

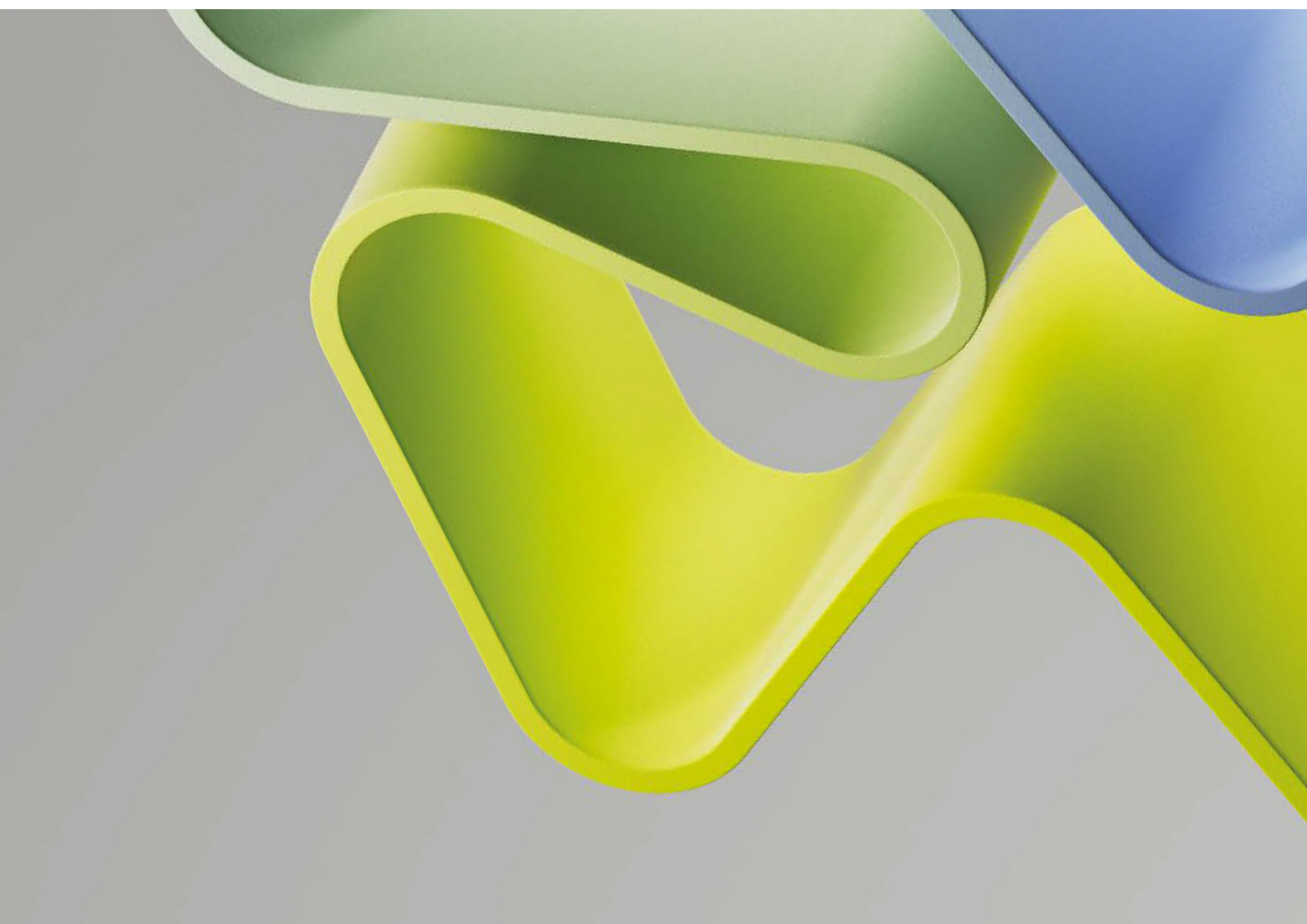
Evaluation of Medicine and Health 2023-2024

Evaluation report – Panel 3b_1

Research Group: The Norwegian Centre for Movement Disorders,
NCMD

Administrative Unit: Stavanger University Hospital

Institution: Stavanger University Hospital



Content

Preface	4
Abstract	5
Overall assessment	5
Recommendations	5
1. Strategy, resources and organisation	6
1.1 Research group's organisation and strategy	6
1.2 Research group's resources	7
1.3 Relevance to the institution	8
2. Research quality	9
2.1 Research group's scientific quality	9
2.2 Research group's societal contribution	10
Appendices	11

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 advise 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

The NCMD research group is a group that has grown in recent years and has been very productive. Notably, they set up and hold a very important bioresource, the Norwegian Parkinson Registry and Biobank, and they also have ParkinsonNet for training health professionals in the best practices for patient treatment. The group is involved in multiple educational activities. The quality of research is internationally excellent.

It has a complex structure within larger organisations. The NCMD group has a centralised leadership model with a good gender balance. There are very clearly delineated objectives and a very well-defined main goal of conducting internationally leading clinical and biomarker research to improve diagnostics, treatment, and care of people with Parkinson's disease and related disorders.

The group's concern about a drop in funding is very understandable - yet not unique - however, they also have a strategy that will mitigate this drop. The resources they hold are top quality and the maximisation of their use for securing research funding is a promising strategy.

The research group's key benchmarks for success for the evaluation period are to offer at least five PhD/postdoc positions, increase over time, and strengthen collaborations to optimise data and resources while diversifying the research portfolio. They plan to publish at least 15 papers annually in relevant journals, manage more projects, and engage in clinical trials and innovation projects. The group will actively contribute to education by presenting at international conferences and participating in higher education initiatives. They aim to boost research funding by 50% over five years and participate in national and EU projects. Additionally, they will collaborate with patients and their families throughout the research process, maintaining biannual meetings and continuous dialogue.

Overall assessment

The group is well-inserted at a national level and international level, and benefits from receiving good support. The group provides important societal contributions in various aspects, including the education of healthcare professionals, the actual care of individuals and the advancement in knowledge generated. Members of the group also lead publications, demonstrating leadership and scientific drive.

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)	4/4
Societal impact dimension (Research group's societal contribution/User involvement)	4/4

Recommendations

- The centralised command structure should be changed. The group would benefit from more full-time positions for scientists; hence it is encouraged to engage in discussions with institutional leaders to secure such positions. Senior scientists should become section leaders, and mentor PhD and master students.
- The group could also benefit from expanding the network of international collaborations.
- Users should be more involved in the research process.

1. Strategy, resources and organisation

1.1 Research group's organisation and strategy

The NCMD research group is a subunit of the National Advisory Unit under the Department of Research at Stavanger University Hospital. Its permanent positions are funded by the Norwegian Ministry of Health and Care Services and Stavanger University Hospital. Other positions and activities are funded from national and multinational sources.

The NCMD research group has a well-defined strategy built around 4 specific objectives (building the content, the team, the infrastructure, and collaborations). An additional objective was added in 2017, which is making research accessible. The organisational environment is very strong in supporting the production of excellent research.

The NCMD research group has centralised leadership and comprises positions dedicated to research (2 senior researchers, 1 statistician, 7 project-based PhD/postdocs, 2 study nurses) and 6 physicians/psychologists with dual roles in research and clinics. Complementing these are 2 administrative members. The group offers researcher education from BSc to postdoc levels and contributes to the clinical training and education of neurologists and other health care professionals. The centralised command structure should be changed. The group would benefit from more full-time positions for scientists.

In promoting a dynamic research environment, the group facilitates mobility by supporting visits to collaborating labs in academia and industry. They have contributed to international educational exchange programs and the researchers' prolific attendance at congresses and meetings, reflecting a commitment to continuous learning, global networking, and knowledge dissemination.

Recommendations to the research group

- The centralised command structure should be changed. The group would benefit from more full-time positions for scientists; hence it is encouraged to engage in discussions with institutional leaders to secure such positions. Senior scientists should become section leaders, and mentor PhD and master students.

1.2 Research group's resources

The NCMD research group's activities are funded by three main sources:

- Basic funding of the National Advisory Unit on Movement Disorders by the Norwegian Department of Health. Approximately 30% of this funding is allocated to research-related activities.
- Basic funding of permanent research positions (including technical/administrative staff) by Stavanger University Hospital.
- Project-based external funding from the private and public sectors.

The NCMD research group's permanent research positions are funded by the Norwegian Ministry of Health and Care Services and Stavanger University Hospital. The remaining activities and positions are secured by project-based funding from multiple national and international sources. The resources are sufficient to support the production of excellent research.

Between 2018 and 2022, the total funding per year increased from 13.8 million NOK to 21.1 million NOK, primarily attributed to a >50% rise in external funding during this period. External funding was obtained from the Norwegian Health Association, Norwegian Parkinson Research Association, Reberg's legacy, the University of Stavanger, Western Norway Health Authority research grants, The Research Council of Norway, Reta Lila Weston Trust (UK), and the EU IMI 2 programme.

Recommendations to the research group

- The group could benefit from expanding the network of international collaborations.

1.3 Relevance to the institution

The NCMD research group aligns well with the mandate of the Advisory Unit, the Research and Innovation Strategy of the Western Norway Regional Health Authority and the Research Strategy of Helse Stavanger. Because of this, the group's research is relevant to the institutions.

In addition, as they are the only National Advisory Unit to be located within Stavanger University Hospital and host one of only 3 national medical quality registries at Stavanger University Hospital, the National Parkinson registry and Biobank, the group also aligns well with nationwide healthcare initiatives.

The research strategy aligns with administrative benchmarks by increasing PhD/postdoc positions to seven by 2022, fostering collaborations resulting in over 90% of publications having external co-authors, and securing funding for advanced equipment at Stavanger University Hospital. From 2018-2022, they produced 74 publications, 25% in level 2 journals, and managed more projects, including 2 innovation projects and 2 clinical trials. They have developed a new test for early Parkinson's diagnosis, filing for a patent in 2022. Their educational contributions include supervising 47 research projects and increasing professor-level staff. Economically, they have exceeded their 50% funding increase goal from 2018-2022 and have been involved in NFR projects, though not currently in EU projects. User involvement is exemplified by their active engagement with the Norwegian Parkinson Association in patient-centred research.

Recommendations to the research group

No further recommendations.

2. Research quality

2.1 Research group's scientific quality

The NCMD group conducts translational and clinical research with the aim of improving the diagnosis and treatment of individuals with PD and other neurodegenerative disorders. They conduct longitudinal observational studies and perform biomarker research.

Ongoing scientific activities include the Norwegian PARKVEST study, Biomarkers to predict individual risk of dementia in Parkinson's disease (ParkDem), Parkinson's Incidence Cohorts Collaboration (PICC), MoDAI (a new kit for early and fast molecular diagnosis of PD and DLB), and early detection, prognosis, and biomarkers of prodromal Lewy Body Diseases (the PRO-LBD- study).

The research group has produced 74 publications between 2018 and 2022, with 25% in level 2 journals. Papers were published in Neurology, Eur J Neurol, J Neurol, JAMA Neurol, Mov Dis, with first or senior authors from the NCMD group. The group has also contributed to book chapters.

The group is interdisciplinary, which is seen as a highly positive characteristic of the team. The research group would improve with more full-time positions for scientists to become section leaders, and to mentor PhD and master students.

Recommendations to the research group

- International cooperation could be increased.

2.2 Research group's societal contribution

The NCMD research group works in close collaboration with patient organisations and user representatives that provide input and feedback.

In terms of education, the NCMD group is engaged in the formal education of health care professionals and participates in traditional academic activities such as seminars and presentations. They have also contributed to the development of treatment guidelines and have their own magazine MOVE for the dissemination of their work.

The work has also contributed to society through improvement of diagnostic, treatment, and care. As members of the group are engaged in the implementation of ParkinsonsNet, the biobank and National Parkinson Registry, the group's work also led to new discoveries. Finally, through dissemination, they also contribute to societal improved understanding of motor and non-motor extrapyramidal diseases. The NCMD group aims to influence social policies and decision-making by involvement of governmental and public healthcare authorities.

Recommendations to the research group

- An increasing involvement of patient organisations is recommended.

Appendices

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 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 Panel 1b
Group 2 MOLECULAR BIOLOGY 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 Panel 2b 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 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 Panel 3b_2 Panel 3b_3
Group 4 PUBLIC HEALTH 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 Panel 4b 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 Panel 4e Panel 4f
Group 5 PSYCHOLOGY 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 Panel 5b

Panel group 3b CLINICAL RESEARCH

Expert panel 3b_1

Name	Title	Institution
Peter Berlit (chair)	Professor	Alfried Krupp Krankenhaus
Graciela Muniz Terrera	Professor	University of Edinburgh
Jennifer Freeman	Professor	University of Plymouth
Erika Frischknecht Christensen	Professor	Aalborg University



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.....	3
Guidelines for completing the self-assessment	4
1. Organisation and strategy	5
1.1 Research group's organisation.....	5
1.2 Research group's strategy	5
1.3 Relevance to the institutions.....	6
1.4 Research group's resources	6
1.5 Research group's infrastructures	7
1.6 Research group's cooperations.....	8
2. Research quality	9
2.1 Research group's scientific quality	9
2.2 Research group's societal contribution.....	12
3. Challenges and opportunities.....	13

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 you 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)				

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.

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

<p>Interdisciplinary (within and beyond the group)</p>	<p>About 1/3 page</p>
<p>Collaboration with other research sectors e.g. higher education, research institutes, health trusts and industry.</p>	<p>About 1/3 page</p>
<p><u>Transdisciplinary</u> (including non academic stakeholders)</p> <p><i>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.</i></p>	<p>About 1/3 page</p>

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:

Short version

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: <i>Project title/Project period (year from – year to)</i>	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: <i>Project title/Journal/Year/DOI/URL</i>	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.

Short version

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 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

Besøksadresse: Drammensveien 288
Postboks 564
1327 Lysaker

Telefon: 22 03 70 00

Telefaks: 22 03 70 01

post@forskningsradet.no

www.forskningsradet.no

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

Design: [design]

Foto/ill. omslagsside: [fotokreditt]

ISBN 978-82-12-[fyll ut (xxxxx-x)] (trykksak)

ISBN 978-82-12-[fyll ut (xxxxx-x)] (pdf)

