALMEDHELSE. The evaluation committee had no involvement in the evaluation of the research group(s).

Research group: Basic and Translational Neuroscience

The future of the group lies in its cohesion and the development of a unified strategy, but these aspects are only superficially described in the self-assessment report. Individually, the constitutive group members have a number of achievements to their credit over the past period, among which substantial infrastructure investments within the NORBRAIN-3 framework. In spite of that, the group reports structural difficulties of recruitment from PhD to PI level and a rising teaching load. The publication output is in high-ranking neuroscience journals. The group shows a certain international reach, with spin-offs in terms of the organisation of scientific events and participation in international projects. Most of the group's contribution is nevertheless built on its strong involvement in training activities. The group is also active in the industrial sector and has carried out a noteworthy initiative for the general public. It also has some links with patient organisations and clinics.

Research group: Cardiovascular Research Group (CVRG)

The Cardiovascular research group produces high quality, primarily preclinical, research related to cardiovascular health. Their research is of a high national and international standard. The group has a very good track record in receiving national funding but would benefit from a more even distribution of funds among the PI’s. The contribution to teaching of medical- and other health related educations is excellent. As a whole, the group contributes very well to the aims and strategies of the host institution. Challenges of the group include an extensive teaching- and administrative load as well as maintaining and further improving the magnitude of external funding. The PIs of the group may benefit from expansion of collaborations to also increase expertise and methodological breadth and thereby enhance the possibility for funding.

Research group: Metabolism and Cancer Unit (MCU)

The group’s strength is in its diverse expertise, enabling multidisciplinary approaches and synergistic resource utilisation. Strong international collaborations and industry connections

offer valuable translational research opportunities. Current challenges, such as restrictive hiring policies and the absence of a tenure-track system, may impact the group's future ability to recruit and retain staff.

Research group: Structural biology and drug discovery (SBD)

The panel agrees with the SBD's self-assessment on its position in the national landscape: "SBD aims to be a leading national environment in structural biology and drug design; in many aspects, this is already true." A major strength of the unit is its competence in structural biology and biophysics, which is unique at UiB, and is creating added value for the host institution as a technology service provider, in research collaborations and in teaching. SBD also maintains active connections to national research infrastructure networks and has taken a leading coordinating role in a funding application for a national Cryo-EM infrastructure. SBD is dependent on external funding and shows a track record of successful external funding applications. SBD regularly leads international, translational and crossdisciplinary collaborations and an SBD initiated start-up company is associated with the department. The track record of SBD shows solid research published in very good international journals of high reputation. Again, the panel agrees with the wording "SBD performs cutting-edge research in structural biology, which is leading at the national level and, in specific focus areas, at a high level internationally". In conclusion, SBD is a very strong unit with unique expertise and vision for development.

Research group: Systems Biology and Translational Cell Signalling (STC)

STC is an outstanding organisational environment that has been formed very recently (2023). Shared resources, common technical staff and research funding to provide all PIs with opportunities for research activity is an enormous asset. The academic reputation of the new STC unit is very good. Senior researchers have large networks and are internationally known and respected. The department acts as a patient/sample reference centre for real world data. Furthermore, it is the leader of several EU-based projects. Collaborations are multi-disciplinary and combine technology with care in an efficient manner. The group manages to attract continuous competitive external international (EU), national and local regional funding for its research activities. It is a strength that research is extremely focused on N-acetyltransferase, however it's also an extremely small niche which can be a risk for the long term.

Research group: Translational Cancer Research (TCR)

The research group's organisation and composition are adequate for conducting its research activities. The research findings from TCR align with strategic research of the institution and experimental results have been translated to large national and international phase I and II clinical trials. TCR has succeeded in obtaining substantial funding in the last 10 years, but the research group is not very successful in attracting external research funding. TCR was mainly funded by the institution, by the Research Council of Norway (RCN) and by other national sources. International and industry funding was very limited.

3. Diversity and equality

In 1973, UiB was the first to launch a committee dedicated to ensuring equal opportunities. Thanks to the work of this committee over the years, the “Action Plan for diversity, inclusion and equality” is being implemented during the period 2023-2025. In addition, an ongoing “Policy for bullying, harassment and conflict” has been applied in the university to provide ethical guidelines for respectful and professional relations between supervisors and students. Following UiB’s example, a “Diversity, inclusion and gender equality action plan” is being implemented at the Faculty of Medicine in the period 2023-2025. IBM, which has employees from over 30 different countries, is ensuring these same principles are implemented. UiB’s “Health, Safety and Environment Action Plan for 2023–2026” also focuses on diversity, openness, and inclusion as essential strategies to cultivate a culture that prioritises health, safety, environmental responsibility, and emergency preparedness as preventive and health-promoting measures.

The committee’s evaluation

Diversity and equality issues do not appear to be a concern as the administrative unit effectively adheres to institutional policies, even though no administrative unit-specific measures are in place. However, gender diversity in leadership positions requires ongoing attention and should be addressed whenever imbalances are observed.

The committee’s recommendations

Assess the IBM employees’ awareness of these policies by conducting surveys or organising focused town hall meetings within the administrative unit. This will provide valuable insights into their understanding of diversity and equality initiatives, ensuring that all employees are well-informed and engaged. Such evaluations can also help identify any gaps in knowledge and offer an opportunity to reinforce the importance of these policies in fostering an inclusive and equitable work environment.

Given the low number of students, it may be beneficial to consider implementing specific recruitment measures aimed at further enhancing diversity and gender balance.

Additionally, ensure that all documents are consistently translated into English to promote inclusivity and accessibility.

4. Relevance to institutional and sectorial purposes

IBM is dedicated to advancing research-based knowledge within its defined focus areas as highlighted in the self-assessment. This mission is pursued through high-quality research and teaching, with a strong emphasis on basic science, innovation, and education. IBM's contributions to training biomedical professionals and exposing students to cutting-edge research hold the potential to yield innovative and cost-effective healthcare solutions, ultimately improving healthcare quality while reducing financial strain on the system. IBM's research consistently maintains high standards across multiple fundamental disciplines as evidenced by high-impact publications. This level of excellence has been sustained over the years despite a reduction in faculty numbers, enabling the unit to remain competitive in securing international funding. The quality of research also highlights the quality of teaching, as the IBM faculty plays a central role in delivering first- and second-year courses for medical and dental students, thereby contributing significantly to the long-term development of biomedical professionals. Although the master's and PhD programmes for IBM students are centrally managed by the UiB board, the administrative unit actively supports students with experimental methods and infrastructure to ensure high-quality research outputs. The administrative unit also places a strong emphasis on research ethics, fostering an environment that minimises bias in scientific analyses. The administrative unit actively promotes innovation, having appointed an innovation leader who is part of the leadership team and the Innovation Leader Forum. IBM also benefits from the expertise of two dedicated innovation advisors at the Faculty of Medicine and additional innovation and legal advisors at UiB's Central Division of Research and Innovation who provide guidance on intellectual property rights (IPR) and early commercialisation phases. Students and researchers at IBM can further access innovation funding through dedicated UiB programmes such as UiB Idé and UiB Early Idea, which support the development of innovative concepts and early-stage projects. Despite its clear commitment to biomedical innovation, clinical translation, and development, the IBM self-assessment highlights challenges in navigating the commercialisation process. These difficulties stem from the complexity of regulations and the time-consuming nature of such endeavours. While the administrative unit's basic science research has successfully generated innovation opportunities as evidenced by two recent biotech startups mentioned in the impact cases, balancing the demands of scientific discovery with the commercialisation journey remains a significant challenge.

The committee's evaluation

Although the administrative unit offers support for innovation and commercialisation to translate research findings, greater emphasis on these efforts could better align with the goals outlined in the self-assessment. Enhancing collaboration with clinical groups as well as private organisations, both nationally and internationally, would amplify the economic impact of these activities. This could boost the administrative unit's visibility and attractiveness, facilitating broader recruitment and funding opportunities.

The committee's recommendations

Broaden economic impact by engaging more actively with the private sector, both within the local geographical region and on a broader national and international scale.

Fostering stronger collaborations with translational and clinical research groups to drive advancements that are both of high scientific calibre and of significant societal relevance. These partnerships have the potential to address pressing healthcare challenges, thereby capturing the attention of investors and stakeholders globally. Strengthening these efforts would not only amplify the administrative unit's visibility but also position it as a key player in translating cutting-edge research into real-world applications.

4.1 Higher education institutions

The administrative unit has a strong and long-standing commitment to educating UiB students at the master's and PhD levels. Group leaders and dedicated teaching staff within IBM play an active role in teaching, contributing significantly to the education of students in Medicine and Dentistry. Beyond traditional coursework, the administrative unit provides statistical education and advisory services tailored to the needs of PhD students and researchers.

To encourage student involvement in research, the administrative unit offers several programmes, including the Medical Student Research Track programme, which enrols 15 students annually. This programme allows students to extend their studies by an additional year and dedicate themselves to full-time lab research, fostering collaboration across departments and local units. This programme encourages students to pursue PhD studies. By 2022, the programme had successfully enrolled and supported 22 students.

The administrative unit also provides summer scholarships to offer medical students hands-on research experience, further enhancing their academic and professional development. Additionally, the Medical Student Research Programme supports students in designing and executing independent research projects. The department's ability to offer high-quality master's projects is closely tied to the size and activity levels of its various research groups. However, the evident reduction in permanent academic staff has increasingly shifted the responsibility of training and supporting master's students to postdoctoral researchers, PhD students, and technicians. This dependency on group size means that not all research groups are equally positioned to host master's students, which may limit opportunities for students and constrain the department's overall capacity to deliver consistent academic experiences. Moreover, this arrangement can place additional strain on the workload of ECRs and technical staff, potentially impacting their productivity and ability to secure funding.

The committee's evaluation

The administrative unit has a diverse and comprehensive educational mission, encompassing undergraduate programmes, specialised master's degrees and PhD courses. The administrative unit makes a significant contribution to the medical and dentistry programmes, while also producing a strong cohort of graduates at the master's and PhD levels. The number of students pursuing these advanced degrees is commendable, particularly given the administrative unit's size and structure. Additionally, the administrative unit plays a critical role in statistical education, providing essential training and advisory services to PhD students and other researchers. This contribution not only enhances the quality of individual research projects but also strengthens the administrative unit's overall impact on the academic and scientific community.

The committee's recommendations

Address the issue of the distribution of students across IBM in order to maintain the department's academic standards and foster a sustainable research and teaching environment.

5. Relevance to society

Aligned with the Norwegian Long-term plan for research and higher education, the administrative unit is making significant contributions to various areas of health, including neuroscience, cancer, cardiovascular diseases, and metabolic disorders. These contributions are realised through research, interdisciplinary and international collaborations, the development of novel therapeutic approaches, education and training initiatives, and the management of three core facilities equipped with advanced biomedical infrastructure.

IBM also contributes to the UN Sustainable Development Goals (SDG) by advancing global health through innovative research (SDG 3), providing high-quality education to foster skilled healthcare professionals (SDG 4), promoting gender equality in all programmes (SDG 5), and driving innovation with advanced facilities that support sustainable industrialisation (SDG 9). Collaborative efforts further strengthen global partnerships, reflecting a commitment to sustainability and progress (SDG 17).

Comments on impact case 1: *Startup Pluvia Biotech (Pluvia)*

Phenylketonuria (PKU) is a rare metabolic disorder affecting approximately 1 in 10,000 individuals, typically identified through newborn screening. It is caused by a deficiency in the enzyme phenylalanine hydroxylase, leading to toxic accumulation of phenylalanine in the blood, which can cause severe neurological damage if untreated. Treatment involves a lifelong, strict protein-free diet, replacing high-protein foods with specialised medical products to prevent cognitive impairment. Early detection and adherence to dietary guidelines are essential for normal development and quality of life. In 2016, a startup company – Pluvia Biotech – was founded based on the results and expertise gained from research projects on pharmacological chaperones (PCs) conducted by the group of Prof. Aurora Martinez at IBM. Pluvia started to develop oral PCs to restore enzymatic activity as a novel therapy for PKU. Since the foundation, the company has obtained a 4-year project grant from RCN, which was matched with Investor funds from Sarsia Seed. Oral administration and safety have been proven in *in vitro* and *in vivo* assays so far, while the first clinical trial is planned to start in 2025. While promising, the impact on PKU patients is yet to be evaluated.

Comments on impact case 2: *Intratumoral cypep-1 for the treatment of patients with advanced solid tumours*

The Translational Cancer Research Group (TCR) at IBM is conducting basic, translational, and clinical research on malignant brain tumours. The group has developed an engineered synthetic peptide with oncolytic properties (CyPep-1) that led to the establishment of the biotech company Cytovation ASA. Since 2018, CyPep-1 has gone through a comprehensive preclinical development pipeline, leading to Phase I clinical trials at international centres, which have now been completed. Following positive therapeutic outcomes observed in several end-stage patients, the company is now preparing to initiate Phase II clinical trials. Preclinical studies in mice with B16-F10 melanoma tumours also showed a significant reduction in both primary and contralateral tumour volumes, where the primary tumours were injected with CyPep-1. This reduction was enhanced when CyPep-1 was administered in combination with anti-PD-1 antibody. These promising results highlight the potential of this treatment to improve the quality of life and offer new hope to individuals with advanced conditions who have limited treatment options. This research has led to four patents.

Comments on impact case 3: *Expanding the knowledge and providing new targets of intervention for neurodevelopmental disorders*

Increased scientific knowledge on psychiatric disorders, including the attention deficit hyperactivity disorder (ADHD), is important for prevention, correct identification and

improved treatment as well as to reduce stigma. In this context, research performed at IBM on ADHD has been important for developing new treatment guidelines in Norway and internationally. As an example, Haavik and coworkers published 94 PubMed listed articles (during 2012-2022) related to the genetics, brain imaging, and clinical aspects of ADHD. Among others, the results showed that ADHD has a strong genetic component. Small but reproducible differences in brain structures have been also demonstrated. Pre- and peri-natal risk factors and prenatal dietary risk factors have been discovered, and new treatment targets have been identified. Together, this information provided important scientific background data for the Norwegian clinical guidelines published in 2014 and updated in 2021.

Appendices

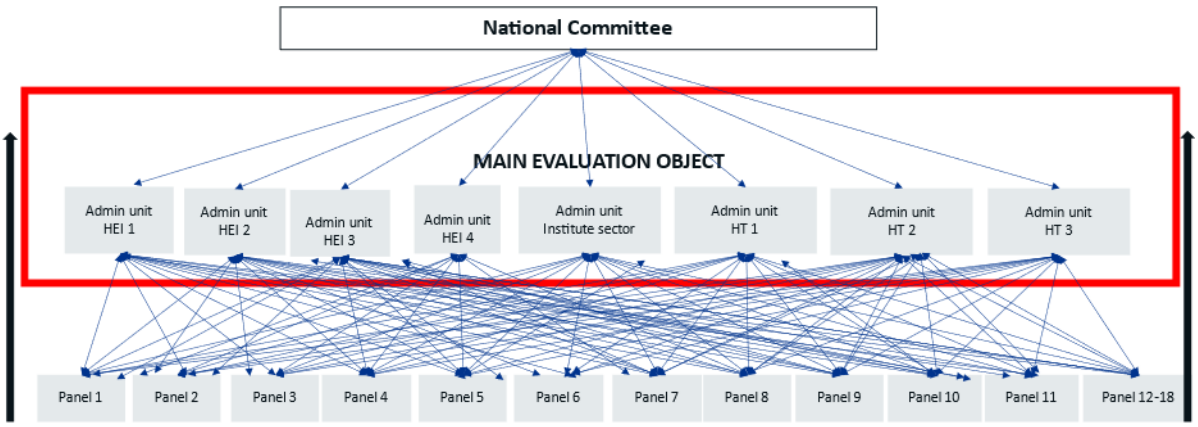
Evaluation of Medicine and health 2023-2024

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 (forskningsradet.no)]

Forskningsrådet

Se vedlagte adresseliste

Vår saksbehandler / tlf.	Vår ref.	Deres ref.	Sted
Hilde G. Nielsen/40922260	23/3056	[Ref.]	Lysaker 28.4.2023

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

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

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

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

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

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

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

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

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

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

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

Administrative enheter (hovedevalueringsobjektet i evalueringen) – skjema 1

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

Forskergrupper – skjema 2

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

Forskningsrådet vil ferdigstille panelstruktur og avgjøre den endelige fordelingen av forskergruppene på fagpaneler *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.

Forskningsrådet

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	Hilde G. Nielsen
avdelingsdirektør	spesialrådgiver
Helse	Helse

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

Kopi
Helse- og omsorgsdepartementet
Kunnskapsdepartementet

Vedlegg
1. Adresseliste
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

The Research Council of Norway

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.

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

1.2 Minimum requirements for research groups

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

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

1.3 The evaluation in a nutshell

The assessment concerns:

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

The Research Council of Norway (RCN) will:

- provide a template for the Terms of Reference[1] 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 colleges[2]

- 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 sector[3] applies to the 33 independent research institutes that receive public basic funding through the RCN, in addition to 12 institutes outside the public basic funding system.

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

The institutes should:

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

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

The hospital sector

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

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

[3] Strategy for a holistic institute policy (Kunnskapsdepartementet 2020)

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

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

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

2.5 Relevance to society

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

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

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

3 Evaluation process and organisation

The RCN will organise the assessment process as follows:

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

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

3.1 Division of tasks between the committee and panel levels

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

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

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

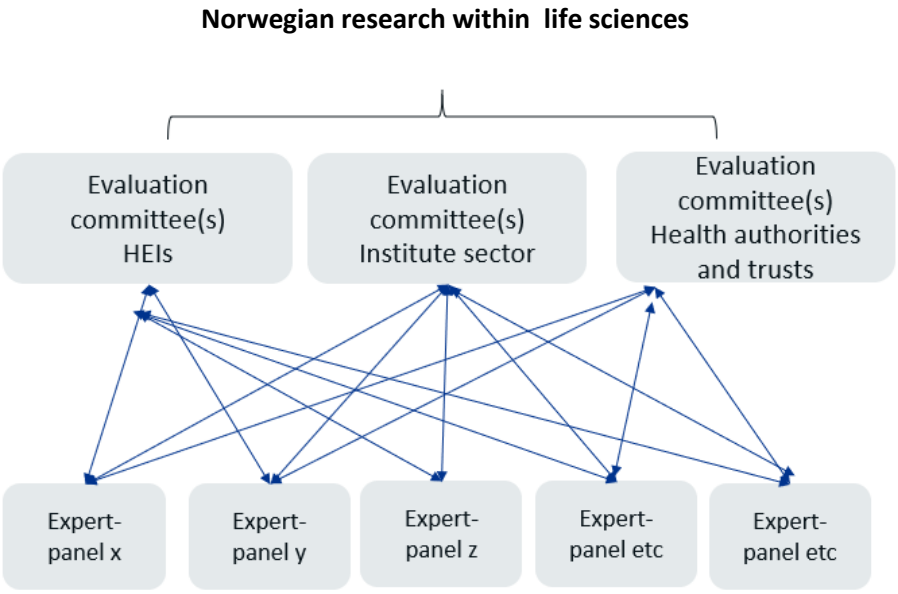

Figure 1. Evaluation committees and expert panels

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

3.2 Accuracy of factual information

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

3.3 National level report

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

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

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

Appendix A: Terms of References (ToR)

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

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

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

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

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

1. …
2. …
3. …
4. …

…

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

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

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

The documents will include the following:

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

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

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

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

Appendix B: Data sources

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

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

National registers

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

Self-assessments

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

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

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

Table 1. Types of evaluation data per criterion

Evaluation units / Criteria	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	*Data related to:* *Benchmark defined by administrative unit*	*Data related to:* *Strategic goals and specific tasks of the admin. unit*

Evaluation of Medicine and Health (EVALMEDHELSE) 2023-2024

Self- assessment for administrative units

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

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

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Introduction

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

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

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

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

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

Thank you!

Guidelines for completing the self-assessment

- Please read the entire self-assessment document before answering.
- The evaluation language is English.
- Please be sure that all documents which are linked to in the self- assessment are in English and are accessible.
- The page format must be A4 with 2 cm margins, single spacing and Calibri and 11-point font.
- The self-assessment follows the same structure as the 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 from. **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&D[1] **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 infrastrukturer i ESFRI roadmap) including as host institution(s).

Table 7. Participation in infrastructures on the ESFRI Roadmap
Please give a description of up to 5 participations that have been most important to your administrative unit.

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

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

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

3. Diversity and equality

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

Table 8. Administrative unit policy against discrimination
Give a description of up to 5 documents that are the most relevant. If the administrative unit uses the strategies, policies, etc. of a larger institution, then these documents should be referred to.
Please delete lines which are not in use.

No.	**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.

Impact case guidelines

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

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

Timeframes

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

Page limit

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

Maximum number of cases permitted per administrative unit

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

Naming and numbering of cases

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

Publication of cases

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

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

Please write the text here

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

Institution:
Administrative unit:
Title of case study:
Period when the underpinning research was undertaken:
Period when staff involved in the underpinning research were employed by the submitting institution:
Period when the impact occurred:

1. Summary of the impact (indicative maximum 100 words)
This section should briefly state what specific impact is being described in the case study.

2. Underpinning research (indicative maximum 500 words)
This section should outline the key research insights or findings that underpinned the impact, and provide details of what research was undertaken, when, and by whom. This research may be a body of work produced over a number of years or may be the output(s) of a particular project. References to specific research outputs that embody the research described in this section, and evidence of its quality, should be provided in the next section. Details of the following should be provided in this section:

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

3. References to the research (indicative maximum of six references)
This section should provide references to key outputs from the research described in the previous section, and evidence about the quality of the research. All forms of output cited as underpinning research will be considered equitably, with no distinction being made between the types of output referenced. Include the following details for each cited output:
- Author(s)
- Title
- Year of publication
- Type of output and other relevant details required to identify the output (for example, DOI, journal title and issue)
- Details to enable the panel to gain access to the output, if required (for example, a DOI or URL).

All outputs cited in this section must be capable of being made available to panels. If they are not available in the public domain, the administrative unit must be able to provide them if requested by RCN or the evaluation secretariate.

4. Details of the impact (indicative maximum 750 words)
This section should provide a narrative, with supporting evidence, to explain:

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

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

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

5. Sources to corroborate the impact (indicative maximum of ten references)

Institution	Administrative unit	Name of research group	Expert panel
UiB	Department of Biomedicine	Basic and Translational Neuroscience	Panel 1b
UiB	Department of Biomedicine	Cardiovascular research	Panel 1a
UiB	Department of Biomedicine	Metabolism and cancer	Panel 2c
UiB	Department of Biomedicine	Structural biology and drug discovery	Panel 2b
UiB	Department of Biomedicine	Systems Biology and Translational Cell Signaling (STC)	Panel 2c
UiB	Department of Biomedicine	Translational Cancer Research Group	Panel 2c

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 leadin**g 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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