JUNE, 2024 ISSUE 01 OF 2024

NEWSLETTER

CENTRE FOR ELDERLY AND NURSING HOME MEDICINE (SEFAS)

Photo: SEFAS, Silje Robinson

ANNOUNCING THE OFFICIAL OPENING OF

CC.AGE: CENTER FOR COMPLEX CONDITIONS AND AGEING!

We are excited to announce the grand opening of the Centre CC.AGE for Complex Conditions and Ageing on October 1, 2024. This remarkable center, generously funded by the Trond Mohn research foundation in collaboration with the University of Bergen, is situated at SEFAS. The aim of CC.AGE is to support older people with complex conditions, so that they can live safely and independently at home. We look forward to sharing more information about this exciting initiative during the opening conference! For information and registration to the opening please click this link.

MEET OUR NEW STAFF MEMBERS

ZOYA SABIR is a trained clinical nutritionist with a doctoral degree in clinical nutrition from the University of Bergen. The main purpose of her doctoral project was to investigate how muscle health can be optimized through diet, thereby contributing to increased independence and quality of life for older individuals. Zoya has recently been employed as a postdoctoral researcher at the Center for Complex Diseases and Aging (CC.AGE), the goal is to facilitate safe and independent aging at home for people with chronic, complex diseases.

Photo: SEFAS/ IGS/Ricky Heggheim

Photo: Private/ IGS/ SEFAS

Anne Therese Hatle is an occupational therapist with a master's degree in evidence-based practice in health sciences. Since 2022, Anne Therese has been a lecturer in the occupational therapy bachelor's program at Western Norway University of Applied Sciences. In April 2024, she started as a doctoral candidate in the SEFAS. Her research will focus on Decoding Death and Dying in people with Dementia by Digital thanotyping (5-D), a groundbreaking study financed by the European Research Council (ERC Consolidator Grant) to precisely investigate the end of life in nursing home patients with dementia utilizing digital technology. Prof. Bettina S. Husebø is PI.

Photo: Private/ IGS/ SEFAS

Kjersti Nedreskår i a psychologist and part of the project "Virtual darkness and digital phenotyping in specialized and municipal dementia care: The DARK.DEM randomized controlled trial." The overarching goal of this project is to reduce health inequalities. Researchers with backgrounds in geriatric medicine, psychiatry, psychology, chronotherapy, data science, and hermeneutics collaborate across disciplines to improve the diagnosis and treatment of behavioral and psychiatric symptoms in dementia (APSD) in both specialist and primary healthcare settings. The study is financed by the research council of Norway and A. Prof. Line I. Berge is PI.

Photo: SEFAS/ IGS/Private

Photo: SEFAS/ IGS/Private

MARIA JOHANSEN is an experienced senior advisor at SEFAS and holds a doctoral degree from the University of Oslo and studied finance and organizational psychology. She has previously worked at The Francis Crick Institute in London. Prior to this, she had research stays at the University of Oslo and held academic positions in between. In her most recent position, she worked at Northern Virginia Community College in the USA. Maria coordinate activities and projects at SEFAS and the department of global public health and primary Care (IGS), the medical faculty at UiB. As administrative part she works with the operational and financial tasks at IGS and SEFAS.

Eli Synnøve Vidhammer is a communications officer working with SEFAS' website, flyers, brochures, annual reports, rollups and other communication tasks in a 20% position. She is also engaged in other research centers at the UiB (Neuro-SysMed, CCBIO, in all 70% at the UiB), and has 18 years of experience at the University of Bergen with administration work. Her background is a Bachelor in languages and literature, and has previously worked many years in marketing. She works from remote, but will visit SEFAS in-person from time to time. Besides UiB, Eli works as a freelance translator.

Maarja Vislapuu defended her Ph.D. thesis

"Informal and formal resource utilization in the care for people with dementia" on April 19, 2024

Maarja Vislapuu used data from three clinical studies to investigate: 1) whether a multi-component intervention and service coordination affect informal caregiving time; 2) the impact of Covid-19 restrictions on informal and formal resource utilization in older adults living at home with dementia; and 3) how formal and informal caregiving time is allocated, along with leisure activities in nursing homes, as well as the factors related to this. In the first study, LIVE@Home.Path, it was found that a multi-component intervention consisting of Learning, Welfare Technology, Volunteering, and Empowerment improved the overall caregiver experience, but informal caregiving time was not reduced. The PAN.DEM study showed that the lockdown in Norway (March-April 2020) led to a significant increase in informal caregiving time. In the COSMOS study, it was found that increased family engagement in Norwegian nursing homes could potentially be improved with more user-friendly environments. There is also a need to provide a greater variety of activities to meet the different interests and needs of nursing home patients.
Vislapuu has a master's degree in clinical diabetes nursing from the Western Norway University of Applied Sciences (2017). From 2019 to 2023, she has been a research fellow at the Faculty of Medicine (UiB) and is currently working on teaching at the VID Specialized University in Bergen. Her doctoral work was based at SEFAS and Professor Bettina Husebø has been her main supervisor. Professor Egil Kjerstad (NORCE) and Associate Professor Line Iden Berge (UiB) have been her co-supervisors. The three studies LIVE@Home.Path, PAN.DEM, and COSMOS trial were all financed by the Research Council of Norway. For more information follow the link.

Photo: Private/ IGS/ SEFAS

BETTINA HUSEBØ GIVES THE RECIPE OF "SEVEN TRICKS TO GET AN (ALMOST) ETERNAL LIFE"

"Biohacking is a worldwide trend that includes stem cell therapy, blood replacement with injected blood from younger relatives, and intricate medications to delay aging.
This is much more than Botox injections between the eyes. Wealthy Americans use such therapies on a daily basis. The goal is not to grow old: stay healthy as long as possible and then straight into the freezer for the next 200 years until someone bothers to thaw you out and cure the diseases that cannot yet be treated today."
Biohacking is indeed a fascinating field that explores ways to optimize our health through experimentation and individualized approaches. If you have any more questions or need further information, feel free to ask!"
"So biohacking is good – both for the individual, but also for society"
Published: 7. JUNI 2024 11:00, Bergens tidende

Bergens Tidende

Syv triks for å få et (nesten) evig liv

Vil du bli 120 år eller eldre? Her er et krasjkurs i biohacking for alle som ønsker å bli gammel med god helse.

Lege og professor Bettina Husebø har i en årrekke jobbet med aldring og livskvalitet for eldre. FOTO: PRIVAT

Completed Master on Wearable sensing-driven assessment of REM sleep behavior disorder in Parkinson's Disease

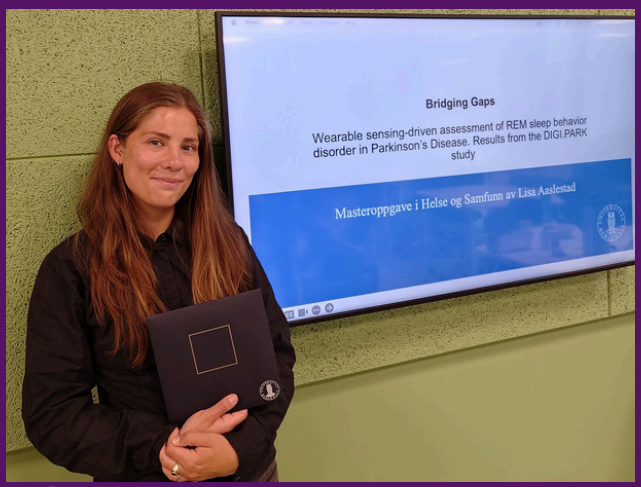

Photo: Private/ IGS/ SEFAS

Lisa Aaslestad at SEFAS and IGS completed her Master degree - and with the best assessment (A)! Her thesis is called "Bridging Gaps: Wearable sensing-driven assessment of REM sleep behavior disorder in Parkinson's Disease. Results from the DIGI.PARK study", and in her project, Lisa has looked at sleep behaviour disorders in Parkinson's disease and how the use of wearable sensor technology can enhance the assessment of such probable disorders in Parkinson's. The Master dissertation defense took place June 10, 2024.

Supervisors have been Line Iden Berge (main supervisor), Monica Patrascu, and Haakon Reithe. Rapid Eye Movement Sleep Behaviour Disorder (RBD) is a prevalent non-motor symptoms in Parkinson's Disease (PD), often assessed using self-reported questionnaires prone to recall bias and low compliance. Consequently, there is critical need for more objective and reliable assessment methods. This study aims to explore the use of wearable sensor technology to enhance the assessment of probable RBD (pRBD) in PD.
Fourteen participants with PD wore a multi-sensor wearable wrist device for 14 nights, capturing nocturnal movements and heart rate variability (HRV). They also completed the REM Sleep Behavior Disorder Questionnaire (RBDSQ). We identified sleep disturbances in sensor data through visual inspection and movement classification and scored the detected movements using the Cole-Kripke sleep-scoring algorithm. We integrated this scoring procedure with the traditional scale into the enhanced D-RBDSQ assessment tool, which we analyzed for internal consistency using Cronbach's alpha coefficient. Lisa used data from the DIGI.PARK trial which is a collaboration project between SEFAS and Neuro-SysMed and financed by the University of Bergen, Research Council of Norway and GC Rieber Foundation. DIGI.PARK is conducted under the ActiveAgeing umbrella.

Meeting with our user panel May 4th

We recently had a wonderful meeting with our user panel at Restaurant Aster in Bergen. The atmosphere was lively, and everyone was eager to share their insights and experiences. During our delightful gathering, we engaged in lively discussions about all SEFAS' projects. The atmosphere was warm and welcoming. As we shared insights and perspectives, it became evident that our collective passion drives the success of these projects. And of course, the social aspect was equally enjoyable—connecting with fellow panel members over good food made the evening truly memorable!

Photo: Maria Johansen/ IGS/ SEFAS

Awards at the Medical Faculty Day April 17th

Congratulations to Professor Kjell-Morten Myhr and the Bergen Multiple Sclerosis Research Group at Neuro-SysMed who received the award for the top research environment of the year!

Marie Hidle Gedde, who did her doctoral defense in February 2023 and now is working as a doctor, won the prize for best PhD work! "I feel very honored to get this recognition from my peers, and I'm very grateful for this award which highlights the quality of my work and my dissemination skills," she says. She would like to see more focus on the need for knowledge and better management of behavioral and mental symptoms in dementia in different settings. "Great research is always teamwork! I would like to emphasize Professor Bettina Husebø for her visionary projects and stamina. My main supervisor, Associate Professor Line Iden Berge, has been vital for my progress in my PhD project. The composition of the project group has promoted crossdisciplinal discussions and secured relevance, included the patient perspective. And without my FEST fellows, I would never have completed my PhD!" Marie concludes.

Photo: Paul Andre Sommerfeldt, Medfak, UiB

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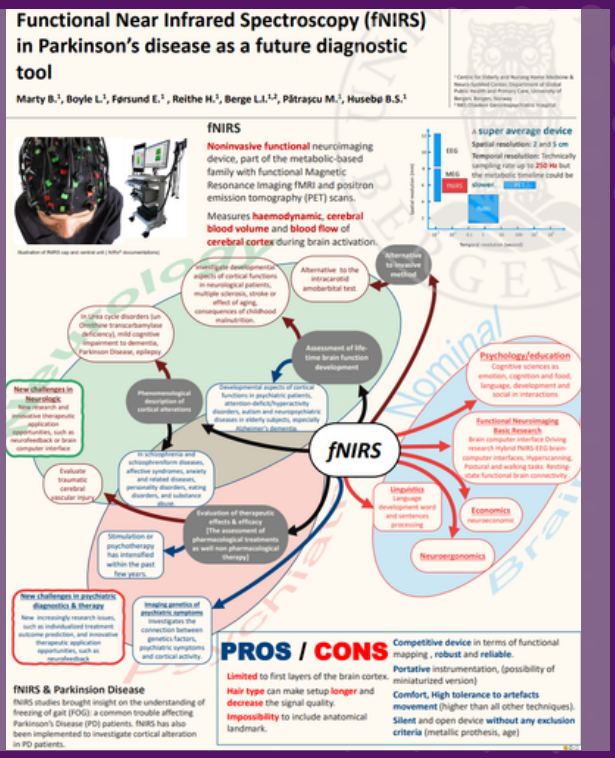
POSTER AWARD

Brice Marty's poster entitled : "Functional Near Infrared Spectroscopy (fNIRS) in Parkinson's disease as a future diagnostic tool" was awarded at the IGS Department Day 2024 - congratulations Brice!

In this poster, Brice gave a brief overview of the basic principles, advantages, and limitations and the first results of a systematic review on fNIRS with focus on motor (tremor, muscle stiffness, balance, coordination) and non-motor (cognitive decline, depression, behavioral changes, or memory difficulties) symptoms in people with PD.



Introducing our recent publications

Berceanu C., Arshad N., Patrascu M. 2023 - Contagion Propagation with Rule-Based Reasoning and Decentralized Control in an Agent-Based Susceptible-Infected-Recovered-Susceptible Infodemic Model, 2023 International Conference on Big Data, Knowledge and Control Systems Engineering (BdKCSE), Sofia, Bulgaria, 10.1109/BdKCSE59280.2023.10339741

Ion A., Patrascu A., Patrascu M. 2024 - Comparative evaluation of evolutionary learning fitness functions in model fitting for human heart rate during treadmill exercise, UPB Scientific Bulletin, Series C: Electrical Engineering, vol. 86, is. 1, pp. 69-80, ISSN 2286-3540

Vislapuu M., Patrascu M., Allore H., Husebo B.S., Kjerstad E., Gedde M., Berge L.I. 2024 - Feedback system analysis of a multicomponent intervention on dyads of home-dwelling persons with dementia and their caregivers. Results from the LIVE@Home.Path trial, Innovation in Aging, vol. 8, is. 3, pp. 1-13, 10.1093/geroni/igae020

Collins J.T., Walsh D.A., Gladman J.R.F, Patrascu M., Husebo B.S., Adam E., Cowley A., Gordon A.L., Ogliari G., Smaling H. 2024 - The difficulties of managing pain in people living with frailty: the potential for digital phenotyping, Drugs & Aging, vol. 41, is. 3, pp. 199-208, 10.1007/s40266-024-01101-4

Sandvik R.K.N.M., Husebo B.S., Selbaek G., Strand G., Patrascu M., Mustafa M., Bergh S. 2024 - Oral symptoms in dying nursing home patients. Results from the prospective REDIC study, BMC Oral Health, vol. 24, is. 129, pp. 1-9, 10.1186/s12903-024-03901-x

Førsund E., Torrado Vidal J.C., Fæø S.E., Reithe H., Patrascu M., Husebo B.S. 2024 - Exploring active ageing in a community-based living environment: an ethnographic study in the Western Norway context, Frontiers in Public Health, vol. 12, pp. 1-12, 10.3389/fpubh.2024.1380922

Berceanu C., Patrascu M. 2024 - Comparative Analysis of Agent-Based Modeling Frameworks for Signal Propagation in Complex Networks: NetLogo and Python Mesa, UPB Scientific Bulletin, Series C: Electrical Engineering, vol. 86, is. 2, pp. 27-40, ISSN 2286-3540

Vislapuu M, Patrascu M, Allore H, Husebo BS, Kjerstad E, Gedde, PhD, Berge LI, Feedback system analysis of a multicomponent intervention on dyads of home-dwelling persons with dementia and their caregivers. Results from the LIVE@Home.Path trial. Innovations in Aging. Innovation in Aging, igae020 (2024), https://doi.org/10.1093/geroni/igae020

Patrascu M, Berge LI, Vislapuu M, Husebo BS, Circadian Rhythm Stability Analysis from Actigraphy Data in Persons with Dementia. Accepted conference paper for the 2024 European Control Conference, Stockholm, Sweden (in press)

And contributed to a white paper:
van Staalduinen, W. and Dantas, C. (2024) White Paper: Designing the perfect New European Bauhaus neighbourhood. Zenodo. doi: 10.5281/zenodo.11212838.