Forskningsrådet

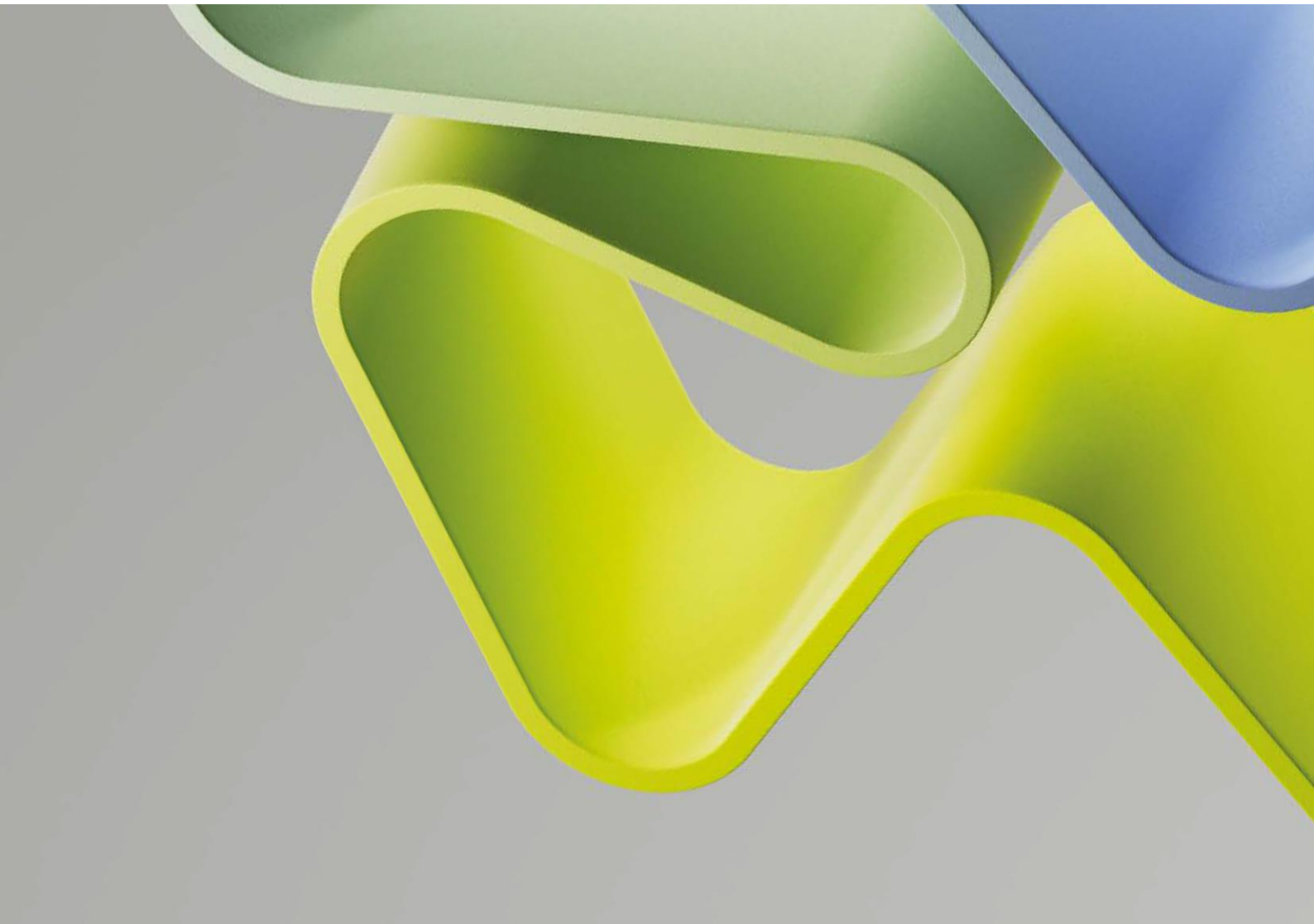
Evaluation of Life Sciences 2022-2024

Evaluation of medicine and health 2023-2024

Evaluation report

ADMIN UNIT: Department of Psychology
INSTITUTION: Norwegian University of Science and Technology (NTNU)

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 Psychology (IPS) has over 50% of its staff engaged in various research roles and many interdisciplinary research groups. The department consists of 29 professors, 32 associate professors, 13 post-doctoral students, 4 researchers, and 70 PhD students. Several of the professors, associate professors, and PhD students are part of more than one research group at the department. Women represent a majority of associate professors (53%), researchers (75%) and PhD-students (71%). They however represent a minority of professors (38%) and postdocs (39%).

The Department of Psychology is comprised of seven research groups: Adult Clinical Psychology, EWeR (Eating and Weight Disorders Research Group), TESS, Citizens, Environment and Safety, Learning and skill development, Healthy workplaces and Occupation, psychocardiology and sleep.

The department’s current strategy plan is for 2018-2025, and the overall goal is to conduct high quality research, within a working environment that is attractive and promotes good health among employees and students. The department's researchers represent the broad spectrum of psychology as a discipline, from neurobiology to community psychology and clinical psychology. The administrative unit’s ambition is to conduct research of high quality, being among the leading in their field nationally and performing at an international level. IPS will safeguard the concept of academic freedom among their employees.

According to its self-assessment, the “bottom-up” approach to networking and research collaboration is preferred because autonomy encourages greater buy-in from research staff, leads to faster risk identification and better management of resources, and fosters trust and inner motivation. There is considerable collaboration with the local and regional health institutions in their education of future clinicians. The scientific staff collaborations are related to research projects; both as partners on externally funded projects, collaboration on scientific papers, research visits/visiting fellowships at other institutions, guest lecturers/researchers visiting IPS, and so forth. While IPS actively participates in national and international collaborations, there's recognition of the potential for improvement, particularly in engaging with the private sector, and there is a realisation that this gap is reflected in the funding landscape.

According to its self-assessment, in the future, IPS may take advantage of being leading in external funding at the faculty. They attract large funding sources like NFR and EU, and benefit from NTNU’s good reputation. According to IPS, their researchers maintain great networks, and NTNU has a good reputation, which makes them an attractive collaborating partner. The potential for increased collaboration could particularly enable easier recruitment of test subjects and allow the administrative unit to gain access to high quality, modern devices, enhancing research quality. However, economic challenges and changes in government funding models may limit strategic recruitment and shift focus from research to education, affecting staff autonomy and innovation. Reduced incentives for sabbaticals abroad could also hinder recruitment efforts.

Overall evaluation

Based at the Norwegian University of Science and Technology (NTNU), the Department of Psychology (IPS) can use the resources and support of a large institution. IPS is a rather large administrative unit, with a Head of Department, a Head for Teaching and a Head for Research and a lead for its Bachelor, Master's and Clinical Psychology programmes, respectively. IPS' research strategy and Terms of Reference align well with those of their Faculty and University. IPS uses a "bottom up" approach to their research organisation, with seven of the largest research groups being reported on but more groups exist.

In line with their research strategy, IPS has been relatively successful in gaining funding and conducting high quality research, with some of its research groups having a strong national and/or international reputation. IPS can also evidence relative strength in terms of their funding, national and international collaborations, commitment to open science, diversity and equality, relevance and societal impact in accordance with their Terms of Reference. Furthermore, students at all levels are clearly embedded and trained in research. Their clinical psychology programme is another strength, with clinical research being applied in successful collaborations with various stakeholders, especially treatment providers in (mental) health settings. However, there has been variability in the evaluations of the research groups which differ in size and in their priorities relative to the administrative unit's strategy. Whilst the research groups' diversity and breadth showcase IPS' broad expertise, research may be siloed into small groups that are more vulnerable to staff and funding priority changes. The number of research groups may also undermine the potential for impactful joint or interdisciplinary projects that could attract more financial support. This administrative unit also has to face the challenges of the current economic situation in society, changes in funding priorities, and the need to deliver student education regardless.

Looking ahead, IPS appears to be in a relatively strong position to continue to enhance its research goals and educator role. With a more strategic focus on fostering interdisciplinary research and collaborations with more diverse stakeholders, including the private sector, IPS could strengthen their current position further and enhance it. Overall, the committee viewed IPS positively, being a very strong administrative unit in many aspects and showing excellence in some.

Recommendations

- Develop a clearer action plan to support all research groups within IPS in achieving their research strategy goals and objectives and in continuing to succeed in gaining research funding
- Develop an action plan to foster a more collaborative and interdisciplinary environment to maximise synergies between education, research and/or patient treatment at IPS
- Explore meaningful research collaborations with various stakeholders, including with the private sector
- Consider streamlining administrative and educational processes further to allow staff time for research related goals
- Continue with efforts to support getting female staff into higher academic positions
- Strengthen impact cases more with better data capture on their reach and significance and strengthen communication pathways with policy makers and governmental agencies to facilitate the translation of research outcomes into improvements in patient care and/or actionable public policies

1. Strategy, resources and organisation of research

1.1 Research strategy

The Department of Psychology (IPS) at the Norwegian University of Science and Technology (NTNU) is a large department of 29 Professors and 32 Associate Professors on permanent contracts. IPS also has 13 post docs, 4 researchers and 70 PhD students. The department includes researchers that cover a broad spectrum of psychology, from neurobiology to community and clinical psychology and from basic to applied research. NTNU IPS acknowledges that they use a 'bottom-up approach', i.e. their research is driven by researcher interest and effort rather than strategically arranged from the top down.

The department's current research strategy covers the timeframe from 2018 until 2025. IPS' overall goals are to conduct research of high quality, be a leader in their field nationally and be recognised at an international level. Indeed, IPS aspires to have at least one research group that meets high international standards in this timeframe (2018-2025) in the areas of research, teaching or dissemination. IPS also strives to create an attractive working environment, considering wellbeing, for staff and students alongside well-functioning research laboratories, psychological training clinics and technical competence.

Objectives in their research strategy guide the department's plan for improved research and education. The department's strategy focuses on psychology as a discipline, meaning they have short-term and long-term goals for basic and applied research as priorities. The NTNU IPS' action plan includes opportunities for newly recruited staff to engage in various workshops, courses and seminars, partly to ensure that they become familiar with the various research groups at the department.

The department includes researchers that represent a broad spectrum of psychology, from neurobiology to community and clinical psychology and from basic to applied research (under point 1.2). The department highlights that their basic, applied and clinical research is characterised by a critical stance (and the concept of safeguarding academic freedom) that might challenge established psychological theories, discourses and practices. They stress that their applied research in environmental psychology, work and organisational psychology contributes to their planned societal impact.

This administrative unit intends to develop their profile and competitive advantage by utilising NTNU's profile (and by increasing sustainable value creation and knowledge for a better world). They have successful and meaningful collaborations with local and national treatment providers, especially St. Olavs hospital (via their clinical psychology training but also through several research collaborations) and with international researchers on various projects. These collaborations (as indicated in their Terms of Reference) are clearly a crucial aspect in IPS' research strategy.

The department plans to strengthen established research groups and to develop new ones, suggesting that this may be in part achieved with their own graduates who have developed relevant expertise through in-house training and through the recruitment of new staff. At IPS, the inclusion of students in research is important (as mentioned in their Terms of Reference too) and evident in their approach to research training and organisation.

The committee's evaluation

NTNU IPS' strategy appears to align with that of the Faculty and the University. This administrative unit is relatively large in terms of staff and research groups. However, it seems that research groups are set up in response to funding success, with successful groups continuing to flourish, whereas the support for other groups is less well articulated in their documentation. There appears to be some exchange of expertise and skills amongst research groups, but this approach could be formalised much more clearly, especially

considering the department's aim of their research groups becoming national leaders in their fields and/or meeting high international standards. In this sense, the department's broad focus on various aspects of psychology is a strength as well as a potential weakness, because the development and implementation of a unifying research strategy across diverse and numerous groups could be challenging, especially if research groups decide on their own single priority. Whilst the committee recognised IPS' strength in sustaining successful national and international collaborations with a variety of stakeholders, IPS could strengthen research successes within the department through more interdisciplinary collaborations, thereby strengthening their competitiveness, relevance, reputation and outputs. Nevertheless, given the relative successes of their existing research groups, the committee judged IPS to be very strong.

The committee's recommendations

NTNU IPS should state their research priorities clearly alongside their planned impacts, with a detailed action plan on how to achieve those. IPS could outline a clear action plan of how they will foster a collaborative (interdisciplinary) environment that allows support and resource allocation across all their research groups. IPS should consider the type of support that the smaller and less established research groups may need to meet the strategic goals of the University, Faculty and IPS or consider if fewer but larger research groups could be more successful in meeting their goals.

1.2 Organisation of research

IPS provided information on seven research groups, often consisting of two to five scientific staff and their PhD candidates, with their largest groups being Citizens, Environment and Safety (CES), the Trondheim Early Secure Centre (TESS) and Adult Clinical Psychology. However, there may be up to 25 research groups in total in this administrative unit. Approximately 25% of Professors and 44% of Associate Professors are part of more than one research group.

IPS at NTNU conducts research across a broad range of disciplines and prides itself on their strong tradition of interdisciplinary research and their collaboration in national and international research studies. The department holds various workshops (including R workshops and bi-weekly seminars), courses (for foreign employees and start-up courses for new PhD candidates) and seminars (two per year). In addition, IPS (and presumably their Head of Research) has regular meetings with research groups to stimulate reflection and clarify each group's own objectives within their overall research strategy.

IPS seeks synergy between education, research and patient treatment. As their clinical research activity is significant, they use the Scientist-Practitioner model as a guideline. Their internal clinic provides learning opportunities for clinical psychology training; however, all students at IPS are involved in a variety of research projects at all levels. Cross-disciplinary research and collaboration are encouraged via funding opportunities for joint projects.

IPS has 29 Professors and 32 Associate Professors on permanent contracts. IPS also has 13 post docs, 4 researchers and 70 PhD students on temporary contracts. It is unclear if these are full or part-time positions. Over 50% of staff are engaged in research but this includes research fellows, PhD candidates, associate or full professors. All staff are involved in the supervision of Bachelor, master's or PhD students.

Researchers are supported with small internal departmental funds, and they can apply for larger research equipment and infrastructure funding from the university. Scientific staff can also apply for a sabbatical abroad to establish or strengthen research networks. Scholarships are available to students (albeit limited in number). Career opportunities are also outlined for PhD candidates and there is a course for Young Research Leaders (YFL,

in collaboration with other psychology departments at other universities). NTNU has a mentor program for women in associate professorship roles and they can also apply for a stipend. IPS staff can apply for funding through Erasmus+ for training visits. Eligible staff can also apply for a sabbatical. PhD students are encouraged to use an international research fellowship for conference participation and external research group visits.

The committee's evaluation

NTNU IPS is a relatively large department, with expertise in different areas of psychology as reflected in their large number of research groups. Whilst IPS appears to be a very good example of integrating education and research, with an apparent societal impact on mental health treatment and patient care, the committee was less clear on how their research is guided and supported at the departmental level. Hence, we judged this administrative unit to provide a good contribution in this area.

The committee's recommendations

NTNU IPS should outline clearly how research is organised at a departmental level by being explicit on how University and Faculty research strategy decisions are communicated and implemented within IPS, how research resources are allocated to research groups, how strategic research decisions or horizon scanning exercises are undertaken at IPS and how the Head of Research supports all research groups within IPS (even the smaller ones), whilst guiding interdisciplinary collaborations.

1.3 Research funding

IPS receives basic funding from the Ministry of Education and Research via NTNU. External grants (applied for by the research groups) come from the Norwegian Research Council, EU-program initiatives, Liaison Committee, internal institutional funding, NTNU Health, Stiftelsen Dam and others. Funders also included The Norwegian Cancer Society, Norwegian Defence Research Establishment, European Economic Area, Equinor and Eckbos Legat. This demonstrates success in obtaining funding from a wide range of external funders. Their average yearly income for the period of 2018-2022 appeared to be 125,7 MNOK. Their total income was NOK 144,8 MNOK for the year 2022 alone.

External funding is awarded for research activities and staff salary costs. IPS allocates specific funding to research activities and laboratories. In addition, IPS prioritises research administration (with 2.5 FTEs), because IPS identified the administrative burden in administrating external research projects as a particular issue. Overall, 42% of their total income is related to research activities.

The committee's evaluation

IPS has an excellent track record of funding success, making this an area of strength, with a clear record of obtaining funding beyond their basic funding. The investment in administrative support is very appropriate. The challenge will be to sustain this funding level amidst funding issues affecting most universities and the economic situation affecting society.

The committee's recommendations

IPS could state their income for the evaluation period clearly and highlight any fluctuations in funding (which are common) in the text. There may be room to explore even more international funding.

1.4 Use of infrastructures

IPS does not participate in any national infrastructure listed in the Norwegian roadmap for research infrastructure. Furthermore, IPS does not participate in international infrastructures funded by the ministries nor any major European infrastructures. Regarding local research infrastructures, IPS has access to publications via University Library. Furthermore, the Trondheim Early Secure Study (TESS) - a digital infrastructure in the form of a large longitudinal dataset - is part of the department. Research groups use larger datasets linked to NTNU (e.g., ARK and HUNT). Collaborations with the HUNT-cloud exist to set up dataspace.

In terms of FAIR principles, NTNU has its own research data repository in DataverseNO, used by IPS researchers. Several researchers at IPS also use open science and pre-registration.

The committee's evaluation

IPS' implementation of FAIR principles is commendable. However, IPS have recognised that they could better utilise resources available to them to foster better collaboration and improve their funding successes further so there may be potential for improvements. Thus, the committee evaluated that the administrative unit has room for improvement in this area.

The committee's recommendations

IPS should investigate if national and international infrastructure participation might be of benefit for their research endeavours. IPS should also expand or strengthen the use of local research infrastructures to share expertise, skills and knowledge across the research groups.

1.5 Collaboration

IPS' collaborations are based on their 'bottom-up approach' to research. They presented evidence that this approach has been successful in terms of a steady increase in publications with international co-authors and in collaborations. Research collaboration and networking appear to be part of the research experience even for students of their bachelor's, master's and clinical programmes: The exchange of expertise between IPS and external organisations is embedded.

In terms of national and international collaborations, IPS can evidence a track record of collaborations. Collaborations on a national level include those with local and regional health institutions (e.g., the training of clinical psychologists and PhDs). International and European collaborations are also listed. IPS highlighted 10 national collaborations and 10 international collaborations. Collaborations vary in scale: from research projects, scientific papers, research visits, guest lectures, etc., to research project collaborations at European and international level as well as with other Norwegian universities or organisations. For instance, IPS has several established national collaborations with various hospitals (especially with St. Olavs hospital in Trondheim) in terms of mental health and health care. They are also part of the International Big Team Science, with other Norwegian universities, and they collaborate on the SENDER project (H2020) and UPRIGHT (H2020). Their international collaborations are quite diverse, thereby showcasing true scientific

collaborations worldwide. IPS listed several international projects related to the research groups TESS, CES and Healthy Workplaces (e.g., see also the H-WORK impact case).

Regarding collaborations with different sectors (e.g., public, private and third sector), IPS acknowledges that there is room for improvement in terms of collaborations with the private sector.

The committee's evaluation

The committee recognised that IPS presented very strong evidence of national and international collaborations, marking this as another area in which the department demonstrates considerable strength, especially in relation to links with health services and the exchange of knowledge from research into clinical patient care. NTNU's collaboration with St. Olavs hospital (which is funded by Helse-Midt) appears to be of particular benefit to IPS, with as IPS also being in the process of potentially moving to the hospital area. These aspects, alongside their other diverse collaborations at national and international level, are impressive.

The committee's recommendations

Strong collaborations are evident, but they could explore additional collaborations as indicated with the private sector. The timeframe for all projects should be provided to indicate if the project is ongoing or completed.

1.6 Research staff

IPS has a total of 148 staff and PhD students. There are 29 Professors and 32 Associate Professors on permanent contracts. IPS also has 13 post docs, 4 researchers and 70 PhD students on temporary contracts. In terms of women, the breakdown is as follows: 38% Full Professors, 53% Associate Professors, 39% post docs, 75% researchers and 71% PhD students. While the gender distribution appears favourable, women are less well represented in the position with the highest prestige (professor). NTNU has its own mentorship programme for female associate professors with the goal of supporting them in their career development. Women in these positions can also apply for a skill development stipend that can be used to buy oneself out of teaching or administrative duties.

The committee's evaluation

IPS is a large department, with an impressive number of staff and PhD students. Support for PhD students and staff is offered for career progression, with an appropriate focus on advancing female Associate Professors. Annual reviews, leadership courses, internal funding and incentives are offered to support and advance staff. Thus, the committee judged IPS to be very strong in this category.

The committee's recommendations

IPS could consider the further expansion of career development and leadership skills as well as the development of women at all research role levels. In addition to the support provided by NTNU, IPS could consider all the health and care barriers that are important for women advancing their careers could also consider the potential impact of additional burdens on female research staff (e.g., childcare and carer responsibilities, the impacts of perimenopause and menopause on productivity).

1.7 Open Science

IPS can demonstrate their compliance with Norwegian law and regulation, and adherence to the NTNU's aims of making their research, education and other activities as open as possible. For example, IPS has had a significant increase in publications through open access (from 32% in 2013 to 96% in 2022). IPS publishes mainly in open access now and ensures open access via NTNU's rights retention strategy for paywalled journals. A self-archiving system is used (NTNU Open Repository) and in the past researchers have used pre-prints for open access. Researchers still use registered protocols for reviews. Master's and PhD students are taught about open science.

IPS lists various initiatives to provide training to students (including BA students) and staff on open science and to ensure they adhere to FAIR principles. From 2024, IPS plans to use JASP and R replacing SPSS. Some IPS staff are members of the Norwegian reproducibility network at NTNU, and staff have engaged in open peer review. Several provide access to research data via DataserveNO and SIKT.

The committee's evaluation

The department's approach to open science was judged to be excellent. In particular, their increase in open access publications is commendable, with an increase from 32% to 96%.

The committee's recommendations

IPS could outline if they use data sharing and processing agreements with partners and collaborators and could specify who is the data custodian for data related to bachelor, master's and PhD projects and who takes responsibility for writing up any master's and/or PhD research. Finally, IPS should explore if their open access publications could be increased further, especially by looking at the pre-registration of projects, while still aspiring to the highest quality publications.

2. Research production, quality and integrity

The Department of Psychology (IPS) is part of the Faculty of Social and Educational Sciences, at the Norwegian University of Science and Technology (NTNU) in Trondheim. It teaches more than 1300 students. As a department, NTNU IPS represents a broad spectrum of psychology, from neurobiology to community and clinical psychology and from basic to applied research. Its foci are on the treatment of psychological disorders, or how they impact workforce performance, the psychological effects of somatic disorders, brain structural deviations and their impacts, as well as ischemic stroke and traumatic brain injury. Basic research on perception, audiovisual connections, etc., are covered, as well as environmental psychology (CES). IPS also hosts the Trondheim Early Secure Study (TESS) which is a longitudinal data collection study that started in 2007.

IPS has several research groups of which the seven largest include the following (in alphabetical order): 1) The Adult Clinical Psychology Group, 2) Citizens, Environment and Safety (CES), 3) Eating and Weight Disorders Research Group (GroupEWeR), 4) Health Workspaces, 5) Learning and Skill Development, 6) Occupation, Psychocardiology and Sleep, and 7) The Trondheim Early Secure Centre (TESS).

IPS promotes a ‘bottom-up’ approach, with research groups growing from the ground or interests of their staff. Thus, these research groups vary in size and in their contribution to national and international impact. For more than 15 years, IPS has promoted the research groups’ efforts by offering 3 PhD and 2 post-doc positions, but it is unclear how these are distributed across the groups. Furthermore, the importance of applying for external funding has been reinforced for a few years now in strategy seminars, bi-weekly personnel meetings and in yearly staff appraisals, which has resulted in a strong increase in funding and hence projects. IPS reports high numbers of peer reviewed research publications.

IPS follows NTNU’s code of ethics for employees and their guidelines for dealing with possible misconduct in research. It is assumed that all research staff and students are mandated to undertake good clinical practice training or any form of research integrity training, offered by their university. Service user, stakeholder or patient involvement in research appears implied but this could be made much more explicit.

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: Adult clinical psychology group

The organisation of the RG is very good and includes both innovative research and clinical training of psychology students (Masters and PhDs) and health professionals. The work of the RG is in line with the Norwegian model of education and is based on the scientific-practitioner model. The RG collaborates well with regional, national and international partners. Their funding portfolio over the period reported shows a high variety of funding from national sources and some international funding. The aim is to increase the number of externally funded projects as well as international collaboration projects. This also holds for an expected growth in the current number of staff. The RG is in a process of transformation due to the retirement of senior staff members which are foreseen to be replaced by current more junior staff. The scientific quality of this RG is very good both in terms of

methodological approaches and in terms of output. The quality and time frame of the ongoing projects that started during the reporting period are more difficult to assess as only starting dates are given and mostly aims are presented instead of interim outcomes. The social impact of the RG is limited when to be appraised based on this self-report. Overall, the RG is a strong national player and has potential to become a strong international one.

Research group: Citizens, environment and safety (CES)

Strengths of the Citizens, Environment and Safety research groups are that the ongoing projects fit with the aims of the research group and translate directly into their benchmarks, the strategic goals that are clearly formulated and an extensive amount of international and national collaborations that is taking place. The group is highly involved in teaching at all levels and societal impact is at a high level. Weaknesses, as the group themselves describe – funding is dependent on the current political interest in climate issues and the environment. More populist and anti-environmental parties may make it difficult to secure funding and maintain the societal impact. Furthermore, the group experiences problems with recruiting new researchers due it being a long process. Thus, the organisational environment might not be sufficiently supportive in this aspect.

Research group: Eating and weight disorders research group (GroupEWeR)

This group appears to be more like a smaller research project group with limited resources and personnel and less like an established research group. The goals, strategies and benchmarks are very ambitious in comparison with the actual previous and current research records. The main challenge for this relatively new group is to cope with the limited resources at all levels of organization and research output.

Research group: Healthy workspaces

This is a relatively small research group but with a substantial number of senior faculty, which has existed for three years during the evaluation period. Taking this into perspective, the unit has performed well. They are setting modest goals for improvement over the coming five years, which therefore seem realistic. They have a good, albeit small, portfolio of external grants and benefit strongly from internal support. The group are engaged in several international consortia and have a relatively small number of on-going research projects. Their scientific output is good but might be increased. There has been some influence on public policymaking, but this might also be increased.

Research group: Learning and skill development

A strength of the Learning and skill development research group is that the group makes efficient use of a very small amount of internal research funding to produce research. Weaknesses concern the lack of a coherent research strategy in terms of shared theoretical perspectives, the development of early career researchers, and societal engagement and impact; the very modest benchmarks and very limited external research funding.

Research group: Occupation, psychocardiology and sleep (OPS)

Strengths of the Occupation, psychocardiology and sleep research group are the fact that the group is at the forefront of education by using new technologies, such as virtual reality for teaching, the members contribute to the strategies of the host institution in multiple ways, the group is also involved with the local community by writing reports and working with the local police department and the group receives a substantial amount of support

from the host institution. Weaknesses consist of the research projects being multi-directional and they seem to be driven by the funding of PhD students. Overall, few external grants have been secured from national grant institutions, while there seemingly has not been any institutional funding and the societal contribution is strong in some formats/media but limited in others.

Research group: The Trondheim Early Secure Centre (TESS)

The strength of this Centre is the ongoing TESS cohort study, which is a resource that has supported, and will continue to support, science at the highest quality addressing research questions of contemporary societal significance. Other strengths are the strong component of researcher development and training evidenced by PhD completions and academic promotions amongst the team and the excellent international links. Weaknesses are the group's reliance on the TESS dataset to address research questions with much less attention to other international cohort studies and, especially in the past 5 years, lack of EU/International research funding.

3. Diversity and equality

The department has instituted comprehensive policies to address discrimination and foster diversity and equality. These initiatives align with the university's core values, emphasising justice, democracy, representation, and quality. The department follows a zero-tolerance approach toward discrimination, underscoring its commitment to an inclusive academic environment. Key elements of its approach include gender-neutral recruitment practices, rigorous job analyses, and committee-led hiring processes designed to encourage gender balance and diversity.

The committee's evaluation

Overall, the committee evaluates IPS as very strong. The committee finds IPS's diversity and equality framework robust, aligning with best practices and demonstrating a proactive stance on inclusivity. The department has taken significant steps to prioritise diversity in recruitment and career advancement, employing a clear set of criteria and monitoring mechanisms. However, the committee notes that some measures, such as achieving gender balance at higher academic ranks, may benefit from additional strategies, as women remain underrepresented among professors.

The committee’s recommendations

To enhance its efforts, the committee suggests:

- Implement targeted mentorship and leadership development programs for women and underrepresented groups in senior roles.
- Continue to monitor and publicly report progress on gender balance and diversity metrics.
- Expand recruitment outreach to attract a broader pool of diverse candidates at all levels, including students, to better reflect societal diversity.

4. Relevance to institutional and sectorial purposes

IPS plays a significant role in advancing sector-specific objectives and contributing to the broader knowledge base. IPS's research aligns with national priorities, emphasising mental health, cognitive neuroscience, social psychology, and clinical practices. Through partnerships with health trusts, hospitals, and governmental agencies, IPS supports the Norwegian healthcare system, focusing on mental health interventions, clinical research, and public health strategies. Collaborative projects with institutions such as the Norwegian Institute of Public Health and Oslo University Hospital facilitate practical applications, directly impacting policy and healthcare advancements.

In terms of innovation and commercialisation, IPS has established several practices aimed at enhancing its contributions to the field. These include interdisciplinary research centres and facilities like the Cognitive and Translational Neuroscience Cluster and the Centre for Applied and Professional Psychology, which foster the development of practical psychological applications. Additionally, IPS actively supports research staff interested in innovation, offering resources and infrastructure that aid in translating research outcomes into societal benefits. Researchers are motivated to pursue commercialisation opportunities, evidenced by IPS's participation in programs such as the Program for Young Research Leaders, which aids early-career researchers in building networks and securing funding.

The committee's evaluation

The committee recognises IPS's alignment with institutional and sectorial goals, noting its strong contributions to national priorities in mental health and social sciences. IPS's active engagement in collaborative projects with healthcare and public institutions significantly advances sectorial objectives by integrating research findings into public health policies and clinical practices. The committee appreciates IPS's structured approach to fostering research innovation and its provision of resources to facilitate commercialisation. However, while the department encourages innovative and applied research, additional support could further motivate researchers to engage in commercialisation activities more proactively.

The committee's recommendations

To enhance its sectorial relevance, the committee recommends:

- Strengthen incentives and support mechanisms for research commercialisation to encourage broader participation among research staff.
- Expand targeted partnerships with private sector entities to increase the application of psychological research in commercial and technological sectors.
- Consider implementing mentorship programs specifically for commercialisation efforts to guide researchers in navigating the innovation landscape, thereby enhancing IPS's impact on both the national and international stages.

4.1 Higher education institutions

IPS significantly contributes to master's and PhD-level education, both within its institution and in broader academic contexts. IPS offers specialised master's programs in cognitive neuropsychology, health psychology, and work and organisational psychology, along with a professional clinical study program that mandates a master's thesis. The curriculum is designed around a scientist-practitioner model, integrating scientific research with evidence-based practices in clinical psychology, which ensures that graduates possess both theoretical and applied expertise.

At the PhD level, IPS hosts approximately 200 candidates, half of whom are employed externally by healthcare and other institutions. Through strategic partnerships with these institutions, such as health trusts and the Norwegian Institute of Public Health, IPS fosters a dual competency (DK) program that enables candidates to concurrently complete a PhD and clinical specialisation. This interdisciplinary approach not only enriches IPS's academic offerings but also prepares candidates for impactful careers across academic and professional settings.

Master's students at IPS have extensive opportunities to engage in research, facilitated by seminar access and project data from IPS's partnerships. A unique research track, Forskerlinje, admits up to eight students annually, allowing them to take an active role in research projects and gain substantial research experience. Additionally, IPS encourages master's and clinical students to apply for roles as scientific assistants, providing hands-on experience in data collection and research publication processes.

The committee's evaluation

The committee commends IPS's integration of research into its educational programs, especially the robust support for both master's and PhD candidates to engage in meaningful research activities. The department's strategic focus on creating a scientist-practitioner model and the dual competency program is particularly beneficial in preparing students for diverse career paths. Furthermore, IPS's structured opportunities, such as the Forskerlinje and scientific assistant roles, actively involve students in ongoing research, strengthening the academic pipeline for future researchers and practitioners. Overall committee evaluates IPS as very strong.

The committee's recommendations

To further enhance its contribution to higher education, the committee recommends that IPS:

- Expand the Forskerlinje program or develop similar initiatives to allow more students to engage in research at an early stage.
- Increase support and mentoring for master's and PhD students aiming for research-oriented careers, potentially through dedicated workshops and mentorship programs.
- Broaden collaborative research opportunities for students, particularly those involving international partnerships, to further enrich their educational experience and academic perspectives.

5. Relevance to society

Through its commitment to high-quality research and applied knowledge, IPS aligns with national priorities by addressing pressing societal challenges, including mental health issues, social inequalities, and cognitive health. This approach combines theoretical rigor with practical applications that inform health policies and public sector strategies, ensuring that research findings directly benefit society.

IPS's research and educational efforts also support several United Nations Sustainable Development Goals (SDGs). By focusing on mental health, IPS addresses SDG 3 (Good Health and Well-being), contributing to improved mental health services and preventative measures. Additionally, its focus on quality education aligns with SDG 4, as the department develops skilled psychologists and researchers who are prepared to address complex social issues. IPS's commitment to gender balance in academic roles promotes SDG 5 (Gender Equality), while research on social justice and inclusion supports SDG 10 (Reduced Inequality). Through these initiatives and partnerships with international research networks, IPS significantly contributes to SDG 17 (Partnerships for the Goals), promoting collaboration across borders to address global challenges. Furthermore, IPS's dedication to climate psychology and related fields also supports SDG 13 (Climate Action) by exploring the psychological dimensions of environmental behaviour. By integrating sustainability into its research and educational frameworks, IPS exemplifies the role of psychology in fostering societal resilience and sustainable practices.

The committee's comments on impact case 1 – The Pollution Pods

The Pollution Pods (commissioned artwork by Michael Pinsky) were part of the research project CLIMART, a four-year project by NTNU professor in environmental psychology Christian Klöckner and the UK-based visual artist Sam Jury. Since its first show in Trondheim 2017, the Pollution Pods have attracted thousands of visitors from across the world, including world leaders and activists like Greta Thunberg, thereby making it one of the most important artworks in the last decade. They were ranked 71st in the 100 artworks that defined a decade in 2019.

Klöckner and Jury started to collaborate on capturing the psychological impact of artwork in relation to climate change on audiences in 2012, with CLIMART (2015-2018) and two PhDs being funded by the Norwegian Research Council. CLIMART had a series of interlinked outputs (review, two research) which informed the development of the Pods. These Pods are five interconnected geodesic domes which allow the visitor to experience as simulation of increasingly polluted cells (based on the potion in major cities). A follow-on project was also funded by RCN.

Klöckner was lead or co-author of six publications referenced (published from 2018-2022) and cited at least 245 times.

The Pollution Pods appear to be an innovative way of demonstrating the impact of climate change and of engaging the public to experience this through art. The artist, NTNU and the climate change art organisation CapeFarewell have found a way to 'tour' the Pods since 2017 in 13 cities/places (and several COPs) worldwide, attracting large audiences, being featured in the media too, with the scope to continue to do so. They featured on the United Nations Environmental Program website and the World Health Organisation website and at three Climate Summits, thereby demonstrating impact in terms of research leading to and informing the development of accessible artwork, which is raising public awareness worldwide. Thus, the committee recognised the excellent significance and reach of this impact case.

The committee's comments on impact case 2 – H-Work. Multilevel interventions to promote mental health in SMEs and public workplaces

H-WORK, a Research and Innovation Action project funded by Horizon 2020, was coordinated by the University of Bolognia and involved 14 partners across 9 countries (2020-2023). NTNU's IPS led work package 3 an contributed to others. With additional funding from RCN, the NTNU team created an e-learning tool and Norwegian translations of H-WORK tools to guide HR, practioners and students to learn more about the creation of healthy workplaces, especially public organisation and small to medium businesses (SME).

The H-WORK project aimed to design, implement and validate effective multi-level assessments and intervention toolkits, evaluating outcomes of measures and providing products and services. It included 1) H-WORK Assessment, Intervention and Evaluation tools, 2) a user-friendly roadmap (step-by-step guidance), 3) an innovation platform and exploitation plan and 4) scientific publications. Professors Innstrand and Christensen were work package leaders, with 5 other NTNU IPS staff and researchers involved.

Of the 12 published papers from the project so far, six are referenced with NTNU staff as mostly co-authors (e.g., Innstrand, Christensen, Zuberbühler, and Aboagye).Data collection finished in 2023 but publications range from 2020-2024.

With its focus on improving workplace mental health policies, providing data (scientific evidence) for policy makers and producing policy briefs (n=11) on a range of topics, the impact of this project is mostly evident in the workplace setting. The translation of all findings (including interventions and various tools) into policies appears to be very strong, especially if the H-WORK project is considered for inclusion by the European Commission's CORDIS website. However, the eventual impact of this project on workers' mental health improvements may not be yet fully seen (440 mental health interventions were named but only 1532 participants were involved and 169 managers). The committee recognised this impact case's very strong significance and wide reach.

The committee's comments on impact case 3 – Psychological treatment of anxiety and depression (2012-ongoing)

Some psychological disorders (such as social anxiety, generalised anxiety disorder, depression, OCD and PTSD) can represent a significant burden to society in terms of lost quality adjusted life years and costs. Treatments of choice may only produce recovery rates of 50% post-intervention and 25% at 2-year follow up, whereas the new treatments tested by NTNU IPS in RCTS increase recovery rates to 70-80% and last into longer term follow ups. These newer treatments are taught to NTNU IPS' clinical psychology students and disseminated more widely to local and national mental health services.

These newer psychological treatments are underpinned by metacognitive theory (and have been tested in a series of RCTS by various staff (e.g., Professors Nordahl, Hagen, Solem, and Hjemdal) since 2012, with the work being part of a long-term psychological research strategy. These interventions for anxiety disorders and depression have been translated from controlled RCT settings into clinical outpatient settings.

The listed publications (from 2016-2022) were in acceptable psychology journals, but not all reported on RCT outcomes.

The potential for this relatively brief therapy (8-12 sessions) in improving anxiety (especially social and generalised anxiety) and depression in participants and patients is very promising in terms of recovery and relapse rates. As clinical psychology students are taught this intervention, meta-cognitive therapy is being offered to more patients in clinic settings, with ongoing studies exploring implementation as well as cost-effectiveness further. Whilst this intervention appears to achieve significant improvements in some RCTs so far, without numbers in terms of how many patients have benefited so far and their recovery rates in the 'real world' alongside information on patient acceptability of this intervention the true impact of this intervention testing and roll-out is not fully known yet. The committee recognised the

overall potential significance of this impact case and its reach at an educational level in terms of clinical psychology students being trained in this intervention as a step towards impact. However, its wider reach and significance in terms of impacting recovery rates for service users and patients and its implementation into routine mental health care are not yet fully known.

Appendices

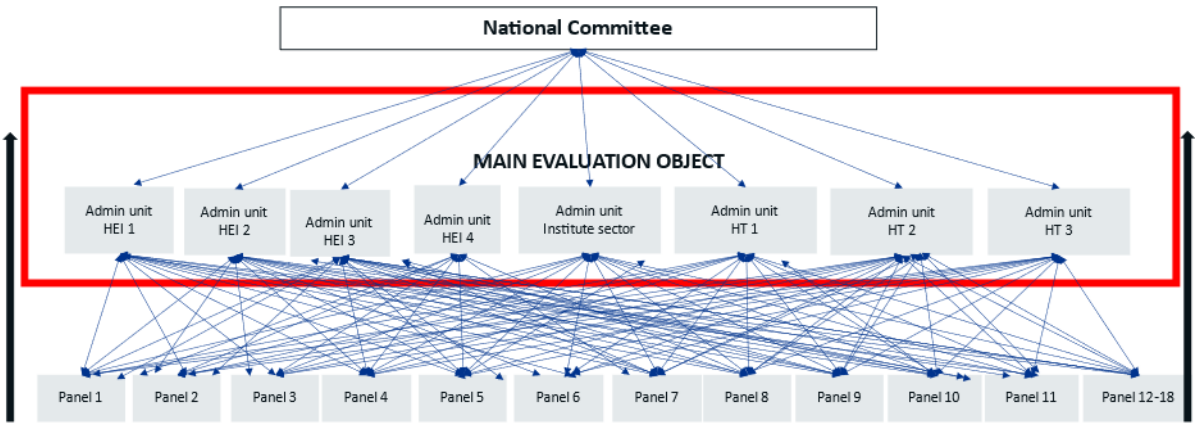
Evaluation of Medicine and health 2023-2024

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

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

Evaluation of medicine and health (EVALMEDHELSE) 2023-2024
The evaluation of medicine and health includes sixty-eight administrative units (e.g., faculty, department, institution, center, division) which are assessed by evaluation committees according to sectorial affiliation and other relevant similarities between the units. The administrative units enrolled their research groups (315) to eighteen expert panels organised by research subjects or themes and assessed across institutions and sectors.

Organisation of evaluation of medicine and health 2023-2024



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

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

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

The web page for the evaluation of medicine and health 2023-2024: [Evaluation of medicine and health sciences (forskningsradet.no)]

Forskningsrådet

Se vedlagte adresseliste

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

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

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

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

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

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

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

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

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

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

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

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

Administrative enheter (hovedevalueringsobjektet i evalueringen) – skjema 1

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

Forskergrupper – skjema 2

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

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

Invitasjon til å foreslå eksperter – skjema 3

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

Obs. Det er to faner i regnearket:

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

Utfylte skjemaer (3 stk):

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

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

Tilpasning av mandat – frist 30. september 2023

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

Forskningsrådet

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

Digitalt informasjonsmøte 15. mai 2023, kl. 14.00-15.00.
Forskningsrådet arrangerer et digitalt informasjonsmøte for alle som ønsker å delta i EVALMEDHELSE.

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

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

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

Med vennlig hilsen
Norges forskningsråd

Ole Johan Borge	Hilde G. Nielsen
avdelingsdirektør	spesialrådgiver
Helse	Helse

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

Kopi
Helse- og omsorgsdepartementet
Kunnskapsdepartementet

Vedlegg
1. Adresseliste
2. Nye fagevalueringer – varsel om oppstart november 2021
3. Erfaringer med oppfølging av fagevaluering av biologi, medisin og helsefag 2010/2011
4. Fagevaluering av livsvitenskap 2022-2024 – Evalueringsprotokoll
5. Tentativ panelinndeling EVALMEDHELSE mai 2023
6. Skjema 1 – Innmeldingsskjema Administrative enheter
7. Skjema 2 – Innmeldingsskjema Forskergrupper
8. Skjema 3 – Forslag til internasjonale eksperter til evalueringskomiteene og ekspertpanelene
9. Appendix A – word format

The Research Council of Norway

Evaluation of life sciences in Norway 2022-2023

LIVSEVAL protocol version 1.0

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

The Research Council of Norway
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The report can be downloaded at
www.forskningsradet.no/publikasjoner

Oslo, 5 April 2022

ISBN 978-82-12-Klikk her for å fylle ut (xxxxx-x). (pdf)

1 Introduction

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

1.1 Evaluation units

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

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

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

1.2 Minimum requirements for research groups

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

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

1.3 The evaluation in a nutshell

The assessment concerns:

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

The Research Council of Norway (RCN) will:

- provide a template for the Terms of Reference[1] for the assessment of RPOs and a national-level assessment in life sciences
- appoint members to evaluation committees and expert panels
- provide secretarial services
- commission reports on research personnel and publications based on data in national registries
- take responsibility for following up assessments and recommendations at the national level.

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

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

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

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

1.4 Target groups

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

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

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

2 Assessment criteria

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

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

2.1 Strategy, resources and organisation

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

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

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

2.2 Research production, quality and integrity

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

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

2.3 Diversity and equality

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

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

2.4 Relevance to institutional and sectoral purposes

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

Higher Education Institutions

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

The purposes of Norwegian HEIs are defined as follows in the Act relating to universities and university colleges[2]

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

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

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

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

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

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

Research institutes (the institute sector)

Norway's large institute sector reflects a practical orientation of state R&D funding that has long historical roots. The Government's strategy for the institute sector[3] applies to the 33 independent research institutes that receive public basic funding through the RCN, in addition to 12 institutes outside the public basic funding system.

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

The institutes should:

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

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

The hospital sector

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

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

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

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

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

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

2.5 Relevance to society

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

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

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

3 Evaluation process and organisation

The RCN will organise the assessment process as follows:

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

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

3.1 Division of tasks between the committee and panel levels

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

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

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

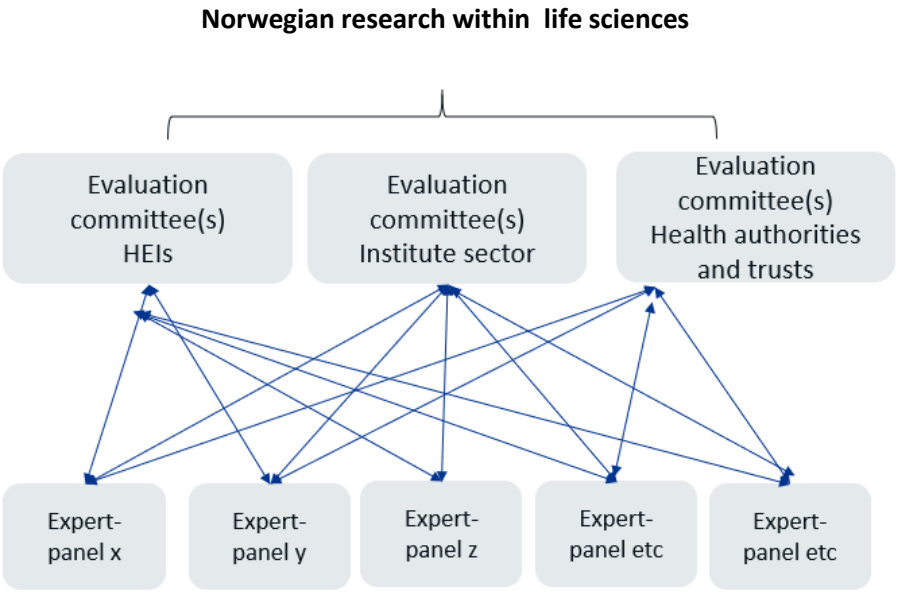

Figure 1. Evaluation committees and expert panels

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

3.2 Accuracy of factual information

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

3.3 National level report

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

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

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

Appendix A: Terms of References (ToR)

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

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

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

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

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

1. …
2. …
3. …
4. …

…

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

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

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

The documents will include the following:

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

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

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

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

Appendix B: Data sources

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

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

National registers

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

Self-assessments

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

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

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

Table 1. Types of evaluation data per criterion

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

Evaluation of Medicine and Health (EVALMEDHELSE) 2023-2024

Self- assessment for administrative units

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

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

Content

Introduction

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

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

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

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

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

Thank you!

Guidelines for completing the self-assessment

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

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

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

1.Strategy, resources and organisation

1.1 Research strategy

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

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

Table 1. Administrative unit`s strategies

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

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

1.2 Organisation of research

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

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

1.3 Research staff

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

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

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

Table 2. Research staff

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

1.4 Researcher careers opportunities

a) Describe the structures and practices to support researcher careers and help early-career researchers to make their way into the profession.

b) Describe how research time is distributed among staff including criteria for research leave/sabbaticals (forskningstermin/undervisningsfri).

c) Describe research mobility options.

1.5 Research funding

a) Describe the funding sources of the administrative unit. Indicate the administrative unit´s total yearly budget and the share of the unit's budget dedicated to research.

b) Give an overview of the administrative unit's competitive national and/or international grants last five years (2018-2022).

Table 3. R&D funding sources
Please indicate R&D funding sources for the administrative unit for the period 2018-2022 (average NOK per year, last five years).

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

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

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

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

From public sector	
Other national contract research	
Total contract research	
International grants (NOK)	
From the European Union	
From industry	
Other international grants	
Total international grants	
Funding related to public management (forvaltningsoppgaver) or (if applicable) funding related to special hospital tasks, if any	
Total funding related to public management/special hospital tasks	
Total all R&D budget items (except basic grant)	

1.6 Collaboration

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

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

Table 4a. The main national collaborative constellations with the administrative unit
Please categorise the collaboration according to the most important national partner(s): 5-10 institutions in the period 2012-2022. Please delete lines which are not in use.

National collaborations

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

Table 4b. The main international collaborative constellations with the administrative unit
Please categorise the collaboration according to the most important international partner(s): 5-10 international institutions in the period 2012-2022. Please delete lines which are not in use.

International collaborations

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

Impacts and relevance of the collaboration	

1.7 Open science policies

a) Describe the institutional policies, approaches, and activities to the Open Science areas which may include the following:

- Open access to publications
- Open access to research data and implementation of FAIR data principles
- Open-source software/tools
- Open access to educational resources
- Open peer review
- Citizen science and/or involvement of stakeholders / user groups
- Skills and training for Open Science

b) Describe the most important contributions and impact of the administrative unit's researchers towards the different Open Science areas cf. 1.7a above.

c) Describe the institutional policy regarding ownership of research data, data management, and confidentiality. Is the use of data management plans implemented at the administrative unit?

1.8 SWOT analysis for administrative units

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

Internal	**Strengths**	**Weaknesses**
External	**Opportunities**	**Threats**

2. Research production, quality and integrity

2.1 Research quality and integrity

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

a) Describe the scientific focus areas of the research conducted at the administrative unit, including the unit's contribution to these areas.

b) Describe the administrative unit's policy for research integrity, including preventative measures when integrity is at risk, or violated.

2.2 Research infrastructures

a) Participation in national infrastructure

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

Table 5. Participation in national infrastructure

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

Areas in roadmap	Name of research infrastructure	Period (from year to year)	Description	Link to website

b) Participation in international infrastructures

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

Table 6. Participation in international infrastructure

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

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

c) Participation in European (ESFRI) infrastructures

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

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

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

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

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

3. Diversity and equality

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

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

No.	**Name**	**Valid period**	**Link**
1			

4. Relevance to institutional and sectorial purposes

4.1 Sector specific impact

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

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

4.2 Research innovation and commercialisation

a) Describe the administrative unit's practices for innovation and commercialisation.

b) Describe the motivation among the research staff in doing innovation and commercialisation activities.

c) Describe how innovation and commercialisation is supported at the administrative unit.

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

No.	Name	Valid period	Link
1			

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

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

4.3 Higher education institutions

a) Reflect how research at the administrative unit contributes towards master and PhD-level education provision, at your institutions and beyond.

b) Describe the opportunities for master students to become involved in research activities at the administrative unit.

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

- Reflect on how research at the administrative unit contributes towards the quality of the Cand.med. degree programme at your institutions and beyond.
- Describe the different opportunities for students on the Cand.med. degree programme to become involved in research activities at the administrative unit, and the extent to which students use those opportunities.

4.4 Research institutes

a) Describe how the research and innovation activities/projects at the administrative unit contribute to the knowledge base for policy development, sustainable development, and societal and industrial transformations more generally.

b) Describe the most important research activities with partners outside of research organisations.

4.5 Health trusts

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

b) Reflect on how research at the unit contributes towards the quality of relevant education programme at your institutions or beyond.

c) Describe the different opportunities for students on relevant educational programmes to become involved in research activities at the administrative unit, and the extent to which students use those opportunities.

5. Relevance to society

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

5.1 Impact cases

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

Impact case guidelines

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

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

Timeframes

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

Page limit

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

Maximum number of cases permitted per administrative unit

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

Naming and numbering of cases

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

Publication of cases

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

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

Please write the text here

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

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

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

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

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

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

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

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

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

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

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

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

Institution	Administrative unit	Name of research group	Expert panel
NTNU	Department of psychology	Adult Clinical Psychology	Panel 5a
NTNU	Department of psychology	Citizens, Environment and Safety	Panel 5b
NTNU	Department of psychology	EWeR (Eating and Weight Disorders Research Group)	Panel 5a
NTNU	Department of psychology	Healthy workplaces	Panel 5b
NTNU	Department of psychology	Learning and skill development	Panel 5b
NTNU	Department of psychology	Occupation, psychocardiology and sleep	Panel 5b
NTNU	Department of psychology	TESS	Panel 5b

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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Publikasjonen kan lastes ned fra
www.forskningsradet.no/publikasjoner

Design: [design]
Foto/ill. omslagsside: [fotokreditt]

ISBN 978-82-12-04095-3 (pdf)