



Neural Development



Seminar: B1 Auditorium, Institute of Molecular Biology (IMB)

Poster Session & Reception & Lunch: 1F Lobby, Interdisciplinary Research for Sciences and Technology (IST)

DAY 1 (Friday, March 2nd, 2018)

11:30-13:00 Registration

13:00-13:20 Opening Remarks

Session I: Fate speciation from cell to system

Chair: Shen-Ju Chou, Francois Guillemot

13:20-13:45 Francois Guillemot **Stem cell heterogeneity in the adult brain**

13:50-14:15 Stefan Thor **Mechanisms underlying the anterior expansion of the central nervous system**

14:20-14:45 Fu-Chin Liu **Neural development of the cortico-basal ganglia circuits**

14:50-15:15 Alessandra Pierani **Transient moving organizers: life and death in cortical development, evolution and pathology**

15:20-15:35 Jamy Peng **Epigenetic mechanism balances human neural stem cell self-renewal and differentiation**

Coffee Break

16:10-16:35 Guo-Li Ming **Modeling neural development and diseases using human iPSCs**

16:40-17:05 Alain Prochiantz **Homeoprotein signaling from early development to adulthood**

17:10-17:25 Shen-Ju Chou **Transcription factors in cortical patterning**

Key Note I

Chair: Cheng-Chang Lien

17:30-18:20 Mu-Ming Poo **Neural plasticity from synapse to cognition**

18:45-21:00 Welcome Reception @ IST

DAY 2 (Saturday, March 3rd, 2018)

Session II: Neuron-glia interaction

Chair: Yijuang Chern, Cagla Eroglu

09:00-09:25 Cagla Eroglu **How do glia sculpt synaptic connectivity?**

09:30-09:55 Cheng-Ting Chien **Glia-derived micro-RNA in synapse and trachea development and hypoxia response behavior**

10:00-10:15 Chi-Kuang Yao **Activity-dependent propagation of oxidative stress promotes motor neuron hyperexcitation and alters neuromuscular junction architecture upon depletion of Drosophila Eaat1**

Coffee Break

10:40-11:05 Angela Giangrande **Transcriptional and epigenetic regulation of glial differentiation in Drosophila**

11:10-11:35 Shun-Fen Tzeng **Molecular regulation of oligodendrocyte differentiation and its application on myelination**

11:40-12:05 Yijuang Chern **Abnormal control of GABAergic signaling by astrocytes in Huntington's disease**

12:10-12:40 Group Photo & Lunch @ IST

12:40-14:00 Poster Session I (Odd numbers) @IST

Session III: Neural differentiation

Chair: Yi-Ping Hsueh, Stephan Sigrist

14:00-14:25 Stephan Sigrist **Active zone scaffold proteins tune functional diversity across brain synapses**

14:30-14:55 Thomas Blanpied **Control of vesicle release position near receptors in single synapses**

15:00-15:25 Volker Haucke **From god's kitchen: How the pre synapse is made**

Coffee Break

15:50-16:15 Fengwei Yu **Dendrite pruning of nociceptive sensory neurons in Drosophila**

16:20-16:35 Chun-Liang Pan **An intimate liaison: fasciculation with axon shapes dendritic development**

16:40-16:55 Gaia Novarino **Haploinsufficiency of the intellectual disability-gene SETD5 disturbs developmental gene expression and cognition**

17:00-17:25 Yi-Ping Hsueh **Using mouse models to assess developmental deficits in neurological disorder**



Neural Development



Seminar: B1 Auditorium, Institute of Molecular Biology (IMB)

Poster Session & Reception & Lunch: 1F Lobby, Interdisciplinary Research for Sciences and Technology (IST)

DAY 3 (Sunday, March 4th, 2018)

Session IV: Synaptic plasticity

Chair: Yi-Shuan Huang, Daniel Choquet

09:00-09:25	Daniel Choquet	Constructing excitatory synapses at the nanoscale
09:30-09:55	Valentin Nägerl	Super-resolution imaging of brain extracellular space
10:00-10:15	Pei-Lin Cheng	Paxillin-associated endocytic activity enables timely neurite initiation on a soft substrate environment
10:20-10:35	Shu-Ling Chiu	GRASP1 regulates synaptic plasticity and learning through endosomal recycling of AMPA receptors
10:40-11:00	Coffee Break	
11:00-11:25	Dmitri Rusakov	Activity-dependent remodelling of synaptic microenvironment
11:30-11:55	Yongqing Zhang	Modeling SHANK3-related autism in non-human primates
12:00-12:25	Adrian Moore	Defining and diversifying dendrite arbor topology
12:30-13:00	Lunch @IST	
13:00-14:30	Poster Session II (All numbers) @IST	

DAY 4 (Monday, March 5th, 2018)

Session V: Circuit formation and function

Chair: Cheng-Chang Lien, Cyril Herry

09:00-09:25	Cyril Herry	Cooperation among prefrontal-amygdala circuits to control fear behavior
09:30-09:55	David Dupret	Neural dynamics of a memory trace in the hippocampal circuit
10:00-10:15	Shih-Kuo Chen	Neuronal circuitry of retinal input to the central clock suprachiasmatic nucleus
10:20-10:35	Chia-Lin Wu	Water reward memory in Drosophila
10:40-11:00	Coffee Break	
11:00-11:15	Suewei Lin	Neural mechanics of a hunger circuit in Drosophila
11:20-11:45	Bo Li	The amygdala circuits in the regulation of divergent behaviors
11:50-12:15	Ann-Shyn Chiang	Memory allocations in the Drosophila brain
12:20-12:50	Lunch @ IST	
12:50-14:00	Poster Session III (Even numbers) @IST	

Session VI: Stem cell

Chair: Hung-Chih Kuo, Pierre Vanderhaeghen

14:00-14:25	Pierre Vanderhaeghen	Deciphering species-specific properties of human corticogenesis
14:30-14:55	Johan Ericson	A Shh/Gli-driven three-node timer motif regulates temporal identity and fate of neural stem cells
15:00-15:25	Bassem Hassan	Transcriptional regulation of neurogenesis
15:30-15:45	Jun-An Chen	LncRNA Meg3 choreographs the epigenetic landscape of postmitotic motor neuron cell fate and subtype identity

Coffee Break

16:10-16:35 Hongyan Wang
16:40-16:55 Hung-Chih Kuo

Key Note II

Chair: Angela Giangrande

17:00-17:50	Magdalena Götz	An intrinsic mechanism controls reactivation of neural stem cells by spindle matrix proteins
18:00-18:10	Closing Remark	Reprogramming neural fates