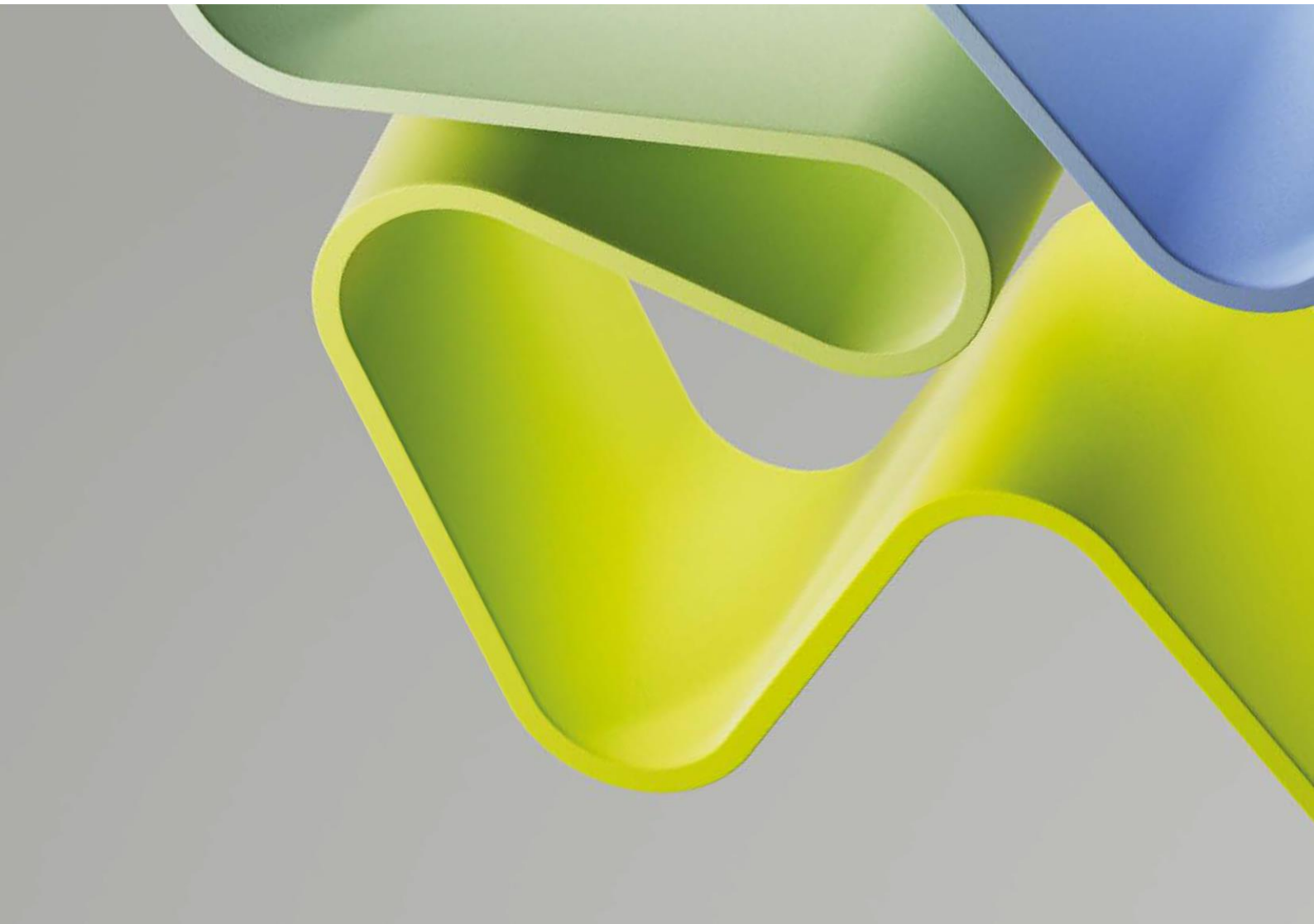
The Research Council of Norway

# *Evaluation of Medicine and Health 2023-2024*

Evaluation report – Panel 5a
Research Group: Centre for Clinical Research in Psychosis (TIPS)
Administrative Unit: Stavanger University Hospital
Institution: Stavanger University Hospital



## Content

# Preface

The Research Council of Norway (RCN) is given the task by the Ministry of Education and Research to perform subject-specific evaluations. The primary aim of the evaluation of medicine and health (EVALMEDHELSE) 2023-2024 is to reveal and confirm the quality and relevance of research performed at Norwegian Higher Education institutions, research institutions (the institute sector) and the health trusts, in an international perspective. Such knowledge is useful for the institutions that participate in the evaluation, for the Research Council who advice the authorities on how research should be developed further, and for the authorities, who set targets and frameworks for research and higher education. Research groups submitted by their administrative unit will be assessed by 18 expert panels organised by research subjects or themes. The expert panels will assess research groups across institutions and sectors based on research group's self-assessments and examples of scholarly output. These research reports will be part of the evaluation of their belonging administrative units.

## Abstract

This RG focuses on clinical research in psychosis. It started in 1996 with the TIPS study (early intervention and treatments for psychosis) and currently includes 8 staff (physicians, psychologists, senior psychiatric nurse), 1 post-doc, 4 PhD students (one with lived experience), 4 research support staff, .5 admin support and .5 information campaign strategist. The RG is fully integrated in clinical practice at SUH. Their main objectives are focused on early detection, improving risk prediction, and investigating treatment outcomes in psychosis. They have been running studies on these topics for over 20 years and their strategy now is internationalisation and developing parallel studies in other countries for replication, visiting research positions and staff exchange programmes. Their benchmarks are enhancing RG's resources, maintaining their scientific and clinical contributions as well as increasing user involvement and grants income. The group contributes significantly to education and training of psychiatrists, clinical psychologists and to various courses and regional and national training programmes. They lead on local research projects and are part of many regional, national and international collaborations. The RG has good support and access to infrastructure in the form of 1 million NOK per year, multi-disciplinary early detection team (7 FTE), admin support staff, a clinical research unit for storage of biological samples, IT support, legal support, statistical expertise, and to national networks of clinical research. The work by the RG has already influenced the national guidelines for the assessment and treatment of psychosis, education and training of psychiatrists and clinical psychologists, contributed to development of national psychiatric registry for adult mental health care, and led to TIPS initiatives throughout Norway and Sweden. Their PPIE is also excellent-to-outstanding with patient and public involvement in all aspects of their research. Overall, TIPS is one of the most established and well-known research groups, both nationally and internationally, in the area of early intervention and treatments for psychosis.

## Overall assessment

Strengths

- The RG has clear objectives which are well aligned to those of the host institution.
- TIPS members provide an excellent fit to the RG's objectives.
- TIPS has good resources in terms of salary support for its permanent members.
- The RG performs well against their benchmarks and their PPIE activities are commendable.
- The RG, with its longitudinal and clinically relevant research studies, has an excellent profile influencing both policy and practice in Norway. It is internationally recognised in the areas of early intervention and treatments for psychosis.

Weakness/es

- The RG has relied mostly on host institution for support and national grants to achieve their research ambitions.
- The RG could improve gender balance in membership in some positions.

Grading:

| Dimensions | Score |
|---|---|
| Organisational dimension (How adequate the organisational environment is in supporting the production of excellent research). | 4 |

| | |
|---|---|
| Quality dimension (Research and publication quality/Research group's contribution) | 5/5 |
| Societal impact dimension (Research group’s societal contribution/User involvement) | 5/5 |

## Recommendations

- The RG is advised, given their excellent-to-outstanding research quality and profile, to aim for external, perhaps international, grants in collaboration with their national and international partners to grow further and enhance their resources.
- Improving gender balance across all personnel categories and strengthen early career scientist (ECS) positions.
- Refining current research strategies and developing pathways to future innovation are challenging and could be supported by implementing a scientific advisory board (SAB).

# 1. Strategy, resources and organisation

### 1.1 Research group's organisation and strategy

This is a Stavanger University Hospital (SUH)-based RG focused on clinical research in psychosis. It started in 1996 with the TIPS study (early intervention and treatments for psychosis) and currently includes 8 staff (physicians, psychologists, nurse), 1 post-doc, 4 PhD students (one with lived experience), 4 research support staff, .5 admin support and .5 information campaign strategist. The RG is fully integrated in clinical practice at SUH. Their main objectives are focused on early detection, improving risk prediction, and investigating treatment outcomes in psychosis. They have been running studies on these topics for over 20 years and their strategy now is internationalisation and developing parallel studies in other countries for replication.

Their benchmarks include enhancing RG's resources (e.g., promoting females to full professorship, offering PhD and post-doc positions, establishing biobanks), maintaining their scientific and clinical contributions (e.g., publish good quality papers, recruit more first episode patients and patient retainment in the study, keep the median duration of untreated psychosis below 8 weeks in the catchment area) as well as increasing user involvement and grants income (by 50% by 2029). The group has also contributed significantly to education of psychiatrists and clinical psychologists via supervision of PhD and MSc students and been involved in various courses and regional and national training programmes. There is a minor difference in the number of PhD projects (5) and positions (4) indicated in the self-assessment.

The host intuition has been providing good support and infrastructure in the form of 1 million NOK per year, multi-disciplinary early detection team (7 FTE), admin support staff, a clinical research unit for storage of biological samples, IT support, legal support, statistical expertise and access to various national networks of clinical research.

The RG has clear objectives and performs well against their benchmarks.

Recommendations:

The RG should consider a greater focus on getting external, perhaps international grants, to achieve further growth and their ambitions. So far, they have relied on host institution and national grants.

### 1.2 Research group's resources

The RG currently has 13 permanent staff (physicians, psychologists, nurse; research support staff, admin support and information campaign strategist) and 5 temporary positions (1 post-doc, 4 PhD students). The gender balance is not equal across personnel positions (i.e. no women in psychologist, senior nurse and post doc categories and only 33% among senior physicians).

The RG receives basic funding (1 Mil. NOK per year) from the SUH, and they have some further grants from the public sector and some national sources. Their funding seems stable though moderate in size, with no international funding in 2018-2022. The RG has access to excellent infrastructure via the host institution.

They also add significantly to teaching and training of psychiatrists, clinical psychologists, resident doctors and allied health professional.

This interdisciplinary RG has an excellent fit to their objectives and has good resources in terms of salary support for its permanent members.

Recommendations:

- The gender balance among clinicians and researchers should be improved, for example, by regular monitoring and positive action (where indicated) when appointing new staff. In addition, we encourage the support of ECS as one post doc and four PhD positions are fair, but do not reflect the scientific excellence of this long-standing project.
- Again, the RG should put more emphasis on getting external grants with their international partners to enhance their resources and support neurobiological investigations.

### 1.3 Relevance to the institution

The host institution considers “Research to be an integral part of the diagnostic and patient treatment at all hospital units”. TIPS’ benchmarks are well aligned with these ambitions, and they are fully integrated into mental health care. All new cases are referred to the TIPS team for assessments.

The RG leads on local research projects and is part of many regional, national and international collaborations.

The RG’s relevance to the host institution is extremely high.

Recommendation: no specific recommendations except that the RG should continue to pursue their plans and ambitions as at present.

# 2. Research quality

### 2.1 Research group's scientific quality

The RG has been running longitudinal studies in Norway for over 20 years to improve early detection, risk prediction, and treatment outcomes in psychosis and now have expanded to add neurobiological dimensions and collaborations to initiate similar studies in other countries. The RG has produced a large number of Internationally excellent/outstanding publications. Furthermore, there is a strong potential for further high-quality papers from this RG arising from their longitudinal and interdisciplinary research.

The RG has a very visible and outstanding research profile. However, the five publications listed, represent only a minor share of the overall publication record. As these papers either report data from the main longitudinal studies or are publications by large consortia (i.e. ENIGMA working group and Schizophrenia Working Group of the Psychiatric Genetics Consortium), where the RG has contributed, it remains a bit difficult to evaluate the research and publication strategy in this respect.

Recommendations:

- It is not fully clear from the self-assessment, how innovation is implemented into the current long-term projects. Particular attention should be paid to the refinement of ongoing long-term projects and their development towards future strategies of personalization and transition from traditional nosologies to transdiagnostic concepts.
- Strengthening ECS´s positions should also encourage involvement of ECS in research and publication strategies. This would also be meaningful for attracting researchers for later tenure positions.

### 2.2 Research group's societal contribution

The work by TIPS RG has influenced the national guidelines for the assessment and treatment of psychosis, education and training of psychiatrists and clinical psychologists, contributed to development of national psychiatric registry for adult mental health care, and led to TIPS initiatives throughout Norway and Sweden.

Their PPIE is also excellent-to-outstanding with patient and public involvement in all aspects of their research.

The RG is making a strong societal contribution with a commendable PPIE.

Recommendation: no specific recommendations except that the RG should continue or enhance their activities in this area.

## Appendices

The Research Council of Norway

# Evaluation of Life Sciences in Norway 2022-2024

## Evaluation of Medicine and Health 2023-2024

## Mandate Expert panels

The Research Council of Norway (RCN) is given the task by the Ministry of Education and Research to perform subject-specific evaluations. The Portfolio board for Life Sciences in the Research Council of Norway has decided to carry out an evaluation of medicine and health in 2023-2024 as the second of two evaluations within Life Sciences. The evaluation of biosciences takes place in 2022-2023.

### 1. The objective of the evaluation

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), by the institute sector and by health trusts.

The results of the evaluation will be used as recommendations to the institutions, the Research Council, and the ministries.

### 2. Tasks of the expert panels

The panels are requested to:

- evaluate the strategy, resources and organisation of/for the research groups.
- evaluate research production and quality of the research groups.
- grade and write a short evaluation text to the evaluated research groups.

Each of the expert panels will write a brief report with evaluations of the different research groups as well as specific recommendations.

### 3. Time schedule

Digital panel meetings will take place in the period March 15. - June 15. 2024.
Deadline for submitting panel report to the Research Council: June 15. 2024.

### 4. Miscellaneous

Other important aspects of Norwegian life sciences research that ought to be given consideration.

## EVALMEDHELSE 2023-2024 – Panel group description – January 2024

| Panel group | Description | Panel no. |
|---|---|---|
| **Group 1 PHYSIOLOGY**<br><br>Physiology-related disciplines (human physiology), including corresponding translational research | Anatomy, physiology, embryology, nutritional physiology, pathology, basic odontological research, exercise physiology, neurobiology, toxicology, pharmacology, medicinal chemistry, chemistry, biology, pathology. | Panel 1a<br><br>Panel 1b |
| **Group 2 MOLECULAR BIOLOGY**<br><br>Molecular Biology, including corresponding translational research | Microbiology, bacteriology, inflammation and infection disease research, forensic medicine, genetics, immunology, vaccine development, microbiological diagnostics, pharmaceutical microbiology, cell biology, molecular medicine and -biophysics, medical biochemistry, omics, organoids, imaging, toxicology, pathology, drug development, cancer research, translational research, systems biology, personalized medicine, biomarkers, oncology, genetics, genomics, epigenetics, proteomics, bioinformatics-/statistics, computational science, AI, biology, virology, radiology, ionisation, molecular biology, microbiology, pharmacology, pharmacogenomics, regenerative medicine and related subjects. | Panel 2a<br><br>Panel 2b<br><br>Panel 2c |
| **Group 3a CLINICAL RESEARCH** | Clinical Research, including surgery and translational research within: paediatrics, women's health, gynaecology, otorhinolaryngology, head and neck surgery, oncology, haematology, radiology and medical imaging. | Panel 3a_1<br><br>Panel 3b_2 |
| **Group 3b CLINICAL RESEARCH** | Clinical Research, including surgery and translational research within: general medicine, emergency medicine, anaesthesiology, neurology, geriatric medicine, rehabilitation medicine, cardiology, nephrology/urology, endocrinology, pulmonary medicine, orthopaedics, rheumatology, Infection, gastroenterology. | Panel 3b_1<br><br>Panel 3b_2<br><br>Panel 3b_3 |
| **Group 4 PUBLIC HEALTH**<br><br>Public Health and Health-related Research | Public health, community research, epidemiology, preventive medicine, mental health, behavioural research and ethics, medical statistics, environment, nutrition, preventive medicine, physiotherapy, sports medicine, implementation research, public health, health care services research, global health, nursing | Panel 4a<br><br>Panel 4b<br><br>Panel 4c |

| | | |
|---|---|---|
| | sciences, rehabilitation sciences, public health systems, digital health care services, ICT, HTA, health competence, genetic and epigenetic epidemiology, non-communicable diseases, pharmacology, nursing research, professional research, occupational medicine. | Panel 4d<br>Panel 4e<br>Panel 4f |
| **Group 5 PSYCHOLOGY**<br>Psychology and Psychiatry | Clinical psychology, personality psychology, developmental psychology, cognitive psychology, biological psychology and forensic psychology, psychiatry, including geriatric psychiatry, child and adolescent psychiatry and biological psychiatry, social-, community- and workplace psychology, organizational psychology, developmental psychology, behavioural and health psychology, health promotion and well-being. | Panel 5a<br>Panel 5b |

## Panel group 5 PSYCHOLOGY

Expert panel 5a

| Name | Title | Institution |
|---|---|---|
| Katya Rubia (Chair) | Professor | King's College London |
| Gordon Harold | Professor | University of Cambridge |
| Frank Padberg | Professor | Ludwig-Maximilians University (LMU) - Munich |
| Michael Hornberger | Professor | University of East Anglia |
| Heleen Riper | Professor | University of Amsterdam |
| Veena Kumari | Professor | Brunell University London |
| Gordon Harold | Professor | University of Cambridge |

Heleen Riper had a conflict of interest with the evaluation of the Research Group for Clinical Psychology (IKP) at the University of Bergen (report 17).

This meant that for those evaluations she did not have access to the self assessments or survey data and she did not participate in the discussion of the research group, nor did she participate in the preparation and completion of the evaluation report.

# Evaluation of Medicine and Health (EVALMEDHELSE) 2023-2024

# Self-assessment for research groups

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

Updated: **13. October 2023**



**Institution (name and short name):_____**
**Administrative unit (name and short name):_____**
**Research group (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 a research group. The self-assessment contains questions regarding the group's research- and innovation related activities and developments over the years 2012-2022. All submitted data will be evaluated by expert panels.

**Deadline for submitting the self- assessment to your administrative unit – 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 submit completed self- assessment to the administrative unit no later than 26 January 2024.

Please use the following format when naming your document: [short name of the institution]_[short name of the administrative unit]_[short name of the research group], e.g. *UiT_DepPsy_Short name of the research group*.

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 link to websites/documents in the self-assessment where relevant.
- Please be sure that all documents linked to in the self- assessment are written 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 the two evaluation criteria described in the evaluation protocol, the research group must answer all questions.
    - ⇨ Provide information – provide documents and other relevant data or figures about the research group, for example strategy and other planning documents, as well as data on R&D expenditure, sources of income and results and outcomes of research
    - ⇨ Describe – explain and present using contextual information about the research group and inform the reader about the research group.
    - ⇨ Reflect – comment in a reflective and evaluative manner how the research group operates.
- Data on personnel should refer to data reported to DBH on 1 October 2022 for HEIs and to the yearly reporting for 2022 for the institute sector and the health authorities. Other data should refer to 31 December 2022 if not specified otherwise.
- It is possible to extend the textboxes when filling in the form. **NB!** A completed self- assessment form cannot exceed 25 pages (pdf file). Expert panels are not requested to read more than the maximum of 25 pages. Pages exceeding maximum limit of 25 pages **might not** be evaluated.
- Submit the self- assessment as a pdf (max 25 pages) to the administrative unit within **26 January 2024**. Before submission, please be sure that all text are readable after the conversion of the document to pdf. The self- assessment should be sent from the administrative unit to evalmedhelse@forskningsradet.no within **31 January 2024.**

***Please note that information your write in the self assessment and the links to documents/websites in the self-assessment are the only available information for the expert panel.***

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

# 1. Organisation and strategy

## 1.1 Research group´s organisation

Describe the establishment and the development of the research group, including its leadership (e.g. centralised or distributed etc.), researcher roles (e.g. technical staff, PhD, post docs, junior positions, senior positions or other researcher positions), the group's role in researcher training, mobility and how research is organised (e.g. core funding organisation versus project based organisation etc.).

**Table 1. List of number of personnel by categories**
**Instructions:** Please provide number of your personnel by categories.
For institutions in the higher education sector, please use the categories used in DBH, https://dbh.hkdir.no/datainnhold/kodeverk/stillingskoder. Please add new lines or delete lines which are not in use.

| | **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 Personnel by position** | Position A (Fill in) | | | | |
| | Position B (Fill in) | | | | |
| | Position C (Fill in) | | | | |
| | Position D (Fill in) | | | | |
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## 1.2 Research group´s strategy

a) Describe the research group's main goals, objectives and strategies to obtain these (e.g. funding, plans for recruitment, internationalization etc.) within the period 2012-2022.

b) Please describe the benchmark of the research group. The benchmark for the research group should be written by the administrative unit in collaboration with the research group. The benchmark can be a reference to an academic level of performance (national or international) or to the group's contributions to other institutional or sectoral purposes.

Example: A benchmark for a research group is related to the research groups' aim which again is included in the strategy for the administrative unit. A guidance for the administrative unit to set a benchmark for the research group(s) can e.g. be: What do the administrative unit expect from the research group(s)?

c) Describe the research group`s contribution to education (master´s degree and/or PhD).

d) Describe the support the host institution provides to the research group (i.e., research infrastructure, access to databases, administrative support etc.).

## 1.3 Relevance to the institutions

Describe the role of the research group within the administrative unit. Consider the research group's contribution towards the institutional strategies and objectives, and relate the research group`s benchmark to these.

## 1.4 Research group´s resources

Describe the funding portfolio of the research group for the last five years (2018-2022).

**Table 2.** Describe the sources of R&D funding for the research group in the period 2018-2022.

| | 2018 (NOK) | 2019 (NOK) | 2020 (NOK) | 2021 (NOK) | 2022 (NOK) |
|---|---|---|---|---|---|
| **Basic funding** | | | | | |
| **Funding from industry and other private sector sources** | | | | | |
| **Commissioned research for public sector** | | | | | |
| **Research Council of Norway** | | | | | |
| **Grant funding from other national sources** | | | | | |
| **International funding e.g. NIH, NSF, EU framework programmes** | | | | | |
| **Other** | | | | | |



## 1.5 Research group´s infrastructures

Research infrastructures are facilities that provide resources and services for the research communities to conduct research and foster innovation in their fields. These include major equipment or sets of instruments, knowledge-related facilities such as collections, archives or scientific data infrastructures, computing systems communication networks. Include both internal and external infrastructures.

a) Describe which national infrastructures the research group manages or co-manages.

b) Describe the most important research infrastructures used by the research group**.**

# 1.6 Research group´s cooperations

**Table 3.** Reflect on the current interactions of the research group with other disciplines, non-academic stakeholders and the potential importance of these for the research (e.g. informing research questions, access to competence, data and infrastructure, broadening the perspectives, short/long-term relations).

| | |
|---|---|
| **Interdisciplinary (within and beyond the group)** | About 1/3 page |
| **Collaboration with other research sectors e.g. higher education, research institutes, health trusts and industry.** | About 1/3 page |
| **Transdisciplinary (including non academic stakeholders)**<br><br>*Transdisciplinary research involves the integration of knowledge from different science disciplines and (non-academic) stakeholder communities with the aim to help address complex societal challenges.* | About 1/3 page |

# 2. Research quality

## 2.1 Research group's scientific quality

Describe the research profile of the research group and the activities that contribute to the research group´s scientific quality. Consider how the research group's work contributes to the wider research within the research group's field nationally and internationally.

Please add a link to the research group`s website:

| |
|---|
| |

**Table 4. List of projects**

**Instructions:** Please select 5-10 projects you consider to be representative/the best of the work in the period 1 January 2012 – 31 December 2022. The list may include projects lead by other institutions nationally or internationally. Please delete tables that are not used.

| | | |
|---|---|---|
| **Project 1 -10:**<br><br>*Project title/Project period (year from – year to)* | **Project owner(s)** (project leaders organisation) | |
| | **Total budget and share allocated to research group** | |
| | **Objectives and outcomes** (planned or actual) **and link to website** | |
| | | |
| | | |
| | | |
| | | |

**Table 5. Research group's contribution to publications**

**Instructions:** Please select 5-15 publications from the last 5 years (2018-2022) with emphasis on recent publications where group members have a significant role. **If the publication is not openly available, it should be submitted as a pdf file attached to the self-assessment.** We invite you to refer to the Contributor Roles Taxonomy in your description: https://credit.niso.org/.

*Cf. Table 1. List of personell by categories:* Research groups up to 15 group members: 5 publications. Research groups up to 30 group members: 10 publications. Research groups above 30 group members: 15 publications.

Please delete tables that are not used.

| | | |
|---|---|---|
| **Publication 1 -15:**<br><br>*Project title/Journal/Year/DOI/URL* | **Authors** (Please highlight group members) | |
| | **Short description** | |
| | **Research group's contribution** | |
| | | |

**Table 6. Please add a list with the research group´s monographs/scientific books.**
Please delete lines which are not used.

| | |
|---|---|
| **1** | Title - Authors (Please highlight group members)- link to webpage (if possible) |
| **2** | |

# 2.2 Research group´s societal contribution

Describe the societal impact of the research group's research. Consider contribution to education, economic, societal and cultural development in Norway and internationally.

**Table 7. The research group's societal contribution, including user-oriented publications, products (including patents, software or process innovations**
**Instructions:** Please select 5–10 of your most important user-oriented publications or other products from the last 5–10 years with emphasis on recent publications/products. For each item, please use the following formatting. Please delete lines which are not used.

# 3. Challenges and opportunities

Information about the strengths and weaknesses of the research group is obtained through the questions above. In this chapter, please reflect on what might be the challenges and opportunities for developing and strengthening the research and the position of the research group.

# Scales for research group assessment

## 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

| Score | Research and publication quality | Score | Research group's contribution<br>Groups were invited to refer to the Contributor Roles Taxonomy in their description https://credit.niso.org/ |
|---|---|---|---|
| 5 | Quality that is outstanding in terms of originality, significance and rigour. | 5 | The group has played an outstanding role in the research process from the formulation of overarching research goals and aims via research activities to the preparation of the publication. |
| 4 | Quality that is internationally excellent in terms of originality, significance and rigour but which falls short of the highest standards of excellence. | 4 | The group has played a very considerable role in the research process from the formulation of overarching research goals and aims via research activities to the preparation of the publication. |
| 3 | Quality that is recognised internationally in terms of originality, significance and rigour. | 3 | The group has a considerable role in the research process from the formulation of overarching research goals and aims via research activities to the preparation of the publication. |
| 2 | Quality that meets the published definition of research for the purposes of this assessment. | 2 | The group has modest contributions to the research process from the formulation of overarching research goals and aims via research activities to the preparation of the publication. |
| 1 | Quality that falls below the published definition of research for the purposes of this assessment. | 1 | The group or a group member is credited in the publication, but there is little or no evidence of contributions to the research process from the formulation of overarching research goals and aims via research activities to the preparation of the publication. |

## Societal impact dimension

| 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. |

**Norges forskningsråd**
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Design: [design]
Foto/ill. omslagsside: [fotokreditt]