

Partnership Symposium between DANDRITE, Aarhus University and BRI, Niigata University

Wednesday 12 - Thursday 13 April 2023 | Nakada Memorial Hall, Brain Research Institute, Niigata University

Wednesday 12 April

13:00 - 13:10 Opening Remarks by **BRI Director Prof Osamu Onodera**

Session 1 Chair: Hideaki Matsui (BRI, Niigata University)

13:10 - 13:35 **Gilles Vanwalleggem** : Neuro-immunity along the gut-brain axis of zebrafish

13:35 - 13:50 **Yohei Nitta** : MeDUsA: A novel method for quantification of degeneration using fly axons to evaluate axonal degeneration?

13:50 - 14:15 **Anders Nykjær** : Sorting out a secret of life – from womb to walker

14:15 - 14:30 **Yuriko Iwakura** : Epidermal growth factor (EGF) signal modulates perineuronal net formations in the neocortex of developing rodent brains

Session 2 Chair: Anders Nykjær (DANDRITE, Aarhus University)

14:40 - 15:05 **Poul Henning Jensen** : The unappreciated alpha-synuclein-aggregate pathology – a source for the wider symptomatology of synucleinopathies?

15:05 - 15:20 **Yuka Koike** : DNA methylation in the TDP-43 autoregulatory region links to aging and ALS

15:20 - 15:45 **Thomas Kim** : Amyloid-beta and tau pathologies act synergistically to induce novel disease stage-specific microglia subtypes

15:45 - 16:00 **Takeshi Ikeuchi** : Deciphering early glial transcriptomic alterations in human brain with Alzheimer's disease

Session 3 Chair: Takayasu Mikuni (BRI, Niigata University)

16:10 - 16:25 **Masayasu Okada** : Novel molecular markers for axon growth: Newly characterized phosphorylation sites of human GAP-43, identified by phosphoproteomics

16:25 - 16:50 **Tomonori Takeuchi** : Dopaminergic memory consolidation and coeruleo-hippocampal pathway

16:50 - 17:05 **Hiroyuki Nawa** : Dopaminergic regulation of schizophrenia onset and associated behaviors in its animal model

Thursday 13 April

09:00 - 09:10 Announcement

Session 4 Chair: Kazuki Tainaka (BRI, Niigata University)

09:10 - 09:25 **Shinsuke Shibata** : Visualizing the localization of specific molecules with electron microscopy

09:25 - 09:50 **Poul Nissen** : The role of Na,K-ATPase and plasma-membrane Ca²⁺-ATPase in neuropsychiatric disorders

09:50 - 10:05 **Motokazu Uchigashima** : Development of single-cell, spatiotemporal, quantitative imaging method for endogenous proteins in mammalian brains

Session 5 Chair: Poul Nissen (DANDRITE, Aarhus University)

10:15 - 10:30 **Sayaka Sugiyama** : Visual experience specifies primary dendrites in cortical interneurons for perception

10:30 - 10:55 **Keisuke Yonehara** : Neural circuits for visually-mediated behaviors in the mouse

10:55 - 11:10 **Isao Hasegawa** : Distributed neural organization for visual perception and memory

Session 6 Chair: Akiyoshi Kakita (BRI, Niigata University)

11:20 - 11:35 **Hirohide Takebayashi** : Establishment and analysis of Eif2b5 mutant mice, a vanishing white matter disease model

11:35 - 12:00 **Taro Kitazawa** : Epigenetic and transcriptional basis of neuroplasticity

12:00 - 12:15 **Masaki Ueno** : Exploring sensorimotor circuits in the spinal cord

12:15 - 12:25 Closing Remarks by **DANDRITE Director Prof Poul Nissen**

Please register to attend the symposium via : <https://www.bri.niigata-u.ac.jp/>