



Association for the Study of
Neurons and Diseases

The 11th International Conference for Neurons and Brain Disease Vancouver July 14-16, 2016

CONFERENCE LOCATION

Rudy North Lecture Theatre, Lower Level
Djavad Mowafaghian Centre for Brain Health
2215 Wesbrook Mall, Vancouver, BC V6T

PROGRAM

July 13, 2016

Arrive in Vancouver

July 14, 2016

8:30-8:45: **Coffee & Refreshments**

8:45-9:00: **Opening remarks**

Min Zhuo (University of Toronto)
Brian MacVicar (University of British Columbia)

9:00-10:00 **Synaptic plasticity (Chair: Xu Zhang, Institute for Neuroscience, Shanghai)**

9:00-9:20 **Graham Collingridge** (Univ. Toronto and LTRI) – *Multiple forms of LTP at CA1 synapses*

9:20-9:40 **Timothy Kennedy** (Montreal Neurol. Inst.) - *Regulation of Synapse Function and Plasticity by Netrin*

9:40-10:00 **Min Zhuo** (Univ. Toronto) – *Investigations of cortical plasticity in tree shrew*

10:00-10:30 **Coffee Break + Posters**

10:30-11:50 **Neurodevelopment (Chair: Fang Liu, University of Toronto)**

10:30-10:50 **Shernaz Bamji** (Univ. British Columbia) - *Protein Palmitoylation in the development and function of neural circuits*

10:50-11:10 **Adriana Di Polo** (Univ. Montreal) - *Mechanisms of dendrite stability and regeneration in the injured visual system*

11:10-11:30 **Bao Lan** (Institute for Biochemistry and Cell Biology, Shanghai) - *Axonal localization and functions of miRNAs in primary sensory neurons*

11:30-11:50 **Kurt Haas** (Univ. British Columbia) - *Early-life seizures alter brain circuit formation by hijacking endogenous plasticity mechanisms*

12:00-1:30 **Lunch break + Posters**

1:30-3:10 **Learning and Memory (Chair: Yong-Chao Ma, Northwestern University)**

1:30-1:50 **Jin-Hee Han**: (KAIST, Korea) – *Selective control of fear expression by ventromedial prefrontal cortex (vmPFC) activity after extinction*





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- 1:50-2:10 **Kaoru Inokuchi** (Univ. Toyama) - *Autophagy induction enhances memory destabilization beyond reconsolidation boundary*
- 2:10-2:30 **Satoshi Kida** (Tokyo Univ. Agriculture) - *Identification of fear and extinction neurons*
- 2:30-2:50 **Xia Zhang** (Univ Ottawa) - *a neural circuitry for cannabinoid improvement of sleep*
- 2:50-3:10 **Gilda Stefanelli** (and Iva Zovkic, Univ. Toronto) - *Sequencing data linking novel histone variant to age-related memory decline*
- 3:10-3:40** **Coffee Break + Group Photo**
- 3:40-5:40** **Receptor and Channel Regulation (Chair: Mike Salter, SickKids Hospital, Univ. Toronto)**
- 3:40-4:00 **Brian MacVicar** (Univ. British Columbia) - *Cellular mechanisms underlying cytotoxic neuronal edema*
- 4:00-4:20 **Fang Liu** (Univ. CAMH, Toronto) - *Dopamine D1 receptor and GABAergic Interneuron Migration*
- 4:20-4:40 **Uhtaek Oh** (Sensory Res Center, Seoul Natl. Univ) - *Tentonin 3, a novel mechanosensitive channel for proprioception*
- 4:40-5:00 **Tuck Wah Soong** (Nat. Univ. Singapore) - *RNA Editing of CaV1.3 Channels: CNS-selectivity and Neurophysiology*
- 5:00-5:20 **Zhengping Jia** (Univ. Toronto) - *Regulation of spine plasticity by PAK signaling*
- 5:40-7:30** **Welcome Reception: Wine & Cheese reception and Poster Presentations**

July 15, 2016

- 9:00-9:30:** **Coffee & Refreshments**
- 9:30-10:30** **Brain Functions and Disease I (Chair: Yu Tian Wang, Univ. British Columbia)**
- 9:30-9:50 **Stephen Ferguson** (Univ. Ottawa) - *mGluR5 and Huntington's Disease*
- 9:50-10:10 **Joanne Nash** (Univ. Toronto) - *SIRT3 is a disease - modifying agent in Parkinson's disease*
- 10:10-10:30 **Yong-Chao Ma** (Northwestern Univ. US) - *Dysregulation of Mitochondrial Functions in Neurodegeneration of Parkinson's Disease and Spinal Muscular Atrophy*
- 10:30-11:00** **Coffee Break**
- 11:00-12:20** **Sensory and Pain (Chair: Brian MacVicar, Univ. British Columbia)**
- 11:00-11:20 **Shao-Jun Tang** (UTMB – Univ. Texas) – *Mechanism of HIV-associated pain*
- 11:20-11:40 **Sabatino Maione** (Sec. Univ. Napoli, Italy) – *N-acyl Ethanol-amines controls pain*
- 11:40-12:00 **Xu Zhang** (Institute of Neurosci. Shanghai) - *Somatosensory neuron types and their functions*
- 12:00-12:20 **Jianguo Gu** (Univ. Alabama at Birmingham) - *Mechanobiology of Neurons*



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12:20-1:30 *Lunch Break*

1:30-3:10 *Neural Circuits (Chair: Bong-Kiun Kaang, Seoul National University)*

1:30-1:50 **Brian Chen** (McGill Univ.) – *Direct Observation of Local Protein Synthesis In Vivo*

1:50-2:10 **Yong Rao** (McGill Univ.) - *IgSF9 family proteins in visual circuit development and function*

2:10-2:30 **Mei Zhen** (Lunenfeld-Tanenbaum Research Institute) - *Circuit Development: from such a simple beginning*

2:30-2:50 **Seung-Hee Lee** (KAIST – South Korea) - *A neural circuit for auditory dominance on visual perception*

2:50-4:10 *Coffee Break + Posters*

3:10-5:20 *Mechanisms of Pain (Chair: Kurt Hass)*

3:10-3:30 **Bong-Kiun Kaang** (Seoul Nat. Univ) - *Bidirectional modulation of hyperalgesia via optogenetic control of ACC neuron*

3:30-3:50 **Feng Wei** (Univ. Maryland) - *New mechanisms for stress-induced comorbid pain*

3:50-4:10 **Mike Salter** (SickKids Hospital Univ. Toronto) – *Dissecting sexual dimorphism in pain signaling*

4:10- *Free Activities - Touring UBC Campus*

July 16, 2016

8:30-9:00 *Coffee and Refreshments*

9:00-10:20 *Brain function and Disease II (Chair: Graham Collingridge, Univ. Toronto and LTRI)*

9:00-9:20 **Vadim Bolshakov** (Harvard Medical School) - *PACAPergic modulation of amygdala-BNST interactions in control of anxiety states*

9:20-9:40 **Tsuyoshi Miyakawa** (Fujita Health Univ. Japan) - *Increased acidity of the brain as a shared endophenotype of mice model of psychotic disorders*

9:40-10:00 **Hideyuki Okano** (Keio Univ. Japan) - *Modelling human neurological diseases using iPS cells and transgenic non-human primates*

10:00-10:20 **Sean Cregan** (Robarts Res Institute, Canada) - *Mechanisms of microglia mediated inhibition of neurogenesis*

10:20-10:40 **Guosong Liu** (Univ. California / Neurocentria) – *TBA*

10:40-11:00 *Coffee Break*

11:00-12:20 *Brain Function and Disease III (Chair: Xia Zhang, Univ. of Ottawa)*

11:00-11:20 **Longjun Wu** (Rutgers University) - *Microglial proliferation dominates spinal microgliosis after peripheral nerve injury*





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- 11:20-11:40 **Xiangyao Li** (Zhejiang Univ) - *Apoptosis related protein 3 regulated both evoked and spontaneous pain via the enhanced excitatory synaptic transmission*
- 11:40-12:00 **Xian-Guo Liu** (Sun Yat-sen Univ., China) - *Oral application of magnesium L-threonate attenuates vincristine-induced neuropathic pain*
- 12:00-12:20 **Yong-Seok Lee** (Chung-Ang Univ., South Korea) – *Cell type-specific dysregulation of RAS signaling in neurodevelopmental disorders*
- 12:20-1:30 **Lunch Break**
- 1:30 **AND Annual Business Meeting (all members)**
- 2:10 **Molecular Brain/BMC (Liz Bal)**
Molecular Pain and Molecular Brain awards
AND investigator awards
Poster Awards
- 7:30 **AND Banquet Dinner (all guests who registered) & Karaoke night**
Sage – Main Floor
6331 Crescent Road
University Centre
Vancouver, BC V6T 1Z2

The end of the meeting

See you in Italy in 2017!





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Poster Competition

- **Hyoung-Gon Ko:** (Seoul National University, Korea) – *The possible role of PKMzeta in the nucleus for maintaining memory*
- **Baoming Li:** (Institute of Life Science, Nanchang University, China) - *Maternal separation impairs prefrontal cortical myelination and cognitive functions in rats*
- **Xuhui Li:** (FIST – Xian Jiatong University, China) – *Synaptic transmission increases the postsynaptic calcium signals of the anterior cingulate cortex pyramidal neurons in brain slices*
- **Jingshan Lu:** (FIST – Xian Jiatong University, China) – *The morphological characteristics of the anterior cingulate cortex in the rat, mouse and tree shrew*
- **Su-eon Sim:** (Seoul National University, Korea) – *The brain-enriched microRNA, miR-9-3p, regulates synaptic plasticity and memory*
- **Qian Song:** (FIST – Xian Jiatong University, China) – *Minocycline does not affect long-term potentiation in the anterior cingulate cortex of adult mice.*
- **Fei Luo –** (Institute of Life Science, Nanchang University, China) - *β 1- and β 2-adrenoceptors in hippocampal CA3 region are required for long term memory consolidation in rats*
- **Manabu Yamanaka:** (University of Toronto, Canada) – *Pre-LTP requires extracellular signal-regulated kinase in the ACC*

Hotel Information

Sheraton Wall Centre Hotel
1088 Burrard St
Vancouver, BC V6Z 2R9

Transit Information

Participants can take:

- #44 bus from Burrard Street to UBC. This trip is ~40 minutes.
- #14 or #4 from Granville Street to UBC. This trip is ~45 minutes.

Further information regarding transit in Vancouver, can be found at www.translink.ca or via www.google.ca/maps

Restaurant Suggestions

The Boathouse Restaurant
1795 Beach Ave, Vancouver, BC V6G 1Y9
Or
1305 Arbutus St, Vancouver, BC V6J 5N2

SickKids

Neurocentria



ALPHA
MED
SCIENTIFIC



MOLECULAR
PAIN



Molecular Brain



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Great spot on the beach to relax and watch the sunset.

Royal Dinette

905 Dunsmuir St, Vancouver, BC V6C 1A8

Large & small plates are locally sourced at this Canadian spot in a smart space with retro touches.

Hawksworth Restaurant

Rosewood Hotel Georgia, 801 W Georgia St, Vancouver, BC V6C 1P7

Considered one of the best new restaurants in Canada - Inventive Pacific Northwest cuisine served in 4 custom-designed rooms in the Rosewood Hotel Georgia.

The Keg Steakhouse + Bar – Yaletown

1011 Mainland Street, Vancouver, BC V6B 5P9

Classic steak & seafood dishes are the mainstays at this stylish yet casual chain restaurant. This location has a superb building-top patio with views of the city.

Kirin Restaurant

1172 Alberni St, Vancouver, BC V6E 3Z3

Northern Chinese dishes with a seafood focus & diverse dim sum are served in a polished dining room.

New Chong Qing Restaurant

2044 W 41st Ave, Vancouver, BC V6M 1Y7

This one come's at our own Dr. Wang's recommendation. He speaks highly of it, saying that it is a bit different than the usual Chinese fare and quite good.

Cactus Club Café

1085 Canada Pl, Vancouver, BC V6C 0C3

Casual fare with a view of Stanley Park and the seaplane port.

