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DANDRITE REPORTING

AARHUS UNIVERSITY

DANDRITE
Danish Research Institute of Translational Neuroscience
Nordic EMBL Partnership for Molecular Medicine

DANDRITE Reporting 2025

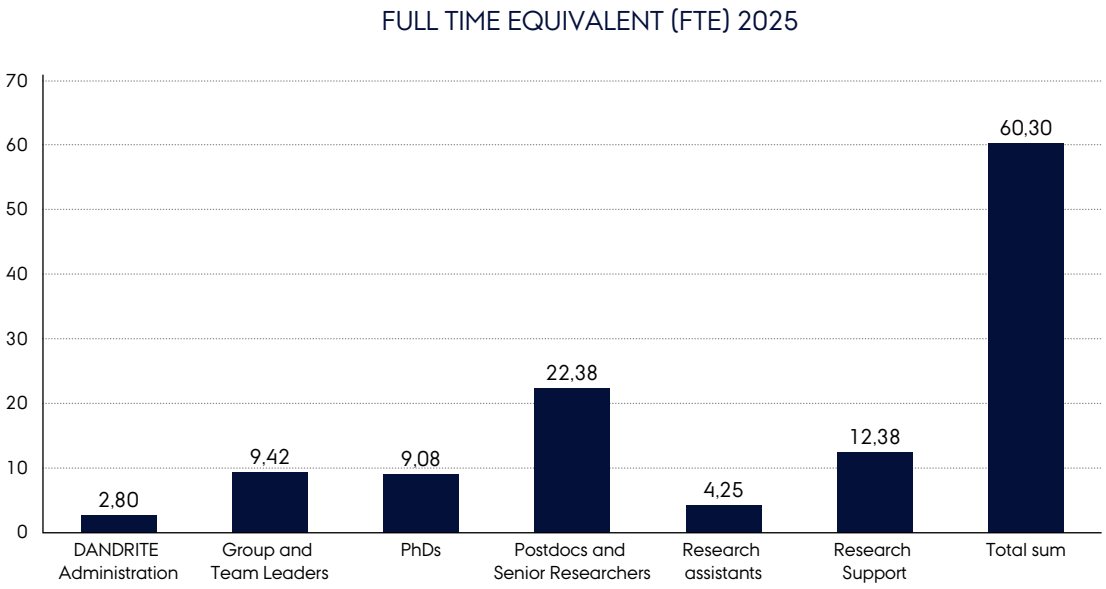
Cover:
Title: Outreach
Medium: Confocal Laser Scanning Microscope

"The image shows an isolated neuron – a brain cell consisting of a cell body, long branching extensions, and a network of connections that allow it to send and receive signals. In this cell, internal stress is marked in green, and my goal is to understand how neurons cope with this kind of strain. In this experiment, I intended to visualize stress in different parts of the neuron. But due to a technical error, I was only able to highlight stress on the cell's surface, shown in orange. This unexpected limitation made me think of a human parallel: how periods of isolation – suggested by the white background – can amplify the stress we carry inside. Neurons are built to reach out and communicate with one another. Perhaps we can learn from them and reach out when we ourselves feel under pressure."

Image by: Vivek Sanjay Belapurkar, Postdoc in Chao Sun's lab, DANDRITE, Department of Molecular Biology and Genetics, Aarhus University, 2025.

Personnel

The following pages display different graphical presentations of DANDRITE statistics.
All counts exclude affiliated researchers.



Personnel figure 1: Graphic representation of the number of personnel in 2025 *counted in FTE – Full Time Equivalent* for appointed categories summarized: DANDRITE Administration, Group- and Team Leaders, PhDs, Postdocs and Senior Researchers, Research assistants, and Research Support.

COUNT OF NUMBER AND PERCENTAGES OF PERSONNEL EMPLOYED DURING 2025 GROUPED BY APPOINTMENT CATEGORY AND GENDER. FTE COUNT.

DANDRITE Personnel categories	Female	Male	Total	Percentage of personnel categories %
DANDRITE Administration	2,80		2,80	4,6
Group and Team Leaders	2,42	7,00	9,42	15,6
PhDs	8,92	0,17	9,08	15,1
Postdocs and Senior Researchers	14,63	7,75	22,38	37,1
Research Assistants	2,25	2,00	4,25	7,0
Research Support	10,17	2,21	12,38	20,5
Grand Total	**41,18**	**19,13**	**60,30**	**100**
Percentage of Female/Male %	68	32	100	

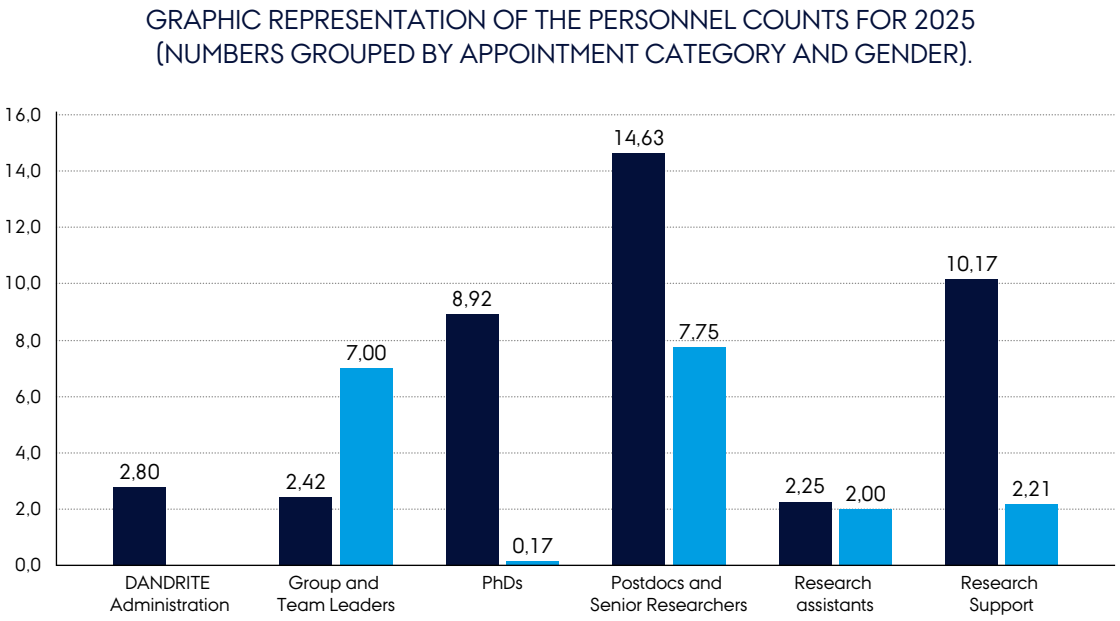


Figure 3:
Graphic representation of the personnel counts for 2025 (numbers grouped by appointment category and gender).

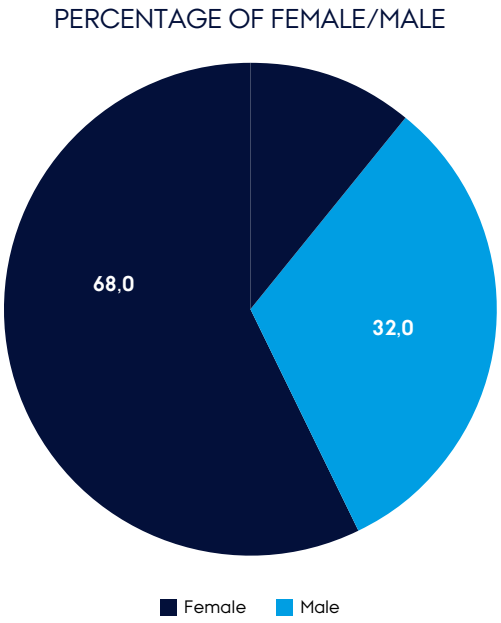


Figure 4:
Graphic representation of the personnel counts for 2025 grouped by gender.

GRAPHIC REPRESENTATION OF THE NATIONALITY DISTRIBUTION IN 2025 OF ALL EMPLOYEES. IN TOTAL, 27 NATIONALITIES.

Figure 5: Graphic representation of the nationality distribution in 2025 of all employees. In total, 27 nationalities.

Belgium (2) Brazil (2) China (1) Czech Republic (1) Denmark (30) Egypt (1) Finland (1) France (2) Germany (2) Holland (1) Hungary (1) India (4) Indonesia (1) Italy (4) Japan (6) New Zealand (1) Poland (1) Portugal (1) Romania (2) Serbia (1) Singapore (1) Spain (2) Sweden (1) Switzerland (1) Turkey (1) United Kingdom (1) USA (5)

GRAPHIC REPRESENTATION OF THE NATIONALITY DISTRIBUTION OF THE EMPLOYEES IN DANDRITE'S EMBL RECRUITED GL'S RESEARCH GROUPS. IN TOTAL 13 NATIONALITIES.

Figure 6: Graphic representation of the nationality distribution of the employees in DANDRITE's EMBL recruited GL's research groups.

Brazil (2) China (1) Denmark (10) Egypt (1) France (1) Germany (1) Holland (1) Hungary (1) India (1) Italy (4) Japan (4) New Zealand (1) Romania (1)

Awards and Prizes

DANDRITE Group Leader Chao Sun was awarded an ERC Starting Grant of DKK 11.1M from the European Research Council to uncover how the brain's cleaning system works, especially during sleep – a process that clears away damaged proteins and protects nerve cells from injury, inflammation, and disease.

DANDRITE Group Leader Fiona Müllner was awarded an ERC Starting Grant of DKK 11.1M from the European Research Council to explore how the thalamus – a deep brain region necessary for conscious perception – actively shapes and modulates visual signals.

DANDRITE Senior Group Leader Magnus Kjærgaard is one of three recipients for the Novo Nordisk Foundation Prize for Natural Science Teachers at Universities.

DANDRITE Postdoc Nanna Møller Jensen (Jensen group) won Forskerfesten 2025 for her groundbreaking Parkinson's research. Nanna impressed the jury with her presentation of new research into Parkinson's disease. Using a new method, she discovered previously invisible protein clusters in the brain. These clusters appear much earlier in the disease progression and are found in more brain regions than the large protein aggregates that were previously considered the main cause of the disease. This discovery paves the way for both earlier and better diagnosis – and, in the long term, potentially new treatment options – for a disease that affects around 1.3 million people worldwide every year. Parkinson's disease is currently one of the fastest-growing neurological disorders. Photo: Agnete Schlichtkrull.

Poster and presentation prizes

DANDRITE Postdoc Yumiko Kitazawa (Kitazawa group) received the Prize for the Best Poster at the DANDRITE Symposium 2025

DANDRITE Postdoc Silvia Turhchetto (Sun group) received the Prize for Best Poster at the PROMEMO SAB meeting 2025

PhD Student Julia Soh (Vanwalleghem team) received the Prize for best presentation at the FEBS Fish Immunology Course 2025

Postdoc Marine Mantel (Vanwalleghem team) received the Prize for best presentation at the FEBS Fish Immunology Course 2025

Grants

1. Postdoc **Alain André**: Marie Curie Postdoc Fellowship: 'SPACER - Synthetic Programmable Artificial Condensates for Enzymatic Reactions, DKK 2.000.000, Marie Skłodowska Curie Actions, Horizon Europe

2. Postdoc **Nanna Møller Jensen**: 'Investigating aggregate-specific alpha-synuclein antibodies and proximity ligation assay as quantitative biomarkers in Parkinson's disease', DKK 1.814.202, M. J. Fox Foundation

3. Postdoc **Nanna Møller Jensen**: 'Developing and validating the alpha-synuclein aggregate proximity ligation assays to correlate novel molecular neuropathology in patients with modifiable read-outs in rodent disease models and cell models', DKK 375.000, Parkinsonforeningen

4. Senior Group Leader **Poul Henning Jensen**: 'Using Caffeine to test the Ryanodine Receptor as a disease-modifying drug target in a novel model of mouse model of MSA', DKK 75.000, Landsforeningen for MSA

5. Group Leader **Thomas Kim**: DFF project: 1 'Lipids at the Front Line: Microglial Lipid Droplet Dysregulation as an Early Driver of Alzheimer's Neuropathology', DKK 3.166.007, DFF – Independent Research Fund Denmark

6. Group Leader **Thomas Kim**: DFF project 1: 'Epigenetic and Transcriptomic Drivers of Microglial Ontogeny in Early Brain Development', DKK 3.166.007, DFF – Independent Research Fund Denmark

7. Group Leader **Thomas Kim**: '3D Resilience Mapping of Dopamine Neurons Under Co-Pathology Stress in Parkinson's Disease', DKK 50.000, Parkinsonforeningen

8. Group Leader **Anna Klawonn**: 'Lateral Septum – A Key Regulator of Mood', DKK 3.167.349, DFF – Independent Research Fund Denmark

9. Postdoc **Vili Lampinen**: 'Design of protein binders to probe neurotrophin signaling in neuronal connectivity and memory', DKK 3.000.000, The Lundbeck Foundation

10. Associate Prof. **Andrea Moreno**: 'NFF Distinguished Investigator: Fading traces: Unravelling a Mechanism of Forgetting', DKK 11.396.000, Novo Nordisk Foundation

11. Group Leader **Fiona Müllner**: ERC Starting Grant: 'Thalamic circuit diversity for active visual processing', DKK 11.174.366, The European Research Council (ERC)

12. Senior Group Leader **Anders Nykjær**: NNF Distinguished Innovator: 'An Oral Sortilin Modulator for the Treatment of Major Depression and Anxiety', DKK 7.599.000, Novo Nordisk Foundation

13. Associate Prof. **Alena Salasova**: EMBO travel grant: 'Implementing accessible 3D imaging techniques to understand motor neuron development and regeneration', DKK 3.750, EMBO

14. Associate Prof. **Alena Salasova**: DANEMO Travel grant, DKK 10.000, DANEMO

15. Associate Prof. **Alena Salasova**: Lundbeck Experiment 2025: 'Born to Degenerate? Tracing the Developmental Origins of Parkinson's Disease', DKK 2.299.441, The Lundbeck Foundation

16. Group Leader **Chao Sun**: Sapere Aude: 'Synaptic Energetics that Underlie Memory Formation', DKK 6.191.984, DFF – Independent Research Fund Denmark

17. Group Leader **Chao Sun**: ERC Starting Grant: 'Quality Control of Damaged Proteins at Synapses', DKK 11.174.366, The European Research Council (ERC)

18. Group Leader **Chao Sun**: 'Access to AI Supercomputer Gefion', DKKK 1.500.000, Novo Nordisk Foundation

19. Associate Prof. **Asami Tanimura**: Hallas-Møller Emerging Investigator Grant: 'Exploring Oxytocin Signaling in the Claustrum: Socio-Emotional Bonding and Vulnerable Brain Development', DKK 11.215.457, Novo Nordisk Foundation

20. Ph.D Student **Valentina Villani**: DANEMO Travel grant, DKK 8.000, DANEMO

21. Team Leader **Gilles Vanwalleghem**: The Lundbeck Foundation Experiment: 'Neuroimmune Memory: Mapping and Manipulating Inflammation in the Brain-Body Axis', DKK 2.000.000, The Lundbeck Foundation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Spin-out companies

From left: CEO and founder Lasse Reimer, founder Claus Elsborg Olesen, founder Poul Henning Jensen, and founder and COO William Dalby Brown. Photo: PR / Esben Zøllner Olesen for Bioinnovation Institute

SynuCa Therapeutics secures 10M DKK for drug development
Spin-out company SynuCa Therapeutics, founded in Professor Poul Henning Jensen's DANDRITE group and led by Assistant Professor Lasse Reimer as CEO, has secured 10 million DKK in new funding to advance its drug candidate toward clinical trials.

Danish basic research behind international medical breakthrough: new oral treatment may prevent dementia
Researchers from DANDRITE have played a central role in developing a new oral treatment that, for the first time ever, has shown promising results in a clinical trial involving patients – a breakthrough that appears capable of preventing and slowing the progression of frontotemporal dementia. The new treatment, VES001, has been developed by Vesper Bio with contributions from Professor and DANDRITE senior Group Leader Anders Nykjær and international collaborators. Vesper Bio is a Danish biotechnology company founded by Anders Nykjær and Mads Kjølby.

Invited talks and outreach

FEBRUARY
Taro Kitazawa: *Recording cellular memory to unveil the mechanism of brain memory,* University of British Columbia, Canada

MARCH
Alena Salasova: *Implementing accessible 3D imaging techniques to understand motor neuron development and regeneration,* Neural Development and Neurodegeneration (EMBO workshop), Taiwan

Naoki Yamawaki: *Tools for studying cell type specific circuits in the brain,* Department of clinical medicine, Aarhus University, Denmark

APRIL
Lasse Reimer: *Targeting the Serca Transporter to Restore Neuronal CA2+ Balance: A New Approach for Parkinson's Disease Treatment,* AD/PD 2025, Italy

Chao Sun: *Synaptic Machinery for Protein Homeostasis,* Okinawa Institute of Science and Technology, Japan

Chao Sun: *Synaptic Machinery for Protein Homeostasis,* Cold Spring Harbor Asia Meeting-Optical Interrogation of Neural Structure and Dynamics underlying Behavior, Japan

Chao Sun: *Synaptic Machinery for Protein Homeostasis,* National Institute of Genetics, Japan

Chao Sun: *DNA PAINT-based Single Molecule Localization,* AUSBI - the AU Structural Biology & Biophysics Initiative, Denmark

MAY
Poul Henning Jensen: *Abnormal α-synuclein and its effects,* International Symposium on Movement Disorders and Anxiety/Depression, Zhejiang University, China

Poul Henning Jensen: *Abnormal alpha-synuclein and its effects - the need for novel tools and models,* Fukuoka Universitet, Japan

Vili Lampinen: *Biophysical methods in Neuroscience,* Young Neuroscience Network, Denmark

Silvia Turchetto: *Local Regulation of Synaptic Protein Lifetime,* PROMEMO follow-up meeting with DNRF, Denmark

Silvia Turchetto: *How do unstable proteins form long-term memory?,* Pint of Science, Denmark

Valentina Villani: *Local Regulators of Synaptic Protein Lifetime,* MBG annual meeting, Aarhus University, Denmark

JUNE
Anna M. Klawonn: ERC starter grant Interview presentation: *MINDMAP - Mapping Immune-to-Neuron Dynamics and Molecular Mechanisms of Affective Processing,* Online

Jelena Radulovic: *The Neurobiology of Stress-Related Memories: Basic and Translational Perspective,* The 34th Annual Meeting of the International Behavioral Neuroscience Society (IBNS), Norway

Chao Sun: *Synaptic Machinery for Protein Homeostasis,* Cold Spring Harbor Asia Neuroimaging course, China

JULY
Chao Sun: *Synaptic Machinery for Protein Homeostasis,* Brain Prize Cajal course on advanced techniques in synapse biology, France

AUGUST
Poul Henning Jensen: *α-synuclein aggregate-specific MJFR14-proximity ligation assay demonstrates abundant oligomers in LRRK-2 variant brains. New aggregate PLA compatible with rodent α-synuclein opens for new disease modelling,* LRRK2 Central Webinar, host Susan Pfeffer & Dario Alessi, Virtual lecture

Magnus Kjærgaard: *Intrinsic disorder in the era of protein design,* University of Copenhagen, Denmark

Anna M. Klawonn: *Immune-to-Brain Mechanisms of Affective State and Parkinson's Disease,* Korea-Nordic LINC Workshop, Aarhus University, Denmark

Anna M. Klawonn: *Klawonn group - Exploring Circuits and Mechanisms of Affective State and Parkinson's Disease,* Affective Neuroscience Meeting - Dept. Biomedicine, Aarhus University, Denmark

Anders Nykjær: *SorCS Receptors: Connecting Psychiatric Risk to Disease Mechanisms,* DANDRITE Symposium, Aarhus University, Denmark

SEPTEMBER
Poul Henning Jensen: *Spot på Parkinsons sygdom,* Human First møde på VIA University College, Denmark

Poul Henning Jensen: *α-synuclein biology Update. Alpha-Synuclein as a Therapeutic Target,* Center for Geometrically Engineered Cellular Systems, host Prof. Dimitris Stamou), Denmark

Thomas Kim: *Building the hypothalamus,* ICMMPB meeting, China

Anna M. Klawonn: *Microglia in affective and motivational regulation - Striatal circuits and beyond',* EBPS Biennial meeting - Almeira, Spain

Jelena Radulovic: *Neuron-specific inflammatory pathways in memory formation,* The 68th Annual Meeting of the Japanese Society for Neurochemistry", Japan

Alena Salasova: *Neurodevelopmental Origins of Neuropsychiatric Disorders: The Role of VPS10p-D Receptors,* Imaging Principles of Life 2025 conference, Czech Republic

Chao Sun: *Synaptic Machinery for Protein Homeostasis,* International Consortium for Primate Brain Mapping meeting, China

Photos: Roar Lava Paaske/AU-Kommunikation and Lars Kruse/AU Kommunikation

Chao Sun: *Synaptic Machinery for Protein Homeostasis,* PROMEMO SAB meeting, Denmark

Asami Tanimura: *Functional Insights into the Endopiriform Cortex in Emotion,* Neuroscience seminar, National institute of Genetics, Japan

Asami Tanimura: *Interplay between retrosplenial layer 1 and diagonal band cholinergic neurons representing distinct internal states for immobility and locomotion,* 68th Neurochemistry conference WINC AICHI, Japan

Naoki Yamawaki: *Cell type specific state dependent activity of retrosplenial cortex, what does it represent?*, Neuroscience seminar, National institute of Genetics, Japan

Naoki Yamawaki: *Interplay between retrosplenial layer 1 and diagonal band cholinergic neurons representing distinct internal states for immobility and locomotion,* 68th Neurochemistry conference WINC AICHI, Japan

OCTOBER

Ankush Garg: *Design-principles of metabolic condensates,* Network on Artificial Biology Aarhus University, Denmark

Ida Kjærsgaard Grene: *Screening de novo designed binders using flow induced dispersion analysis,* Aarhus University, Denmark

Thomas Kim: *Neuronal vulnerability mapping,* Braincity, Poland

Taro Kitazawa: *Whole-genome single-cell multimodal history tracing reveals cell identity transition,* Karolinska Institute, Sweden

Taro Kitazawa: *Whole-genome single-cell multimodal history tracing reveals cell identity transition,* Copenhagen University, Denmark

Magnus Kjærgaard: *Screening de novo designed binders using flow induced dispersion analysis,* FIDA Webinar, Virtual lecture

Anna M. Klawonn: *Glial mechanisms of motivational states and Parkinson's Disease,* NENCKI - BRAINCITY - DANDRITE Symposium, Poland

Anders Nykjær: *Sortilin Receptors in Building and Breaking the Brain,* Neuroscience Seminar Series, Max-Delbrück Center, Germany

Jelena Radulovic: *Maintenance of Memory Representations Through Neuron-Specific Immune Pathways,* The 4th Neuroepigenetics & Neurotranscriptomics Conference, Malta

Jelena Radulovic: *The Brain on Fear: What's Memory Got to Do with it?,* Public lecture, Chicago, USA

Lasse Reimer: *Pioneering the first therapy to slow Parkinson's at its roots - a journey through the Danish funding landscape,* BII x Lundbeck Foundation Partnership Launch in Copenhagen, Denmark

Chao Sun: *Molecular Logistics of Brain Synapses,* Nencki Institute for Experimental Biology, Poland

NOVEMBER

Vivek Belapurka: *Activity-driven oxidative Stress at Brain Synapses,* iNANO nanotalks, Denmark

Markus Christensen: *Visualizing Neuron-Tumor Synapses,* DANDRITE Community Meeting, Denmark

Maciej B. Gielnik: *Synthetic IDPs as Tunable Desiccation Chaperones,* WALII Symposium, Virtual lecture

Poul Henning Jensen: *Investigating aggregate-specific alpha-synuclein antibodies and proximity ligation assay as quantitative biomarkers in Parkinson's disease,* QBio in-person meeting af M. J. Fox Foundation, New York, USA

Anna M. Klawonn: *Panel debate on precision psychiatry, member of expert panel representing preclinical neuroscience,* Neuroscience Academy Denmark (NAD) Annual Meeting, Denmark

Anna M. Klawonn: *Immune-to-brain mechanisms of affective homeostasis,* 2nd International Moesgaard Conference on Personalized Medicine, Denmark

Jelena Radulovic: *Neuron-specific immune signaling in memory,* 2nd International Moesgaard Conference on Personalised Medicine, Denmark

Chao Sun: *Synaptic Machinery for Protein Homeostasis,* Core2core Synapse biology in Health and Disease meeting, Denmark

Chao Sun: *Molecular Logistics of Brain Synapses,* University of Lausanne, Switzerland

Naoki Yamawaki: *High impact publication, Lesson learnt from personal experience,* NAD event, Scandic Falkoner, Denmark

Publications 2025

JOURNAL ARTICLES

1. **Basse Hansen, S**, Flygaard, RK, **Kjærgaard, M** & **Nissen, P** 2025, 'Structure of the [Ca]E2P intermediate of Ca^{2+}-ATPase 1 from *Listeria monocytogenes*', *EMBO Reports,* vol. 26, no. 7, eadd9742, pp. 1709-1723. https://doi.org/10.1038/s44319-025-00392-x

2. Buhl, JM, Mahapatra, S, **Kjærgaard, M** & Mulder, FAA 2025, 'Quantification of Small Molecule Partitioning in a Biomolecular Condensate with 2D Nuclear Magnetic Resonance Spectroscopy', *ChemBioChem,* vol. 26, no. 17, e202500401. https://doi.org/10.1002/cbic.202500401

3. Calvo, JS, **Heger, T**, Kabin, E, Mowrey, WR, Del Angel, G, Ding, W & Lutsenko, S 2025, 'Functional Screen of Wilson Disease ATP7B Variants Reveals Residual Transport Activities', *Human Mutation,* vol. 2025, no. 1, 7485658. https://doi.org/10.1155/humu/7485658

4. da Silva, IS, Cardoso, AR, **Reimer, L**, König, A, van Riesen, C, Outeiro, TF, Jensen, PH & Sales, MGF 2025, 'α-Synuclein plastic antibody applied to monitor monomeric structures and discriminate aggregated forms in human CSF', *Biosensors and Bioelectronics,* vol. 268, 116880, pp. 116880. https://doi.org/10.1016/j.bios.2024.116880

5. Fritz, M, Rosa, PB, Wilhelms, D, Jaarola, M, Ruud, J, Engblom, D & **Klawonn, AM** 2025, 'Nicotinic α7 receptors on cholinergic neurons in the striatum mediate cocaine-reinforcement, but not food reward', *Frontiers in Molecular Neuroscience,* vol. 17, 1418686. https://doi.org/10.3389/fnmol.2024.1418686, https://doi.org/10.3389/fnmol.2024.1418686

6. **Hansen, SB**, Bartual, SG, Yuan, H, Raimi, OG, Gorelik, A, Ferenbach, AT, Lytje, K, Pedersen, JS, Drace, T, Boesen, T & **van Aalten, DMF** 2025, 'Multi-domain O-GlcNAcase structures reveal allosteric regulatory mechanisms', *Nature Communications,* vol. 16, no. 1, 8828. https://doi.org/10.1038/s41467-025-63893-2

7. Ho, KH, Trapp, M, Guida, C, Ivanova, EL, De Jaime-Soguero, A, Jabali, A, Thomas, C, **Salasova, A**, Bernatík, O, Salio, C, Horschitz, S, Hasselblatt, M, Sassoe-Pognetto, M, Čajánek, L, Ishikawa, H, Schroten, H, Schwerk, C, Acebrón, SP, Angel, P, Koch, P & Patrizi, A 2025, 'Activation of Wnt/β-catenin signaling is critical for the tumorigenesis of choroid plexus', *Neuro-Oncology,* vol. 27, no. 1, pp. 106-122. https://doi.org/10.1093/neuonc/noae176, https://doi.org/10.1093/neuonc/noae176

8. Hu, Q, Sitsel, O, Bågenholm, V, Grønberg, C, Lyu, P, Pii Svane, AS, Andersen, KR, Laursen, NS, Meloni, G, **Nissen, P**, Juhl, DW, Nielsen, JT, Nielsen, NC & Gourdon, P 2025, 'Transition metal transporting P-type ATPases: terminal metal-binding domains serve as sensors for autoinhibitory tails', *FEBS journal,* vol. 292, no. 7, pp. 1654-1674. https://doi.org/10.1111/febs.17330

9. Jensen, NM, Vitic, Z, Antorini, MR, Viftrup, TB, Parkkinen, L & **Jensen, PH** 2025, 'Abundant non-inclusion α-synuclein pathology in Lewy body-negative LRRK2-mutant cases', *Acta Neuropathologica,* vol. 149, no. 1, 41. https://doi.org/10.1007/s00401-025-02871-w

10. **Kim, DW**, Duncan, LH, Xu, Z, Chang, M, **Sejer, S**, Terrillion, CE, Kanold, PO, Place, E & Blackshaw, S 2025, 'Decoding gene networks controlling hypothalamic and prethalamic neuron development', *Cell Reports,* vol. 44, no. 6, 115858. https://doi.org/10.1016/j.celrep.2025.115858

11. Klæstrup, IH, Reinert, LS, Ferreira, SA, Lauritsen, J, Toft, GU, **Gram, H**, **Jensen, PH**, Paludan, SR & **Romero-Ramos, M** 2026, 'Lack of functional STING modulates immunity but does not protect dopaminergic neurons in the alpha-synuclein pre-formed fibrils Parkinson's disease mouse model', *npj Parkinson's Disease,* vol. 12, no. 1, 17. https://doi.org/10.1038/s41531-025-01228-0

12. Matsumoto, A, Morris, J, Looger, LL & **Yonehara, K** 2025, 'Functionally distinct GABAergic amacrine cell types regulate spatiotemporal encoding in the mouse retina', *Nature Neuroscience,* vol. 28, no. 6, 1374, pp. 1256-1267. https://doi.org/10.1038/s41593-025-01935-0

13. Miraghaee, DS, Khalili, A, Bayat, G, Mousavi, Z, **Nazari, M**, Hosseini, M, Goudarzvand, M & Mazloom, R 2025, 'A single dose of nicotine modulates heart rate variability in rats with induced-ulcerative colitis', *Autonomic Neuroscience: Basic and Clinical,* vol. 260, 103282. https://doi.org/10.1016/j.autneu.2025.103282

14. Mitchell, CW, Yuan, H, Sønderstrup-Jensen, M, Ferenbach, AT & **van Aalten, DMF** 2025, 'O-GlcNAcylation of the intellectual disability protein DDX3X exerts proteostatic cell cycle control', *Open Biology,* vol. 15, no. 7, 250064. https://doi.org/10.1098/rsob.250064

15. **Muñoz-Juan, A**, Laromaine, A, Yuste, VJ & Dalfó, E 2025, 'Assessing Gastrointestinal Motility in Caenorhabditis elegans RAC1/CED-10 Mutants as a Tool to Study Early Parkinson's Disease', *Journal of Visualized Experiments,* vol. 2025, no. 225, e69278. https://doi.org/10.3791/69278

16. Nielsen, J, Pedersen, JN, Kleijwegt, G, Nowak, JS, Nami, F, Johansen, C, Sassetti, E, Berg, BB, Lyngsø, NM, Brøchner, BH, Holm Carlson, J, Simonsen, AJ, Pallisgaard Olsen, W, Simonsen, BW, Mikkelsen, JH, Sereika-Bejder, V, Lauritsen, JA, Merrild, KF, Malle, MG, Valero Moreno, J, Kjems, J, Bøggild, A, Boesen, T, Birkelund, S, Christiansen, G, Hansen, SB, Kristensen, M, Madsen, P, Strømgaard, K, **Romero-Ramos, M**, Gustafsen, C, Glerup, S, Andersen, KR, Clausen, MH & Otzen, DE 2025, 'Nanobodies raised against the cytotoxic α-synuclein oligomer are oligomer-specific and promote its cellular uptake', *npj biosensing,* vol. 2, 23. https://doi.org/10.1038/s44328-025-00042-1

17. Pinheiro, F, Nowak, JS, Zueva, E, Pheasant, EC, Grene, IK, **Lampinen, V** & **Kjaergaard, M** 2025, 'Screening de novo designed protein binders in unpurified lysate using flow induced dispersion analysis', *Protein Science,* vol. 34, no. 10, e70286. https://doi.org/10.1002/pro.70286

18. Pravata, VM, Jiang, H, Ferenbach, AT, Lamond, A & **van Aalten, DMF** 2025, 'Zscan4 as a Candidate Conveyor of Early Developmental Defects in O-GlcNAc Transferase Intellectual Disability', *Molecular & Cellular Proteomics : MCP,* vol. 24, no. 11, 101077. https://doi.org/10.1016/j.mcpro.2025.101077

19. Qin, Q, Wei, P, Usman, S, Ahamefule, CS, Jin, C, Wang, B, Yan, K, van Aalten, DMF & Fang, W 2025, 'Gfa1 (glutamine fructose-6-phosphate aminotransferase) is essential for *Aspergillus fumigatus* growth and virulence', *BMC Biology,* vol. 23, no. 1, 80. https://doi.org/10.1186/s12915-025-02184-0

20. Rahdar, M, Salimi, M, Eskandari, K, **Nazari, M**, Davoudi, S, Raoufy, MR, Mirnajafi-Zadeh, J, Hosseinmardi, N, Behzadi, G & Janahmadi, M 2025, 'Behavioral assessments and differential excitability, oscillatory dynamics in dorsal and ventral hippocampal CA1 neurons in male rats of a prenatal VPA-exposed autism model', *Progress in Neuro-Psychopharmacology and Biological Psychiatry,* vol. 142, 111507. https://doi.org/10.1016/j.pnpbp.2025.111507

21. **Salasova, A** & **Nykjær, A** 2025, 'Emerging potential of progranulin-dependent SorCS2 signaling in healthy and diseased nervous systems', *Neural Regeneration Research,* vol. 20, no. 9, pp. 2591-2593. https://doi.org/10.4103/NRR.NRR-D-24-00734

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1. Bayraktar, G 2025, 'Characterization of the Na+/K+-ATPasen Isoforms in the Axon Initial Segment', PhD, Aarhus University.

2. Dannersø, JK 2025, 'Neuronal functions elucidated by electron microscopy – from calcium transport to the Axon Initial Segment', PhD, Aarhus University.

3. Heger, T 2025, 'Structural and Functional Studies of the Copper Transporter ATP7B', PhD, Aarhus University.

4. Nazari, M 2025, 'Modeling Temporal Characteristics and Topological Structures in Data-driven Signal', PhD, Aarhus University.

5. Sawale, RA 2025, 'Impact of the Gut Microbiome on Enteric Nervous System Development and Intestinal Function', PhD, Aarhus University.

6. Safrankova, K 2025, 'The role of SorCS3 and SorCS1 in neuronal activity, learning and memory', PhD, Aarhus University.

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