

May 2025

DIRECTORS COMMENTS

Dear all

We are excited to share the latest updates and achievements at Neuro-SysMed. Our research teams have made considerable progress, with several notable publications recently covering topics related to the diseases at our centre.

We are also pleased to report substantial advancements in our clinical trials. The N-DOSE, N-DOSE AD, OVERLORD-MS, SMART-MS, and NO-PARK trials are all scheduled to conclude in 2025, with data analysis either ongoing or about to commence, while the NO-ALS trial is nearing the completion of recruitment. The NORSEMAN trial is progressing well, with an increasing number of centres actively enrolling patients, and the NADAPT trial is gradually expanding into more centres across Norway, steadily enhancing its recruitment rate.

In addition, we have launched several new initiatives, including the NADream study, which explores the physiological effects of NAD-augmentation on human sleep. Our research on prodromal α-synucleino-pathies, identified by isolated REM Sleep Behaviour Disorder (iRBD), is also underway, focusing on the prodromal phase and potentially delaying or preventing conversion to Parkinson's disease or dementia. At the same time, we are preparing to initiate a large Phase 2 efficacy trial of NAD-augmentation therapy for Alzheimer's disease, supported by KLINBEFORSK. The TAF-1 study, which aims to influence chronic EBV infection, has completed recruitment, and we expect results in September. The TAF-2 trial, designed to reduce chronic inflammation in MS, has been submitted for approval, and we anticipate starting recruitment this coming fall.

We are grateful for the generous funding we have received from various agencies, which allows us to continue our groundbreaking research and advance our mission to improve treatments for neurological diseases.

Our participation in events such as Nevrodagene and the AD/PD conference has provided valuable opportunities for knowledge exchange and collaboration. We take pride in our researchers who have received recognition for their outstanding contributions, including awards for best poster presentations.

Thank you to all our partners, collaborators, and team members for your dedication and enthusiasm. Your contributions are invaluable to our mission of making a difference in the field of neuroscience.

Warm regards,

Charalampos Tzoulis & Kjell-Morten Myhr





ANNUAL SYMPOSIUM

You can already now register for Neuro-SysMed's 3rd Annual Symposium, which this year will be November 18-19, also this time at the historic Solstrand Hotel outside of Bergen. Save the date!

We will prepare a varied program that highlights key research areas at Neuro-SysMed, focusing on dementia, ALS, Parkinson's disease, and multiple sclerosis. The program will feature international speakers who are renowned experts in their fields, as well as updates on Neuro-SysMed's research.

We will make room in the program for talks based on submission of abstracts, available for both senior and junior researchers. If you wish to do a talk, please click the appropriate boxes in the registration form. A committee will then consider your proposal. Poster submissions are also welcome.

When: November 18-19, 2025

Where: Solstrand Hotel & Bad at Os, close to Bergen

Registration: please use this link

Program: Will be available at a later point on this page

Besides being the Neuro-SysMed event of the year, the annual symposium is part of the course NEUROSYSM920 - Neuro-SysMed Seminars and Symposium, at the Neuro-SysMed Research School for Translational Neuroscience.



ANNUAL REPORT 2024



THE 2024 ANNUAL REPORT IS NOW AVAILABLE

Make sure you don't miss the Neuro-SysMed Annual Report 2024, with lots of information on our research, organization, activities and people.

The report provides an excellent picture of all research and activities at Neuro-SysMed last year.

You can find it <u>online for downloading on this</u> <u>webpage</u>, or you can drop in on our office to get a printed copy in the end of April.

RECENT PUBLICATIONS

Recent publications from 2025

Mitochondrial complex I deficiency occurs in skeletal muscle of a subgroup of individuals with Parkinson's disease. **Kverneng SU et al.** Commun Med (Lond). 2025 Apr 27;5(1):141. doi: 10.1038/s43856-025-00817-7. PMID: 40289204

NAD augmentation as a disease-modifying strategy for neurodegeneration. Dölle C, Tzoulis C. Trends Endocrinol Metab. 2025 Apr 25:S1043-2760(25)00070-0. doi: 10.1016/j. tem.2025.03.013. PMID: 40287324. Review.

Early extended interval dosing of rituximab in multiple sclerosis: A comparative cohort study on efficacy and safety. Fossum MT, Torgauten HM, Aarseth JH, Shirzadi M, Wergeland S, Myhr KM, Bø L, Torkildsen Ø, Wesnes K. *Mult Scler Relat Disord*. 2025 Mar 21;97:106400. doi: 10.1016/j.msard.2025.106400. Online ahead of print. PMID: 40157038.

Association of UNC13A with increased amyotrophic lateral sclerosis risk, bulbar onset, and lower motor neuron involvement in a Norwegian ALS cohort. Novy C, Tysnes OB, Busk ØL, Jaioun K, Holmøy T, Holla ØL, Høyer H. Amyotroph Lateral Scler Frontotemporal Degener. 2024 Dec 30:1-7. doi: 10.1080/21678421.2024.2447922. Online ahead of print. PMID: 40135631.

Chromogen-based double immunohistochemical detection of mitochondrial respiratory chain deficiencies in human brain tissue. Bjerknes TL, Rubiolo A, Shadad O, Tysnes OB, Tzoulis C. Acta Neuropathol Commun. 2025 Mar 20;13(1):63. doi: 10.1186/s40478-025-01980-7. PMID: 40114250.

Structural recognition and stabilization of tyrosine hydroxylase by the J-domain protein DNAJC12. Tai MDS, Ochoa L, Flydal MI, Velasco-Carneros L, Muntaner J, Santiago C, Gamiz-Arco G, Moro F, Jung-Kc K, Gil-Cantero D, Marcilla M, Kallio JP, Muga A, Valpuesta JM, Cuéllar J, Martinez A. Nat Commun. 2025 Mar 20;16(1):2755. doi: 10.1038/s41467-025-57733-6. PMID: 40113792.

Relationship of cognitive decline with glucocerebrosidase activity and amyloid-beta 42 in DLB and PD. Gonzalez MC, Oftedal L, Lange J, Tovar-Rios DA, Tysnes OB, Paquet C, Marquié M, Boada M, Alcolea D, Rejdak K, Papuc E, Hort J, Falup-Pecurariu C, Aarsland D, Alves G, Maple-Grødem J. Ann Clin Transl Neurol. 2025 Mar 6. doi: 10.1002/acn3.52295. Online ahead of print. PMID: 40051075.

Burden and care time for dementia caregivers in the LIVE@ Home.Path trial. **Berge LI et al.** Alzheimers Dement. 2025 Mar;21(3):e14622. doi: 10.1002/alz.14622. PMID: 40042468. Clinical Trial.

Cross-evaluation of wearable data for use in Parkinson's disease research: a free-living observational study on Empatica E4, Fitbit Sense, and Oura. Reithe H, Marty B, Torrado JC, Førsund E, Husebo BS, Erdal A, Kverneng SU, Sheard E, Tzoulis C, Patrascu M. Biomed Eng Online. 2025 Feb 21;24(1):22. doi: 10.1186/s12938-025-01353-0. PMID: 39985029.

Polygenic scores for disease risk are not associated with clinical outcomes in Parkinson's disease. Tan MM, Iwaki H, Bandres-Ciga S, Sosero Y, Shoai M, Brockmann K, Williams NM, Alcalay RN, Maple-Grødem J, Alves G, Tysnes OB, Auinger P, Eberly S, Heutink P, Simon DK, Kieburtz K, Hardy J, Williams-Gray CH, Grosset DG, Corvol JC, Gan-Or Z, Toft M, Pihlstrøm L. medRxiv. 2025 Feb 3:2025.01.31.25321395.doi:10.1101/2025.01.31.25321395. PMID: 39974079. Preprint.

Activity and Behavioral Recognition Using Sensing Technology in Persons with Parkinson's Disease or Dementia: An Umbrella Review of the Literature. Boyle LD, Giriteka L, Marty B, Sandgathe L, Haugarvoll K, Steihaug OM, Husebo BS, Patrascu M. Sensors (Basel). 2025 Jan 23;25(3):668. doi: 10.3390/s25030668. PMID: 39943307. Review.

A multi-country cohort database study to assess pregnancy and infant outcomes after potential maternal or paternal exposure to cladribine tablets in the treatment of multiple sclerosis: the CLEAR study methods and status update. Hellwig K, Magyari M, MacDonald TM, Cesta CE, Wergeland S, Leinonen MK, Ornoy A, Vukusic S, Lauer A, Zhou X, Kawai A, Weinrib R, Arana A, Boumenna T. Ther Adv Neurol Disord. 2025 Jan 27;18:17562864241310996. doi: 10.1177/17562864241310996. eCollection 2025. PMID: 39872126.

Selecting a smartwatch for trials involving older adults with neurodegenerative diseases: A researcher's framework to avoid hidden pitfalls. Boyle LD, Marty B, Haugarvoll K, Steihaug OM, Patrascu M, Husebo BS. *J Biomed Inform.* 2025 Feb;162:104781. doi: 10.1016/j.jbi.2025.104781. Epub 2025 Jan 27. PMID: 39864718.

Autologous haematopoietic stem cell transplantation for treatment of multiple sclerosis and neuromyelitis optica spectrum disorder - recommendations from ECTRIMS and the EBMT. Muraro PA et al. Nat Rev Neurol. 2025 Mar;21(3):140-158. doi: 10.1038/s41582-024-01050-x. Epub 2025 Jan 15. PMID: 39814869. Review.

Digital phenotyping from heart rate dynamics: Identification of zero-poles models with data-driven evolutionary learning. Patrascu A, Ion A, Vislapuu M, Husebo BS, Tache IA, Reithe H, Patrascu M. Comput Biol Med. 2025 Mar;186:109596. doi: 10.1016/j. compbiomed.2024.109596. Epub 2024 Dec 27. PMID: 39731924.

Effect of alemtuzumab on fatigue, quality of life, and

patient/caregiver-reported outcomes in relapsing-remitting multiple sclerosis-A real-world evidence study. Frederiksen JL, Massacesi L, Nielsen HH, Rini A, Baldi E, Mirabella M, Antonella FFM, Lus G, Paolicelli D, Kant M, Salemi G, Aguglia U, Comi C, De Riz M, Barcella V, Flemmen HØ, Protti A, Farbu E, van Exel J, Torkildsen Ø. Mult Scler Relat Disord. 2025 Jan;93:106214. doi: 10.1016/j.msard.2024.106214. Epub 2024 Dec 3. PMID: 39642455.

Amyotrophic lateral sclerosis caused by the C9orf72 expansion in Norway - prevalence, ancestry, clinical characteristics and sociodemographic status. Olsen CG et al. Amyotroph Lateral Scler Frontotemporal Degener. 2025 Feb;26(1-2):132-140. doi: 10.1080/21678421.2024.2405118. Epub 2024 Sep 24. PMID: 39316038.

Brain Proteome Profiling Reveals Common and Divergent Signatures in Parkinson's Disease, Multiple System Atrophy, and Progressive Supranuclear Palsy. Dick F, Johanson GAS, Tysnes OB, Alves G, Dölle C, Tzoulis C. Mol Neurobiol. 2025 Mar;62(3):2801-2816. doi: 10.1007/s12035-024-04422-y. Epub 2024 Aug 21. PMID: 39164482.

OTHER NEWS: Research highlights

Short updates from some of our clinical studies

- NO-ALS: Has completed recruitment this year!
- SMART-MS, OVERLORD-MS and NO-PARK: The clinical trials are completed, and data will be analysed over the summer or early autumn. Results are expected before the year is over!
- NORSEMAN: Six Centres have started patient inclusion and a total of 65 patients have been included to date.
- TAF-MS1 is fully recruited with 50 patients!
- <u>TAF-MS2</u>: The protocol has been finalized and is ready for CTIS.
- RAM-MS is fully recruited with 97 participants!





The N-DOSE AD trial is fully recruited

The N-DOSE AD trial, which aims to determine the optimal biological dose of nicotinamide riboside in Alzheimer's disease reached its target inclusion of 80 participants by the 14th of March. The last study visit will be conducted in early June this year.

"We are very grateful to all participants, both the patients themselves, as well as their study partners - and also of our very effective study team" says investigators Kristoffer Haugarvoll (PI) and Ragnhild Eide Skogseth (local PI at Haraldsplass Deconess Hospital).

NADream recruitment

A new clinical trial, coordinated by Prof. Janne Grønli and Dr. Katarina Lundervold, is recruiting healthy adults to explore whether nicotinamide riboside (NR) can improve sleep.

The <u>NADream study</u> will consist of taking the supplement or placebo for 8 weeks, followed by sleep assessments, questionnaires and blood tests.

If you would like to learn more about NADream, please contact Katarina Lundervold.



Updates on our new platform trials for Parkinson's disease: SLEIPNIR and HYDRA

Professor Tzoulis is the head of two exciting multi-arm, multi-stage (MAMS) trial initiatives: SLEIPNIR (led by Dr Irene Flønes) and HYDRA (led by Dr. Geir Olve Skeie).

SLEIPNIR is an innovative platform that aims to accelerate the discovery of DMTs by testing several treatments simultaneously, but independently of each other, against a single placebo group, to assess whether interventions are engaging their intended target in the human brain.

HYDRA is, like SLEIPNIR, a platform trial that will test rounds of treatments against a single placebo, the difference being that only interventions that successfully showed target engagement and penetration will be included in HYDRA.

In November 2024, the world's leading research communities gathered in London to establish a collaboration between the five major multi-arm, multi-stage (MAMS) trial initiatives for Parkinson's disease worldwide. We are proud to say that SLEIPNIR and HYDRA are part of this important global alliance.





Studies recruiting participants with Isolated REM Sleep Behavior Disorder across Norway

Did you know that isolated REM Sleep Behavior Disorder (iRBD) can be an early indicator of α-synucleinopathies, including Parkinson's disease (PD), dementia with Lewy bodies (DLB), and multiple system atrophy (MSA)? This gives us an opportunity to delay or prevent the onset of PD and related diseases. On average, iRBD can precede clinical diagnosis by up to 15 years. iRBD affects ~1% in the population >50-60 years, translating to at least ~14,000 individuals in Norway. Because of the long window before diagnosis, high predictive value, and relatively mild symptoms early on, people with iRBD are now considered ideal candidates for neuroprotective clinical trials - that is, studies aimed at delaying or preventing the onset of PD and related diseases. Read the full story here.

Neuro-SysMed currently has two clinical studies recruiting participants:

- NAD-RBD: A Randomised Double-blind Trial of NAD Replenishment Therapy to Prevent α-Synucleinopathies
- NOR-RBD: A Longitudinal Cohort and Clinical Trial Platform for Prodromal α-Synucleinopathies

Main paper in the LIVE@Home.Path trial now published

The Care Node is happy to announce that the main paper of the LIVE@Home.Path trial, "Burden and care time for dementia caregivers in the LIVE@Home. Path trial," has been published in the dementia journal Alzheimers & Dementia. The trial included 280 days of home-dwelling persons with dementia and their caregivers in a stepped wedge design and provided them with the multicomponent LIVE interventions encompassing Learning, Innovation, Volunteer services and Empowerment, and this intervention was delivered by a municipal coordinator.

This intervention had no effect on the trial's primary endpoint, resource utilization of the caregiver burden, yet the team found that that the caregivers reported clinical global impression of change improved over the trial, in particular related to the coordinator.

The team suggests that these results should be acknowledged when designing future health care services to families affected by dementia.



News from the DIPH.DEM study

The Care Node is excited to announce two new publications from our DIPH.DEM team!

The first publication provides researchers with a new framework for selection of a smartwatch for trials involving people with neurodegenerative disorders:

Boyle LD et al: <u>Selecting a smartwatch for trials involving</u> older adults with neurodegenerative diseases: A researcher's framework to avoid hidden pitfalls.

The second offers a synthesis of current literature about the use of human activity and behavioral recognition for people with Parkinson's disease or dementia: Boyle, LD et al: Activity and Behavioral Recognition Using Sensing Technology in Persons with Parkinson's Disease or Dementia: An Umbrella Review of the Literature.

Further results from the DIPH.DEM study are expected later this year!



Evaluating the utility of three popular wearable devices in the DIGI.PARK study

The Care Node recently <u>published an article</u> where they evaluated the utility of three popular wearable devices, Empatica E4, Fitbit Sense, and Oura ring, in PD research.

Over a two-week period, the **DIGI.PARK** team collected data from 13 participants with PD and 15 controls. They focused on heart rate and movement data, comparing data between devices and with self-reported diaries. Their findings revealed large variations in data and device characteristics, and weak cross-correlation between devices. They found that none of the devices were deemed optimal for PD research, and wearable devices with similar sensors are not always interchangeable. All devices provided data for tracking behavioral patterns over time. However, only the Empatica E4 provided high quality data necessary for detecting symptoms, whereas the Fitbit Sense and Oura possessed necessary user-friendly characteristics for long term use. The study contributes to ongoing efforts to help the PD community make better decisions when planning the use of wearable technology in research and clinical settings.



Funding

Neuro-SysMed Receives Over 67 million NOK in Research Funding

Neuro-SysMed has recently secured significant funding from multiple agencies to support the centres research projects:

PI Kristoffer Haugarvoll and the Dementia Node

were awarded 25 million NOK from the National Program for Clinical Treatment Research (KLINBEFORSK) for a double-blind trial on a new treatment for Alzheimer's disease. Read the full story Funding for large Alzheimer's trial testing vitamin B3.



Photo by Eivind Senneset

Charalampos Tzoulis, Co-Director at Neuro-SysMed and the Parkinson's Node

received 5 million NOK from the Norwegian Parkinson Association to support the HYDRA research project. This marked a milestone for the association, as it had never donated such a large sum before. HYDRA is a multi-arm, multi-stage (MAMS) trial platform designed to continuously test new treatments and has great potential to accelerate breakthroughs in Parkinson's disease.

Senior Researcher Irene Flønes

secured strategic project support from Helse Vest under the "New Therapy Forms" initiative, receiving 20 million NOK over 5 years for the HYDRA project.



The project "NADage - Boosting NAD metabolism to prevent pathological brain aging"

is now fully funded thanks to funding from the Dam Foundation and from the ERA4Health program. The study, led by Prof. Tzoulis and coordinated by Katarina Lundervold, will investigate the effects of NAD supplementation in elderly people with frailty.

From the Parkinson's Foundation

The <u>DECODE-PD group</u>/PD Node secured funds from the Norwegian Parkinson's Foundation for Dr. Irene Flønes, Dr. Gonzalo Nido, Dr. Christian Dölle, Dr. Svein Støve and Prof. Charalampos Tzoulis.





Kjell-Morten Myhr, Director of Neuro-SysMed, and the MS Node

were granted 3.6 million NOK from the Kjell Almes Fund for multiple sclerosis research in the Bergen MS Research Group.

The Horizon Europe project "EBV-MS"

was awarded an additional 5,5 million NOK from the Horizon Europe Work programme WIDERA to add a new partner from Cyprus to strengthen their genetics and AI work.



Ole-Bjørn Tysnes, PI for the ALS Research Node

was awarded NOK 225,000 from Sparebanken Vest to support his ALS research. Additionally, he received NOK 60,000 as part of the Monrad Krohn Prize 2025, recognizing his significant contributions to the field of neurology.



Dimitrios Kleftogiannis, Co-Leader for the Systems Biology & Bioinformatics Node

secured 3.4 million NOK over three years for the project "Assisting Personalized Treatment Decisions in Multiple Sclerosis Using Data-driven Immunological Signatures."



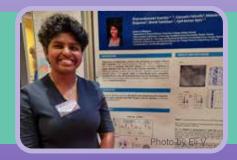
Professors Øivind Torkildsen and Kjell-Morten Myhr

received 10 million NOK over three years for the projects "Long-term Efficacy and Safety of B-cell Therapy in MS" and "Antiviral Therapy in MS (TAF-MS2" (5 MNOK for each).



Postdoctoral fellow Sam Anandhan

was granted 75,000 NOK from the Oddfellows Research Fund for her postdoctoral project titled "Brain-derived blood extracellular vesicles – a potential for new biomarkers in MS".



In addition, individual PhDs and postdocs have received new and renewed funding for their projects. This funding will significantly strengthen Neuro-SysMed's ability to advance clinical research, paving the way for improved treatments for neurological diseases. This achievement highlights the dedication and excellence of our researchers, and we look forward to the impactful discoveries this funding will help bring to life. Congratulations to all! You can read more here.

Other Centre updates

German Mass Cytometry User Forum and Best Poster Presentation

From February 11th to 12th, members of the MS group attended the 8th German Mass Cytometry User Forum (GMCUF) 2025 in Jena, Germany. Sonia Gavasso was invited as a guest speaker and presented on "Immune Signature Changes in the Blood of MS Patients Undergoing aHSCT." Additionally, Jonas Haugsøen delivered a short talk titled "Immune Reconstitution After Hematopoietic Stem Cell Transplantation in Multiple Sclerosis." Both presentations highlighted their exciting findings from the RAM-MS study.

A key highlight of the event was PhD candidate Yola Gerking receiving the award for Best Poster Presentation. Her poster, titled "Immune Profiling and Microglial Dynamics in Multiple Sclerosis Using Imaging Mass Cytometry," garnered well-deserved recognition. Congratulations to Yola Gerking!



The AD/PD Conference

Anna Rubiolo, Gard Johanson and Peder Lillebostad from the PD Node joined the AD/PD conference in Vienna, April 1-5, and presented posters on their projects. Anna presented "Complex I Deficiency POLG and Parkinson's disease: differential involvement of MTDNA defects". Gard's poster was entitled "Investigating mitochondrial dysfunction in progressive supranuclear palsy," and Peder presented the poster "Towards generalizing image segmentation" on neuromelanin-sensitive MRI across sites". The conference provided the opportunity to meet and hear what leading international experts are working on and to discuss the latest findings in Alzheimer's disease, PD and other neurodegenerative disorders. In addition to presenting a poster at the meeting, Gard Johanson, and Ragnhild Eide Skogseth (co-leader of the Dementia Node) participated in a panel discussion between clinicians and the health care industry, an event that took place at the Norwegian Embassy Residence in Vienna on April 2nd. The purpose of the discussion was to promote Norway as a trial country and strengthen collaborations between industry and the Norwegian health care system.



Nevrodagene 2025

The Nevrodagene (Neuro Days) event is this year's major professional and social meeting point for Norwegian neurologists and was held from March 11th to 13th. Some of our members from the MS Node participated and gave talks during the event. Max Korbmacher gave a presentation titled: "Aging with Multiple Sclerosis: A 12-Year Follow-Up Study," and Jonas Haugsøen gave a presentation titled: "Immune Reconstitution After HSCT in MS." Professors Øivind Torkildsen and Charalampos Tzoulis presented updates on MS and PD research and therapy.



REACH program

Prof. Charalampos Tzoulis, Dr. Yamila Torres Cleuren and Dr. Christian Dölle were selected to take part of the REACH program, organized by Nordic Innovation House in Silicon Valley. This prestigious program is part of Innovation Norway and their participation is being covered by the Norwegian Research Council.





60th NBS contact meeting at Røros

In January, Neuro-SysMed researchers **Svein Isungset Støve** and **Kunwar Jung KC** attended the 60th NBS contact meeting at Røros. They presented the posters "Screening Approved Drugs to Restore Mitochondrial Function in Parkinson's Disease" (Svein) and "Innovative Strategies to Treat Parkinson's Disease: Addressing Complex I Deficiency to Alter Disease Course" (Kunwar).

Kunwar Jung KC won the poster award for the best poster with a cash prize of NOK 5000. Congratulations!

SFI Centre proposals to round 2

The PD and Care Nodes advanced to the second round in the application process for a Centre of Excellence in Innovation (SFI). The Research Council of Norway runs the SFI scheme to develop expertise that is important for innovation and value creation in Norway. The view is that longterm research in close cooperation between R&D active companies and prominent research groups will strengthen technology transfer, internationalisation and researcher training. The centres are established for a maximum period of eight years. The centres are co-financed by enterprises, host institutions and the Research Council.

Professor Charalampos Tzoulis and his team, along with partners, applied for the SFI "ICoN: Innovation Center for Neuroresilience."

Professor Bettina Husebø with her team submitted the <u>BetterAge project</u>, proposing a new model of living with lifestyle dynamics that empower independent living for older adults throughout the rest of their lives.

This means that two of the three applications from UiB that advanced were from the Neuro-SysMed environment. Both nodes are now focused on preparing for the Phase II proposal, due June 4th.







Prof. Aurora Martinez Shares Insights at HFSP Scientific Symposium

On March 17, Professor Aurora Martinez presented at the Human Frontier Science Program (HFSP) Scientific Symposium in Singapore. Esteemed scientists from around the world gathered at this engaging event, hosted by HFSP and A*STAR - the Agency for Science, Technology and Research in Singapore. Experts in immunology, virology, cancer research, and cellular biology shared groundbreaking insights into the mechanisms that influence health and disease. We are proud to note that Aurora was among the distinguished speakers at this symposium.

Prizes at the Research School's poster presentations

On February 29th and 30th, the 19th annual research presentations took place for participants in the Research School in Clinical Medicine. Among the award winners were two of Neuro-SysMed's young researchers.

Congratulations to **Gonzalo Nido** with the postdoc prize for oral presentations, and **Brit Ellen Rød** with the 2nd prize for poster!



Photo by Atle Halvorsen





Change in leadership of the DRONE group in the Drug Discovery Node

Congratulations to **Trond Riise** with his <u>70th birthdayJanuary21</u>!Trond Riise retired January 31st, although he will still be contributing with his expertise to the group.

New leader of the DRONE group is Associate Professor **Jannicke Igland**. She is a statistician with long experience from registry-based epidemiology, including pharma-coepidemiology. She has been part of the DRONE group from the start.

UPCOMING NEURO-SYSMED EVENTS

These - and later events - can be found in the Neuro-SysMed calendar.



SEMINAR ON DRUG SCREENING

Welcome to Neuro-SysMed's monthly seminars! Topic this time is *Screening and development of drugs for neurological targets*, by speakers **Aurora Martinez** and **Gloria Gamiz**. Join us in the auditorium in Armauer Hansens Hus at 11:30–13:00 (lunch at 11:30–12:00).



Place: the auditorium in Armauer Hansen Hus Time: Wed. May 21 at 11:30–13:00 (incl. lunch).

Registration: through this link **Abstract:** is available here

JUNIOR SCIENTIST SYMPOSIUM

Explore new frontiers with the young Neuro-SysMed researchers in this excellent arena to obtain valuable skills in presentation techniques, engage in scientific discussions and take advantage of peer reviews and comments. Learn about current research within MS, PD, dementia and ALS! Senior researchers are also welcome. Lunch is included.



BB building

Registration: via this link.
More info: is available

here







SEMINAR ON NAD AUGMENTATION

Welcome to Neuro-SysMed's monthly seminars! Topic this time will concern all Neuro-SysMed's disease fields, titled *NAD Augmentation as a Disease Modifying Strategy for Neurological Diseases*, with speaker **Charalampos Tzoulis**. Join us in the auditorium in Armauer Hansens Hus at 11:30–13:00 (lunch at 11:30–12:00).

Place: the auditorium in Armauer Hansen Hus Time: Wed. June 4, 2025 at 11:30–13:00 (incl. lunch).

Registration: Register through this link

Abstract: will be available here



NEURO-SYSMED ANNUAL SYMPOSIUM

Save the date for the 2025 Annual Symposium! We will prepare a varied program that highlights key research areas at Neuro-SysMed, focusing on dementia, ALS, Parkinson's disease, and multiple sclerosis (MS). The program will feature international speakers who are renowned experts in their fields, as well as updates on Neuro-SysMed's research.

Students and junior researchers: Start planning a poster now! Perhaps you also would like to submit proposal for a talk in the main program? You can, as we will make room in the program for talks based on submission of abstracts, available for both senior and junior researchers.

Place: Solstrand Hotel & Bad, Os outside of Bergen

Time: Nov. 18 & 19, 2025

Registration: through this link

Program: will be available at a later point





NEW FACES & POSITIONS IN THE NEURO-SYSMED GROUPS



Agnete S. T. Engelsen joined us May 1st 2025, taking over Nina Torkildsen's former tasks as coordinator of the Neuro-SysMed Research School. She holds a Cand. Scient. in Cell and developmental biology, and a PhD in Biomedicine. Engelsen did her postdoctoral training exploring the Impact of cellular epithelial plasticity programs on the anti-tumor response. In 2017-2020 she continued as a Marie Skłodowska-Curie Actions (MSCA) fellow at the Gustave Roussy Cancer Center in Paris, France. Since 2022, Engelsen has been an associate PI of CCBIO's Team 2: Discovery and validation of cancer biomarkers, and in 2023-2025 head of CCBIO's Research School for Cancer Studies.



Marine Brognaux is an internship student from Belgium who works on a specific protein modification in the central nervous system of PD.



Andrea Gremes, from Italy, is working as a research assistant in the PD Node, focusing on single cell transcriptomics in a PD mouse model.



Julia Nienhuis is an internship student recently arrived from The Netherlands. She will investigate PD pathology in skeletal muscle and skin biopsies.



Ingrid Revheim is a Clinical Nutritionist who defended her PhD thesis in December 2024 and has joined the dementia group as a post-doctoral researcher. She will explore the effect of mechanisms associated with nutrition and inflammation and impact on the relationship between general health as reflected by the frailty concept and cognitive decline.



Sina-Isabel Warz is a clinical dietician and currently a PhD candidate at the Center for Nutrition at UIB, in Prof. Jutta Dierkes's group. Her project is a collaboration between the Center for Nutrition and Neuro-SysMed. The research focuses on dietary factors, especially niacin and tryptophan intake, nutritional biomarkers, and metabolomics in the risk of Parkinson's disease (PD).

RECENT NEURO-SYSMED NEWS STORIES

NRK, April 11, 2025. <u>Tango med Parkinson</u>. Geir Olve Skeie.



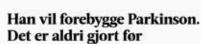


LMI, April 4, 2025. <u>Alzheimers og</u> <u>Parkinsons sykdom: Biomarkører og</u> <u>innovasjoner gir håp</u>. Ragnhild Eide Skogseth, Gard Aasmund Skulstad



Adresseavisen, April 2, 2025. <u>Han vil forebygge Parkinson. Det er aldri gjort før.</u> Charalampos Tzoulis. Also in Bergens Tidende April 1, 2025.

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Podcast Helsesjekken, BA, April 2, 2025. <u>Hvordan holde aldersforfallet unna.</u> Charalampos Tzoulis.



Dagens Medisin, March 27, 2025. Fra MSrevolusjonen til Alzheimer: En ny æra for behandling. Kjell-Morten Myhr, Øivind Torkildsen.



Fra MS-revolusjonen til Alzheimer: En ny æra for behandling

Vi mener at striklingen mann MS (lisstreen viktigheten av fidlig og effersie behandling, og a Altheimersleiket kan stil sverfor en liknende revolusjon som MS (eftet stof for 20 år siden.

Frambu.no, March 11, 2025. <u>Rapport fra kurs om mitokondriesykdom.</u> Kristin Varhaug.

Firdaposten March 2, 2025. For 30 år sidan fanst det inga behandling for sjukdomen Sara Louise fekk som 17-åring. Kjell-Morten Myhr. Also in Haugesunds Avis February 24, 2025, and in Bergensavisen

February 25, 2025.



For 30 år sidan fanst det inga behandling for sjukdomen Sara Louise fekk som 17åring

Tidegare var multippet sklerose (MS) en sjukdom der dei ramma ofte hamma i rullestol, Ny behandling har endra dette.

Helse Bergen.no, February 20, 2025. <u>25</u> millionar til forsking på Alzheimers. The Dementia Node.



Vogue India, February 20, 2025. <u>NAD+infusions have become increasingly popular for anti-ageing. But are they too good to be true?</u> Charalampos Tzoulis.

Sykepleien, February 14, 2025. <u>Fem millioner til forskning på Parkinson</u>. Charalampos Tzoulis.



Dagens Medisin, February 10, 2025. Millionstøtte til nasjonal plattform for utprøvende behandling mot Parkinsons. The PD Node.



Millionstøtte til nasjonal plattform for utprøvende behandling mot Parkinsons

 Vi har store forwentsloger til leva HYDRA prosjektet kals utrotte på sikt, sier generalsekuntur Kristin Rund i Norges Parkinsonforbund.

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UiB News, February 2, 2025. Forskerskolens posterpresentasjoner - vinnere 2025. Gonzalo Nido, Brit Ellen Rød.

SciTechDaily, January 27, 2025. <u>How NAD Keeps Your Cells Energized and Slows Down Aging</u>. Mathias Ziegler, Christian Dölle.

Bergensavisen, January 11, 2025. <u>Sunnivas lange kamp for svar.</u> Kjell-Morten Myhr. Also in Sydvesten January 26, and in Avisa Nordhordland January 11.



Sunnivas lange kamp for svar

Trebarromoren har slitt med helsen i årøvs. I sommer fikk hun endelig sveret på morfor. Hun har MS.

Publisher 31.01.20.0100

UiB News, January 9, 2025. Aktiv aldring i praksis: Kan felles bomiljø for eldre utsette demens og fysisk forfall? The Care Node.



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DID YOU KNOW...

..that there is an "Oscar of Science" event each year? It awards the Breakthrough Prize in Fundamental physics, in Life Siences, and in Mathematics, and shines a spotlight on scientists and their groundbreaking work, to celebrate their achievements and inspire the next generation.

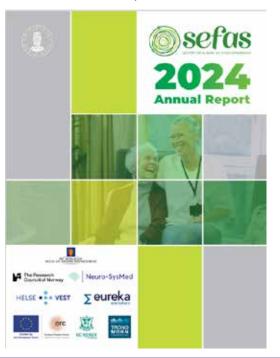
This year, the \$3 million Breakthrough Prize in Life Sciences was awarded to Alberto Ascherio and Stephen L. Hauser for their work on establishing Epstein-Barr virus infection as leading cause of MS. Alberto Ascherio is a dear friend and collaborator of our MS Node at the University of Bergen, where he received an honorary doctorate last year.

Read more in the Harvard article Alberto Ascherio receives Breakthrough Prize for groundbreaking research on multiple sclerosis.

Congratulations!



Did you also know that Neuro-SysMed's Care Node, SEFAS, recently published their 2024 Annual Report? Have a look at the 2024 SEFAS Annual Report here!



CONTACT

Centre co-Directors

Kjell-Morten Myhr, Centre Director kjell-morten.myhr@helse-bergen.no

Charalampos Tzoulis, Centre Co-Director charalampos.tzoulis@helse-bergen.no

Managing Director

Yamila Torres Cleuren Yamila.cleuren@uib.no +47 55 58 54 31

Centre Coordinator

Mona Machrouh mona.machrouh@uib.no +47 55 58 91 11

Research School Coordinator

Agnete S. T. Engelsen agnete.engelsen@uib.no

Communications Officer

Eli Synnøve Vidhammer eli.vidhammer@uib.no

General inquiries

Post@neuro-sysmed.no

Website

Neuro-sysmed.no

Events calendar

https://www.uib.no/en/neuro-sysmed/calendar













