



Neuro-SysMed

Newsletter

May 2024

DIRECTORS COMMENTS

Dear all

2024 has continued with the high activity as described [in the annual report for 2023](#) – with already 3 PhD dissertations and nearly 20 scientific publications.

We have had important results with high impact on clinical practice for the treatment of patients with **multiple sclerosis (MS)**. Hilde M. Torgauten et al. shows that the clinical effect from vaccination is excellent despite reduced humeral vaccination response due to rituximab therapy. Thus, the important message is to vaccinate! Brit Ellen Rød et al. shows that rituximab is superior to cladribine in the treatment of MS. This finding has already been included in the recently [revised Norwegian treatment guidelines for MS](#). Moreover, Øivind Torkildsen et al. analysed the blinded follow-up data from the OVERLORD-MS trial comparing rituximab to ocrelizumab and reports an extreme low annual relapse rate of 0.02. Thus, early B-cell depletion therapy seem to be highly effective in relapsing-remitting MS. We are waiting in excitement for the final results of the trial next summer. Another important milestone by the MS group is the launch of the EBV-MS project which initiated the recruitment of patients for anti-viral EBV therapy, under the leadership of Øivind Torkildsen.

On the neurodegeneration front, Berven et al. reported exciting results of the NR-SAFE trial, showing that high-dose NAD-replenishment treatment with 3000 mg NR per day is safe and associated with a pronounced systemic augmentation of the NAD-metabolome, thus allowing the dose range to be extended in future trials. In another seminal paper, Irene Flønes et al. identified a novel biological subtype of **Parkinson's disease** characterized by severe mitochondrial dysfunction in the brain and a predilection for a non-tremulous phenotype. This discovery paves the way for patient stratification in Parkinson's disease and takes us a step closer to individualized medicine. The PD group is currently working on a clinically applicable biomarker for "mitochondrial PD" – a project led by Simon Kverneng et al. Another important milestone was the initiation of the NADAPT study, Norway's first disease-modification trial for atypical parkinsonism syndromes. Last but not least, our flagship NAD-replenishment trial, NOPARK, is now fully included with 400 participants enrolled! This means that the trial will be concluded in April 2025.

Importantly, the NO-ALS and N-DOSE_AD trials of NR in **ALS and Alzheimer's disease** have also made great progress in patient recruitment and are expected to reach their target numbers in 2024/2025.

In total, our Centre has now included over 1800 patients in interventional and observational clinical studies. This is an impressive feat, which has only been possible thanks to the unique dedication and hard work of everyone in our extended Neuro-SysMed family.

Thank you all for your continued commitment and extraordinary contributions to advancing the field of neurological research. Your tireless efforts are directly impacting clinical practices and improving patient outcomes across a spectrum of neurological disorders. As we move forward, let us maintain our momentum and strive for even greater accomplishments. Stay tuned for more updates and breakthroughs as we continue to drive innovation in neurological research.

With gratitude and anticipation for the future,

Kjell-Morten Myhr and Charalampos Tzoulis



Neuro-SysMed



Centre for
Clinical Treatment
Research

NEW ANNUAL REPORT

Make sure you don't miss the Neuro-SysMed Annual Report 2023, with lots of information on our research, organization, activities and people.

You can find it [online for downloading on this webpage](#), or you can drop in on our office to get a printed copy after the summer.



NEURO-SYSMED ANNUAL REPORT 2023 - 17



CONTENT

DIRECTOR'S COMMENTS	
VISION AND GOALS	
RESEARCH PLAN AND STRATEGY	
ORGANISATION OF THE CENTRE	
CORE CENTRE PERSONNEL AND FACILITIES	
RESEARCH ADVICE AND PROJECT DEVELOPMENT	
THE SCIENTIFIC ADVISORY BOARD	
THE USER COUNCIL	
NEURO-SYSMED IN NUMBERS	
INNOVATION	
FROM THE NEURO-SYSMED CENTRE BOARD	
VIEWPOINT ARTICLES	
RESEARCH SCHOOL IN TRANSLATIONAL NEUROSCIENCE	
SEMINARS	
ANNUAL SYMPOSIUM	
JUNIOR SCIENTIST SYMPOSIUM	
RESEARCH NODES	40
CLINICAL STUDIES	56
MINI BIOGRAPHIES OF PHD CANDIDATES AND POSTDOCS	90
NEURO-SYSMED IN THE NEWS	98
PUBLICATION LIST 2023	106
PERSONNEL LIST 2023	110
CONTACT INFORMATION	115



Centre for
Clinical Treatment
Research

RECENT PUBLICATIONS

Highlighted publications from 2024

P. Martin-Malpartida, C. Torner, A. Martinez and M. J. Macias. TPPU_DSf: A Web Application to Calculate Thermodynamic Parameters Using DSf Data. *Journal of Molecular Biology*, 2024, Pages 168519; DOI: <https://doi.org/10.1016/j.jmb.2024.168519>

Thöny B, Ng J, Kurian MA, Mills P, Martinez A. Mouse models for inherited monoamine neurotransmitter disorders. *J Inherit Metab Dis*. 2024 Jan 2. doi: 10.1002/jimd.12710. Online ahead of print. PMID: 38168036

Jung-KC K, Tristán-Noguero A, Altankhuyag A, Belenguer DP, Prestegård KS, Fernandez-Carasa I, Baldesch AC, Bondarenko MS, García-Cazorla A, Consiglio A, Martinez A. Tetrahydrobiopterin (BH4) treatment stabilizes tyrosine hydroxylase: Rescue of tyrosine hydroxylase deficiency phenotypes in human neurons and in a knock-in mouse model. *J Inherit Metab Dis*. 2024 Jan 9. doi: 10.1002/jimd.12702. Online ahead of print. PMID: 38196161

Stige KE, Kverneng SU, Sharma S, Skeie GO, Sheard E, Søgne M, Geijerstam SA, Vetås T, Wahlvåg AG, Berven H, Buch S, Reese D, Babiker D, Mahdi Y, Wade T, Miranda GP, Ganguly J, Tamilselvam YK, Chai JR, Bansal S, Aur D, Soltani S, Adams S, Dölle C, Dick F, Berntsen EM, Grüner R, Brekke N, Riemer F, Goa PE, Haugarvoll K, Haacke EM, Jog M, Tzoulis C. The STRAT-PARK cohort: a personalized initiative to stratify Parkinson's disease. *Prog Neurobiol*. 2024 Apr 9;102603. doi: 10.1016/j.pneurobio.2024.102603. Epub ahead of print. PMID: 38604582.

Flønes IH, Toker L, Sandnes DA, Castelli M, Mostafavi S, Lura N, Shadad O, Fernandez-Vizarra E, Painous C, Pérez-Soriano A, Compta Y, Molina-Porcel L, Alves G, Tysnes OB, Dölle C, Nido GS, Tzoulis C. Mitochondrial complex I deficiency stratifies idiopathic Parkinson's disease. *Nature Communications* 15, 3631 (2024). <https://doi.org/10.1038/s41467-024-47867-4>

Torkildsen Ø, Myhr KM, Brugger-Synnes P, Bjørnevik K. Antiviral therapy with tenofovir in MS. *Mult Scler Relat Disord*. 2024 Mar;83:105436. doi: 10.1016/j.msard.2024.105436. Epub 2024 Jan 7. PMID: 38217968.

Lereim RR, Nytrova P, Gulbrandsen A, Havrdova EK, Myhr KM, Barsnes H, Berven FS. Natalizumab promotes anti-inflammatory and repair effects in multiple sclerosis. *PLoS One*. 2024 Mar 25;19(3):e0300914. doi: 10.1371/journal.pone.0300914. PMID: 38527011; PMCID: PMC10962820.

Olsen CG, Busk ØL, Holla ØL, Tveten K, Holmøy T, Tysnes OB, Høyner H. Genetic overlap between ALS and other neurodegenerative or neuromuscular disorders. *Amyotroph Lateral Scler Frontotemporal Degener*. 2024 Feb;25(1-2):177-187. doi: 10.1080/21678421.2023.2270705. Epub 2024 Jan 23. PMID: 37849306.

Eidem LE, Birkeland E, Austdal M, Bårdsen K, Lange J, Alves G, Berven F, Nilsen MM, Herlofson K, Tysnes OB, Omdal R. Fatigue in Parkinson's Disease: A Proteomic Study of Cerebrospinal Fluid. *Mov Disord*. 2024 Jan 20. doi: 10.1002/mds.29715. Epub ahead of print. PMID: 38243743.

Taule T, Tysnes OB, Aßmus J, Rekan T. A prospective study for using cognitive decline as a predictor for survival and use of feeding/respiratory support for patients with motor neuron disease in Norway. *Ann Palliat Med*. 2024 Jan;13(1):86-92. doi: 10.21037/apm-23-386. PMID: 38316400.

Olsen CG, Busk ØL, Holla ØL, Tveten K, Holmøy T, Tysnes OB, Høyner H. Genetic overlap between ALS and other neurodegenerative or neuromuscular disorders. *Amyotroph Lateral Scler Frontotemporal Degener*. 2024 Feb;25(1-2):177-187. doi: 10.1080/21678421.2023.2270705. Epub 2024 Jan 23. PMID: 37849306.

Van Damme P, Al-Chalabi A, Andersen PM, Chiò A, Couratier P, De Carvalho M, Hardiman O, Kuźma-Kozakiewicz M, Ludolph A, McDermott CJ, Mora JS, Petri S, Probyn K, Reviers E, Salachas F, Silani V, Tysnes OB, van den Berg LH, Villanueva G, Weber M. European Academy of Neurology (EAN) guideline on the management of amyotrophic lateral sclerosis in collaboration with European Reference Network for Neuromuscular Diseases (ERN EURO-NMD). *Eur J Neurol*. 2024 Mar 12:e16264. doi: 10.1111/ene.16264. Epub ahead of print. PMID: 38470068.

Novy C, Busk ØL, Tysnes OB, Landa SS, Aanjesen TN, Alstadhaug KB, Bjerknes TL, Bjørnå IK, Bråthen G, Dahl E, Demic N, Fahlström M, Flemmen HØ, Hallerstig E, HogenEsch I, Kampman MT, Kleveland G, Kvernmo HB, Ljøstad U, Maniaol A, Morsund AH, Nakken O, Olsen CG, Schlüter K, Utvik MS, Yaseen R, Holla ØL, Holmøy T, Høyner H. Repeat expansions in AR, ATXN1, ATXN2 and HTT in Norwegian patients diagnosed with amyotrophic lateral sclerosis. *Brain Commun*. 2024 Mar 14;6(2):fcae087. doi: 10.1093/braincomms/fcae087. PMID: 38585669; PMCID: PMC10998343.

Titlestad I, Haugarvoll K, Solvang SH, Norekvål TM, Skogseth RE, Andreassen OA, Årslund D, Neerland BE, Nordrehaug JE, Tell GS, Giil LM. Delirium is frequently underdiagnosed among older hospitalised patients despite available information in hospital medical records. *Age Ageing*. 2024 Feb 1;53(2):afae006. doi: 10.1093/ageing/afae006. PMID: 38342753; PMCID: PMC10859244.

Gonzalez-Ortiz F et al. incl. Skogseth R. Plasma brain-derived tau is an amyloid-associated neurodegeneration biomarker in Alzheimer's disease. *Nat Commun*. 2024 Apr 4;15(1):2908. doi: 10.1038/s41467-024-47286-5. PMID: 38575616; PMCID: PMC10995141.

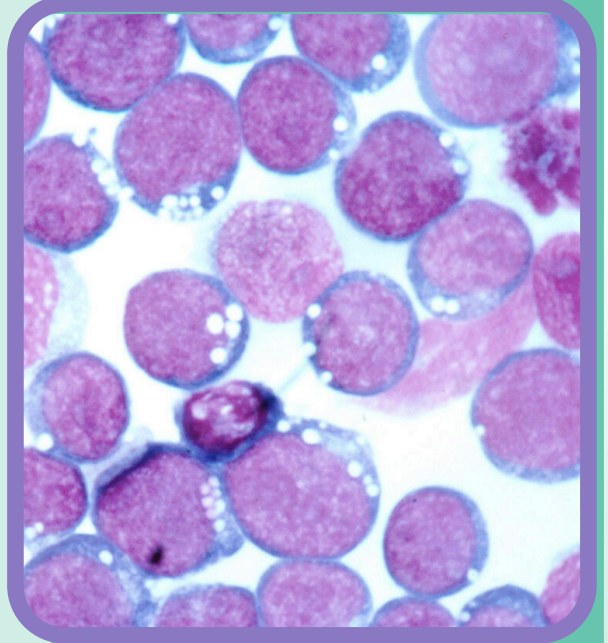
Titlestad I, Haugarvoll K, Solvang SH, Norekvål TM, Skogseth RE, Andreassen OA, Årslund D, Neerland BE, Nordrehaug JE, Tell GS, Giil LM. Delirium is frequently underdiagnosed among older hospitalised patients despite available information in hospital medical records. *Age Ageing*. 2024 Feb 1;53(2):afae006. doi: 10.1093/ageing/afae006. PMID: 38342753; PMCID: PMC10859244.

OTHER NEWS: Research highlights

MS news

The TAF-1 MS study: Tenofovir Alafenamide Fumarate and Epstein-Barr virus infection in multiple sclerosis (MS)

Convincing evidence suggesting that a previous Epstein-Barr virus (EBV) infection is a prerequisite for developing multiple sclerosis (MS). Tenofovir alafenamide fumarate (TAF) is an antiviral treatment that seems to have an effect against EBV. We therefore investigate whether treatment with TAF is safe, and whether it can affect the EBV-infection (EBV shedding in saliva) in MS. TAF (25 mg) or placebo is given as add-on therapy to ongoing MS therapy with natalizumab for six months. The first patients were included in January 2024, and this is part of our Horizon Europe project "EBV-MS". Results will be available early next year.



COVID-19 Vaccine is effective in rituximab treated multiple sclerosis (MS) patients

Vaccination protects normally from severe covid-19 disease, but humoral vaccine response is attenuated in MS-patients receiving anti-CD20 therapies like rituximab.

We have therefore evaluated the immunological and clinical vaccination responses to covid-19 vaccines in rituximab-treated MS-patients. The results showed that although significant reduced humoral vaccinations responses, only 6.3% of the patients were hospitalized due to COVID-19 disease during the observation period, none needed intensive care unit treatment, and there were no deaths. We conclude accordingly that vaccinated patients with MS treated with rituximab have a protective clinical effect, despite a low humoral antibody response.

OVERLORD-MS – ocrelizumab vs rituximab: Trial updates

The OVERLORD-MS study is a phase III double-blinded non-inferiority study comparing treatment with ocrelizumab 600 mg to rituximab 500 mg given every six months. Study participants have been randomized 2:1 to treatment with rituximab or ocrelizumab and are followed for a total of 30 months. The primary endpoint is the proportion of participants without new/enlarged T2 lesions on brain MRI from months 6 to 24.

A total of 214 participants at 12 study centers (one in Sweden and 11 in Norway) were included between November 2020 and November 2022. Blinded overall relapse evaluation so far showed only 6 protocol defined relapses, estimating an extremely low annualized relapse-rate of ARR=0.02. No unexpected side events have been reported. The final results will be available early summer 2025.



Real-world data shows that rituximab is more effective than cladribine

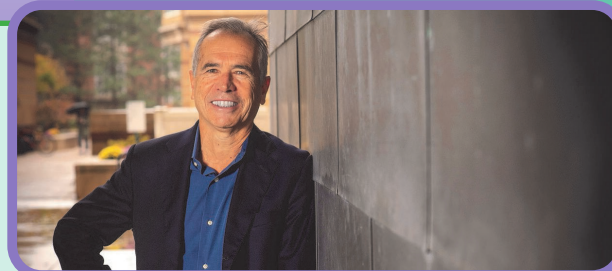
During 2017-2019, systematic differences in high-efficacy MS-treatment strategies were preferred in Oslo (cladribine) and Bergen (rituximab). Comparisons of long-term (median 4.5 years) effects from these different treatments showed a 2.7 higher risk for new MRI disease activity after four years in the cladribine group (n=132) compared to rituximab group (n=168). Patients receiving cladribine also had a higher risk of relapses and disability worsening, our results suggest that rituximab should be preferred over cladribine as therapy for most patients with MS.



Professor Alberto Ascherio will receive an honorary doctorate at the University of Bergen

In recognition of his groundbreaking contributions to the understanding of neurological disease etiology, Professor Alberto Ascherio has been appointed to receive an honorary doctorate by the University of Bergen. His main contribution relates to identifying the causal factors of multiple sclerosis (MS). You can read the [full interview with Alberto Ascherio here](#).

Alberto will be awarded his honorary doctorate at a ceremony to be held in the University Aula on May 24th. He will also be giving a [lecture at the Medical Faculty / Neuro-SysMed](#) on Thursday, May 23rd.



Parkinson's disease news

The results of the NR-SAFE trial

The [results of the NR-SAFE trial were published in the journal Nature Communications](#). The study shows that high-dose nicotinamide riboside (NR), 3000 mg daily, is short-term safe and associated with a highly potent augmentation of the NAD-metabolome. The results of the NR-SAFE trial support extending the dose range of NR in phase II clinical trials to 3000mg per day, with appropriate safety monitoring. Based on these results, we were able to initiate two other clinical trials ongoing at our Center, N-DOSE and N-DOSE_AD, with the aim to determine the optimal biological dose of NR for PD and Alzheimer's disease (AD).



PD can be stratified according to the severity of mitochondrial dysfunction in the brain

On the translational research front, a milestone study by the PD group was just accepted for [publication at Nature Communications](#). This groundbreaking work shows that PD can be stratified according to the severity of mitochondrial dysfunction in the brain and identifies two emerging disease subtypes with distinct molecular and clinical profiles. The mitochondrial subtype of PD, or "mitoPD", accounts for approximately a fourth of all cases, and is characterized by anatomically widespread neuronal respiratory dysfunction, a distinct cell type-specific gene expression profile, increased load of neuronal mtDNA deletions, and a predilection for non-tremor dominant motor phenotypes. These findings constitute a step towards resolving the biological heterogeneity of PD with implications for both mechanistic understanding and treatment strategies.



Clinical biomarkers for mitoPD

Ongoing work by the PD group aims to identify clinical biomarkers for mitoPD, to enable patient selection for clinical trials of mitochondria-targeting therapies. The biomarker work is based on the STRAT-PARK initiative, a longitudinal prospective PD-cohort from Norway and Canada, whose first description was just published in *Prog Neurobiol*.



The NOPARK trial is fully enrolled!

The NOPARK trial, our flagship clinical NAD-replenishment study, was fully enrolled in April with 400 patients included in the study. This means that this phase III efficacy study will be completed in April 2025, with results becoming available later in the year.



The NADAPT study has started enrolment!

Prof. Geir Olve Skeie, and Dr. Gard Aasmund Skulstad Johanson are leading, together with other participating sites and investigators, the first Norwegian clinical trial on Atypical parkinsonian syndromes (APS). The study includes progressive supranuclear palsy (PSP), multiple system atrophy (MSA) and corticobasal syndrome (CBS). The primary objective is to determine whether treatment with NR (3000mg daily) can delay disease progression in these conditions.

The NADage study is ready to start

Dr. Katarina Lundervold is leading the NADage trial, a study that aims to investigate the potential of nicotinamide riboside (NR) to decelerate functional decline in the elderly frail population. By administrating 2000 mg of NR daily, the idea is to explore the effects on brain and body metabolism. The outcomes of this study could potentially demonstrate that NR effectively reduces signs of frailty, offering considerable advantages to the individuals affected, their families, and society.

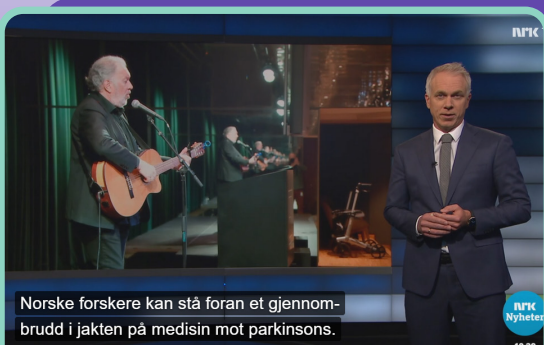


Great event for the World's Parkinson Day

The DECODE-PD group, led by Prof. Tzoulis, together with Norges Parkinsonforbund, joined efforts and organized the Parkinsondagen. The event happened on the 9th of April and was a celebration of the World's Parkinson's Day, officially celebrated on the 11th. A scientific session during the day covered important topics, while a session dedicated to patients and the public filled the room at Hotel Norge during the evening. Bjørn Eidsvåg came to Bergen only for this occasion, giving a concert between the sessions.

Researchers, patients and relatives truly appreciated to gather for such an important occasion!

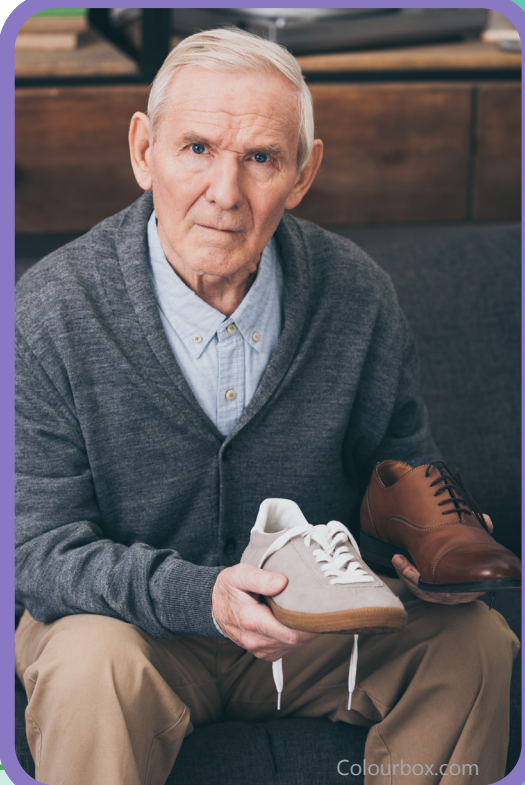
[See story from the event on national TV \(NRK\).](#)



Dementia news

Recruitment Well on its Way in Alzheimer Trial

The N-DOSE AD trial is a dose optimization trial of nicotinamide riboside (NR) supplementation in Alzheimer's disease (AD). Participants are selected at random to either receive one of the following options: 1) Capsules of nicotinamide riboside (same dose 1000 mg daily). 2) Capsules of nicotinamide riboside (escalating dose 1000, 2000 and finally 3000 mg daily). 3) Capsules of placebo (also called a dummy treatment which is an inactive substance identical in appearance to the dietary supplement being tested with no active therapeutic effect). Neither the participant nor their doctor will know if the person is receiving the dietary supplement or not. The study period lasts three months and the purpose of the study is to evaluate the safety and determine the optimal dose of nicotinamide riboside in people with Alzheimer's disease. To be included participants must have a diagnosis of probable Alzheimer's disease according to the National Institute on Aging (NIA) and Alzheimer's Association guidelines within two years. They must also have results of lumbar puncture (spinal tap) with findings consistent with a diagnosis of Alzheimer's disease. Participants must be able to undergo spinal tap and MRI imaging. To date 50 of a total of 80 participants have been randomized in the trial!



ALS news



- Albrioza/Relyvrio did not receive approval in Europe. We are currently awaiting the outcomes of a phase 3 trial.
- Tofersen is available as treatment for SOD ALS, albeit not yet commercially available.
- The CARDINALS study, in which Neuro-SysMed participates, is now closed for inclusion. Results may potentially be available in 12 months. This is a phase 2, randomized, double-blind, placebo-controlled, parallel study to assess the effects of PTC857 treatment in adult male and female patients diagnosed with ALS. This is an international multicentre study. The objectives of the study are to evaluate the efficacy, safety, tolerability, PK (pharmacokinetics), and effects on biomarkers of PTC857 therapy in patients with ALS.

Funding

In 2023, quite a few new projects have received funding

In addition to the €7 Million to the EBV-MS project led by Prof. Myhr and Prof. Torkildsen, for neurodegeneration and care four projects were awarded open-project support from Helse Vest led by Dr. Skogseth and Prof. Husebø (both at Haralds plass), Dr. Haugarvoll and Prof. Tzoulis (both at HUS); and our first atypical parkinsonism trial (NADAPT) was funded via the KLINBEFORSK program. In addition, the patient organizations and private foundations have further supported the TAF trials, NADAPT, and our new preventive trial NADage.

Prof. Tzoulis, Dr. Riemer and Prof. Tysnes, have also been granted an equipment fund; a donation from the Simon Fougner Hartmann Familiefond to purchase the CLARIOstar fluorescence reader, which will be a dedicated instrument for the α -synuclein seed amplification assay (α Syn-SAAs). The technique is a promising diagnostic tool for PD and related synucleinopathies and we're looking forward to including it in our new studies. In addition, this grant also included new coils for our imaging colleagues, led by Frank Riemer.

Other centre updates



Top research environment of the year to Professor Kjell-Morten Myhr's Bergen Multiple Sclerosis Research Group!

The Faculty Day was held on Wednesday, April 17th, during which prizes were presented to teachers, researchers, innovators, and research environments. Congratulations to Professor Kjell-Morten Myhr and the Bergen Multiple Sclerosis Research Group with the award for the top research environment of the year!

Innovation Prize

Neuro-SysMed partner Prof. Aurora Martinez, Department of Medicine, and CSO at the start-up Pluvia received the Innovation prize for year 2023 from the Faculty of Medicine, University of Bergen.

[Read more here about the Medical Faculty prizes.](#)



Two awards to Bettina and her team

We would like to congratulate Bettina and her team in winning two awards!

- Associate Professors Lone Holst and Reidun Kjome at the Department of Global Public Health and Primary Care received the main prize in education.
- Marie Gedde at the Department of Global Public Health and Primary Care received an award for best PhD: "Behavioral and Psychological Symptoms of Dementia: The impact of medication reviews in multicomponent interventions and the consequences of the Covid-19 restrictions".



Guest Researcher at the PD Group

Prof. Tzoulis had the pleasure to have a guest researcher in his group between 8th January - 5th April 2024. Elizaveta Olkhova (Liza) is a researcher at the Wellcome Trust Centre for Mitochondrial Research at Newcastle University. She is an expert on mitochondrial pathology and cell-type specific vulnerability that has studied extensively the fate and involvement of GABAergic neurons in mitochondrial disease. Liza got an EMBO scholarship and joined the PD group for 3 months.



STIFTELSEN
KRISTIAN
GERHARD
JEBSEN

New leader of the KG Jebsen Academy for Young Medical Researchers

Svein Isungset Støve, researcher in the Biorecognition group at the Department of Biomedicine, and affiliated with Neuro-SysMed and K.G. Jebsen Centre for Parkinson's Disease, was recently elected as the new leader of the K.G. Jebsen Academy for Young Medical Researchers, from autumn 2024. The academy was initiated to "promote talented young researchers, and to strengthen the collaboration between young researchers affiliated with the different Jebsen centres". End of April, the two young researchers representing the K.G. Jebsen Centre for PD, Svein and Irene Flønes, will travel with the academy for a spring meeting in London, among other visiting the Francis Crick Institute, The I-X Centre for AI in Science, and the Wellcome Trust Foundation.

Amy Van den Hooven receives international recognition for "Pain Communication Tool Kit"

For her work on communicating pain, alumna from the Department of Design, Amy Van den Hooven, recently received Silver at the International Design Awards for her "Pain Communication Tool Kit" which won in the category Designs for Social Impact. Amy will be working with Neuro-SysMed where they will be testing the tool kit and developing workshops and communication tools. She is interested in the patient narratives and wants to bring this into the way we practice medicine.



Doctoral defenses so far in 2024

Congratulations to:

- **Intakhar Ahmad** 16. January 2024: [Novel biomarkers in multiple sclerosis pathology with a focus on neuroprotection and myelin repair.](#)
- **Karine Eid** 23. February 2024: [Multiple adversity: Childhood abuse, adult abuse, and perinatal depression in women with multiple sclerosis.](#)
- **Ellen Danielsen Skorve** 19. April 2024: [Cognitive assessment in the early stages of multiple sclerosis.](#)

UPCOMING NEURO-SYSMED EVENTS

These - and later events - can be found in [the Neuro-SysMed calendar](#).



NEURO-SYSMED SEMINAR, MAY 15

Join us at the auditorium in Armauer Hansens Hus at 11:30 - 13:00 (lunch from 11:30 - 12:00).

Speaker: Svein Isungset Støve

Title: *Screening for activity modulators of targets relevant for Parkinson's disease and hyperkinetic movement disorders*

Place: The auditorium in Armauer Hansens Hus

Time: Wednesday May 15 at 11:30 - 13:00 (incl. lunch).

Registration: through [this link](#)

Abstract: [is available here](#)



HONORARY DOCTOR LECTURE MAY 23 BY ALBERTO ASCHERIO

Newly appointed Honorary Doctor at UiB Alberto Ascherio lead the international research team who showed a direct link between multiple sclerosis (MS) and the Epstein Barr virus. Hear about his further research!

Speaker: Alberto Ascherio

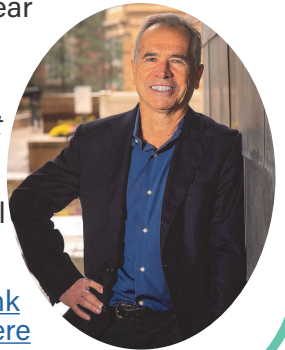
Title: *EBV causes MS: does it also drive MS pathology?*

Place: Auditorium 1, BB building, Haukeland U. Hospital

Time: Thursday May 23 at 11:30 - 13:00 (incl. lunch).

Registration: through [this link](#)

Abstract: [will be available here](#)



NeuroDialogues: Free Will and Morality in Neurological Contexts

Join the Neuro-SysMed RRI/PPI node in a conversation about autonomy, authenticity, and agency in the context of neurological conditions and challenges. The workshop will be organized as chaired discussions and will not require any formal preparation.

- What ethical dilemmas emerge when neurotechnologies offer the potential to manipulate emotions, memories, or perceptions?
- How does moral challenges posed by disease-driven changes in personality and self-perception intersect with societal values regarding personal autonomy and well-being?

These are just some of many questions we will discuss, in the view of research and health services.

When: June 6th 2024 at 19.00-21.00. **Where:** SVT (Senter for vitenskapsteori), Seminar room (ground floor), Parkveien 9, 5007 Bergen. **Registration:** [through this link](#). **More info:** [is available here](#).



NEURO-SYSMED ANNUAL SYMPOSIUM 2024

Neuro-SysMed has the pleasure of inviting you to the 2nd Neuro-SysMed Annual Symposium September 30th-October 1st at Solstrand Hotel, and we ask you to save the date. You can [register](#) already now. We will invite a range of national and international speakers, and the symposium will have a scientific agenda which we will forward to you later.

Our PhD candidates enrolled in the research school and NEUROSYSM920 Seminars and Symposium will have the opportunity to hold poster presentations as well as a 3-minute oral presentations.

When: Monday September 30 and Tuesday October 1, 2024

Where: Solstrand Hotel & Bad, Os (close to Bergen)

Registration: [through this link](#)

More info: Will be available [on this page](#)



NEW FACES & POSITIONS IN THE NEURO-SYSMED GROUPS



Synne Geithus joined the DECODE-PD group through K.G. Jebsen Center for Parkinson's Disease as a PhD student and will be working as a bioinformatician. Her aims and interests for the PhD is to use bioinformatics to stratify and make de novo discoveries in Parkinson's Disease through transcriptomics and proteomics.



Magnus Svensen received Helse Vest PhD scholarship and started January on a project focusing on MR-spectroscopy (mostly 31P-MRS) in clinical trials and cohorts coordinated at Neuro-SysMed, both in terms of acquisition and analysis. Magnus' research interests are magnetic resonance technology, neuroscience and chemistry.



Mona Machrouh holds an M.A in political science. She assumed the role of Centre and Project Coordinator for Neuro-SysMed, where she will also serve as the project manager for the EBV-MS project. Mona brings with her extensive experience, having been affiliated with the University of Bergen (UiB) since 2020. Her background encompasses a diverse range of responsibilities, including significant experience in research and administrative tasks at UiB. Previously, Mona served as a research coordinator at the Department of Government at UiB.



Irene Flønes received Helse Vest funding and will during 2024 be leading two clinical trials in PD: the SLEIPNIR study, aimed at examining the penetration and target engagement of potential disease-modifying compounds, and the HYDRA study, a multi-arm, multi-stage clinical trial.



Karine Eid defended her PhD thesis in February on MS and childhood adversity and perinatal depression. This June she will start her Postdoc project, which aims at studying migraine as a prodromal feature of MS using epidemiological and register-based data.



Kristina Njosen is a nurse starting in the PD group as a master student focusing on factors associated with the time of diagnosis in Parkinson's disease. She is also joining the clinical trial team.



Julia Saltyte Benth is a second-year medical student at the University of Bergen that will study sex differences among Parkinson's disease patients, with focus on cognitive symptoms, mild cognitive impairment, and dementia.



Karina Maciak is a PhD candidate at the University of Lodz, Doctoral School of Exact and Natural Sciences in Poland. Over the next two months, she will be undertaking an ERASMUS+ traineeship at Neuro-SysMed, collaborating with Prof. Kjell-Morten Myhr and Shamundeeswari Anandan, PhD in the project aimed at defining a potential MS-specific brain-derived blood exosomal biomarker panel to tailor rituximab treatment regimens to individual relapsing MS patients.

RECENT NEURO-SYSMED NEWS STORIES

KK, 24.04.24, "[Gir nytt håp til MS-syke](#)", Øivind Torkildsen.



Gir nytt håp til MS-syke

- Kan revolusjonere MS-behandling, sier overlege.



MULTIPPEL SKLEROSE: Multipel sklerose (MS) er en kronisk sykdom. I Norge lever rundt 13.000 med sykdommen. Foto: Shutterstock / NTB Scanpix.

NRK Vestland. 23.04.2024, "[Trur på gjennombrøt i Parkinsons-forskning](#)", Charalampos Tzoulis.



Norsk forskningsprosjekt i slutfasen - trur denne pilla kan gje Parkinsons-gjennombrøt

I tiår har ein leita etter ein kur mot hjerne sjukdomen. Forsking frå Bergen er kanskje det fremste håpet.

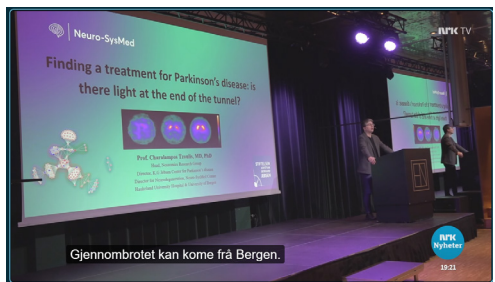


ODDGEIR ØYSTERE, NRK

- Eg er optimist. I løpet av dei siste ti åra har det skjedd mykje meir enn på dei 50 siste, seier Charalampos Tzoulis.

UiB Nyheter 17.04.24 "[Stor interesse for Fakultetets dag 2024](#)", and 12.04.24 "[Prisvinnere på Fakultetets dag 2024](#)", Kjell-Morten Myhr and the MS group, Aurora Martinez.

NRK 10.04.24, [Parkinsonsdagen](#), Charalampos Tzoulis.



UiB Nyheter 05.04.24, "[Ny æresdoktor håper å lage en vaksine mot MS](#)", Neuro-SysMed, Trond Riise.

Vi over 60 05.04.2024 (paper version), "MS kobles til virussykdom", Øivind Torkildsen, Kjell-Morten Myhr.

21.03.24 Shifter, "[Sliter med å skape business av helseforskning](#)", Neuro-SysMed mentioned as world-leading research environment.

Dagens Medisin 01.04.24 and 11.04.2024 (paper version), "[Natalizumab kan brukes som brobehandling](#)", Lars Bø.



BEDRØSET RISIKO: Lars Bø, leder for Nasjonal kompetansetjeneste for multipel sklerose, og Gjø Ovein Nygaard, sier behandlingen vil redusere risiko for alvorlig infeksjon hos de aktuelle MS-pasientene. Foto: DM arkiv/Michael Chr. A. Simonsen

Nå kan natalizumab brukes som brobehandling for utsatte MS-pasienter

I sitt mars-møte vedtok Beslutningsforum å støtte forslaget om å ta i bruk natalizumab som brobehandling for multipel sklerose (MS)-pasienter som skal starte eller skifte behandling til såkalt anti-CD20-behandling.

Michael Chr. A. Simonsen

ABC Nyheter 10.03.24, "[Hva er NMN-tilskudd, og virker det?](#)", Charalampos Tzoulis.

Østlands-Posten Pluss 10.03.2024, "[De lærde strides, og i midten står Erlend \(48\) med en alvorlig sykdom og et avslag fra kommunen](#)", Parkinson patient case, Charalampos Tzoulis

TV2 10.03.24, "[Siri \(73\) vil bidra til å løse demensgåten](#)", dementia patient case and Neuro-SysMed trial, Ragnhild Eide Skogseth and Kristoffer Haugvoll.

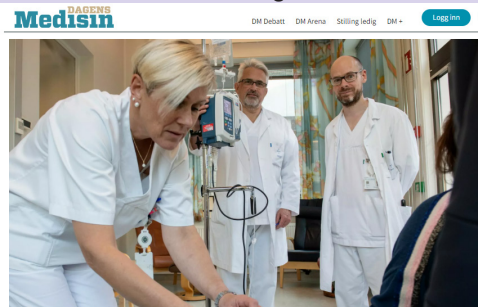
Siri (73) vil bidra til å løse demensgåten

Den pensjonerte ungdomsskolelæreren med Alzheimer deltar i studie som kan begrense tap av hjerneceller.



DEMENT: Siri Jonano Sandbukt sier hun lever et godt liv, på tross av at hun har fått diagnosen Alzheimers sykdom. Foto: Robert Reinlund / TV 2

Dagens Medisin 20.02.24, "[Data fra «komplett negativ studie» brukt i 40 publikasjoner og seks doktorgrader](#)", Kjell-Morten Myhr, Øivind Torkildsen and Randi Haugstad.



KLINISKE STUDIER: Professorene Kjell Morten Myhr og Øivind Torkildsen ved Universitetet i Bergen. Her arbeider sammen med spesialistlegepilot Randi Cecilie Haugstad i forbindelse med oppstart av OVERLOAD-studien. Foto: Marit Hommedal

Data fra «komplett negativ studie» brukt i 40 publikasjoner og seks doktorgrader

Haukeland universitetssjukehus ble nylig stemplet som dårligst i Norge på publisering av resultater fra kliniske studier. Men bildet er ikke helsvart i Bergen.

Michael Chr. A. Simonsen

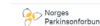
Vi over 60 01.03.2024 (paper version), "Medisiner kobles til Parkinson", the DRONE project, Trond Riise and Julia Romanowska. Also in Swedish newspapers in January, such as in [Expressen](#).

NRK Trøndelag 24.02.2024, "[Dette tror norske eksperter vil bli lyspunkt og gjennombrudd innen demensforskning i 2024](#)", Kristoffer Haugvoll.

Khrono 31.01.2024, "[Disse skal dele ut milliarder til forskning](#)". Bettina Husebø appointed in the Health Portfolio Board for the Research Council of Norway.

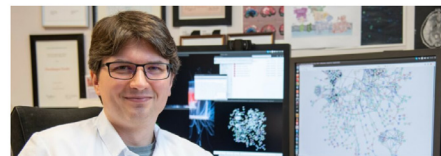
UiB Nyheter 10.04.24, "[Mottar 400 000 for kurs i brukermedvirkning i forskning](#)", support from the DAM Foundation for Neuro-SysMed's/CCBIO's course Patient and public involvement in medical and health research.

Norges Parkinsonforbund, "[Atypisk parkinsonisme og NAD: Nå kan du delta i behandlingsstudie](#)", Charalampos Tzoulis.



Escalade / Aktuelt / Atypisk parkinsonisme og NAD: Nå kan du delta i behandlingsstudie

Atypisk parkinsonisme og NAD: Nå kan du delta i behandlingsstudie



I 2024 starter professor Charalampos Haris Tzoulis og hans kollegaer ved Neuro-SysMed en ny behandlingstudie for mennesker med atypisk parkinsonisme. Se oppdatert nettmøte med mer informasjon.

[EU-Openscreen \(EU-OS\) highlighted the success story](#) on the impactful collaboration between Maria Macias and her team from IRB_Barcelona and the EU-Openscreen partner site, at the University of Bergen, Norway, with Aurora Martinez and Kunwar Jung K C, and the Chemistry Partner Site from Leibniz-Forschungsinstitut für Molekulare Pharmakologie (FMP), Berlin, Germany, with Marc Nazaré.



Maria Macias, Carles Torner and Míriam Condeminas (of her research team) and Aurora Martinez from UiB at the EU-OPENSREEN-DRIVE final meeting in Berlin in September 2023.

DID YOU KNOW..

Kunwar Jung KC was invited to discuss the recent publication "Tetrahydrobiopterin (BH4) treatment stabilizes tyrosine hydroxylase: Rescue of tyrosine hydroxylase deficiency phenotypes in human neurons and in a knock-in mouse model" as a guest on JIMD podcast, providing insights and expertise to a wide audience in the field, and enhancing the dissemination of his research findings. Listen to it as [Apple podcast](#) or [Spotify podcast](#).



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

Centre Coordinator

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

Research Adviser

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

Research School Coordinator

Nina Grytten Torkildsen
nina.agnethe.grytten.torkildsen@helse-bergen.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>

UPDATE YOUR INFO

Personal pages

Did you know, that when a research partner, media house or anyone else google you, one of the first port of call is your personal page at the University of Bergen (if you are a UiB employee.) That's your digital business card. So this is a kind reminder to all who are UiB employees or UiB guest researchers/students, to keep your information updated and professional. This is how you do it:

[How-to in Norwegian](#)

[How-to in English](#)

Here is a [good example](#) of how it should look like.

Research group pages

Please also have a look at your research group's website. A bit outdated? Please have it updated.

The Neuro-SysMed website

Neuro-SysMed's web pages are also due for a thorough update, and this will be done in the coming months. If you have any news and updates you would like to share on our website or in the newsletter, please contact mona.machrouh@uib.no

