The 8th International Conference for Neurons and Brain Diseases (2013)
CeLS auditorium, Center for Life Sciences, National University of Singapore, Singapore

Program

2 July 2013 (Tuesday)

8:00 Registration
8:00-9:00 Coffee and Refreshments; Poster set-up
9:00-9:10 Opening Remarks
  Tuck Wah Soong, Meeting Organizer, National University of Singapore
  Khay Guan Yeoh, Dean, Yong Loo Lin School of Medicine, National University of Singapore
  Min Zhuo, AND Director, University of Toronto

Session 1: Brain Disease I (Chair: Fengwei Yu)

9:10-9:30 Edward Koo, University of California, Dan Diego, USA
  Synaptic damage in Alzheimer disease: a complex problem

9:30-9:50 Kah-Leong Lim, National Neuroscience Institute, Singapore
  Harnessing the neuroprotective function of parkin for the development of Parkinson's disease therapeutics

9:50-10:10 Uhtaek Oh, Seoul National University, Korea
  A Neurological Disorder in TRPM2 Deficient Mice

10:10-10:30 Ferdinando Nicoletti, University of Rome, Italy
  New vistas of metabotropic glutamate receptors

10:30-11:00 Coffee Break

Session 2: Neurons and Synapses (Chair: Hongyan Wang)

11:00-11:20 Yong Rao, McGill University Health Centre, Canada
  Visual circuit football predictions assembly requires fine tuning of borderless

11:20-11:40 Fengwei Yu, Temasek Life Sciences Laboratory, Singapore
  Mechanisms of neuronal pruning in drosophila

11:40-12:00 Stephen Ferguson, Robarts Research Institute, Canada
  Glutamate receptor signaling in models of neurodegenerative disease
12:00-12:20  **Jun Xia**, Hong Kong University of Science and Technology, China
PICK1 Regulates Dense Core Vesicle Trafficking

12:20-13:30  Lunch Break

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**2 July 2013 (Tuesday)**

**Session 3:** Synaptic plasticity I (Chair: Naranjo Jose)

13:30-13:50  **Tuck Wah Soong**, National University of Singapore, Singapore
Alternative structures of calcium channels for selective functions

13:50-14:10  **Yasunori Hayashi**, RIKEN Brain Science Institute, Japan
Quantitative view of AMPA receptor phosphorylation

14:10-14:30  **Bao Lan**, Institute of Biochemistry and Cell Biology, Shanghai, China
MEC-17 is required for alpha-tubulin acetylation and neuronal migration in cortical neurons

14:30-14:50  **Graham Collingridge**, Seoul National University, Korea
LTD Mechanisms: picking up on the details

14:50-15:10  **Zhengping Jia**, University of Toronto, Canada
Role of limK1 in long-lasting synaptic plasticity and long-term memory

15:10-15:40  Tea Break

**Session 4:** Pain and plasticity I (Chair: Xinzhong Dong)

15:40-16:00  **Fei Luo**, Institute of Psychology, Chinese Academy of Sciences, China
Frontal/Amygdala imbalance in depression-pain interaction

16:00-16:20  **Sanjay Khanna**, National University of Singapore, Singapore
A role of forebrain medial septum in the affective-motivational dimension of pain

16:20-16:40  **Min Zhuo**, University of Toronto, Canada
Long term potentiation within the cortical network

16:40-17:00  **Jon Levine**, University of California, San Francisco, USA
Its past, enlightened to perceive new periods of pain: Nociceptor mechanisms in the transition from acute to chronic pain
17:00-17:20  **Xu Zhang**, Institute of Neuroscience, Shanghai, China
The function of FGF13 in the nervous system

17:20-18:30  **Posters and Wine Reception**

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3 July 2013 (Wednesday)

8:00-9:00  Coffee and Refreshments

**Session 5:**  **Memory and Emotion I (Chair: Satoshi Kida)**

9:00-9:20  **Bong-Kiun Kaang**, Seoul National University, Korea
Role of LLP in synaptic plasticity and memory

9:20-9:40  **Adam Claridge-Chang**, Duke-NUS Medical School, Singapore
A genetically tractable model of anxiety-related behavior

9:40-10:00  **Kaoru Inokuchi**, University of Toyama, Japan
Synaptic reconsolidation

10:00-10:20  **Ajai Vyas**, Nanyang Technological University, Singapore
Intersection of sex and fear in the rat brain

10:20-10:40  **Saji Kumar Sreedharan**, National University of Singapore, Singapore
Memory beyond the circle: metaplasticity of synaptic tagging and capture

10:40-11:00  **Coffee Break**

**Session 6:**  **Pain and plasticity II (Chairs: Khanna Sanjay)**

11:00-11:20  **Shao-Jun Tang**, University of Texas, USA
Mechanism of HIV-associated pathological pain

11:20-11:40  **Xinzhong Dong**, John Hopkins University, USA
Descending facilitation of presynaptic terminals is a key determinant of chronic pain

11:40-12:00  **Fusao Kato**, Jikei University School of Medicine, Japan
The central amygdala - where pain meets fear

12:00-12:20  **Jianguo Gu**, University of Cincinnati, USA
Cellular and molecular mechanisms underlying the sense of light touch in Mammals
12:20-12:40 Bai Chuang Shyu, Institute of Biomedical Sciences, Academia Sinica, Taiwan
Optoexcitation of reticular thalamic nucleus in regulation of cortical seizure

13:00-14:00 Lunch Break

14:00- Half-day Tour + dinner

Program

4 July 2013 (Thursday)

8:00- 9:00 Coffee and Refreshments

Session 7: Synaptic Plasticity II (Chairs: Bong-Kiun Kaang)

9:00-9:20 Haruhiko Bito, University of Tokyo, Japan
New roles of CaM kinases in neuronal plasticity and brain development

9:20-9:40 Haiqing Zhao, John Hopkins University, USA
The on and off of olfactory signal transduction

9:40-10:00 Makoto Tominaga, Okazaki Institute for Integrative Bioscience, Japan
Physiological function of TRPV4 in choroid plexus

10:00-10:20 Carlos F Ibanez, National University of Singapore, Singapore
Genetic dissection of neurotrophin signaling through the death receptor p75NTR

10:20-10:40 Coffee Break

Session 8: Memory and emotion II (Chair: Tsuyoshi Miyakawa)

10:40-11:00 Satoshi Kida, Tokyo University of Agriculture, Japan
Role of Calcineurin in Enhancement of Fear Memory after Retrieval

11:00-11:20 Xia Zhang, University of Ottawa, Canada
Glia and Memory

11:20-11:40 Suresh Jesuthasan, Duke-NUS Medical School, Singapore
Asymmetric processing of light and smell

11:40-12:00 Brian Chen, McGill University, Canada
Protein concentration quantification in single cells in vivo

12:00-13:00 Lunch Break
Session 9: Brain Disease II (Chair: Kah Leong Lim)

13:00-13:20 Guo-li Ming, John Hopkins University, USA
Function of risk jeans for mental disorders in neural development

13:20-13:40 Chian-Ming Low, National University of Singapore, Singapore
Neuroprotection by benzimidazoles in a rate stroke model

13:40-14:00 Sean Cregan, University of Western Ontario, Canada
Mechanism of neuroinflammation induced neural precursor cell death

14:00-14:20 Tsuyoshi Miyakawa, Fujita Health University, Japan
Bidirectional change of maturation statue of dentate gyrus neurons: relevance to neuropsychiatric diseases

14:20-14:50 Coffee Break

Session 10: Brain Disease III (Chair: Chian Ming Low)

14:50-15:20 Xiangyao Li, Xi'an Jiaotong University, China
The basic properties of IG cells from adult mice

15:20-15:40 Jose Naranjo, CNB-CSIC, Spain
DREAM-mediated neuroprotection in AD

15:40-16:00 Guoqiang Bi, University of Science and Technology, China
Mitochondrial flash and synaptic plasticity in hippocampal neurons

16:00-16:20 Fen-Biao Gao, University of Massachusetts Medical School, USA
Molecular pathogenic mechanisms of frontotemporal dementia
Mol Brain Award Recipient

16:20-16:40 Yves De Koninck, Universite’ Laval, Canada
Chloride extrusion enhancers as novel therapeutics
Mol Pain Award Recipient

16:40-17:00 AND Member Annual Meeting
(Chairs: Min Zhuo, Bong-Kiun Kaang and Satoshi Kida)

17:00-17:30 Coffee Break

17:30-18:30 Molecular Brain, Molecular Pain, and AND Investigator Awards;
Poster Awards and Concluding Remarks

18:30 Dinner Party (Ticket holders ONLY)