EDA OSLO 2026
DELIRIUM: FROM MECHANISMS TO BETTER CARE
Detailed programme
5–6 November 2026
Radisson Blu Scandinavia Hotel, Oslo

Thursday 5 November

EDA executive committee meeting

Time: 08:00–09:00
Room: Bærum

Registration

Time: 08:30–09:30

Welcome, practical information

Time: 09:30–09:45
Room: Scandinavia Ballroom

Keynote Speaker I: How can we get the message across to politicians and bureaucrats who plan health care services?

Time: 09:45–10:45 **Chair:** Bjørn Erik Neerland
Room: Scandinavia Ballroom



Liz Sampson (United Kingdom)
Queen Mary University of London; Barts Health NHS Trust

Talk description: We all know that delirium is bad for patients, their friends and families, staff, hospitals and our wider health and social care systems. Many cases are preventable through low-cost, evidence-based interventions but we lag behind many similar conditions, for example sepsis, in terms of our mechanistic understanding and treatment options. Why has it been so hard to leverage change?

Delirium is underrecognized at policy level with serious implications for healthcare systems. As policymakers try to address the challenges of an ageing population, delirium offers a high-impact opportunity to improve patient outcomes and reduce system-wide costs. In my presentation I will consider why delirium remains an "orphan" condition and how best to engage national policy makers in improving delirium care, and research. In particular we need both top-down and bottom-up approaches, a challenge that international delirium societies, such as the EDA are uniquely positioned to overcome.

Bio: Liz Sampson is one of the leading voices on how to improve delirium care with a focus on «delirium lobbyism» at the hospital director level and above. She is an inaugural chair in the Queen Mary University of London and Bart's Health Academic Centre for Healthy Ageing (ACHA), leading on mental health, dementia and delirium. She is a liaison psychiatrist at the Royal London Hospital. Her research focuses on the complex interfaces between physical and mental health, particularly in older adults and those who are frail, clinical studies of delirium and how this translates to policy influence. She studied medicine at the University of Birmingham and gained her MD from the UCL Institute of Neurology. Liz is President of the European Delirium Association and research lead for the UK Faculty of Liaison Psychiatry Executive Committee.

10:45–11:15	**Coffee break and posters**

Parallel 1: Young EDA symposium

Time: 11:15–12:30 **Room:** Helsinki

Chairs: Sophie Leroy, Viktor Bublitz, Yorben Lodema, Julia van der A

Practical challenges of prospective delirium research – interim findings from Oxford and Reading Cognitive Health After Recovery from acute illness and Delirium-Prospective Study (ORCHARD-PS)



Sanchit Turaga (United Kingdom)
Lily Elderton (United Kingdom)

Talk description: This talk will present findings from ORCHARD-PS, a real-world prospective cohort investigating delirium and subsequent dementia risk following acute illness. Alongside the cohort findings, the speakers will reflect on the practical challenges of recruiting and retaining older and frail participants, including issues around consent and capacity, follow-up, home visits, and transport support.

Bio – Sanchit Turaga: Sanchit is a physician based in Oxford currently completing his PhD or DPhil at the University of Oxford looking at delirium and dementia. Prior to his PhD he completed his internal medicine residency and is entering neurology residency.

Bio – Lily Elderton: Lily is the research assistant for ORCHARD-PS (Oxford and Reading Cognitive Health After Recovery from acute illness and Delirium-Prospective Study). She has been working on the project since it began in August 2023. Prior to this, she completed her MBiomedSci at the University of York.

Investigating Delirium in Older People Admitted to Hospital with Infection: The Challenges



Hannah Moorey (United Kingdom)

Talk description: This talk will focus on serum biomarkers in older people admitted to hospital with infection, comparing those with and without delirium. The study identified differences in several inflammatory, oxidative stress and tau-related proteins. The presentation will particularly highlight the practical challenges of conducting the study as an early-career researcher with limited study support, including screening and recruiting patients, dealing with lack of capacity, processing samples, and assessing pre-existing cognitive impairment in people with delirium.

Bio: Hannah Moorey is a Geriatric Medicine trainee in the UK and clinician-researcher at the University of Birmingham. She recently submitted her PhD, which investigated the pathophysiology of delirium, focusing on immune ageing and communication between the peripheral immune system and the brain. Her research interests include the biological mechanisms underlying delirium and the development of new approaches to its prevention and treatment.

The NIDUS workshop

Bram Tilburgs (The Netherlands)

Talk description: Short presentation on the NIDUS workshop.

Bio: Bram Tilburgs, RN, MSc, PhD is an intensive care nurse, health psychologist, and post-doctoral researcher at the Department of Intensive Care Medicine of Radboud University Medical Center, the Netherlands. During his PhD, he investigated advance care planning interventions for people with dementia in primary care. He subsequently continued his research at Leiden University Medical Center, focusing on innovative approaches to advance care planning for individuals with dementia and their families. Since 2020, his research at the ICU Research Department has focused on humanizing intensive care, person-centered care, long-term outcomes after critical illness, delirium, PICS, and the work environment of ICU nurses.

Parallel 2: Advancing Child-Centered Pediatric Delirium Care in the PICU

Time: 11:15–12:30 **Room:** København

Chairs: Jacqueline Strik, Mark van den Boogaard

Children's experience of pediatric intensive care and delirium explored through Photovoice



Sara Åkerman (Sweden)
Uppsala University Hospital; Uppsala University

Talk description: What does delirium feel like from a child's perspective? Children recovering from delirium in the Pediatric Intensive Care Unit (PICU) are rarely given the opportunity to share their experiences. Using Photovoice, this study invited children to return to the PICU, photograph their former rooms, and use these images to explore memories and experiences through interviews.

The findings reveal an overarching experience of "Sudden Deprivation"—a profound loss of agency, identity, and a sense of reality. Two themes, "The Bed: An Unsafe Haven" and "Anchors in the Chaos," capture children's struggles to find safety, orientation, and control within the PICU environment. By bringing children's voices into focus, this presentation challenges us to reconsider what child-centered care means during and after delirium—and how the PICU environment and relationships can either amplify or alleviate psychological distress

Bio: Sara Åkerman is a PhD Fellow and Specialist Nurse in Intensive Care at the Pediatric Intensive Care Unit, Uppsala University Hospital, and a PhD student at the Department of Surgical Sciences, Uppsala University. Her research focuses on pediatric delirium, with particular interest in children's experiences of delirium, nursing care, and the PICU environment.

Non-Pharmacological Interventions for Pediatric Delirium: Current Evidence and Future Directions



Jelena Golubovic (United States)
Indiana University School of Medicine; Oslo Delirium Research Group, Oslo University Hospital

Neelima K. Marupudi (United States)
University of Arizona; Banner Children's Hospital

Talk description: Non-pharmacological interventions are recommended for pediatric delirium (PD), yet supporting evidence remains limited. Current guidelines emphasize multicomponent care bundles but provide little guidance on active components, underlying mechanisms, or adaptation across clinical contexts. We argue that these approaches are mechanistically underspecified, limiting intervention optimization and rigorous evaluation.

Following a brief overview of evidence from systematic reviews, we will present findings from a realist review examining how and under what circumstances music-based interventions may prevent or mitigate PD. We developed a programme theory linking contexts, mechanisms, and outcomes through which music may influence delirium-related domains and processes. The review identified pathways involving arousal regulation, distress reduction, parent–child co-regulation, sleep support, and reduced sedative exposure, highlighting Active Music Engagement (AME) as the intervention best aligned with PD care targets. These findings are informing AME adaptation through EMR-based care mapping and stakeholder interviews to identify implementation barriers and inform feasibility testing.

We will complement this work with a prospective feasibility study of guided mindful meditation for critically ill children in the pediatric intensive care unit. Delivered as a brief daily audio intervention, meditation proved highly feasible, well accepted by patients, caregivers, and providers, and free of adverse events. It reduced physiologic arousal and self-reported anxiety and fear, supporting meditation as a scalable intervention targeting modifiable delirium-related processes.

Together, these studies illustrate complementary stages of mechanism-informed intervention development, from programme theory and intervention adaptation to feasibility testing, providing a roadmap for more precise, context-sensitive non-pharmacological interventions for pediatric delirium.

Bio – Jelena Golubovic: Dr. Jelena Golubovic is a Postdoctoral Research Fellow in Walther Supportive Oncology at Indiana University School of Medicine. She holds a PhD focused on music and delirium in adults, completed through a collaboration between the Norwegian Academy of Music and Oslo University Hospital. She is a member of Oslo Delirium Research Group and American Delirium Society. Her research spans music and neurorehabilitation, dementia, and delirium, including clinical research, systematic reviews, and meta-analyses. Her current research focuses on further exploring music-based interventions (MBIs) for acutely ill older adults in long-term care settings, as well as refining and adapting an evidence-based active music engagement intervention for delirium in pediatric populations and supportive oncology. Jelena is a classical pianist and an experienced music therapist, having worked with older adults in hospitals and long-term care settings and with children and adolescents in pediatric hospitals, schools, and inclusive education settings. Her work is informed by a commitment to culturally responsive and inclusive care and research.

Bio – Neelima Marupudi: Dr. Neelima Marupudi is a pediatric critical care physician-scientist whose research focuses on improving neurologic, cognitive, and functional outcomes for critically ill children. Her work spans pediatric delirium and acute brain dysfunction, sleep and circadian disruption, ICU liberation, and post-intensive care outcomes. Neelima currently serves as Co-Chair of the American Delirium Society Pediatric Special Interest Group and contributes to the Society of Critical Care Medicine ICU Liberation Committee. Her research includes multicenter studies of sleep and circadian health in critically ill children, delirium assessment and management, and post-PICU recovery. Through clinical research, implementation initiatives, and multicenter collaborations, Neelima's work aims to develop and evaluate interventions that promote brain health and recovery across the continuum of pediatric critical illness.

Proactive Psychiatric Consultation for Delirium Prevention and Management in the PICU

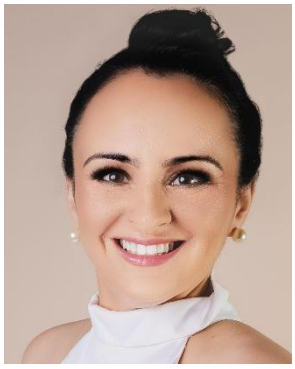


Nadia Zaim (United States)
Vanderbilt University Medical Center

Talk description: Dr Zaim's talk will focus on the rationale, feasibility, and initial outcomes associated with the build of a proactive pediatric psychiatry consultation liaison service in the pediatric intensive care unit. She will begin by reviewing delirium prevalence in ICU settings, then will highlight the importance of relationship building and modifications to daily process, and finally she will share initial outcomes including numbers, demographic information and diagnoses. She will close by sharing next steps planned for program expansion.

Bio: Nadia Zaim is the director of the Pediatric Consultation Liaison Psychiatry service at Monroe Carell Children's Hospital at Vanderbilt. Her training path included completion of residency in pediatrics, adult psychiatry, and child and adolescent psychiatry. She is passionate about destigmatizing mental health care and psychiatric symptoms in medical settings. Her career has been focused on education across all levels of medical education, and program building with most recent programmatic growth in the proactive consultation psychiatry space.

Beyond Delirium: Implementing a Brain Health Approach in the Pediatric ICU



Roberta Esteves Vieira de Castro (Brazil)
State University of Rio de Janeiro (UERJ)

Talk description: This symposium will present a practical, integrated approach to promoting brain health in the pediatric ICU, moving beyond delirium screening to address modifiable risk factors throughout critical illness. It will explore how evidence-based pain management, optimized analgosedation, sleep promotion, withdrawal prevention, early mobilization, family engagement, and interdisciplinary collaboration can work together to reduce acute brain dysfunction and improve short- and long-term outcomes. Emphasis will be placed on translating evidence into routine practice across PICUs with different resource levels, using practical implementation strategies, multidisciplinary workflows, and quality improvement principles to overcome common barriers and promote sustainable, patient- and family-centered care.

Bio: Roberta Castro, MD, PhD, is a pediatric intensivist and Associate Professor at the State University of Rio de Janeiro (UERJ), Brazil. Her clinical, research, and academic work focuses on pain, sedation, delirium, withdrawal, and brain health in critically ill children. She leads research initiatives addressing brain health across different pediatric care settings, including SAFE-PED, focused on analgesia and

sedation in the pediatric ward, and DELINEO, investigating delirium and neurodevelopment in newborns. She is dedicated to translating evidence into clinical practice and advancing patient- and family-centered approaches to improve neurological outcomes in pediatric and neonatal care.

Parallel 3: Beyond Delirium Guidelines: Creating Sustainable Systems for Perioperative Brain Health

Time: 11:15–12:30 **Room:** Oslo
Chairs: Stefanie Pilge, Alex Barroso

From Delirium Guidelines to Sustainable Systems of Care: Lessons from Large-Scale Implementation



Svenja Letz (Germany)
TUM University Hospital, Munich

Talk description: International delirium guidelines provide evidence-based recommendations for the prevention, monitoring, and management of postoperative delirium. However, their consistent implementation in routine clinical care remains challenging, particularly within complex healthcare organisations. This lecture will discuss key principles and practical considerations for implementing perioperative delirium pathways on a large scale. Using the experience of a university medical centre, where such structures have been implemented for more than 15,000 patients in routine care, the presentation will address governance structures, stakeholder engagement, implementation strategies, and the development of continuous perioperative care pathways.

Particular attention will be given to factors that support the sustainability and scalability of these approaches, as well as their integration into existing clinical workflows. The lecture will illustrate how evidence-based recommendations can be translated into structured and sustainable clinical practice.

Bio: Dr. Svenja Letz is a specialist in Anesthesiology and Intensive Care Medicine at the Department of Anesthesiology and Intensive Care Medicine at the TUM University Hospital Rechts der Isar in Munich. In addition to clinical responsibilities, Dr. Letz has a strong interest in perioperative brain health, with a particular focus on the prevention and management of postoperative delirium. Together with a dedicated and interdisciplinary team, Dr. Letz is committed to bridging preclinical and clinical research and translating scientific findings into evidence-based strategies for routine clinical practice. This includes the development and implementation of innovative structures for the perioperative care of patients at increased risk of postoperative delirium, as well as active involvement in clinical research on electroencephalography and its application in the perioperative setting. Through close integration of research and clinical practice, the overarching goal is to advance patient-centered care and sustainably improve perioperative outcomes.

Interprofessional Leadership, Family Engagement and Sustainable Delirium Care



Peter Nydahl (Germany)
University Hospital Schleswig-Holstein, Kiel

Talk description: Delirium care is more than prevention, assessment and treatment. It requires a humanising, person-centred approach that recognises patients, families and healthcare professionals as partners in care, while considering the environmental impact of healthcare practices. This lecture explores how interprofessional leadership can foster shared responsibility, strengthen family engagement and embed meaningful delirium care into everyday clinical practice. Particular attention is given to sustainable approaches that combine high-quality care with responsible use of environmental and healthcare resources. By integrating humanising critical care, person-centredness and environmental responsibility, delirium care can become more effective and compassionate while contributing to more sustainable healthcare for patients, families, professionals and future generations.

Bio: Dr. habil. Peter Nydahl, RN BScN MScN, Nursing Research, University Hospital Schleswig-Holstein Kiel, Germany. Peter worked on ICU for 30 years and always tried to start rehabilitation of patients as early as possible. He started studying nursing research beside his practical work and performed many interprofessional research projects. The focus of his work is on person-centered care including early mobilization, delirium prevention and therapy, family integration, and ICU diaries. As an ICU nurse, he is a team player and like to cooperate with many delirium enthusiasts around the world. He lives with his wife in Kiel, Germany, at the Baltic Sea, loves running in the morning and is proud dad of three children and super-proud granddad of six (yes!) grandchildren.

Brain Health Before Surgery: Prehabilitation as a Delirium Prevention Strategy



Cynthia Olotu (Germany)
University Medical Center Hamburg-Eppendorf

Talk description: Increasing evidence suggests that postoperative delirium is influenced by patient vulnerability long before the day of surgery. This lecture will discuss prehabilitation as a brain health intervention targeting modifiable risk factors such as frailty, functional decline and reduced physiological reserve. Current evidence for multimodal prehabilitation programmes will be reviewed, together with opportunities and challenges for integrating preoperative optimisation into perioperative brain health pathways. The presentation will highlight how prehabilitation may contribute to delirium prevention within a broader life-course approach to perioperative care.

Bio: Cynthia Olotu, MD, PD, is consultant anaesthesiologist at the University Medical Center Hamburg-Eppendorf and leads the Research Group for Geriatric Anaesthesiology and Perioperative Medicine in Older Adults. Her scientific work focuses on perioperative care for older patients, particularly delirium, neurocognitive disorders, medication safety, pain management, and needs-based care pathways. She is co-founder of the Geriatric Anaesthesia Working Group of the German Society of Anaesthesiology and Intensive Care Medicine and serves as its secretary. She is a board member of the European Delirium Association and a member of the ESAIC Scientific Subforum "Geriatric Patient". Dr Olotu contributes to evidence-based guideline development, including the German S3 guideline on delirium in older age and the S3 guideline on pain management in geriatric patients across care settings. Her funded research projects address optimisation of perioperative pathways, patient safety, and care transitions for geriatric surgical patients.

Reading the Vulnerable Brain: Intraoperative EEG and the Limits of Delirium Prevention



Alex Barroso (Spain)
Hospital Regional Universitario de Málaga; University of Málaga

Talk description: Two large, randomised trials reduced time spent in burst suppression and did not reduce delirium. The intervention worked; the outcome did not move. That paradox is the starting point of this talk. I will argue that intraoperative EEG is better read not as an anaesthetic dosimeter but as a stress test: the drug is the standardised stimulus, and the trace shows how much reserve the anaesthesiologist is dealing with. I will review the markers available at induction, maintenance and emergence, with their actual performance figures, including those that fall short of what is often claimed. And I will raise the question that matters most for practice: if the monitor only changes outcomes when it sits inside a care pathway that acts on what it shows, the problem stops being technological and becomes organisational.

Bio: Alex Barroso, MD, PhD, is a consultant anaesthesiologist at Hospital Regional Universitario de Málaga and Associate Professor at the Faculty of Medicine, University of Málaga. His work focuses on protecting the brain during surgery: what intraoperative EEG reveals about each patient's vulnerability, and how to bring that information into daily practice in the operating room. He holds an International PhD from the University of Málaga and King's College London. He serves on the Steering Committee of the Safe Brain Initiative, where he works on the implementation of perioperative brain health programmes, and coordinates the NeuroScope group of the Spanish Society of Anaesthesiology (SEDAR), devoted to EEG education and neuromonitoring research. He has published more than twenty articles, including in eLife, PAIN and the British Journal of Anaesthesia.

12:30–13:30	**Lunch and posters** *Lunch: Restaurant*

Oral presentations – Thursday afternoon

Time: 13:30–15:00

Oral presentations 1: Pathophysiology

Room: Helsinki **Chairs:** Kristin Markus, Eli Rudi

Time	Presentation
13:30–13:40	**Yamini Ajmera (13):** To evaluate determinants and short-term and long-term outcomes of delirium in hospitalized older adults.
13:40–13:50	**Maria Scheutz (24):** The relationship between MRI-based preoperative blood-brain barrier permeability and postoperative delirium symptom severity is modulated by intraoperative blood-loss
13:50–14:00	**Sofie Lautrup** (39): Longitudinal Associations Between Immune-Regulatory Kynurenine Pathway Metabolites and Delirium
14:00–14:10	**Yoonhyoung Jo** (41): Postoperative Delirium Is Associated with Cortical Gray Matter Loss Following Brain Metastasis Surgery: A Longitudinal MRI Study
14:10–14:20	**Christine von Arnim** (43): Preoperative Plasma Amyloid-β1-40 Is Associated with Increased Risk of Postoperative Delirium after Cardiac Surgery: Results from the Prospective FINDERI Cohort.
14:20–14:30	**Yorben Lodema** (66): Widespread Alterations in Aperiodic EEG Activity in Delirium
14:30–14:40	**Mathias Hella** (73): CSF α-synuclein seeding activity in delirium: exploring a potential link with Lewy body disease.
14:40–14:50	**Tania Ahmed** (86): The Brain's Sweet Spot

Oral presentations 2: Phenomenology, diagnosis, risk factors

Room: København **Chairs:** Sigurd Evensen, Thea Berntsen

Time	Presentation
13:30–13:40	**Florence Gerakios** (25): Clinical delirium subtypes and associated one-year mortality, dementia and institutionalisation.
13:40–13:50	**Rachael Lawson** (32): Developing a Parkinson's Disease-Specific Delirium Diagnostic Tool: Internal Validation Using Penalised Regression
13:50–14:00	**Sara Åkerman** (51): CAPD-defined delirium was highly prevalent in Swedish PICUs.
14:00–14:10	**Stefan Holman** (60): Diagnostic accuracy and feasibility of the 4AT, including non-verbal adaptations, for delirium detection in critically ill patients: a prospective multicenter study
14:10–14:20	**Matthew Luney** (62): Delirium severity after hip fracture: development and validation of a UK clinical prediction model
14:20–14:30	**Sophie Leroy** (85): Standardizing EEG Acquisition in Delirium Research: Clinical and Technical Recommendations for Harmonization and Federated Analysis
14:30–14:40	**Aline Nixon** (87): Poor Physical Function, a Key Risk Factor for Development of Post-operative Delirium in Older Adults. A Systematic Review and Meta-analysis
14:40–14:50	**XiangLu Xiao** (95): PharmkGPT, a biomedical knowledge graph to support evidence-grounded question answering and literature exploration across delirium and AD.

Oral presentations 3: Treatments and outcomes

Room: Oslo **Chairs:** Wilhelm Frich, Kristine Verlo

Time	Presentation
13:30–13:40	**Jian-An Su** (2): Delirium as an Early Mortality Signal in Older Inpatients: A Three-Year Comparative Survival Study
13:40–13:50	**Anders Aasheim** (4): EEG Spectrogram- and BIS-Guided Anaesthesia Improves Emergence and Early Postoperative Cognitive Function: A Randomized Controlled Trial.
13:50–14:00	**Eva Trompetter** (9): "My sister often tried to talk to the doctors about the delirium, but nothing came of it" - Care experiences and coping behaviour of relatives of older people with delirium
14:00–14:10	**Christina Aggar** (45): PREDICT (Prevention and Early Delirium Identification Carer Toolkit)
14:10–14:20	**Sining Zeng** (63): Perioperative Music Interventions for Prevention of Postoperative Delirium in Adult Patients: A Systematic Review and Meta-analysis
14:20–14:30	**Rose Penfold** (65): Delirium on admission and subsequent dementia subtype: a population-based cohort study of older adults
14:30–14:40	**Sanchit Turaga** (89): Delirium occurrence across dementia subtypes in older hospital patients: ORCHARD-EPR cross-sectional study

15:00-15:30	**Coffee break and posters**

Maeve Leonard Award Lecture

Two Vulnerabilities, One Imperative: Research for Better Delirium and Palliative Care

Time: 15:30–16:30 **Chair:** Colm Cunningham

Room: Scandinavia Ballroom



Winner 2025: Meera Agar (Australia)

University of Technology Sydney

Talk description: Delirium and life-limiting illness bring together two vulnerabilities: people whose capacity to consent may fluctuate, and people who are nearing the end of life. Too often, though well intentioned the focus has been on how these groups can be protected from research rather than protected through it, leaving clinicians to rely on consensus, individual practice, extrapolation and untested practice. There is however a strong argument that rigorous research is not a burden placed on vulnerable people but an ethical imperative owed to them. In many other discipline building research into routine care transformed outcomes for patients once considered too fragile to study. Delirium and palliative care research shows the same is possible, with well - designed studies providing important knowledge on how better to prevent, assess and screen, and better understand whether how we currently treat delirium works. Remembering the important work Maeve Leonard

contributed to this body of work, this talk will outline how researchers working with people with lived experience have built more inclusive approaches and pragmatic designs which can make evidence-informed care the standard, not the exception.

Bio: Professor Agar is the Director of IMPACCT, a research centre focussed on applied clinical research in aged, chronic and palliative care. Her research interests are in delirium in chronic conditions including those with life limiting illness, and she is a clinical trialist. She is a Board member of the Australasian Delirium Association.

EDA General Assembly

Time: 16:30–17:15
Room: Scandinavia Ballroom

Thursday evening programme

17:15–17:30	Walk to Oslo City Hall
17:30	Check-in and distribution of admission passes at Oslo City Hall
18:00–19:30	**Reception at Oslo City Hall**
20:00	**Social dinner at Oche Torggata**

Friday 6 November

EDA board meeting

Time: 08:00–08:45
Room: Skagerak

Welcome and information

Room: Scandinavia Ballroom

08:50–09:00: Special address by Cathrine M. Lofthus
Director General of Health and Chief Medical Officer, Norwegian Directorate of Health

Keynote Speaker II: Network dysfunction in delirium

Time: 09:00–10:00 **Chair:** Leiv Otto Watne
Room: Scandinavia Ballroom



Robert D. Sanders (Australia)
University of Sydney; Royal Prince Alfred Hospital

Talk description: Prof Sanders will describe how the network architecture of the brain is optimised for functioning in our environment, how network failure may be a critical feature of delirium. Using data from functional imaging and electroencephalography, he will illuminate the central mechanisms underlying these processes and how an increased understanding of these mechanisms may lead to novel treatments for delirium.

Bio: Prof Robert Sanders is the Nuffield Chair of Anaesthetics, University of Sydney; Academic Head of Department, Department of Anaesthetics, Royal Prince Alfred Hospital; a founding member of the European Society of Anaesthesiologists Task Force on Postoperative Delirium; and an Executive Committee member of the Australasian Delirium Association (Research Working group co-lead).

He is passionate about understanding the pathophysiology of delirium with his work including animal models and translational phenotyping studies in patients (neuroimaging, EEG, plasma biomarkers). The resulting knowledge has driven clinical trials. He co-designed, recruited patients for and published the MENDS2 RCT in the New England Journal of Medicine. He currently leads an NHMRC Clinical Trials Cohort Scheme-funded multicentre clinical trial to define the role of dexmedetomidine in preventing postoperative delirium after cardiac surgery. More recently he has started the MRFF-funded NOTBADD perioperative non-cardiac surgery delirium-prevention platform pilot study. In a new direction, our group has pioneered novel Bayesian meta-analysis tools to allow us to synthesize evidence rapidly and clearly for consumers.

10:00–10:30	Coffee break

Parallel 4: Adaptive Platform Trials

Time: 10:30–11:45 **Room:** Helsinki
Chairs: Liz Sampson, Meera Agar

Adaptive platform trials: an innovative methodology for discovering new delirium treatments in heterogeneous hospital populations



Meera Agar (Australia)
University of Technology Sydney

Talk description: Delirium affects a clinically diverse population, varying by age, frailty, comorbidity, precipitating illness, and underlying mechanism. It has historically been studied using traditional parallel-group trials testing single interventions in narrowly defined cohorts. This approach has consistently failed to deliver licensed treatments, is slow and resource-intensive, and poorly reflects the heterogeneity of patients encountered in routine acute care.

This talk outlines the rationale for adaptive, multi-arm, multi-stage platform trials as a solution to these limitations. By evaluating multiple interventions simultaneously against a shared control using a master protocol, platform trials allow arms to be added, dropped, or modified in response to accumulating evidence, while shared infrastructure reduces cost and accelerates recruitment. Response-adaptive randomisation and pre-planned subgroup analyses enable efficient identification of which treatments work best for which patients, directly addressing delirium's mechanistic and clinical heterogeneity.

Platform designs offer a scaled, clinically embedded approach to trial delivery within busy acute hospital settings, generating faster, more applicable answers and supporting personalised treatment strategies for delirium.

Adaptive platform trials represent a methodologically robust and pragmatic route to overcoming decades of stalled progress in delirium treatment discovery, particularly suited to heterogeneous, real-world hospital populations.

Bio: Professor Agar is the Director of IMPACCT, a research centre focussed on applied clinical research in aged, chronic and palliative care. Her research interests are in delirium in chronic conditions including those with life limiting illness, and she is a clinical trialist. She is a Board member of the Australasian Delirium Association.

From exclusion to inclusion: people and community involvement to address inequalities in delirium trials



Alexandra Feast (United Kingdom)
Queen Mary University of London; Barts Health NHS Trust

Talk description: Delirium trials face persistent recruitment challenges, particularly in frail older adults, those lacking capacity, and populations experiencing health inequalities. Barriers span patient (cognitive fluctuation), system (time-pressured acute care pathways), and methodological (complex consent) domains, leading to under-representation and inequities in the evidence base.

Drawing on multiple complex delirium trials, we describe a structured People and Community Involvement (PaC) model to address these challenges. This combines site-specific community mapping with co-produced strategies developed alongside patient panels, carers, and underserved groups. A People and Community Steering Group, co-developed with community, faith, and advocacy organisations, informs recruitment, consent, and study materials.

Key elements include accessible, multilingual resources; flexible, proportionate consent pathways; and partnerships with community services. Innovative methods such as peer-led discussions, simulated recruitment workshops, and mobile “research cafés” to build trust and improve access. Patients and communities are active partners in knowledge mobilisation, shaping dissemination and supporting translation into practice. Continuous feedback and international collaboration enable iterative refinement.

Embedding PaC across the trial lifecycle offers a scalable approach to improving equity, feasibility, and acceptability, supporting more representative cohorts and implementation in routine care.

We will present practical lessons and transferable strategies for inclusive delirium trial delivery in real-world settings.

Bio: Dr Alexandra Feast is a Senior Research Fellow at the Academic Centre for Healthy Ageing, Queen Mary University of London and Barts Health NHS Trust, working with Professor Liz Sampson on the intersection of delirium, dementia and frailty across acute and community care pathways. She leads delivery of the UK Delirium James Lind Alliance Priority Setting Partnership, working with patients, carers and professionals to agree the nation's top research priorities for delirium. With over 15 years' experience in applied health and care research, her work spans systematic reviews and evidence synthesis, focused particularly on pain and delirium in dementia. She previously managed a national cancer research programme at Cancer Research UK and a multi-site NIHR trial at UCL, where she completed her PhD on behavioural and psychological symptoms in dementia. She has published widely on delirium and dementia, including in Age and Ageing and the British Journal of Psychiatry.

Building an early-phase (2a/b) pipeline for mechanism-targeted delirium treatments



Robert D. Sanders (Australia)
University of Sydney; Royal Prince Alfred Hospital

Talk description: In this talk, Prof Sanders will describe the potential treatments being considered in the RAPID trial with a brief description of the initial interventions being adopted in the pain and circadian rhythm domains, followed by description of the pathway to add new interventions to the platform.

Bio: Prof Robert Sanders is the Nuffield Chair of Anaesthetics, University of Sydney; Academic Head of Department, Department of Anaesthetics, Royal Prince Alfred Hospital; a founding member of the European Society of Anaesthesiologists Task Force on Postoperative Delirium; and an Executive Committee member of the Australasian Delirium Association (Research Working group co-lead).

He is passionate about understanding the pathophysiology of delirium with his work including animal models and translational phenotyping studies in patients (neuroimaging, EEG, plasma biomarkers). The resulting knowledge has driven clinical trials. He co-designed, recruited patients for and published the MENDS2 RCT in the New England Journal of Medicine. He currently leads an NHMRC Clinical Trials Cohort Scheme-funded multicentre clinical trial to define the role of dexmedetomidine in preventing postoperative delirium after cardiac surgery. More recently he has started the MRFF-funded NOTBADD perioperative non-cardiac surgery delirium-prevention platform pilot study. In a new direction, our group has pioneered novel Bayesian meta-analysis tools to allow us to synthesize evidence rapidly and clearly for consumers.

The example of sleep and optimising cerebral metabolism: potential therapeutic trials of insulin and melatonin in older adults with delirium





Anita Nitchingham (Australia)
Prince of Wales Hospital; UNSW; NeuRA

Peter Lange (Australia)
University of Melbourne

Talk description: Delirium is increasingly understood as a state of acute cerebral energy failure and circadian disruption, in which reduced glucose utilisation, brain insulin resistance, and mitochondrial vulnerability. Some patients experience sleep fragmentation and loss of normal melatonin rhythm which compromises neuronal resilience during acute illness. Intranasal insulin, delivered directly to the central nervous system without clinically significant systemic glucose effects, offers a mechanism-targeted approach to improving cerebral glucose metabolism, dampening

neuroinflammation, and modulating HPA-axis activity. Melatonin, a chronobiotic with antioxidant and anti-inflammatory properties, offers a complementary route to restoring circadian integrity and sleep architecture disrupted during delirium.

This talk uses intranasal insulin and melatonin as exemplars to explore the promise and pitfalls of mechanism-targeted trials in older adults. Drawing on the first randomised trial of intranasal insulin for established delirium, which found an age-related treatment response and reduced acute length of stay despite no overall effect on delirium duration, alongside emerging evidence for melatonin, it examines shared practical challenges of trial conduct in this population: comorbid diabetes, polypharmacy, nutritional variability, route-of-administration constraints, and reassuring safety profiles for both agents.

These findings illustrate how careful subgroup analysis and outcome selection across metabolic and circadian domains can uncover clinically meaningful signals even when primary endpoints are not met.

Insulin and melatonin exemplify the therapeutic promise and methodological complexity of metabolic and sleep-targeted interventions, supporting further investigation into dose, timing, and patient selection in frail older populations.

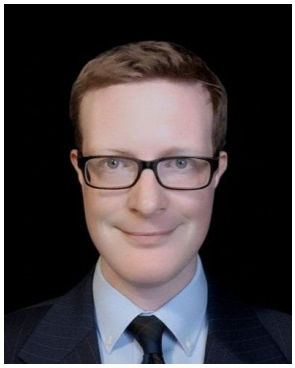
Bio – Anita Nitchingham: Dr Anita Nitchingham is a geriatrician and clinician-researcher at Prince of Wales Hospital, UNSW and NeuRA. Her research focuses on delirium, particularly its underlying mechanisms, treatment and recovery. She completed her PhD in 2025, investigating brain glucose metabolism and intranasal insulin as a novel treatment for delirium. Anita is a SPHERE Clinical Academic Fellow, leading work to develop and implement better post-delirium care pathways. She is also Vice-President of the Australasian Delirium Association.

Bio – Peter Lange: Peter Lange is a physician-researcher and Clinical Associate Professor at the University of Melbourne, serving as Director of General Medicine and Geriatrics at Werribee Mercy Hospital. He leads multidisciplinary innovation in acute care, with a particular focus on delirium, cognitive vulnerability, and hospital-acquired complications. As Principal Investigator of the PTDP trial, he oversees protocol development, implementation science, and system-level redesign aimed at improving early detection, personalised treatment, and long-term cognitive outcomes for older inpatients. His work integrates clinical governance, translational research, and creative engagement strategies to strengthen staff capability and patient-centred care. Peter’s academic background includes a PhD in scientific writing and comparative health systems, informing his interest in immunosenescence, functional trajectories, and international models of delirium care. He is committed to advancing evidence-based, scalable approaches that reduce harm, enhance recovery, and elevate the standard of delirium management across diverse hospital settings.

Parallel 5: Scaling Up Delirium Detection and Care

Time: 10:30–11:45 **Room:** København
Chairs: Bjørn Erik Neerland, Koen Milisen

Effective large-scale delirium assessment in routine care is possible: the 4AT as an exemplar



Alasdair MacLullich (Scotland)
University of Edinburgh

Talk description: Delirium is still often missed in routine care. In this talk I will discuss how we can make delirium assessment part of everyday clinical practice, using the 4AT as the main example. I will describe why we developed it, the evidence for its use, and examples of large-scale implementation. I will look at practical questions such as who does the assessment, how it fits into routine work, and how education and audit can help staff use it consistently. I will also discuss other approaches to delirium detection and what we can learn from them. The focus will be on what has worked in practice and how assessment can lead to appropriate clinical care.

Bio: Alasdair MacLullich is Professor of Geriatric Medicine at the University of Edinburgh and a consultant physician at the Royal Infirmary of Edinburgh. He works in acute geriatric medicine and hip fracture care, with research interests in delirium and hip fracture. He led the development of the 4AT in 2011. He co-founded the European Delirium Association and was its President from 2012 to 2015. He is Editor-in-Chief of Delirium and chairs the Scottish Hip Fracture Audit. He also develops educational resources for clinicians and information about delirium for patients and families.

Putting Delirium on the Agenda – National Supervision to Support Ownership, Learning and Improvement



Lena Korsnes (Norway)
Norwegian Board of Health Supervision

Talk description: The Norwegian Board of Health Supervision has put delirium on the agenda. The ambition is to use national supervision as a structured approach to strengthen organisational ownership, promote learning, and improve delirium care. The overall aim is to support safer, more systematic care for patients with, or at risk of, delirium.

We will present our newly designed, learning-oriented approach to national supervision of delirium care for older hospitalised patients. The supervision is structured around shared learning, systematic follow-up, and opportunities for hospitals to reflect on and improve their own practice.

Hospitals review their own records, present their own results, identify barriers, learn from peers, and adjust their practice over time. The purpose is not to assess individual episodes of care, but to support and assess how hospitals monitor practice, evaluate service delivery, and implement improvements.

Bio: Lena Korsnes is a senior adviser at the Norwegian Board of Health Supervision. Her work focuses on supervision, patient safety and quality improvement in specialist healthcare. She has led the development of national supervision of delirium care for older hospitalised patients.
Lena has a professional background in clinical nursing, hospital management, supervision and quality improvement. She is particularly interested in how supervision can support learning and safer care in complex healthcare services.
She holds a Master of Clinical Nursing from Flinders University of South Australia and an Executive Master of Management in Security Management and Cultural Understanding from BI Norwegian Business School.

How to become better?



Katinka Alme (Norway)
Haukeland University Hospital

Talk description: The County Governor (Statsforvalteren) in Norway has launched a national supervisory initiative focusing on delirium. Whereas inspections previously functioned primarily as an authority that identified what organizations were doing wrong, the supervision is now organized as a quality improvement process. Have we become better, and if so, in what ways?

Bio: Katinka Nordheim Alme, MD, PhD, is a consultant geriatrician and Head of the Geriatric Department at Haukeland University Hospital in Bergen, Norway. She holds a PhD and is actively involved in clinical leadership and interdisciplinary initiatives aimed at improving outcomes for frail older patients.

Parallel 6: Pathophysiology themes

Time: 10:30–11:45 **Room:** Oslo

Chairs: Cynthia Olotu, Esther Oh

Updating the pathophysiological picture: from medical precipitant to cellular & molecular impacts on neuronal function



Colm Cunningham (Ireland)
Trinity College Dublin

Talk description: Our understanding of the basic biology underpinning episodes of delirium has increased incrementally over the last 2 decades but remains fragmented. Although we have shown that certain cellular and molecular pathways appear to be sufficient to produce delirium-like deficits in animal models, we will still have a poor understanding of precisely which molecules act on which cells to produce which type of neuronal and network dysfunction. One important consequence of this is that we still do not have mechanistically-based treatments for delirium. In this talk Colm Cunningham will attempt to draw together clinical and preclinical work to present an overview on the current state of understanding of delirium pathophysiology.

Bio: Dr Colm Cunningham is an Associate Professor in Neuroscience, in the School of Biochemistry and Immunology in Trinity College Dublin (TCD). His main research interest is to develop and study animal models to understand the impact of inflammation, in particular systemic inflammation, on brain function and neurodegeneration. He obtained a Ph.D. in Neurochemistry in TCD and did post-doctoral research with Prof. Hugh Perry's CNS inflammation group in the University of Southampton. He was awarded a Wellcome Trust Career Development Fellowship in 2006 to establish the first animal models of delirium during dementia in Trinity College Dublin and won a WT Senior Fellowship in 2010 to further pursue inflammatory mechanisms relevant to delirium. The interaction between prior neurodegenerative pathology and superimposed secondary insults in delirium and long-term cognitive decline is now the major focus of his work and his lab is currently supported by the US National Institutes of Health (NIH), The Irish Research Council and the Health Research Board.

Glymphatic dysfunction: a unifying hypothesis for delirium



Hans Christian Boesen (Denmark)
Zealand University Hospital

Talk description:

- Introduction to the glymphatic system – anatomy – discovery – inflow, outflow and interstitial clearance.
- Regulation during sleep and anaesthesia.
- Knowledge about factors inhibiting the system:
- Ageing, diseases, sleep-disorder, stroke, traumatic brain injury, anaesthetics, analgesics, norepinephrine, mechanical ventilation.
- Glymphatic dysfunction might be a final common pathway of all known risk-factors and triggers leading to delirium.
- What is currently supporting the hypothesis?
- And what are the perspectives for future research.

Bio: Hans Christian Toft Boesen, MD, EDIC, SSAI, Specialist in Anaesthesiology and intensive care. Clinical work in intensive care focusing on delirium, and sleep promotion, starting out in 2010 implementing CAM-ICU and non-sedation. Sleep-studies with polysomnography in ICU-delirium. In cooperation with Professor Maiken Nedergaard's group suggesting glymphatic dysfunction as a unifying hypothesis for delirium.

11:45–12:45	**Lunch and posters** *Lunch: Restaurant*

Parallel 7: Delirium in the Developing Brain

Time: 12:45–14:00 **Room:** Helsinki
Chairs: Sara Åkerman, Roberta Esteves Vieira de Castro

Recognising Paediatric Delirium Across Developmental Stages: From Clinical Observation to Daily Practice



Jacqueline Strik (The Netherlands)
Maastricht University / Maastricht University Medical Centre

Talk description: This talk will provide a clinical framework for recognizing pediatric delirium across critical care settings. It will focus on how developmental stage, communication ability, baseline neurodevelopmental functioning and family context influence the presentation and interpretation of delirium in children. Core clinical features such as acute change, fluctuation, altered attention, arousal and behavioral dysregulation will be discussed, alongside the challenges of distinguishing delirium from pain, withdrawal, sedation effects or developmental distress. The presentation will also address practical barriers to implementation, including staff familiarity, competing clinical priorities and uncertainty around atypical presentations. Finally, it will explore strategies for embedding delirium

awareness into daily PICU and NICU routines through structured screening, multidisciplinary collaboration, family input and clear escalation pathways.

Bio: Prof. dr. Jacqueline Strik is a pediatric psychiatrist with expertise in the field of pediatric delirium in pediatric and neonatal ICU and professor in pediatric psychiatry and somatic comorbidity. Also she is head of the residency of childpsychiatry and integration of education, research and clinical activities within the Maastricht Medical Centre and Maastricht University. She will talk about challenges of screening delirium in children.

Can Neonates Become Delirious? Diagnostic Boundaries and Prospective NICU Data



Husam Salamah (The Netherlands)
Maastricht University / Maastricht University Medical Centre

Talk description: This talk will focus on neonatal delirium as an emerging and underexplored area within delirium research. It will address the diagnostic complexity of identifying delirium in preterm and medically fragile infants, where neurological immaturity, limited behavioral repertoire, sedation, analgesia and overlap with pain, withdrawal or seizures complicate clinical interpretation. The presentation will discuss the limitations of current screening approaches and the absence of validated neonatal delirium instruments. It will also present emerging prospective NICU data using expert DSM-5-based clinical assessment alongside repeated bedside observations. The findings will be used to reflect on whether delirium-like states can be identified in neonates, how these states may present clinically, and what further research is needed to refine diagnostic criteria, develop screening tools and improve recognition of acute brain dysfunction in this vulnerable population.

Bio: Husam Salamah is a child and adolescent psychiatrist and a PhD- candidate based in Maastricht, the Netherlands. He works across clinical, academic and teaching settings, with a focus on child and adolescent psychiatry. His research focuses on delirium in critically ill children and neonates, including diagnostic challenges in the NICU and the relationship between pediatric delirium and outcomes after PICU admission. He is involved in undergraduate medical education at Maastricht University and contributes to teaching, assessment and supervision in child and adolescent psychiatry. His clinical and research interests center on the interface between physical illness, brain development and mental health in children and adolescents.

Beyond Survival: Paediatric Delirium as a Predictor of Health-Related Quality of Life After PICU Admission



Britney Broeders (The Netherlands)
Maastricht University

Talk description: This talk will examine pediatric delirium in relation to recovery after critical illness. As survival after PICU admission improves, increasing attention is given to Pediatric Post-Intensive Care Syndrome and its impact on physical, cognitive, psychological, and social functioning. This presentation will focus on health-related quality of life after PICU admission and discuss delirium as a possible marker or contributor to poorer recovery. Drawing on PICU follow-up data, the talk will consider delirium alongside other clinical risk factors such as illness severity, ventilation, age, and length of admission. It will also address methodological challenges, including the measurement of health-related quality of life across pediatric age groups and the influence of confounding factors. The presentation will conclude by discussing how routine delirium screening may support acute care, risk identification, and post-discharge follow-up planning.

Bio: Britney Broeders is a PhD candidate in child and adolescent psychiatry at Maastricht University, the Netherlands. Her research focuses on vulnerable children across diverse healthcare settings, including intensive care units and general hospital wards. Specifically, she investigates pediatric delirium and its impact on children's quality of life, while integrating a family-centred care perspective by also evaluating parental well-being. Her academic interests lie at the interface of somatic and psychiatric care, child development, and family outcomes.

Parallel 8: ADA/ADS symposium

Time: 12:45–14:00 **Room:** København
Chairs: Anita Nitchingham, Sikandar Khan

An update on ADS activities and initiatives



Leanne Boehm (United States)
Vanderbilt University School of Nursing

Bio: Leanne Boehm, PhD, RN, ACNS-BC, is an Associate Professor at Vanderbilt University School of Nursing whose research focuses on eliminating delirium, oversedation, and immobilization in the ICU and maximizing quality of life for patients and families following critical illness. Her work has advanced the use of the ABCDEF bundle, ICU recovery clinics, and peer support programs to reduce the prevalence of ICU delirium and Post-Intensive Care Syndrome. She has advanced training in implementation science and quality improvement, and her current research evaluates telehealth ICU recovery services and digital tools to strengthen family engagement during and after an ICU stay. Dr. Boehm serves as President of the American Delirium Society and Nurse Editor-in-Chief of the American Journal of Critical Care.

What's in the blood? Biomarkers in Patients with Intensive Care Unit Delirium – A Pilot Study



Sikandar Khan (United States)
Indiana University Center for Aging Research; Regenstrief Institute

Talk description: In this presentation, Dr. Khan will review current biomarker models for ICU delirium, discuss candidate peripheral biomarkers for future studies, and show early results of biomarkers obtained from critically ill adults with acute respiratory failure and ICU delirium.

Bio: Dr. Khan is an Assistant Professor in the Division of Pulmonary and Critical Care, Associate Director at Indiana University Center for Aging Research, and Scientist at Regenstrief Institute. Dr. Khan is funded by the National Institute on Aging (NIA) Paul Beeson Emerging Leaders Career Development Award to study the role of oxidative stress in critical illness, ICU delirium and post-ICU aging. His research activities to date include measurement of delirium duration and severity, identification of delirium risk factors, exploring delirium's association with dementia through peripheral blood-based biomarkers and testing novel non-pharmacological interventions to mitigate delirium in the ICU.

Personalized Communication and ICU Delirium: Lessons from the EMERGE Trial



Somnath Bose (United States)
Harvard Medical School; Beth Israel Deaconess Medical Center

Talk description: Delirium is a common complication of critical illness and a major contributor to poor patient outcomes. This session will review the EMERGE Trial, a multicenter randomized study evaluating a personalized communication platform designed to provide orientation, family

engagement, and auditory stimulation for mechanically ventilated ICU patients. The presentation will highlight the potential role of technology-enabled, nonpharmacologic interventions in delirium prevention, discuss key trial findings, and explore implications for future research and clinical care.

Bio: Dr. Somnath Bose is an anesthesiologist, intensivist, and Assistant Professor of Anesthesia at Harvard Medical School and Beth Israel Deaconess Medical Center. His research focuses on ICU delirium prevention and recovery after critical illness, spanning clinical trials and observational studies of innovative pharmacologic and nonpharmacologic interventions. He has led multicenter studies examining post-intensive care syndrome, unmet healthcare needs after hospital discharge, and long-term outcomes among ICU survivors. Dr. Bose was Principal Investigator of the EMERGE trial, a multicenter randomized study evaluating a novel, personalized communication platform for delirium mitigation in mechanically ventilated ICU patients. His work seeks to develop scalable, patient-centered strategies that improve recovery and quality of life after critical illness.

An update on ADA activities and initiatives



Anita Nitchingham (Australia)
Prince of Wales Hospital; UNSW; NeuRA

Talk description: This presentation will provide an update from the Australasian Delirium Association (ADA), including an overview of the organisation's structure, priorities and recently released Strategic Plan. It will also introduce the ADA's new Education Position Statement and its role in supporting consistent, evidence-based delirium education across Australia and New Zealand.

Bio: Dr Anita Nitchingham is a geriatrician and clinician-researcher at Prince of Wales Hospital, UNSW and NeuRA. Her research focuses on delirium, particularly its underlying mechanisms, treatment and recovery. She completed her PhD in 2025, investigating brain glucose metabolism and intranasal insulin as a novel treatment for delirium. Anita is a SPHERE Clinical Academic Fellow, leading work to develop and implement better post-delirium care pathways. She is also Vice-President of the Australasian Delirium Association.

Sensational delirium research



Gideon Caplan (Australia)
Prince of Wales Hospital

Talk description: This presentation will present some innovative findings that truly broaden and, at the same time, confound our understanding of delirium. Looking at neurological (non-cognitive) signs of delirium. The second looks at anatomical differences between hypoactive versus hyperactive/mixed delirium on MRI.

Bio: Professor Gideon Caplan is Director of Geriatric Medicine at Prince of Wales Hospital, founding President of the Australasian Delirium Association (for 12 years!) and a long-term delirium tragic.

Parallel 9: Delirium and big data – key epidemiological findings in delirium

Time: 12:45–14:00 **Room:** Oslo
Chairs: Wolfgang Hasemann, Isabella Glaser

From delirium to dementia: insights from linked routine healthcare data



Rose Penfold (Scotland)
University of Edinburgh

Talk description: This talk will explore how linked routine healthcare data can be used to investigate delirium at scale and enable more inclusive research involving older adults. Drawing on experience working with DataLoch (dataloch.org), a regional data service linking primary care, hospital, prescribing and administrative data for around 900,000 people in southeast Scotland, I will describe how routinely collected delirium assessments can be linked to longer-term outcomes. In NHS Lothian, the 4AT has been recorded electronically since 2016, and around 80% of emergency medical admissions have a completed assessment. This talk will consider the opportunities and challenges of using real-world data for delirium research, and how the platform created can support future studies into acute brain health and the longer-term consequences of delirium.

Bio: Dr Rose Penfold is an Academic Clinical Lecturer in Geriatric Medicine at the University of Edinburgh, UK. Her research focuses on delirium, dementia and improving outcomes for older people following acute illness. She completed a Wellcome Trust-funded PhD earlier this year, using large-scale linked routine data to investigate delirium, multimorbidity and longer-term outcomes, including subsequent dementia. She co-chairs the Geriatric Medicine Research Collaborative (GeMRC), a national trainee-led research network, and is an active member of the European Geriatric Medicine Society Early Career Geriatricians Initiative (EuGMS ECGI).

Establishing the infrastructure for real-world delirium research: ORCHARD portfolio studies



Sarah Pendlebury (United Kingdom)
University of Oxford; Oxford University Hospitals NHS Foundation Trust

Talk description: I will describe the real-world ORCHARD portfolio studies that we have set-up in Oxford to understand acute hospital delirium occurrence (prevalence and incidence), associated factors and outcomes and the underpinning mechanisms linking delirium and future incident dementia. The talk will illustrate our journey to establish the necessary research infrastructure beginning in 2010 with prospective audit cohorts of delirium in acute general (internal) medicine (n~18,000) followed by the implementation and hospital-wide roll-out of routine on-admission screening for delirium via the Electronic Health Record (EHR, Cerner Millenium, 2015-), and the subsequent exploitation of these large scale EHR data and routinely acquired brain imaging for research (ORCHARD-EPR, n~200,000). The talk will finish with a description of our recently established bi-centre prospective cohort study of delirium and hospital acute illness (ORCHARD-PS, n=620) with blood banking and brain imaging and 3-year follow-up for incident dementia and cognitive decline.

Bio: Sarah Pendlebury graduated in clinical medicine from the University of Oxford and worked subsequently in London and France. She is Professor of Medicine and Old Age Neuroscience, Consultant Physician and Clinical Lead for Dementia at Oxford, UK. Sarah's research centres around the impact of cerebrovascular disease and acute illness on the ageing brain encompassing delirium, dementia, multimorbidity and frailty. Her work on stroke-associated dementia has informed multiple international guidelines and latterly has explored delirium and infection as potentially modifiable risk factors. In parallel, she has established the ORCHARD research portfolio on delirium in the acute hospital encompassing big data cohorts and smaller prospective studies. She has led a 15-year programme to develop and implement cognitive and delirium screening at scale for all older hospital patients and is now leveraging the Electronic Health Record data for epidemiologic studies on delirium, dementia risk prediction, and automated CT-brain imaging analysis.

Delirium in the population: findings from the HUNT study



Wilhelm Frich (Norway)
Oslo University Hospital;
University of Oslo

Talk description: This talk will present findings from the HUNT delirium project, using data from HUNT4 70+, a well-characterised population-based Norwegian cohort (n=9,956). In-hospital delirium was ascertained through systematic chart review of approximately 50,000 hospital admissions from

2006 to 2023. Findings on delirium incidence and under-recognition in clinical practice will be presented. Associations between frailty, blood-based biomarkers (p-tau217 and NfL), and incident delirium will also be discussed. The talk will briefly highlight opportunities for future studies using the HUNT delirium data.

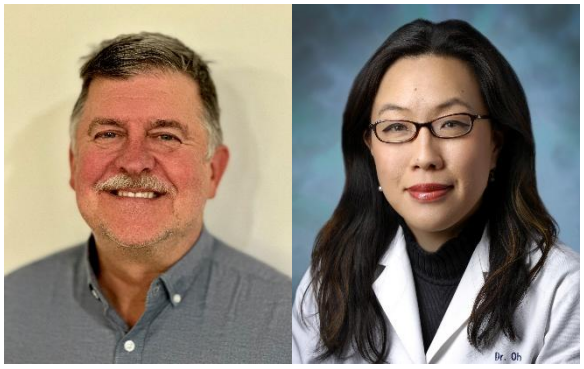
Bio: Wilhelm Frich is a consultant geriatrician and PhD candidate at the University of Oslo. His PhD project investigates frailty, delirium, biomarkers and dementia risk using data from HUNT4 70+, a population-based study of 9,956 older adults in Norway.

14:00–14:30	**Coffee break**

Parallel 10: Grant writing, research planning, research resources

Time: 14:30–15:45 **Room:** Helsinki
Chairs: Stefan Kreisel, Gideon Caplan

NIDUS-III: Opportunities for European Delirium Investigators – 30 minutes



John Devlin (United States)
Northeastern University; Mass General Brigham; Harvard Medical School

Esther Oh (United States)
Johns Hopkins University School of Medicine

Talk description: NIDUS (Network for Investigation of Delirium: Unifying Scientists) is a multiprofessional network dedicated to the acceleration of scientific discovery in delirium research. The overarching goal of NIDUS-III is to advance understanding of the interrelationship between delirium and Alzheimer's disease (AD) and AD related dementias (ADRD). NIDUS-III will be focusing the next 5 years on accelerating discovery of the mechanistic drivers of delirium, improving delirium prediction using AI approaches and advanced biomarkers, investigating risk factors for the interrelationship between delirium and AD/ADRD, including social determinants of health, and implementation of evidence-based delirium reduction efforts across organizations. We will discuss opportunities through the NIDUS-III, particularly for early-stage investigators, including an annual 3-day research boot camp, multiple research resources, and the opportunity to participate in working groups.

Bio – John Devlin: John W. Devlin, PharmD, BCCCP, MCCM, FCCP is a professor of pharmacy at Northeastern University, a critical pharmacist and research scientist in the Division of Pulmonary and Critical Care Medicine at Mass General Brigham and an instructor of medicine at Harvard Medical School, Boston, MA. Dr. Devlin's research program, funded by the NIA, PCORI, foundations and industry, is focused on the detection, prevention and treatment of delirium and disrupted sleep in both ICU and post-ICU settings. He has published more than 300 peer-reviewed papers and serves on the editorial boards of Pharmacotherapy and Critical Care Medicine. Dr. Devlin co-directs the NIA-funded NIDUS Delirium Research Network and is a past president of the American Delirium Society.

Bio – Esther Oh: Esther Oh, M.D. Ph.D., Sarah Miller Coulson Human Aging Project Scholar, is a Professor in the Division of Geriatric Medicine and Gerontology, Department of Medicine with appointments in the Departments of Psychiatry and Behavioral Sciences and Pathology at the Johns Hopkins (JH) University School of Medicine. She is currently the co-director of the JH Memory and Alzheimer's Treatment Center. She is also an investigator in the Richman Family Precision Medicine Center of Excellence in Alzheimer's disease (AD) and the JH Artificial Intelligence and Technology Collaboratory funded by the National Institute on Aging (NIA)/National Institutes of Health (NIH). Dr. Oh is an internationally renowned investigator with research focus on delirium and its interrelationship with AD and AD Related Dementias (AD/ADRD). Dr. Oh served as the President of the American Delirium Society (ADS) from 2022-2023. She is the multiple PI (MPI) of the Network for Investigation of Delirium: Unifying Scientists (NIDUS) III.

Result of UK and Australian delirium priority setting partnership for research





Emma Vardy (United Kingdom)
Northern Care Alliance NHS Foundation Trust; University of Manchester

Meera Agar (Australia)
University of Technology Sydney

Talk description – Emma Vardy: Priority Setting Partnerships (PSPs) enable clinicians, patients and carers to work together to identify and prioritise evidence uncertainties in particular areas of health and care that could be answered by research. This session will provide an overview and progress of the UK Delirium PSP facilitated by the National Institute for Health and Care Research James Lind Alliance.

Talk description – Meera Agar: The Australasian priority setting partnership was conducted in Australia and New Zealand following the approach outlined by the James Lind Alliance. We aimed to identify the top unanswered research questions with the scope being priorities relevant to adults with or at increased risk of delirium in any clinical setting (hospital, critical care, community, residential aged care, palliative care), their carers and healthcare staff providing care for them. Next steps will be advocating for funders, researchers, clinicians and the community to consider these end-user priorities in progressing research that is most likely to have impact on the prevention, care, recovery and experience of delirium.

Bio – Emma Vardy: Professor Emma Vardy is a Consultant Geriatrician and Clinical frailty lead at the Northern Care Alliance NHS Foundation trust. She holds an honorary clinical chair with the Manchester Academic health sciences centre at the University of Manchester. Professor Vardy is the NIHR Greater Manchester Applied Research Collaboration deputy lead for the health ageing theme and NIHR Regional Research Delivery Network North West Ageing Specialty lead. She is senior editor for the journal Age and Ageing, a board member of the European Delirium Association and a committee member for the Equality, Diversity and Inclusion (EDI) and Academic and Research Committee for the British Geriatrics Society. Professor Vardy is clinical co-lead for the Royal College of Psychiatrists National Audit of Dementia and Chair of the Research Special Interest Group for the UK Hospital at Home Society.

She has published widely on topics which include delirium, acute illness in the older person, frailty, dementia, virtual wards, quality improvement and digital.

Bio – Meera Agar: Professor Agar is the Director of IMPACCT, a research centre focussed on applied clinical research in aged, chronic and palliative care. Her research interests are in delirium in chronic conditions including those with life limiting illness, and she is a clinical trialist. She is a Board member of the Australasian Delirium Association.

Parallel 11: Science to Practice – Music-Based Interventions (MBI) for Mitigating Delirium

Time: 14:30–15:45 **Room:** København

Chair: Sikandar Khan

How should we assess the effect of MBIs on delirium symptoms?



Bjørn Erik Neerland (Norway)
Oslo University Hospital; Oslo Delirium Research Group

Talk description: Clinical trials often assess delirium at the syndromal level using dichotomous outcomes (presence or absence). We propose more nuanced assessments of individual symptom domains to identify those most responsive to MBIs. We describe our symptom-level assessment method and discuss implications for future research in MBIs and delirium outcome measurement.

Bio: Bjørn Erik Neerland, MD, PhD, is a senior consultant in geriatrics and internal medicine and a senior researcher at Oslo University Hospital (OUS), Norway. He leads the Oslo Delirium Research Group at OUS and has over 15 years of experience in delirium research, spanning clinical intervention studies, biomarker-based research, and large population-based cohorts. He is the principal investigator of the national multicenter ALPHA2PREVENT trial and a population-based delirium study including approximately 10,000 participants.

Live and Recorded Music Interventions for Delirium in Older Adults: Feasibility, Mechanisms, and Outcomes



Jelena Golubovic (United States)
Indiana University School of Medicine;
Oslo Delirium Research Group, Oslo University Hospital

Kristi Stedje (Norway)
Norwegian Academy of Music

Talk description: Findings from a pilot feasibility trial that randomized geriatric patients with delirium to music therapist–delivered, preference-based live vs. recorded music will be discussed. A

mechanistic framework linking musical components to delirium symptoms/subtypes will be presented, alongside work to refine outcomes for personalized MBIs in delirium care.

Bio: Dr. Jelena Golubovic is a Postdoctoral Research Fellow in Walther Supportive Oncology at Indiana University School of Medicine. She holds a PhD focused on music and delirium in adults, completed through a collaboration between the Norwegian Academy of Music and Oslo University Hospital. She is a member of Oslo Delirium Research Group and American Delirium Society. Her research spans music and neurorehabilitation, dementia, and delirium, including clinical research, systematic reviews, and meta-analyses. Her current research focuses on further exploring music-based interventions (MBIs) for acutely ill older adults in long-term care settings, as well as refining and adapting an evidence-based active music engagement intervention for delirium in pediatric populations and supportive oncology. Jelena is a classical pianist and an experienced music therapist, having worked with older adults in hospitals and long-term care settings and with children and adolescents in pediatric hospitals, schools, and inclusive education settings. Her work is informed by a commitment to culturally responsive and inclusive care and research.

When the Brain Listens: Neurobiological Effects of Slow-Tempo Music on Inflammatory Pathways and Delirium in the ICU



Sikandar Khan (United States)
Indiana University School of Medicine; Indiana University Center for Aging Research; Regenstrief Institute

Talk description: Neurobiological effects of slow-tempo music on inflammatory biomarkers and results from a feasibility trial comparing slow-tempo vs. patient-selected music on delirium and coma will be discussed. Data on sedative exposure will be shared, highlighting the biological plausibility of slow-tempo music to mitigate delirium.

Bio: Dr. Khan is an Assistant Professor in the Division of Pulmonary and Critical Care, Associate Director at Indiana University Center for Aging Research, and Scientist at Regenstrief Institute. Dr. Khan is funded by the National Institute on Aging (NIA) Paul Beeson Emerging Leaders Career Development Award to study the role of oxidative stress in critical illness, ICU delirium and post-ICU aging. His research activities to date include measurement of delirium duration and severity, identification of delirium risk factors, exploring delirium's association with dementia through peripheral blood-based biomarkers and testing novel non-pharmacological interventions to mitigate delirium in the ICU.

Effect of Music on Delirium in Critically Ill Older Adults: Implications for Future ICU Delirium Studies



Babar Khan (United States)
Indiana University School of Medicine; Indiana University Center for Aging Research

Talk description: Results from a large multi-center US trial will be discussed. Findings will summarize the effects of music on delirium duration/severity, levels of consciousness, sedative exposure, and adherence to the ABCDEF bundle, with implications for ICU delirium management.

Bio: Dr. Babar Khan is a Professor of Medicine, Floyd and Reba Chair of Respiratory diseases, and the Current Director of the IU Center for Aging Research at Indiana University School of Medicine, USA. He is a patient oriented-translational and clinical researcher with a principal focus on delirium among hospitalized older adults, and the impact of critical illness and delirium on long term cognitive, functional, and psychological morbidity of older ICU survivors. During his tenure at Indiana University, he was able to convert the ICUs of two big health systems into learning health system laboratories capable of not only recruiting critically ill patients into clinical studies but also implementing clinical evidence into practice at a rapid pace.

Parallel 12: Simulation-based training for delirium point-of-view experience and nurse-reported screening implementation – an interactive workshop

Time: 14:30–15:45 **Room:** Oslo



Miarca ten Broeke
Thorax Centrum Twente; University of Twente
Thomas H. Ottens
HagaZiekenhuis; DELIER-NL
Frank R. Halfwerk
Thorax Centrum Twente; University of Twente

Talk description: Healthcare staff including nurses and medical doctors experience challenges in delirium detection. Delirium screening instruments are not consistently used, underlying principles frequently not understood, and a positive delirium screening result not followed by actions. This leads to a non-adherence to institutional protocols, and suboptimal delirium management.

E-learning to improve knowledge is ineffective for skills training, and on-the-job training is increasingly difficult with staff shortages. Simulation-based education allows for training in a safe environment, yet is rarely used as part of a delirium management program including delirium screening, diagnosis, and interventions. Indeed, using simulation-based activities for understanding the underlying principles of delirium screening instruments as ICDSC, 4AT, CAM-ICU, DOSS may speed up implementation or improve current institutional delirium management practice. Moreover, simulation-based training may

assist in developing clinical reasoning skills more uniform in a department and reduce subjectiveness of individual professional assessment.

Bio – Miarca ten Broeke: At the cardio-thoracic surgery ward at Thorax Centrum Twente, Miarca ten Broeke experiences the struggle with delirium screening as advanced nurse practitioner. As doctoral candidate at University of Twente she investigates the impact for patients and healthcare professionals of a new approach of delirium screening after cardiac surgery.

Bio – Thomas H. Ottens: Dr. Thomas Ottens is an anesthesiologist-intensivist at HagaZiekenhuis, The Hague, the Netherlands. He is one of the founders of the Dutch DELIER-NL network. He is active in clinical delirium research, focusing on delirium monitoring, detection and treatment in ICU and perioperative medicine.

Bio – Frank R. Halfwerk: As technical medical doctor in cardio-thoracic surgery at Thorax Centrum Twente, Medisch Spectrum Twente, Enschede, the Netherlands, Dr. Frank Halfwerk is passionate to maximise patient outcomes by refining training opportunities. As associate professor he leads the Cardiac Surgery Innovations Lab (University of Twente) and is scientific committee member of the Society for Simulation in Europe (SESAM).

15:45–16:00	**Break**

Wind up and farewell – Prize winners

Time: 16:00–16:30
Room: Scandinavia Ballroom