Gordon Research Conferences

Meeting Details

Posttranslational Modification Networks

Gordon Research Conference

Regulation Mechanisms of Proteins and Signaling Pathways in Humans, Animals and Plants

Dates

August 13-18, 2017

Location

The Hong Kong University of Science and Technology Hong Kong, China

Organizers

Chairs:

Heribert Hirt & Lan Huang

Vice Chairs:

Steven P. Briggs & Yingming Zhao

Hong Kong Advisory Board:

Tony F. Chan, Kathryn Song Eng Cheah, Fanny M.C. Cheung, Arthur B. Ellis, Barry Halliwell, Nancy Ip, Jian Lu, Peter Mathieson, Alfonso Ngan, Paul Tam, Benjamin Wah, Henry Wong, Vivian Wing-Wah Yam, Kenneth Young & Albert Cheung-Hoi Yu

Application Deadline

Applications for this meeting must be submitted by **July 16**, **2017**. Please apply early, as some meetings become oversubscribed (full) before this deadline. If the meeting is oversubscribed, it will be stated here. *Note*: Applications for oversubscribed meetings will only be considered by the Conference Chair if more seats become available due to cancellations.

Meeting Description

The 2017 Gordon Conference on Posttranslational Modification Networks will present the latest development on approaches how the protein machinery and signaling pathways function in the context of various cellular systems. The genomic era has generated an enormous amount of information about the number of genes different organisms have and when they are expressed. However, we still know very little about how the encoded proteins function in the context of the molecular machines that underlay the essential cellular mechanisms such as transcription, translation or the primary metabolism. An understanding of these cellular systems is strongly dependent on the technologies to analyze the composition, behavior and regulation of proteins and protein complexes. The Gordon Conference 2017 on Posttranslational Networks will present advances in studying proteins and signaling pathways by using most modern developments in proteomics, bioinformatics, biochemistry and structural biology with a major focus on posttranslational modifications (PTMs). The Conference will feature a wide range of topics, such as the detection and quantitative analysis of various PTMs, including protein phosphorylation, ubiquitination, glycosylation, alkylation or nitrosylation in protein networks of humans, animals and plants. The Conference will showcase how biological problems can be addressed by using genomics, proteomics, mass spectrometry, structural biology as well as computational and systems biology approaches. Invited speakers are at the forefront of their field and represent a variety of scientific disciplines, including animal, medical and plant sciences. Besides the programmed discussion and poster sessions, informal gatherings in the afternoons and evenings will enable scientists from different disciplines to brainstorm and develop cross-disciplinary collaborations. Early career scientists and students will be able to discuss their data with leaders in the field throughout the conference. In addition to presenting their work in

dedicated slots throughout the program, the Gordon Research Seminar will provide opportunities for students and post-docs to present their work in poster format and exchange ideas with leaders in the field.

Related Meeting

This GRC will be held in conjunction with the "Posttranslational Modification Networks" Gordon Research Seminar (GRS). Those interested in attending both meetings must submit an application for the GRS in addition to an application for the GRC. Refer to the associated GRS program page for more information.

Contributors







Preliminary Program

The topics and speakers for the conference sessions are displayed below (italics denote discussion leaders). The Conference Chair is currently developing their detailed program, which will include the complete meeting schedule, as well as the talk titles for all speakers. The detailed program will be available by **April 13, 2017**. Please check back for updates.

- Cellular Signaling Networks and Controls
 (Richard Vierstra / Jesper Velgaard Olsen / Peipei Ping / Ziv Bar-Joseph)
- Chromatin Dynamics and Gene Regulation (Ning Li / Wolfgang Fischle)
- Roles and Functions of Protein Glycosylation
 (Roman Zubarov / Carlito Lebrilla / Hui Zhang / Ronghu Wu)
- Miscellaneous PTMs and Biological Functions
 (Yingming Zhao / Roman Zubarev / Yasushi Ishihama / Ueli Aebersold / Alma Burlingame)
- Roles and Functions of Protein Phosphorylation
 (Steven Briggs / Jian-Min Zhou / Cyril Zipfel / Gary Loake)
- PTMs and Protein Complexes
 (Anne-Claude Gavin / Zhiyong Wang / Joe Loo / Jun Qin)
- PTMs and Systems Biology
 (Aebersold Ruedi / Anne-Claude Gavin / Anne-Claude Gingras)
- Ubiquitination and Protein Quality Control
 (Peipei Ping / Richard Vierstra / Ingrid Wertz / Dieter Wolf)
- PTM Cross-Talk and Cellular Pathways
 (Jesper Velgaard Olsen / Frank van Breusegem / Ning Li / Waltraud Schulze)