Report on the ISN Symposium on "Emerging Topics on Sphingolipids in the Nervous System" in the 7^{th} international Ceramide Conference

Hiroko Hama

The 7th international Ceramide Conference (iCC) was held on October 20-24, 2013, at Gurney's Inn in Montauk, NY, located near the eastern end of Long Island. Drs. Maurizio Del Poeta of Stony Brook University and Hiroko Hama of Medical University of South Carolina co-chaired the conference. The 133 conference attendees included students, postdoctoral fellows, junior and senior investigators, and industrial scientists from the following countries: China, France, Germany, Israel, Italy, Japan, Lebanon, The Netherlands, Portugal, Singapore, Spain, Switzerland, USA.

Since its inception in 2001, the main emphasis of iCC has been to provide young scientists with the opportunity to present their research findings and to interact with leaders in the field. As such, all students and postdoctoral fellows who had submitted abstracts for oral presentation were scheduled to give a talk. The remaining oral presentations were given by junior investigators. Others presented a total of 52 posters.

During the opening night, two leaders in the field gave keynote addresses:

Dr. Anthony Futerman, the Weizmann institute of Science, Israel

"10 years since the identification of ceramide synthases: What have we learned and what is left to discover?"

Dr. Lina Obeid, Stony Brook University, USA

"Translational lessons from knock out mouse models of sphingolipid metabolism"

This was followed by a total of 37 oral presentations in the following eight sessions in three days:

- Session 1 Structure, Enzymology and Sphingolipid Metabolism
- Session 2 Sphingosine Kinase Regulation and S1P Signaling
- Session 3 Lipid Trafficking and Biophysics of Membranes
- Session 4 ISN Symposium on "Emerging Topics on Sphingolipids in the Nervous System"
- Session 5 Bioactive Sphingolipids in Cell Stress Part 1
- Session 6 Bioactive Sphingolipids in Cell Stress Part 2
- Session 7 Translational Aspects of Sphingolipid Biology
- Session 8 Sphingolipid-based Therapeutics

Each session was chaired/co-chaired by two senior investigators who provided a 10-min overview of the field and led active discussions.

The five speakers for the ISN Symposium (one student, two postdoctoral fellows, and two junior investigators) had been nominated by senior scientists in the field and selected by the conference organizing committee. The symposium was chaired by Dr. Hiroko Hama and co-chaired by Dr. Nuria Casals of Universitat Internacional de Catalunya, Spain. The names of the speakers and the title of their presentations are as follows:

Dr. Alaa Othman, University Hospital Zurich, Switzerland

"L-Serine supplementation suppresses the formation of neurotoxic deoxysphingolipids and improves neuropathy in a diabetic rat model"

(Unfortunately, Dr. Alaa Othman was unable to attend the conference. The presentation was given by his advisor Dr. Thorsten Hornemann.)

Ms. Oshrit Ben-David, Weizmann Institute of Science, Israel

"Ceramide Synthase in the CNS of different mouse models"

Dr. Jingdong Qin, University of Chicago, USA

"NSMase2/ceramides involved hyaluronan regulation of 4-methylumbelliferone and anticancer"

Dr. Shun Watanabe, Kitasato University, Japan

"The roles of b-series gangliosides in nociceptive responses"

Dr. Massimo Aureli, University of Milano, Italy

"Role of the plasma membrane glycohydrolases in the central nervous system"

All presenters at the conference including the ISN Symposium speakers shared published and unpublished findings, and the audience participated in active discussions. Altogether, the conference was a great success.

Additional details of the 7th iCC are available at the conference web site: http://ceramide.stonybrook.edu/

Financial Report

The cost of the conference included registration fee (\$350), room & board (\$194.00-\$325.18/day including tax), and travel expenses. The total cost to each attendee ranged from \$1,400 to over \$2,000. The funds from the ISN (\$7,000) were used to provide an honorarium of \$1,400 to each of the five speakers to cover the cost of the conference.