



Association for the Study of Neurons and Brain Diseases

14th International Conference of Neurons and Brain Diseases

Queenstown, New Zealand – November 20-22, 2019

November 19

Checking in the hotel

Free time for dinner (ask if you need recommendation)

November 20

Each speaker 15 min talk plus 5 min questions

8:45-9:00	Registration
9:00-11:00	Section 1: Synaptic Plasticity Chair: Kaoru Inokuchi Cliff Abraham Preservation of overall synaptic drive during synaptic plasticity Haruhiko Bito Rational engineering of XCaMPs, a next-generation Ca ²⁺ indication Graham Collingridge TBD Zhengping Jia Molecular mechanisms of synaptic plasticity and brain disorders Bong-Kiun Kaang Synaptic Engram Hyong Kyu Kim The role of adenomatous polyposis coli-stimulated GEF 1 (Asef)1 in Synaptic Plasticity
11:00-11:30	Coffee break
11:30-1:30	Section 2: Pain and emotion I Chairs: Guang Yang Vadim Bolshakov Neuropeptide-mediated gating of anxiety circuits Ruth Empson Mapping cortical connectivity during sensory behavior Philippe Séguéla Dopaminergic deficits in neuropathic cingulate cortex Guang Yang In vivo imaging of pain-related changes of neuronal activity in the peripheral and central nervous system Pejmun Haghighi TBD Jianguo Gu Ion Channel Mechanisms of Rapid Conduction of Myelinated Nerves
1:30-2:30	Lunch break

2:30-4:30

Section: Glia cells and functions

Chair: Long-Jun Wu

Giannina Descalzi

Lactate from astrocytes fuels learning-induced mRNA translation

Shinghua Ding

GDNF in neuronal protection and brain recovery

Yong-Seok Lee

Glia dysfunction and learning disability in RASopathy

Yi Ren

The consequences of engulfment and processing of myelin debris by phagocytes in neural injury

Vanda Lennon

Impact of Autoimmune Gliopathies on Neuronal Function

Junfang Wu

Risk of Dementia/Depression and Associated Inflammatory Mechanisms in Spinal Cord Injury

4:30-5:00

Coffee break

5:00-6:20

Section: Brain Disease I

Chair: Mike Salter

Stephen Ferguson

mGluRs in Neurodegenerative disease

Tsuyoshi Miyakawa

Transcriptomic immaturity inducible by neural hyperexcitation is shared by multiple neuropsychiatric disorders

Johanna Montgomery Synaptic dysfunction in Autism Spectrum Disorders

Lu Yang Wang

Pathogenesis and Rescue of Autism Spectrum Disorder.

6:30-8:30

Wine reception and poster competition

Trainee posters:

1. **Indranil Basak**
2. **Juliette Cheyne**
3. **Farida Emran**
4. **Mohamed Fasil Ibrahim**
5. **Xuhui Li**
6. **Honghong Li**
7. **Renhao Liu**
8. **Jasmine Lock**
9. **Jingshan Lu**
10. **Zhuang Miao**
11. **Wun Chey Sin**
12. **Yukti Vyas**
13. **Zhaoxiang Zhou**

Professor posters:

1. **Kurt Haas:** Comprehensive imaging of experience-driven structural and functional plasticity in the developing brain
2. **Brian Chen:** A Drug Screening Platform to Increase Protein Expression Levels for Neurological Disorders
3. **Kyungmin Lee:** Role of Epac2 in inflammatory pain
4. **Bai Chuang Shyu:** Spontaneous high-current spikes in thalamocingulate pathways signaling pain states
5. **Min Zhuo:** Cortical plasticity in chronic pain and anxiety

November 21

9:00-11:00

Section 3: Pain and emotion II

Chair: Yong-Seok Lee

Sanjay Khanna

A septo-hippocampal cholinergic neuraxis in pain

Mike Salter

TBD

Fengwei Yu

Establishing Drosophila as a model to study the roles of medicinal cannabinoids in ageing, neurodegeneration and neuronal pruning

Gerald Zamponi

A brain circuit for neuropathic pain

Uhtaek Oh

The role of Tarentin 3 in Mediating the Baroreceptor reflex

11:00-11:30

Coffee break

11:30-1:30

Section: Brain Disease II

Chair: Lu yang Wang

Ping Liu

Arginine metabolism and neurodegenerative disease

Lucia Schweitzer

Neuronal atrophy in the hippocampus of Apswe/PS1dE9 mouse model of Alzheimer's disease after overexpression of I1PP2A

Seong-Woon Yu

Autophagic death of neural stem cells mediates chronic stress-induced decline of adult hippocampal neurogenesis and cognitive deficits

Joanna Williams

Blood plasma microRNA as biomarkers of Alzheimer's disease progression

Tuck Wah Soong

Ca²⁺ dependent regulation of Cav2-1 channel and Ataxia

Terrance Snutch

Effects of Gabapentinoids on Suppressing Fatal Seizure Events in a Model SUDEP

1:30

Lunch

Afternoon free activity

November 22

9:00-11:00	Section: Memory Chair: Stephen Ferguson Manipulation of fear memory allocation Orchestrated ensemble activities constitute a hippocampal memory engram Roles of hippocampus regulation of fear memory Noradrenergic modulation of thalamofrontal neuron excitability and thalamofrontal connectivity contributes to cognition Ghrelin/GHS-R signaling in memory storage and memory linking Deletion of IQ-Domain RNA editing in CaV1.3 channel enhances spacial learning and memory
11:00-11:30	Coffee break
11:30-1:30	Section: Neuronal signaling Chair: Hongyan Wang Principles of Neural Stem Cell Lineage Progression Approaches to understanding and correcting lysosome dysfunction in neurodegenerative disease TMC1 and TMC2 proteins: pore-forming subunits of mechanosensitive ion channels in hearing transduction Top-down wake circuitry Nrg/L1CAM alternative splicing isoforms in dendrite-epidermis interaction.
1:30-2:30	Lunch break
2:30-4:30	Section: Neuronal development, injury and circuits Chair: Zhengping Jia Control of synaptic function and color vision by IgSF9 family proteins A neuronal molecular switch to regulate quiescent neural stem cells Regulating neural stem cell homeostasis Detecting early brain changes in Parkinson's Brain metabolism in the pathophysiology of obesity Neuronal activity controls microglial dynamics via norepinephrine signaling in awake mice
4:30-5:00	Coffee Break
5:00-5:30	Overview of AND meetings, and future directions (Min) 15 th AND meeting (2020) Russia Mol Brain (Tsuyoshi Miyakawa) Mol Pain (Min Zhuo) Hello Bio (Graham Collingridge) Poster awards (Satoshi Kida) Investigator awards (Kaang, Zhuo and Kida)
7:00-...	Banquet Dinner