Forskningsrådet

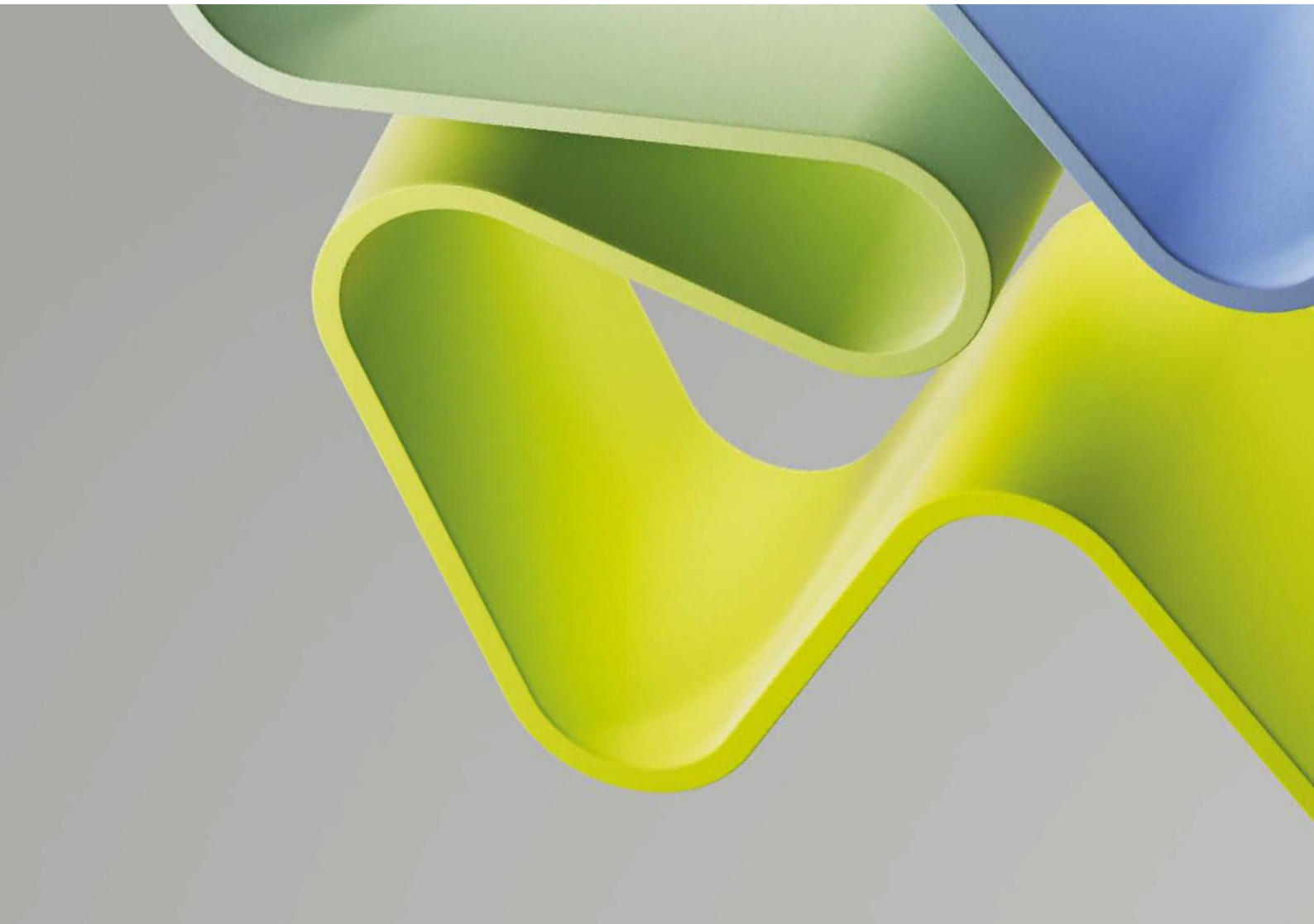
# Evaluation of Life Sciences 2022-2024

## Evaluation of medicine and health 2023-2024

# Evaluation report

**ADMIN UNIT: Department of Sports Medicine**
**INSTITUTION: Norwegian School of Sport Sciences (NIH)**

December 2024



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## Statement from Evaluation Committee Higher Education Institutions 2

This report is from Evaluation Committee Higher Education Institutions 2 which evaluated the following administrative units representing the higher education sector in the Evaluation of medicine and health 2023-2024:

- Department of Physical Performance, Norwegian School of Sport Sciences (NIH)
- Department of Sports Medicine, Norwegian School of Sport Sciences (NIH)
- Department of Psychology, Norwegian University of Science and Technology (NTNU)
- Department of Psychology, UiT Arctic University of Norway
- Regional Centre for Child and Youth Mental Health and Child Welfare, UiT Arctic University of Norway
- School of Sport Sciences, UiT Arctic University of Norway
- Faculty of Psychology, University of Bergen (UiB)
- Department of Psychology, 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 evaluation committee higher education institutions 2. All members of the committee have agreed with the assessments, conclusions and recommendations presented here.

Evaluation committee higher education institutions 2 consisted of the following members:

Professor Til Wykes (Chair)
King's College London

Professor Mats Bôrjesson
University of Gothenburg and Sahlgrenska University Hospital

Docent Lena Hübner
Stockholm University

Professor Louise Mansfield
Brunel University of London

Professor Sven Vanneste
Trinity College Dublin

Dr Anja Wittkowski
University of Manchester

Dr Laura Rennie, Technopolis Group, was the committee secretary.

*Oslo, December 2024*

## Profile of the administrative unit

The Department of Sports Medicine (IIM) operates with a lean administrative team, including the Head of Department and the Head of Office. Additionally, the IIM incorporates the Oslo Sports Trauma Research Centre (OSTRC). The IIM has an exclusively assigned administrative research advisor and as such, they rely heavily on a close relationship with the central administrative units. The staff consists of 40 researchers, including 10 professors and 14 PhD candidates, among others. 68% of the staff are women.

The IIM is organised into five different research teams: Physical activity and health, Exercise and women's health, Prevention of injuries, Active rehabilitation, and Physical activity in the fitness industry setting.

The IIM aims to produce high-quality research with numerous publications in top journals and to train young researchers, translating their findings into functional health actions. Their strategies include linking research to sustainable sports and society development and promoting interdisciplinary collaboration nationally and internationally. Each research team has specific goals and detailed plans, with full autonomy for researchers.

The IIM's policy towards collaboration, both nationally and internationally, is guided by principles of mutual benefit, shared knowledge, and collective advancement of the field of sports medicine. The collaborations range from joint research projects and co-authorship of academic papers, to shared resources and exchange of expertise. They also engage in cross-sectoral collaborations with public, private, and third sector entities, and interdisciplinary collaborations that allow them to approach sports medicine from various academic perspectives. These collaborations are put into practice through regular communication, joint meetings, and shared platforms for knowledge exchange. The collaborations add significant value to the IIM and the Norwegian research system by enabling knowledge exchange and enhancing the quality and impact of their research.

According to its self-assessment, IIM sees themselves as a strong, attractive, and well-organised administrative unit both at the administrative level within the department and within each research team. They believe they have an extraordinarily good scientific environment which is attractive for students and international young researchers. This could prove beneficial in the future. However, since their research projects are often large and complex, they consider themselves vulnerable when it comes to administrative expertise/support. With an ageing workforce and recruitment difficulties, this could pose a significant challenge in the future. Additionally, the financial situation at NIH is challenging and they spend a substantial amount of time to secure external funding. They sometimes struggle with external funding 'calls' that don't align with their research strategy. Since 2018, NIH has benefitted from administrative assistance, specifically knowledgeable about external funding, and an action plan for external funding has been implemented, which may help mitigate future funding problems. Moreover, the IIM may benefit from its wide collaboration opportunities.

## Overall evaluation

The overall assessment of the administrative unit by the evaluation committee is very strong, with areas such as research quality and societal relevance being excellent.

As outlined in the self-assessment, the strategic main goal of the administrative unit is to contribute to leading research nationally and internationally and to translate research into health initiatives, recommendations, and guidelines for physical health. The terms of Reference (ToR) include key areas for assessment, including societal relevance. The main fields of research are: (1) Physical activity and health, 2) Exercise and women's health, 3) Prevention of injuries 4) Active rehabilitation and 5) Physical activity in the fitness industry setting. The administrative unit has an excellent research output, with over 100 papers in peer reviewed journals annually. Master's programs in Sport Medicine and Sports Physiotherapy are held, and 4-5 PhD students are graduated per year. A high level of basic funding contributes to the basic infrastructure and support. Overall, the Department of Sports Medicine at NIH is very strong, offering an inspiring and creative scientific environment.

The administrative unit has been successful in getting national funding, while international funding is still at a comparatively lower level. Several prospective and interventional studies are described in the self-assessment, many of them started before this evaluation. Continuous studies of similar statue are needed to keep the present high quality. Collaborations within NIH and clinical health care could be expanded. Internationally recognised senior researchers are accompanied by fewer researchers in "mid-career" positions. A substantial number of PhD graduates should result in this situation being less pronounced. The overall objective to implement research in order to increase general health, has been boosted by impact cases such as project "skadefri". However, the clinical impact should be more clearly assessed and followed, to ensure its full and continued impact. In addition, future directions of the administrative unit are not clearly outlined.

The administrative unit has excellent future prospects, having a strong organisation, high-quality research and high level of overall funding, with great societal and clinical implications. Challenges include continued and increased international funding, collaborations at various levels, succession of older researchers and, clearly outlined future directions. The administrative unit should put resources into future visons and strategies, including innovations.

## Recommendations

- Strengthen collaboration: Both internationally, but also internally (within NIH and between groups) and to the health care system, regarding clinical implementation of research, to improve not only the exercise as treatment concept, but its practical implementation into regular health care
- Efforts to increase international grants should be put to the forefront
- The research field of physical activity in the fitness industry should be supported by additional researchers and/or academic positions, for improved impact
- The unit should benefit from increased participation in infrastructures for instance regarding data sharing, and AI
- Innovation, not previously prioritised, should be included in strategic plans. New innovation initiatives should be evaluated and increased
- Prioritise outlining future strategies and specific research goals, describing where the unit should be in 5-10 years from now.

# 1. Strategy, resources and organisation of research

## 1.1 Research strategy

The main goal of the Department of Sports Medicine (IIM) unit is to be established as a leading research unit nationally and internationally and to translate research into health initiatives, recommendations, and guidelines for physical health in general and in sports. These goals align with the overall institutional overarching strategies and scientific priorities of the institution (NIH), produced every fifth year.

The terms of reference (ToR) highlight the interest of the administrative unit, to be evaluated in key areas, such as an attractive research environment.

The research encompasses epidemiological studies to establish the prevalence of risk factors for a condition/injury/disease, and the magnitude of associations between the risk factor (e.g. low physical activity) and the outcome; and randomised controlled studies to examine the effect of various intervention/exercise measures. The main fields of research are: (1) Physical activity and health, 2) Exercise and women's health, 3) Prevention of injuries 4) Active rehabilitation and 5) Physical activity in the fitness industry setting. Innovation is not so clearly defined.

The research aims to be clearly linked to the sustainable development of sports and society and having an impact on recommendations and guidelines for physical activity for health and in sports. It has already contributed to societal development in Norway and internationally via collaborations with significant organisations. Societal partners are involved in the research process.

Action plans within each research team include specific research goals/aims and detailed plan on how to achieve these aims, which are regularly followed-up to monitor different milestones. All researchers and staff have full autonomy and trust to formulate their research questions within the overall aims. The institution provides the administrative support needed.

Positions are prioritised at rector-level and during competition for internally funded PhD-positions. Positions are divided according to need and the alignment with the overall strategy. Thorough follow-ups of strategies could also lead to priorities being changed.

**The committee´s evaluation**:

The committee evaluated the research strategy of the administrative unit to be very strong. The unit aligns to the overall strategic goals of NIH, but has its own strategy, from establishing risk factors in epidemiological studies, to study the effect of these in interventions. Most of the research fields are easily connected to this strategy, although the field of physical activity in the fitness industry setting needs to be more clearly linked to the rest of the research areas at the administrative unit. Future development of strategies is not discussed.

**The committee’s recommendations:**

The research field of physical activity in the fitness industry should also be more clearly linked to the overall strategy and linked to the other research areas more clearly. Future strategies should be outlined.

### 1.2 Organisation of research

The IIM is one of five departments in the Norwegian School of Sport Sciences (NIH). The department heads form NIHs academic leadership group. IIM includes the Oslo Sports Trauma Research Centre (OSTRC), a collaboration between the Dept of Orthopaedic Surgery at Oslo University Hospital and NIH. Responsibility for research and innovation activities is delegated to the respective fields/departments. A bachelor's and master's program in health and exercise physiology and sports physiotherapy and a one-year program for personal trainers are offered. A joint responsibility exists between the different departments for NIH's PhD program. The administrative unit was organised into five main research areas in 2012-2022.

For synergy, annual research seminars are organised since 2003. ARK – designed by and for the higher education sector as a tool for promotion of psychosocial factors in the work environment – gave the unit the highest score, of those at NIH.

The research staff consists of 40 researchers, of which 3 is fully supported in administrative functions. Ten staff are professors and 15 are PhD students.

No structured career development program exists. The administrative unit strongly supports PhD students and post docs to have national and international networking opportunities.

Permanent academic positions get 45%of time for research time, 45% of time for teaching/supervising and 10 % for administrative work.

Permanent academic staff have the opportunity to be granted up to 12 months sabbatical during the evaluation period. PhD students and postdocs are encouraged to spend at least two months at a foreign university during their fellowship.

**The committee's evaluation:**

The committee evaluated the research organisation of the administrative unit to be very strong. However, the research on physical activity in the fitness industry setting is not fully connected to the rest of the focus areas, as discussed in section 1.1.

**The committee's recommendation:**

A more even distribution of experience of researchers, in their mid-career, would be of benefit. Research on physical activity in the industry setting should be boosted by support, including researchers/academic positions, to be better placed to provide impact. A structured career development program should be considered, to ascertain the succession of senior researchers.

### 1.3 Research funding

In the period 2018-22, IIM received a total of 77,7 MNOK from national grants. National funding sources over the period were: Norwegian Directorate of Health, Eastern Norway Regional Health Authority, Royal Norwegian Ministry of Culture, The Norwegian Directorate for Education and Training, Research Council of Norway, Norwegian women´s public health association, Norwegian Cancer Society and Foundation Dam.

There is a comparatively low international grant success rate compared with the national grants achieved, totalling 14,7 MNOK, including from the International Olympic Committee (IOC). However, recently an EU HORIZON (Stayhlth-01-05) grant was granted.

There is a plan to increase international grants, by recruiting someone whose main responsibility will be to work on increasing international grants. In addition, the unit may

increase the number of research areas to 7, to give possibility to younger researchers to establish networks, before seniors retire.

**The committee's evaluation:**

The committee evaluated the research funding of the administrative unit to be very strong. The unit has a comparatively lower number of international grants. The external funding, although impressive, still has potential for improvement, considering the high scientific level of research at the administrative unit. The recent recruitment at administrative level of staff, focusing on writing grants may aid in this effort.

**The committee's recommendation:**

Efforts to increase external and especially international grants should be intensified. This includes knowledge on "how to", support in writing and editing, time for writing as well as sharing of international networks from seniors to junior research members.

### 1.4 Use of infrastructures

According to the self-assessment, the administrative unit does not participate in any national infrastructure listed in the Norwegian roadmap for research infrastructures, according to their self-evaluation. IIM does recognise the potential in joining networks and infrastructures at different levels, for example in digital infrastructures, data sharing and AI.

**The committee's evaluation:**

The committee evaluated the use of infrastructures of the administrative unit to have potential for improvement. IIM should consider the potential in joining additional networks and infrastructures at different levels.

**The committee's recommendation:**

The administrative unit should benefit from participation in infrastructures for instance regarding data sharing, and AI.

### 1.5 Collaboration

Collaborations vary in scale, from joint research projects and co-authorship of academic papers, to shared resources and exchange of expertise. IMM has cross-sectoral collaborations with public, private, and third sector entities, and interdisciplinary collaborations. Regular communication, joint meetings, and shared platforms for knowledge exchange exists. The administrative unit's collaborations, both nationally and internationally, is guided by mutual benefit, shared knowledge, and collective advancement of the field of sports medicine. Partnerships preferably should align with the research goals and contribute to the mission.

National collaborations include with Norway National Physical activity surveillance study (NNPAS), Schools in Motion (ScIM), #ready-to-play, Healthy Body Image Intervention, Women´s Health, Prospective anterior cruciate ligament (ACL) injury study and Norsemen Xtreme triathlon. International collaborations include the Lancet series on physical activity (global); the International Adult Accelerometer Consortium; Delaware-Oslo ACL Cohort Study (with the USA); REPIMPACT; Prevention Injury in Youth Sports and the International

Children Accelerometer Database. Collaborations with different sectors provide practical insights and offers the potential to influence policy and practice within Norway and abroad.

**The committee's evaluation:**

The committee evaluated the collaboration of the administrative unit to be very strong. The unit has multiple collaborations at various levels and vary in scale, from exchange of expertise to joint research projects. They include prominent national and international collaborations. The collaboration within NIH is not clearly outlined.

**The committee's recommendation:**

Further strengthen collaboration internationally. Collaboration within NIH and between research groups of the administrative unit, should also be prioritised. Strengthen collaboration with the health care system regarding clinical implementation of research, to improve not only the exercise as treatment in theory, but to aid its practical implementation into regular health care.

### 1.6 Research staff

The total staff of the administrative unit totals 40, of which 10 are professors and 15 PhDs. The proportion of women in 2022 was 68%. For permanent academic staff and temporarily positions (PhDs, researchers and post docs) the proportion of women was approximately 55% and 65%, respectively.

Other temporary research staff, include 15 PhD´s, one post-doc, 3 research assistants and 4 other researchers. Few of the research staff are in the positions between students and more senior researchers.

**The committee's evaluation:**

The committee evaluated the research staff of the administrative unit to be good. The share of professors and PhDs is large: 25 out of 40 of total staff. The proportion of women is well over 50%.

**The committee's recommendation:**

Aim for a better balance in the structure of the research staff, by increasing the percentage of "medium-experienced" researchers.

### 1.7 Open Science

The administrative unit aligns to the NIH´s institutional repository for scientific papers (Brage) since 2008, and to the institutional policy for open access (https://www.nih.no/biblioteket/publisering-og-open-access/nihs-open-access-policy.html) since 2014. Currently, the policy is under revision to include a Rights Retention Strategy (RRS), expected in 2024, outside of this review. About 80% of IIM´s scientific articles were available in Brage, with 50% gold open access and 50% the accepted version.

The administrative unit covers the author fee for gold open access articles, and exceptionally for open access articles in hybrid journals. IIM has PAR agreements with several publishers, and agreements that give a discount on the author processing charges.

Researchers are primarily responsible for data collection, but NIH owns the data - it is not personal property. In multicentre studies, data sharing and processing agreements are sought with partners. Some master's projects originate from other institutions, who then own the data. For data management, routines for storage and a roadmap for the level at which data should be in terms of confidentiality and data security. Only the project team within the unit should have access to their own data. NIH´s has a Data Storage Guide: https://www.nih.no/english/about/privacy/privacy-and-research-routines-nih.html#toc30

**The committee's evaluation:**

The committee evaluated the open science of the administrative unit to be very strong. The administrative unit, as part of NIH, has policies for open science and for ownership of research data and sharing. PAR agreements are in place and the administrative unit covers author fees for gold open access papers.

**The committee's recommendation:**

The updated institutional policy at NIH will include a rights retention strategy (RRS) and should be applied.

# 2. Research production, quality and integrity

The unit´s scientific focus areas are:

1) **Physical activity and health**. Focuses on the associations between sedentary behaviour, and physical activity, with health outcomes, throughout the lifespan, provides excellent contribution to the area.

2) **Exercise and women's health**. Epidemiological and interventional research into specialised training for women, emphasising pregnancy, postnatal care, pelvic dysfunction, and the female athlete triad, provides very strong contribution to the area.

3) **Prevention of sports injuries**. OSTRC is dedicated to developing methods for preventing sports injuries in both child/youth sports and at the elite levels, provides excellent contribution to the area.

4) **Active rehabilitation**. Through the Norwegian Centre for Active Rehabilitation, the unit collaborates to develop and implement methods for assessing functional ability, essential for customising progression to achieve the desired training effect, provides a very strong contribution to the area.

5) **Physical activity in the fitness industry setting**. RCT´s on the effect of specific exercise and training regimes on fitness, body composition and health, at present provides a limited contribution in this area, but has a great potential.

The unit publishes over 100 peer-reviewed papers annually, many in highly ranked journals, most in Sport Sciences and Surgical Sciences and Public, Environmental and Occupational Health. The group is ranked as one of the most important research groups in their field internationally and has contributed with research that has had an overall important impact on 4 out of 5 of research focus areas.

The administrative unit uses the Vancouver rules for authorship and to minimise disagreements, develop publication rules. Support PhD students and young researchers to draft manuscripts as first authors. In the master's and PhD education, emphasis is placed on research ethical issues All projects must be approved by the official bodies such as Norwegian Centre for Research Data and the Regional Ethical Committee before data collection begins. If integrity is violated, NIH has a fairness committee, led by an external lawyer.

## 2.1 Research quality and integrity

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

### Research group: Department of Sports Medicine (IMM)

The overall assessment of the research group by the panel is that it is internationally outstanding. The department of sports medicine at NIH have expressed a clear focus on continuing to foster an environment for high impact research with annually >100 papers in peer reviewed journals, whereof 30% in highly ranked journals, graduating 4-5 PhD students/yearly. The group has an excellent history of good research output and is ranked

as one of the most influential research institutions in the field of sports medicine world-wide. The group is very research focused but also hold master programmes in Sport Medicine and Sports Physiotherapy and are engaged in projects for master's degree. The group has excellent and steady basic funding which is a guarantee for building a basic foundation and infrastructure. The group has been successful in getting additional national funding, but international funding is sparse although some international collaborations are well established. In the self-assessment several ambitious, prospective, often interventional studies are described. The panel did note that most of them started some 15 years back and are beyond the inclusion phase of this evaluation. The group has many well-known and internationally recognised senior researchers and an ambitious target for yearly PhD graduations, but few researchers in the positions less senior. This raises questions for the panel about the possibility of a good succession which is a prerequisite for a continued prominent position in sports related research. The group has as an overall objective to implement research in order to increase general health and has initiated courses, congresses, and the concept "skadefri" which is of great importance. However, information about future directions is sparsely mentioned in the self-assessment.

## 3. Diversity and equality

As part of NIH, the administrative unit follows Norwegian laws for hiring, which aim to prevent discrimination based on religion, ethnicity, gender, and sexual orientation. For example, it is stated in all the unit's announcements: "The state workforce should reflect the diversity of the population as much as possible, and it is a personnel policy goal for the Norwegian School of Sport Sciences to achieve a balanced composition. We therefore encourage all qualified individuals to apply regardless of cultural background, gender, sexual orientation, age or disability."

NIH has its own strategies for equality and diversity and sexual harassment, followed by the administrative unit:

https://www.nih.no/english/about/governance/documents/dei---plan-og-action.pdf

The research staff is over 50% women.

**The committee's evaluation:**

The committee evaluated the diversity and equality of the administrative unit to be adequate. The unit follows the policy and practices against any form of discrimination, as formed by their institution, NIH. The follow-up of any cases of discrimination is not clear.

**The committee's recommendation:**

The administrative unit should structure how follow-up of any cases of discrimination is to be performed.

# 4. Relevance to institutional and sectorial purposes

Higher Education institutions (HEI) are regulated under the Act of Universities. As part of NIH, the administrative unit´s responsibility is to contribute to the provision of higher education, conduct research and achieve academic development at high international level and to disseminate knowledge of NIHs activities. The administrative unit teaches at all levels at NIH (bachelor's, master's and PhD courses). Examples of the dissemination of knowledge outside the scientific world include: 1-Fit to Play (from SKADEFRI): Outreach activities educate athletes, coaches, and the public about and injury prevention, promoting the 'Fit to Play' program. 2-Women's Health: Disseminating research on women's health in sports: like the Female Athlete Triad. 3-Physical Activity Recommendations: Communicating evidence-based physical activity guidelines to the decision makers.

During 2012-22, innovation and commercialisation of research results was limited, being largely dependent on the motivation of individual researchers- there is a lack of institutional support and focus in this area. A NOKUT report (2021) noted that innovation, commercialisation and entrepreneurship are not mentioned in the NIH's strategic plan for 2021-25. In 2022, NIH received financial support from the European Institute for Innovation and Technology's HEI Initiative to coordinate the two-year project *HEInnovaSport - Building innovation capacity and fostering entrepreneurship in sport science higher education institutions*. Student-driven initiatives have started, including a new course at bachelor's level.

To increase innovation and commercialisation, NIH has an incentive and reward system for researchers, which includes the administrative unit. HEInnovaSport has also trained researchers in innovation.

NIH has appointed an innovation coordinator to systematise and strengthen the support of researchers, including an EU project.

**The committee's evaluation:**

The committee evaluated the relevance to institutional and sectorial purposes of the administrative unit to be excellent. The administrative unit contributes to institutional and sectorial objectives, through their research and educational activities. The administrative unit provides knowledge and methods for development of health care and public health. However, innovation has not been prioritised so far and is not part of strategic plans.

**The committee's recommendation:**

Innovation should be included in future strategic plans. New initiatives should be increased in numbers and be evaluated.

### 4.1 Higher education institutions

The administrative unit's research significantly enhances master and PhD-level education, within and outside of the institution. The research being conducted provides experience-based knowledge, from which students can learn.

In the master's programs, students can engage directly with research. This integration of research and teaching provides a learning environment where students can apply theoretical knowledge to real-world research scenarios.

At the PhD level, the administrative unit´s research guides the development of new projects, where PhD´s can build on the existing research, contributing to knowledge while developing their own research skills. The administrative unit's researchers provide mentorship and guidance. The administrative unit has 4-5 new PhD´s every year.

Outside the institution, the research contributes to the broader academic community. By publishing findings and by collaborations with other institutions, the administrative unit contributes to exchange of knowledge and ideas.

A master's degree comprises two years of study; one year of coursework and one year dedicated to the master's thesis. The department has 15-35 new master's students annually, who are encouraged to participate in ongoing projects. Following the project presentations, students are given two months to select a project which will also serve as the basis for their master's thesis. In some cases, talented individuals are identified and offered research assistant positions. The administrative unit encourage and provide funding for master's students to present their work at national sports conferences. An annual seminar for new master students is hosted, where staff will present current projects.

**The committee's evaluation:**

The committee evaluated the administrative unit to be very strong as a higher education institution. The administrative unit contributes extensively towards master and PhD-educations, as well as to the academic community. There are multiple opportunities for master´s students to participate in research.

**The committee's recommendation:**

A follow-up of the master student's involvement in research, maybe in a more formalised way, could further increase the system.

## 5. Relevance to society

The administrative unit, specialising in Sports Medicine, plays a role in addressing societal challenges and contribute to the Norwegian Long-term plan for research and higher education, by focusing on the areas of physical activity and health, prevention of sports injuries, women's health and “exercise is medicine”.

The work directly aligns with a number of UN Sustainable Development Goals (SDGs). Physical activity is a critical component for promoting health and well-being, aligns with SDG 3: Good Health and Well-being. The administrative unit contributes to improved public health outcomes and prevention of lifestyle-related diseases. The focus on women's health is relevant to SDG 5: Gender Equality. Researching women's health, the unit contributes to a greater understanding and help develop strategies for the female athlete triad and the effects of exercise during pregnancy.

Preventing sports injuries addresses wide-ranging societal challenges. By developing interventions and guidelines that reduce the risk of injuries, the administrative unit contributes to a safer sports environment for everyone. It encourages more people to engage in physical activity, contributing to healthier societies. ‘Exercise is medicine' addresses several societal challenges., directly contributing to the nationwide early project of “Green recipe”, in collaboration with the Ministry of Health. By promoting physical activity as a preventive measure and treatment, the administrative unit is contributing to a sustainable healthcare system.

**The committee’s comment on impact case 1 - SKADEFRI- Keeping athletes fit to play-preventing health problems in the youth**

SKADEFRI is a free, evidence-based resource based on research from the Oslo Sports Trauma Research Centre providing guidance to coaches, parents and athletes on sports injury prevention with programs and exercises for different sports organised around 11 different body parts prone to injury. The website: www.skadefri.no (English: www.fittoplay) and smartphone app SKADEFRI (international version: Get Set, available in 11 major languages) are the foundation. The program includes: 1. Ambassador grassroot level sport club courses, 2. National coach certification programs, 3. Sport academy educational programs for youth elite athletes, 4.  a social media strategy.

The centre developed specific injury prevention programs and conducted appropriately designed RCTs to test their efficacy, publishing close to 1000 papers, including collaborations with over 50 PhD students. The research is related to injury and illness prevention in sports, addressing their causes (injury mechanisms, pathophysiology, external and internal risk factors) as the basis for interventions targeting specific health problems, or specific sports. International references are listed. Aiming to close the gap between injury prevention research and real-life implementation, OSTRC developed and launched the website www.skadefri.no in 2008. SKADEFRI has since been expanded and revised and now covers all sports disciplines organised within the Norwegian Confederation of Sports and Olympic and Paralympic Committee. The smartphone application “GETSET train smarter” was developed in in 2014. **The committee evaluates the impact case to be excellent.**

# Appendices

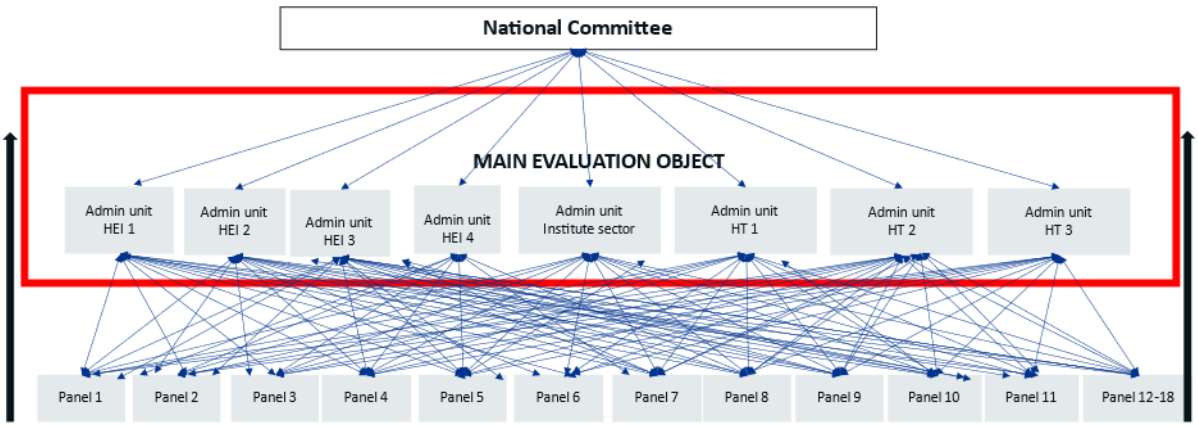
# Evaluation of Medicine and health 2023-2024

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

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|---|---|---|---|
| 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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# 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.

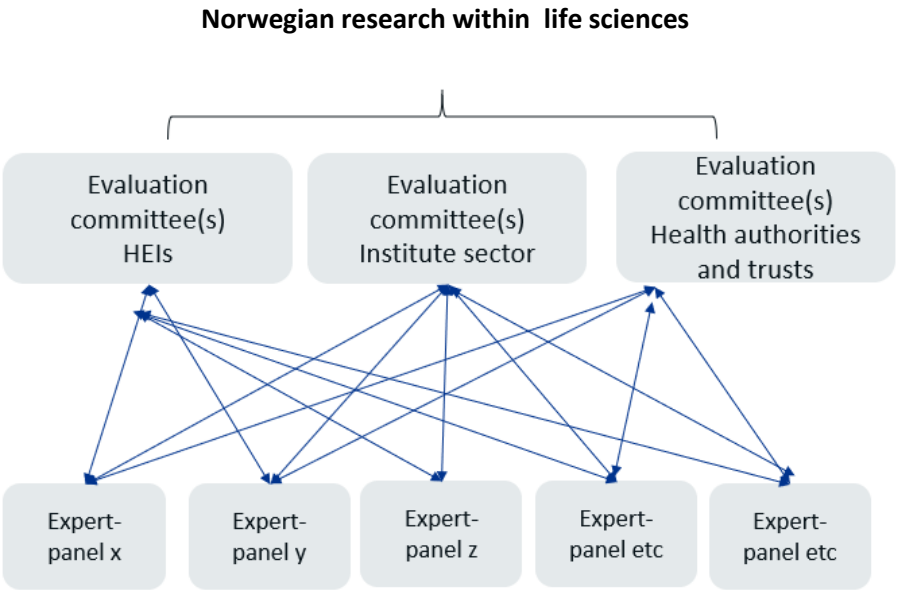


Figure 1. Evaluation committees and expert panels

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<br>Administrative data | Self-assessment<br>National registers<br>Administrative data<br>SWOT analysis |
| **Research production and quality** | Self-assessment<br>Example publications (and other research results) | Self-assessment<br>National registers |
| **Diversity, equality and integrity** | | Self-assessment<br>National registers<br>Administrative data |
| **Relevance to institutional and sectoral purposes** | | Self-assessment<br>Administrative data |
| **Relevance to society** | | Self-assessment<br>National registers<br>Impact cases |
| ***Overall assessment*** | *Data related to:*<br>*Benchmark defined by administrative unit* | *Data related to:*<br>*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) | | | | |
| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| | | | | | |

## 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]**<br>**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 |
|---|---|---|---|
| NIH | Sports Medicine | Department of Sports Medicine | Panel 4b |

# 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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