

September 2025

Strategic renewal

NCMBM's Update & Next Phase



Norwegian Centre for Molecular Biosciences and Medicine

New name
and profile
from 1/2025

Academic Profile based on the NCMBM mandate

NCMBM's academic profile will be **based on outstanding research, the development of new technologies, and an emphasis on interdisciplinary collaboration within molecular medicine and bioscience**. Through interdisciplinary efforts, the center shall **address issues ranging from intricate cellular mechanisms in biology and biomedicine to major challenges related to human health and ecosystems**.

The center's relevance to other academic environments at UiO shall be strengthened through **collaboration between NCMBM's group leaders and other life science environments and other relevant environments at UiO**.

The **scientific strategy of NCMBM will follow EMBL's strategy "Molecules to Ecosystems."** NCMBM shall be **part of The Nordic EMBL Partnership for Molecular Medicine** in a collaboration between the European Molecular Biology Laboratory (EMBL), the University of Oslo, the University of Helsinki, Umeå University, and Aarhus University.

NCMBM as a member of the EMBL Partnership for Molecular Medicine in 2025



In brief

The EMBL partnership was renewed for the next 10- year period for 2023-2032

UiO and HSØ decided to continue funding of the Centre as an EMBL Partnership node with a new name and a renewed strategy .



Signing ceremony and scientific seminar in Helsinki May 2023



Collaborative initiatives

NORPOD 2024-2028: a NordForsk-funded postdoctoral programme designed to enhance mobility and collaboration within the Nordic EMBL Partnership

Nordic EMBL Partnership Hub 2021-2024: Nordforsk funded initiative to strengthen regional biomedical research by facilitating joint initiatives, resource-sharing, and strategic collaboration.



The Nordic EMBL Partnership Meeting in Oslo September 2024



EMBL Model

- › Financial and scientific independence to conduct cutting-edge research using a rotation model enabling renewal of the centre
- › International recruitment based on scientific excellence
 - › Early-career, highly ambitious and promising group leaders (minimum of 5-6/centre)
 - › Recruitment of strong PhDs and postdoctoral candidates from an international pool of talent
- › Non-tenure positions 5+4 years with competitive start-up packages
 - › Mid-term evaluation of group leaders around 4 years into first 5-year period
- › Regular evaluations on Centre level
 - › NCMM operates in 5-year cycles
 - › Scientific Advisory Board evaluation and recommendations every 18 months



Procedure for reappointment to Group Leader

- ~ 4 years: submit dossier (EMBL style)
- Two-tier evaluation process:
 - Written evaluations from 4-6 international experts, suggestions of 10-12 from GL, Director, SAB, Board
 - Assessment of the letters from international experts and group performance by the NCMM Scientific Advisory Board (SAB w/ EMBL presence) and Director integrating both the international feed-back and the SAB observations from following each group
 - Director recommendation to the Board.
- Decision to continue/discontinue group & reappoint leader
- If negative, 1 year phasing out. (natl. requirement: dismissal of leader/members separate from above)



Norwegian Centre for Molecular Biosciences and Medicine

New name and profile

- 1. Molecular & cellular basis of disease and therapy –**
human genetics and precision medicine.
- 2. Computational biology, functional genomics & systems biology –**
bridging genotype to phenotype.

Same EMBL operational principles

- Research excellence
- Technology development
- Interdisciplinary collaboration
- Recruitment hub
- Nordic and European Integration

”

RESEARCH MISSION

NCMBM is pushing the frontiers of life science by decoding the cellular machinery that drives health and disease.

Current Group Leaders



Janna Saarela, Director
Human immune disorders



Anthony Mathelier, Associate Director
Computational biology and gene regulation



Emma Haapaniemi
Precision paediatrics and gene editing



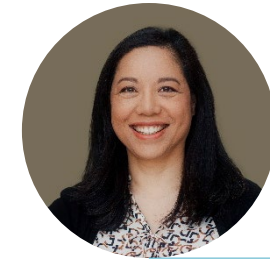
Charlotte Boccara
Systems neuroscience and sleep



Biswajyoti Sahu
Precision cancer epigenomics

+ Ongoing group leader recruitment

Outgoing group leaders



Camila Esguerra
Chemical neuroscience
-> Director of Comparative Aquatic Core Facility at UiO



Nikolina Sekulić
Structural biology and chromatin
-> Associate Professor at IMB

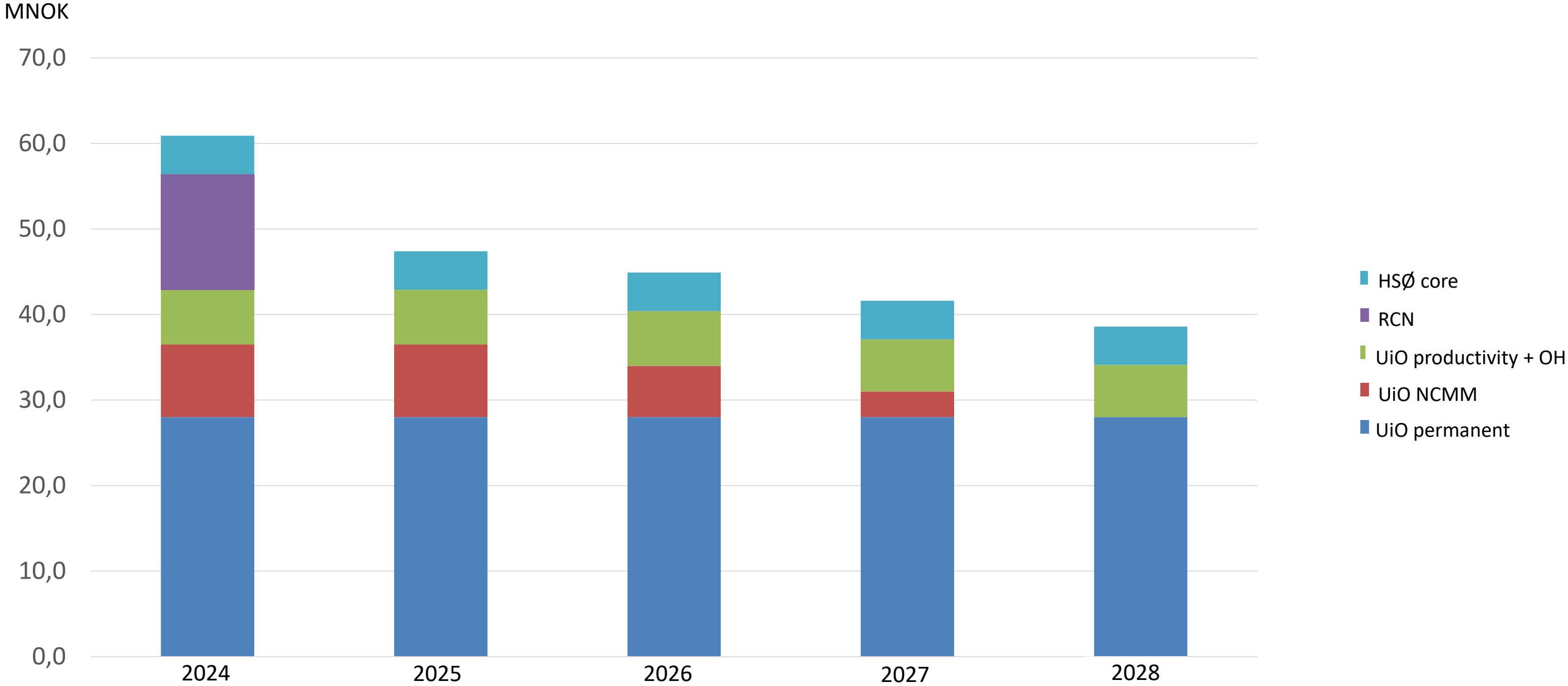


Marieke Kuijjer
Computational biology and systems medicine
-> Associate Professor at University of Helsinki



Sebastian Wazak
Computational oncology
-> Assistant Professor at École Polytechnique Fédérale de Lausanne (EPFL)

Core funding 2024-2028





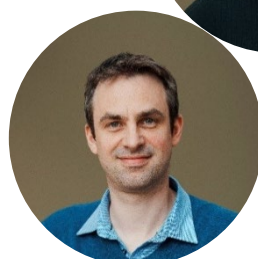
Funding highlights:



Charlotte Boccara
ERC Starting Grant



**Biswajyoti Sahu,
Marieke Kuijjer,
Anthony Mathelier**
Norwegian Cancer Society



**Emma Haapaniemi
Cecilia Fahlquist-Hagert**
Novo Nordisk Foundation



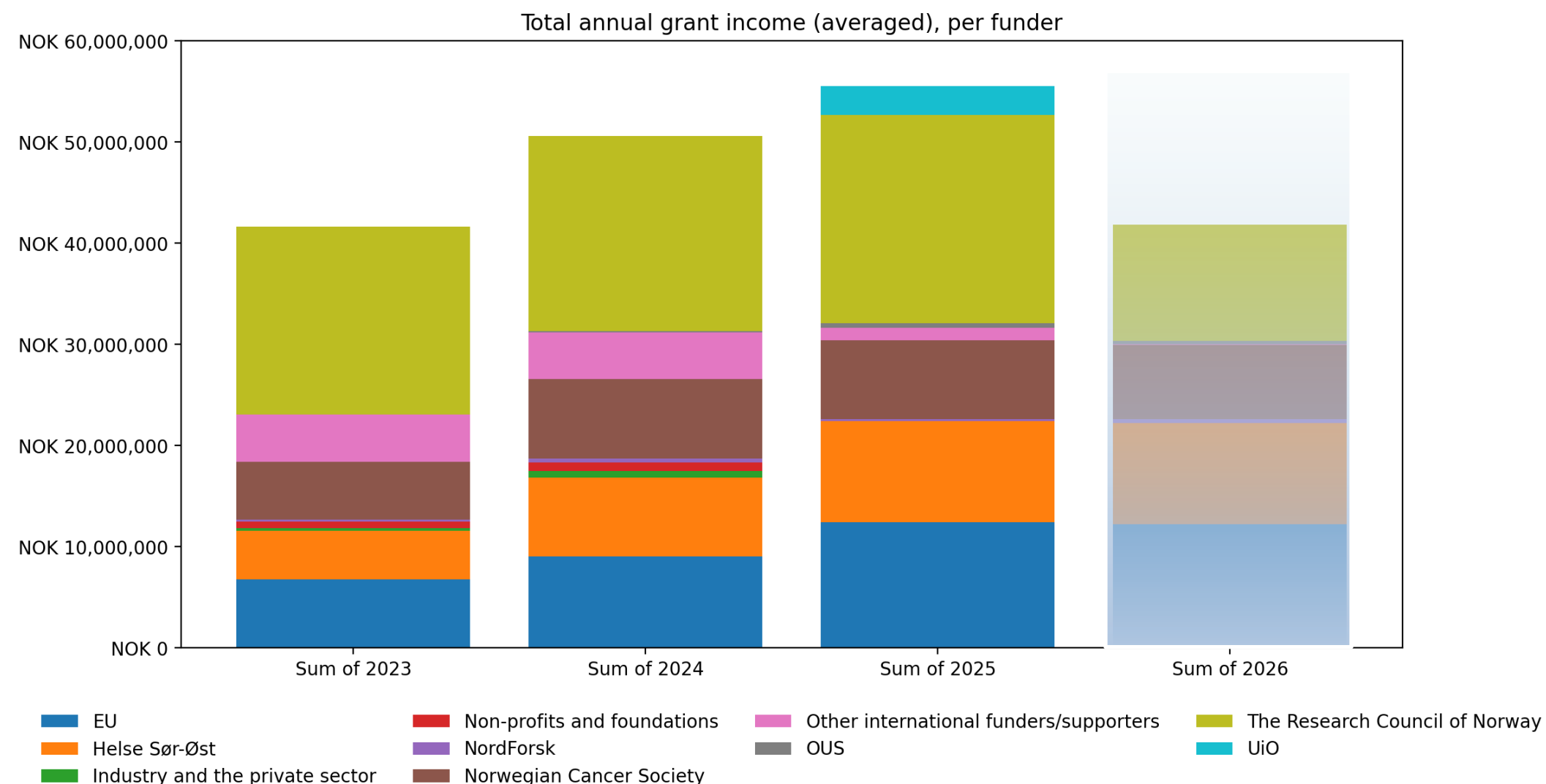
novo nordisk
foundation

New collaboration initiatives:



PRIMA
ATMP Norway
Realised
upcoming SFF applications

Competitive Funding 2023-2025

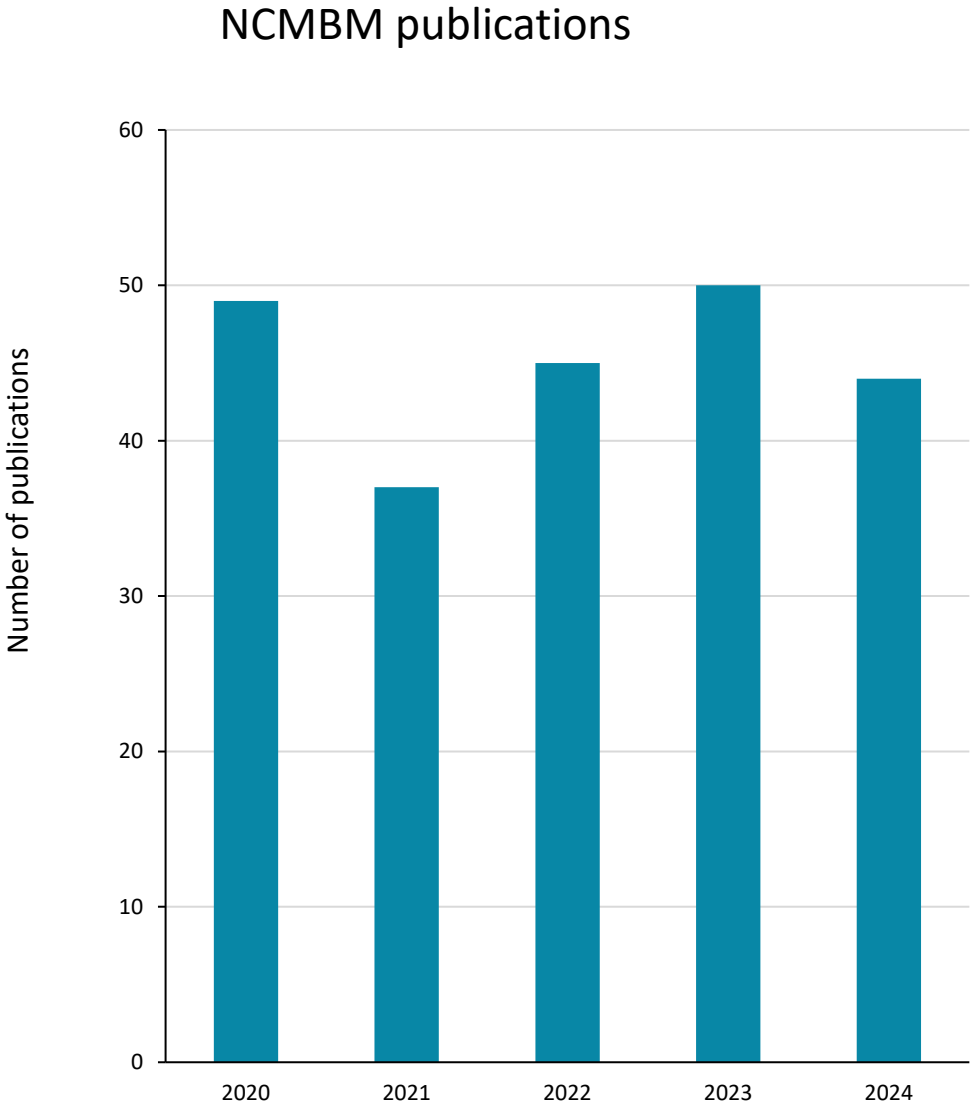


Prizes



Marieke Kuijjer
Winner of the Familien Blix
Fond prize for excellence within
cancer research

Publications



RESEARCH ARTICLE | NOVEMBER 29 2023

Global Transcriptome Analysis Reveals Distinct Phases of the Endothelial Response to TNF

Eike C. Struck; Tatiana Belova; Ping-Han Hsieh; Jacob O. Odeberg; Marieke L. Kuijjer; Philip J. Dusart; Lynn M. Butler

+ Author & Article Information

J Immunol (2024) 212 (1): 117–129.

JOURNAL ARTICLE

Identification of transcription factor co-binding patterns with non-negative matrix factorization

Ieva Rauluseviciute, Timothée Launay, Guido Barzaghi, Sarvesh Nikumbh, Boris Lenhard, Arnaud Regis Krebs, Jaime A Castro-Mondragon, Anthony Mathelier

Nucleic Acids Research, gkae743, <https://doi.org/10.1093/nar/gkae743>

Published: 01 September 2024 Article history

Article

Truncating *NFKB1* variants cause combined NLRP3 inflammasome activation and type I interferon signaling and predispose to necrotizing fasciitis

Katariina Nurmi, Kristiina Silventoinen, Salla Keskitalo, Kristiina Rajamäki, Vesa-Petteri Kouri, Matias Kinnunen, Sami Jalil, Rocío Maldonado, Kirmo Wartiovaara, Elma Inés Nievas, Silvana Paola Denita-Juárez, Christopher J.A. Duncan, Outi Kuismin, Janna Saarela, Inka Romo, Timi Martelius, Jukka Parantainen

Article

Single-cell epigenome analysis identifies molecular events controlling direct conversion of human fibroblasts to pancreatic ductal-like cells

Liangru Fei, Kaiyang Zhang, Nikita Poddar, Sampsa Hautaniemi, and Biswajyoti Sahu

Article

Population-level comparisons of gene regulatory networks modeled on high-throughput single-cell transcriptomics data

<https://doi.org/10.1038/s43588-024-00597-5>

Received: 2 March 2023 Daniel Osorio, Anna Capasso, S. Gail Eckhardt, Uma Giri, Alexander Somma, Todd M. Pitts, Christopher H. Lieu, Wells A. Messersmith, Stacey M. Bagby, Harinder Singh, Jishnu Das, Nidhi Sahni, S. Stephen Yi & Marieke L. Kuijjer

Accepted: 17 January 2024

Published online: 4 March 2024

Locus for severity implicates CNS resilience in progression of multiple sclerosis

International Multiple Sclerosis Genetics Consortium; MultipleMS Consortium

Collaborators + expand

PMID: 37380766 PMCID: PMC10602210 DOI: 10.1038/s41586-023-06250-x



Zebrafish – Aquatic Core Facility



Camila Esguerra
Head of Facility

High-Throughput Chemical Biology Screening Platform



Johannes Landskron
Head of Facility

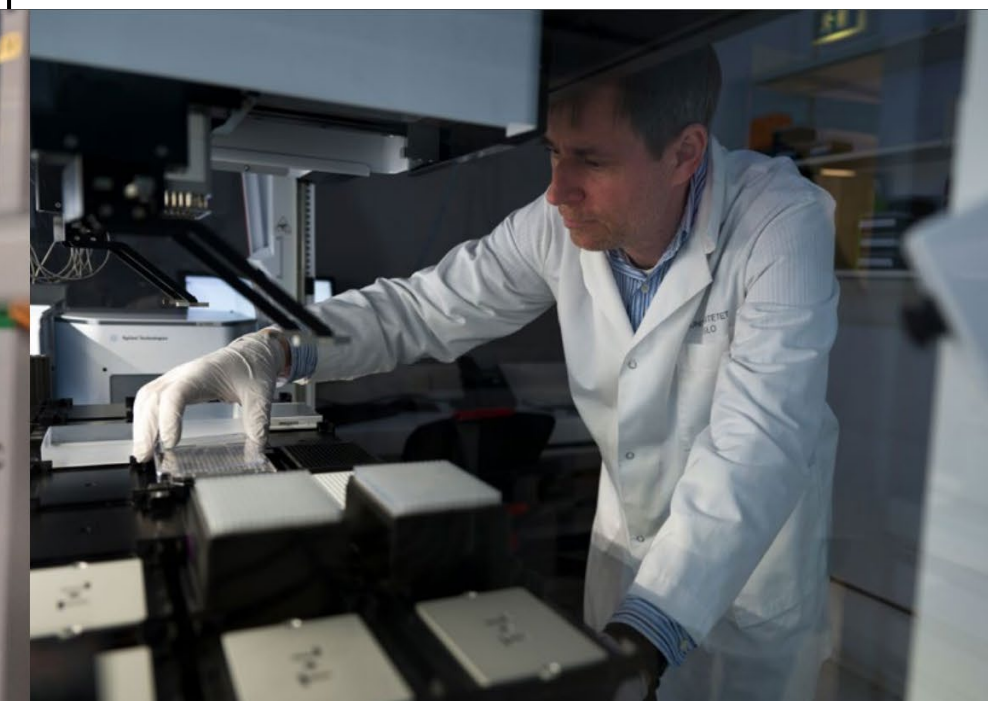
Core Facilities and National & European Infrastructures

NOR-openscreen 



Alexandra Gade
Tamjidmaa Khatanbaatar
Dalila Hedhili

Alejandro Pastor Remiro



eatris

European infrastructure
for translational medicine



Anita Kavlie
National Coordinator

Janna Saarela
National Director



Research & outreach



Outreach:

Patient engagement workshop
Nordic ATMP webinar series



Collaboration:

NCMBM Joint Post Doc Program
NORPOD program



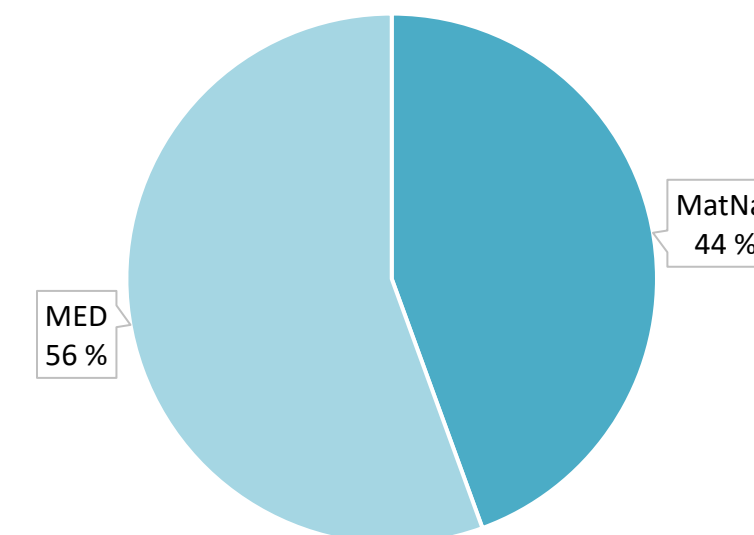
Strategy & community:

Employee journey
Trainee Committee
Engineers' working group



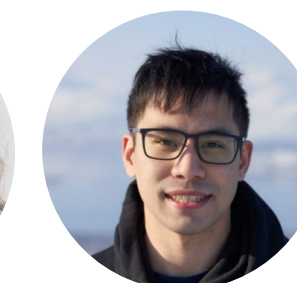
PhD students

Current PhD Students - NCMM



Headlines:

- 18 students engaged by NCMM
 - 8 registered at MatNat
 - 10 registered or in the process of registering at MED
- 4 students have successfully defended their thesis at NCMM in 2024.

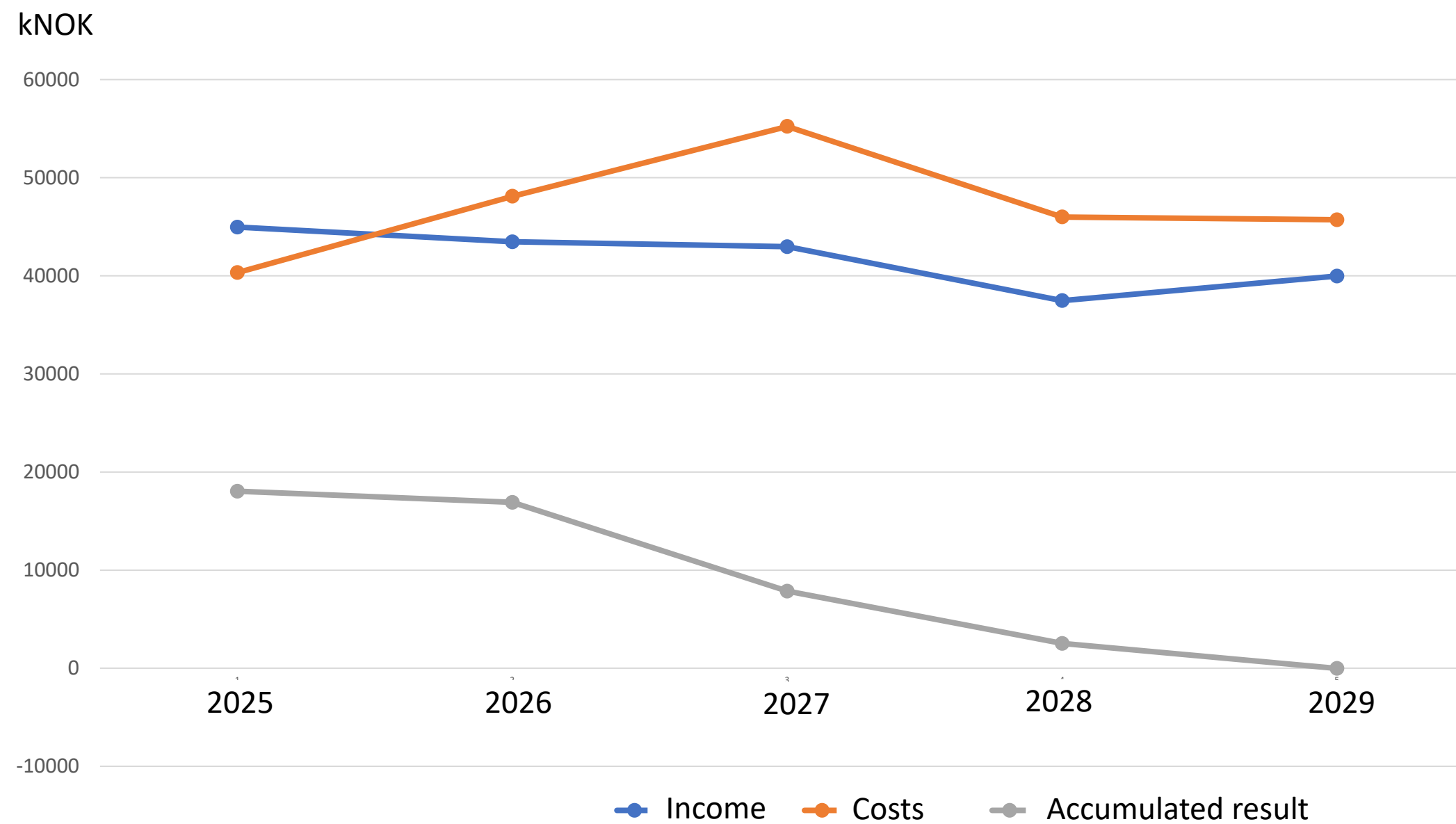




NCMBM

Norwegian Centre for Molecular Biosciences and Medicine
Nordic EMBL Partnership for Molecular Medicine

Long-term budget estimate





EVALMEDHELSE



EVALMEDHELSE FEEDBACK

Impact

- Highly organised and ambitious Centre.
- Strong Nordic EMBL collaboration.
- Excellent international research profile.
- Impactful contributions, raising Norway's profile.

Organisation and strategy

- Clear, well-aligned strategy
- Team-science approach.
- Strong collaborative spirit.
- Flexible and high-risk/high-gain.
- Robust mentoring and education.

Research quality

- Excellent scientific quality.
- High publication and funding record.
- Projects at the forefront of science.
- Translational collaborations of high quality.
- Generous group leader support.

Talent and diversity

- Effective early-career support.
- Attracts international talent.
- Strong gender balance (64% female)
- Extensive training and mentoring.
- Diversity is excellent for the model.

Infra and open science

- Excellent facilities and personnel support.
- Active in national and international infrastructures.
- Strong collaborative networks.
- Formalised open science strategy.
- Increasing OA publications.



EVALMEDHELSE RECOMMENDATIONS

ENSURE CRITICAL MASS

Achieving critical mass is essential for NCMBM to remain attractive to top global talent, sustain the EMBL model, and deliver collaborative, high-impact science for Norway

SECURE SENIOR PRESENCE

Senior presence provides leadership, mentoring, and continuity — essential to retain talent and strengthen Norway's competitiveness.

LEVERAGE EMBL AS A NATIONAL RESOURCE

As a bridge between the Norwegian research community and EMBL, the Centre drives collaboration, training, and visibility, turning international connections into a national asset.

About NCMBM

STRATEGY

We advance molecular biosciences and medicine to bridge the gap between basic research, translational science, and clinical applications — with an emphasis on rare diseases, cancer, and neurology.



NCMBM Annual competitive funding per funder

