**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
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!
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) - β1- and β2-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](http://www.translink.ca) or via [www.google.ca/maps](http://www.google.ca/maps)

Restaurant Suggestions

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