## Discovery of Colorful Life

**KPS 2013** 

22-24 | 10 | 2013 Chung-Ang University Art Center

Korean Physiological Society **Chung-Ang University** 

## KPS 2013 22-24 | 10 | 2013 Chung-Ang University Art Center The 65<sup>th</sup> Annual Meeting of Korean Physiological Society

Discovery of Colorful Life

www.koreaphysiol.org

Tuesday, October 22

Chung-Ang University

17:30-18:30 Opening Lecture : Stem cell and physiology Hong Jun Lee (Chung-Ang University, Korea)

## Wednesday, October 23

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Time	Hall A	Hall B
09:30-13:20	Registration	
10:00-12:00	Satellite Symposium: The roles of cation channels in pathophysiology of the human bodies (Spornsored by Seoul national University TRP Research Lab)  Chair: Insuk So (Seoul National University TRP Research Lab)  Gating mechanisms of Orai1 and TRPC channels by STIM1  Shmuel Muallem (NIIH, USA)  Generating and sensing the flow signal for establishing left-right asymmetry  Hiroshi Yamada (Osaka University, Japan)  TMC-1 is a cation channel for sodium sensation in C. elegans nociceptor neurons  SunWook Hwang (Korea University, Korea)  The roles of cation channels in pacemaking activity in Interstitial Cells of Cajal  Byung Joo Kim (Pusan National University, Korea)  Neurotoxic action of oxidized TRPC5 in abnormal glutathione homeostasis  Chansik Hong (Seoul National University, Korea)	
11:40-12:00	Advisory Board Meeting (11F R&D Center University Club)	
12:00-13:20	Board of Directors Meeting (11F R&D Center University Club)	
13:20-13:30	Opening Ceremony	
13:30-14:30	Plenary Lecture: Dynamic aspects of the function and stoichiometry of ion channel complexes Chair: Byung-II Min / Yoshihiro Kubo (NIPS, Japan)	
14:30-16:30	Symposium I: Learning and memory (Sponsored by Neuro-Immune Information Storage Network MRC)  Chair: Sang Jeong Kim  Synapse-to-nucleus and nucleus-to-synapse signaling: molecular mechanisms of Arc/Arg3,1 regulation and its role on synaptic function  Hiroyuki Okuno (Medical Innovation Center Kyoto University, Japan)  Structural and molecular remodeling of single dendritic spines during long- term potentiation  Yasunori Hayashi (Brain Science Institute, RIKEN, Japan)  Mechanism and adult treatment for the memory deficits associated with mouse models of RASopathy  Yong-Seok Lee (Chung-Ang University, Korea)  Neuron-glia crosstalk under pathological condition of Alzheimer's disease  Inhee Mook-Jung (Seoul National University, Korea)	Special Focus Session I: Ion channels in mechanotransduction Chair: Young Min Bae  Revisiting ion channel mechanosensitivity Young Min Bae (Konkuk University, Korea)  The mechanosensitivity of TREK-2 channel: Role of PLC activation by membrane stretch Joohyun Nam (Dongguk University, Korea)  Segregation of TRP channels in Drosophila mechanosensory cilia Yun Doo Chung (University of Seoul, Korea)  Ectopic pacemaking in atrial myocytes under fluid pressure Sun-Hee Woo (Chungnam National University, Korea)
16:30-18:00	Poster oral presentation I : lon channels, muscles, and molecular physiology	Poster Presentation
18:00	Standing Reception (Faculty office building / Gymnasium)	

## Thursday, October 24

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Time	Hall A	Hall B
9:00-9:30	Youdang Scholarship Award Lecture	
09:30-12:00	Symposium II: Integrative and computational physiology  Chair: Chae Hun Leem  Modelling for better understanding physiological phenomena  Chae Hun Leem (Ulsan University, Korea)  Simulation of pacemaker activity in Interstitial Cells of Cajal  Jae Boum Youm (Inje University, Korea)  A physiomic model for the analysis of heart mechanics and blood circulation  Eun Bo Shim (Kangwon National University, Korea)  Basic and clinical application of cardiac arrhythmia in-silico modeling  Hui-Nam Pak (Yonsei University, Korea)  Hemodynamics in vascular disease  Kyehan Rhee (Myongii University, Korea)	Special Focus Session II: Physiological studies using Drosophila melanogaster: from molecules to behaviors Chair: Ji hye Lee  Why do we study Drosophila melanogaster?: a powerful genetic model system to study molecular functions and relevant behaviors  Ji hye Lee (Pusan National University, Korea)  Sensory discrimination of polymodal TRPA1 in Drosophila  Kyeong.lin Kang (Sungkyunkwan University, Korea)  Modeling and studying Parkinson's disease using Drosophila genetics  Hyongiong Koh (Dong-A University, Korea)  A Stress Hormone Regulates the Female Reproduction by Facilitating the Sperm Storage  Young-Joon Kim (GIST, Korea)  Role for dCLOCK in behavioral synchronization to daily temperature cycle  Eun Young Kim (Ajou University, Korea)
12:00-12:30	General Assembly	
12:30-13:30	Photograph and Lunch (Collge of Business Administration)	
13:30-15:00	Poster oral presentation II: Neuronal, Systemic, and Integrative physiology	Poster Presentation
15:00-17:00	Symposium III: Disease animal models  Chair: Tong Mook Kang The power of mouse genetics  Han-Woong Lee (Yonsel University, Korea) Prediction of gene function through mouse phenotype analysis in metabolic syndrome  Je Kyung Seong (Seoul National University, Korea) Mechanism and therapy for vascular malformation: lesson from animal models  S. Paul Oh (Gachon University, Korea)  A rat model of atopic pruritus  Heung Sik Na (Korea University, Korea)	Special Focus Session III: Inner Ear Physiology  Chair: Min Sun Kim  Electrophysiology related cochlear implantation  Jae Young Choi (Yonsei University, Korea)  Noise induced hearing loss & hair cell regeneration  Jong Woo Chung (Ulsan University, Korea)  Vestibular afferent signaling & homeostasis  Gyu Cheol Han (Gachon University, Korea)  Role of vestibular system in function of basal ganglia in rats  Min Sun Kim (Wonkwang University, Korea)
17:00-17:30	Poster Prize Award and Closing Ceremony	