Proceedings of the 16th International Symposium on Chromaffin Cell Biology

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It is our pleasure to present to the audience of neurobiologists, neuroendocrinologists, and cell biologists the Proceedings of the 16th International Symposium on Chromaffin Cell Biology (ISCCB) as a Special Issue of Journal of Molecular Neuroscience. The goal of the ISCCB is to promote high-quality neuroscience research using chromaffin cells as a biological model, to exchange ideas between laboratories with complementary methodologies, to foster scientific strategies, and to bring together senior and junior neuroscientists. The meeting provides a forum for the gathering of international scientist working in the field of chromaffin cell biology to discuss new ideas and challenge old ones and to foster collaboration.

The 16th ISCCB was held in the Xinhua Hotel (north of Peking University) in Beijing, China, during July 11–15, 2011. A total of 120 researchers and students (65 from overseas and 55 from China) from all over the world attended the meeting. The meeting received more than 110

abstracts. Following ISCCB tradition, 11 travel awards were given to support young students to the meeting. Most of the financial support to ISCCB-16 for the fellowships, as well as the meeting hall cost came from a generous donation by Zeiss Microscope Division-China. We also received support from the National Science Foundation of China.

For the first time, the ISCCB took place in China. The 4-day symposium had 13 scientific oral sessions and two poster sessions covering 14 topics ranging from mechanisms of secretory granule biogenesis and transport, exocytosis/endocytosis to chromaffin cell plasticity and granin-derived peptides in diseases. The names of the speakers and the scientific program can be found at the ISCCB website (<http://www.cicst.org.cn/isccb16/>). A special session to increase the interest of Chinese junior scientists to work in the field of chromaffin cell biology was organized and chaired by L-S Kao. These researchers presented papers representing various aspects of study, directly or indirectly related to chromaffin cell biology. This included *Pingyong Xu* (China) who showed a series of exciting newly developed, reversibly switchable fluorescent proteins with high photon output, high photostability and different switching rate and pH dependence that are potentially useful for superresolution microscopy and applicable to chromaffin cells; and *Zhengxin Wu* (China) who discussed Ca^{2+} imaging results that suggested a PKC-1-dependent mechanism for the on/off responses of ASH neurons to aversive stimuli in *Caenorhabditis elegans*. *Xiao Yu* (China) showed that thiopental-induced insulin secretion via activation of IP3-sensitive calcium stores in rat pancreatic beta cells. *Alan Schneider* (USA) discussed the possibility that electroporation is part of the mechanism in fusion pore formation in chromaffin cells.

Like previous meetings, there was a business meeting of all ISCCB international advisory board (IAB) members

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(Luis Gandia, Luis Miguel Gutierrez, Youssef Anouar, Nicolas Vitale, Frederic Meunier, Ana M. Cárdenas, Emilio Carbone, Lung-Sen Kao, and Zhuan Zhou) on July 13. The board members selected the next two meeting sites for ISCCB-17 (2013 July, Rouen, France; organizer, Youssef Anouar) and ISCCB-18 (2015, Australia; organizer, Frederic Meunier). In addition, at the board meeting, the following new IAB members were added: Seung Hyun Yoo (Korea), Damien Keating (Australia), Manfred Lindau (USA), Corey Smith (USA), Jens Rettig (Germany), and Chien-Yuan Pan (Taipei) who replaced Lung-Sen Kao as IAB for Taiwan.

After the meeting, Peng Loh contacted the ISCCB-16 attendees to determine if there was enough interest in sharing the proceedings with a wider audience of neurobiologists, neuroendocrinologists, and cell biologists. The positive response led her to contact the Editor-in-Chief of the Journal of Molecular Neuroscience, Dr. Illana Gozes with the proposal of a Special Issue of the Journal dedicated to the Proceedings. With the positive reply from the Journal, Peng Loh and the organizers of the 16th ISCCB, Zhuan

Zhou and Lung-sen Kao undertook the responsibility for actualizing this project.

This special issue is divided into four sections, corresponding to major themes discussed at the meeting. These include: *Granins, secretory granule biogenesis and transport; ion channels, fusion pores and exocytosis; chromaffin cell plasticity in stress, inflammation and development, and neurotransmitter secretion and cell signaling*. Each section is preceded by a commentary highlighting important findings from some of the talks presented at the meeting under the subject of the theme, independent of sessions. A cluster of papers/reviews submitted by speakers, that pertain to the theme follow the commentary, giving a broader and more detailed prospective of the chromaffin cell research in that discipline.

Finally, the co-editors wish to thank the Editor-in Chief, Dr. Illana Gozes and the publishers of the Journal of Molecular Neuroscience for the opportunity and privilege to recapture and share the novel developments in the field of chromaffin biology presented at the 16th ISCCB with their readership.