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Schedule

7:30–8:30	Registration, Continental Breakfast and Exhibits
8:30–9:30	Welcome: Richard Moss, Ph.D. (Honorary Symposium Chair) Keynote Address: <i>Genotypic Variability and the Quantitative Proteotype</i> Ruedi Aebersold, Ph.D. (Introduction: Lloyd M. Smith, Ph.D.)
9:30–10:00	Eric R. Strieter, Ph.D. (Moderator - Morning Session) <i>Phosphorylation–regulated Protein Dynamics in Kinase Regulation and Implications for Inhibitor Design: The Case of ERK2</i> Natalie G. Ahn, Ph.D.
10:00–10:15	BREAK
10:15–10:45	<i>Dynamic Protein Modification in Metabolism and the Epigenome</i> John Denu, Ph.D.
10:45–11:15	<i>An Edgotype of Chemoresistant Cells Reveals the Shaping of Epigenetic Regulatory Components</i> James E. Bruce, Ph.D.
11:15–11:45	<i>Fast and Comprehensive Proteome Analysis</i> Joshua J. Coon, Ph.D.
11:45–1:15	Lunch, Poster Session and Exhibits
1:15–1:45	Martha M. Vestling, Ph.D. (Moderator - Afternoon Session) <i>O-GlcNAcylation Serves as a Nutrient Sensor to Regulate Transcription, Signaling and Mitochondrial Function and is a Major Molecular Basis of Glucose Toxicity in Diabetes</i> Gerald Hart, Ph.D.
1:45–2:15	<i>Seeing Red and Going Green: Regulation of Eukaryotic Plasma Membrane Primary Transport Pumps by Phosphorylation, in Plants and Electric Fish</i> Michael R. Sussman, Ph.D.
2:15–2:45	<i>Development and Application of MS-Based Strategies for Qualitative and Quantitative Analysis of Protein and Peptide PTMs</i> Lingjun Li, Ph.D.
2:45–3:00	BREAK
3:00–3:30	<i>A New Frontier in Proteomics: Identifying Proteoforms and Elucidating Proteoform Families from Measurements of Intact Mass and Lysine Count</i> Lloyd M. Smith, Ph.D.
3:30–4:00	<i>Toward Top-Down Proteomics</i> Ljiljana Paša-Tolić, Ph.D.
4:00–4:30	<i>Top-Down Proteomics for Comprehensive Analysis of Post-Translational Modifications: Applications to Heart Disease</i> Ying Ge, Ph.D.
4:30–4:45	Poster Awards and Closing Remarks
4:45–5:45	Reception Sponsored by: <i>Michael Best & Friedrich LLP</i>

Wisconsin Human Proteomics Symposium

Post-Translational Modifications in Human Disease

August 7, 2015 | Madison, WI



Overview

The Human Proteomics Program at the University of Wisconsin-Madison and the BioPharmaceutical Technology Center Institute are pleased to offer this excellent symposium. Nationally recognized leaders will present a range of topics in cutting-edge proteomics technology developments for qualitative and quantitative analysis of post-translational modifications. Applications to human diseases, for example, cancer and cardiovascular, infectious and neurodegenerative diseases, will be discussed. Attendees are also invited to present their recent work in scientific poster sessions; a poster contest for graduate students and post-doctoral researchers is included.

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Presenters

Honorary Symposium Chair

Richard Moss, Ph.D.

Professor, Department of Cell and Regenerative Biology
Senior Associate Dean for Basic Research, Biotechnology and Graduate Studies
Executive Director, Master of Science in Biotechnology
Director, UW Cardiovascular Research Center
School of Medicine and Public Health
University of Wisconsin-Madison, Madison, WI

Keynote Speaker

Ruedi Aebersold, Ph.D.

Deputy Head
Department of Biology
ETH Zürich, Zürich, Switzerland

Session Chairs

Eric R. Strieter, Ph.D.

Assistant Professor
Department of Chemistry
University of Wisconsin-Madison, Madison, WI

Martha M. Vestling, Ph.D.

Director of the Mass Spectrometry Facility
Department of Chemistry
University of Wisconsin-Madison, Madison, WI

Speakers

Natalie G. Ahn, Ph.D.

Professor of Distinction
Department of Chemistry and Biology
University of Colorado at Boulder, Boulder, CO

James E. Bruce, Ph.D.

Professor of Genome Sciences, School of Medicine
University of Washington, Seattle, WA

Joshua J. Coon, Ph.D.

Professor, Department of Chemistry
University of Wisconsin-Madison, Madison, WI

John Denu, Ph.D.

Theme Leader, Professor, Biomolecular Chemistry, Epigenetics, Wisconsin Institute for Discovery, University of Wisconsin-Madison, Madison, WI

Ying Ge, Ph.D.

Associate Professor of Cell and Regenerative Biology and Chemistry
Director of Mass Spectrometry, Human Proteomics Program
School of Medicine and Public Health
University of Wisconsin-Madison, Madison, WI

Gerald Hart, Ph.D.

DeLamar Professor and Director of Biological Chemistry
Johns Hopkins University School of Medicine, Baltimore, MD

Lingjun Li, Ph.D.

Professor, School of Pharmacy and Department of Chemistry
University of Wisconsin-Madison, Madison, WI

Ljiljana Paša-Tolić, Ph.D.

Lead, Mass Spectrometry Group and Manager, Mass Spectrometry Environmental Molecular Sciences Laboratory
Pacific Northwest Laboratories, Richland, WA

Lloyd M. Smith, Ph.D.

Professor, Department of Chemistry
University of Wisconsin-Madison, Madison, WI

Michael R. Sussman, Ph.D.

Director, UW Biotechnology Center; Professor of Biochemistry
University of Wisconsin-Madison, Madison, WI

Poster Contest and Session Committee

Rebekah Gundry, Ph.D. (Committee Chair)

Assistant Professor
Department of Biochemistry
Medical College of Wisconsin, Milwaukee, WI

Christopher Hosfield, Ph.D.

Senior Research Scientist 2
Promega Corporation, Madison, WI

Paul Thomas, Ph.D.

Associate Director of the Proteomics Center of Excellence and Assistant Research Professor of Molecular Biosciences
Weinberg College of Arts and Sciences
Northwestern University, Evanston, IL

Marjeta Urh, Ph.D.

Director, Research
Promega Corporation, Madison, WI

