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SYMPOSIUM

ORGANIZING COMMITTEE

YING GE, PH.D.
Director of Mass Spectrometry
Human Proteomics Program
School of Medicine and Public Health
University of Wisconsin-Madison

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School of Pharmacy and Dept of Chemistry
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AMY PREVOST, M.S.
Director of Scientific Courses
BioPharmaceutical Technology Center Institute

KARIN BORGH, PH.D.
Executive Director
BioPharmaceutical Technology Center Institute

WISCONSIN HUMAN
PROTEOMICS SYMPOSIUM

PROTEOMICS
TECHNOLOGIES
& APPLICATIONS TO HUMAN DISEASE
AUGUST 4-6, 2011 MADISON, WI

SCHEDULE

THURSDAY, AUGUST 4, 2011

2-4pm OPEN HOUSES at the University of Wisconsin
Biotechnology Center Core Facility, Human
Proteomics Program Core Facility and Chemistry
Instrument Center Mass Spectrometry Facility

4:30-6:30pm RECEPTION: Pyle Center (Alumni Lounge) Name
badges and Symposium packets will be available at
the Registration Table here.

FRIDAY, AUGUST 5, 2011

8-9am REGISTRATION / CONTINENTAL BREAKFAST / EXHIBITS

9-9:15am WELCOME: Richard Moss, Ph.D., Honorary
Symposium Chair

9:15-10am KEYNOTE ADDRESS: Advances in LC-MS Based
Proteomics -Richard Smith, Ph.D.

10-11am SESSION ONE: Proteomics Technologies
Session Chair: Michael Sussman, Ph.D.
Proteomic Technologies for the Genome Age
-Lloyd Smith, Ph.D.
Precursor Acquisition Independent from Ion Count:
Extending Proteomic Dynamic Range without
Prior Fractionation -David Goodlett, Ph.D.

11-11:15am BREAK

11:15-12:15pm SESSION ONE (continued)
How High Mass Accuracy Measurements
Will Transform Targeted Proteomics
-Joshua Coon, Ph.D.
Developing Integrated Proteomic Approaches
for Comprehensive Profiling of Protein Complexes
-Lan Huang, Ph.D.

12:15-1:45pm LUNCH / POSTER SESSION / EXHIBITS

1:45-2:45pm SESSION ONE (continued)
Can Mass Spectrometry and Protein Footprinting
Play a Role in Structural Biology?
-Michael Gross, Ph.D.
A Top Down Approach to the Human Proteome
-Neil Kelleher, Ph.D.

2:45-3pm BREAK

3-5pm SESSION TWO: Proteomics Applications in
Cardiovascular Diseases
Session Chair: Marion Greaser, Ph.D.
Electron-Based Dissociation Methods for Glycans,
Glycopeptides and Glycoproteins
-Catherine Costello, Ph.D.

SESSION TWO (continued)
COPa Library: A Protein Knowledgebase for
Cardiovascular Biology and Medicine
-Peipei Ping, Ph.D.
The Cell-Environment Interface – Applications to
Heart Disease and Biomarkers -Jennifer Van Eyk, Ph.D.
Top-Down Disease Proteomics of Myofilaments for
Understanding Heart Failure -Ying Ge, Ph.D.

DAY ONE: CONCLUDING REMARKS

5-6pm RECEPTION / POSTER SESSION / EXHIBITS

SATURDAY, AUGUST 6, 2011

8-9am REGISTRATION / CONTINENTAL BREAKFAST / EXHIBITS

9-11am SESSION THREE: Proteomics Applications in
Neurodegenerative Diseases
Session Chair: Martha Vestling, Ph.D.
Mass Spectrometric Analysis of Neuropeptides from
Single Ascaris Neurons -Antony Stretton, Ph.D.
Proteomic Technologies Towards the Membrane
Proteome: Applications in Neuroscience
-Christine Wu, Ph.D.
Regulation of SMN and Identification of its
Downstream Targets -Judith Steen, Ph.D
Mass Spectrometry-based Tools for Biomarker
Discovery in Neurological Disorders -Lingjun Li, Ph.D.

11-11:15am BREAK

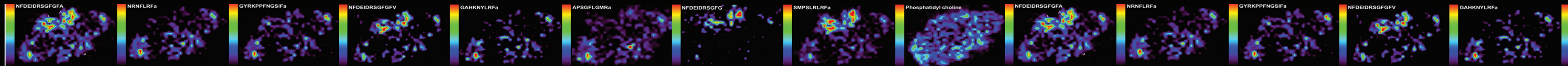
11:15-12:15pm SESSION FOUR: Proteomics Applications in Cancer
Session Chair: William F. Dove, Ph.D.
Application of Proteomics to Cancer and
Personalized Medicine -Sam Hanash, Ph.D.
Comprehensive Glycomics for Biomarker Discovery
and Nutrition -Carlito Lebrilla, Ph.D.

12:15-1:45pm LUNCH / POSTER SESSION / EXHIBITS

1:45-4:15pm SESSION FOUR (continued)
Session Chair: John Denu, Ph.D.
Unraveling Novel Molecular Mechanisms of Action
of Thiopurine Drugs -Yinsheng Wang, Ph.D.
Electron Irradiation of Cat- and Anions: A Potential
Analytical Tool in both Proteomics and Glycomics
-Kristina Hakansson, Ph.D.
Discovery and Characterization of Novel Lysine
Modifications -Yingming Zhao, Ph.D.
From Innovative Technologies to Model Organisms:
The Search for Biomarkers for the Detection of Early
Stage Epithelial Ovarian Cancer
-David Muddiman, Ph.D.

DISCUSSION & CONCLUDING REMARKS

4:15-5pm RECEPTION (desserts)



HONORARY SYMPOSIUM CHAIR:

Richard Moss, Ph.D.
University of Wisconsin-Madison
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

KEYNOTE SPEAKER:

Richard D. Smith, Ph.D.
Pacific Northwest National Laboratory
Battelle Fellow and Chief Scientist
Environmental Molecular Sciences Laboratory and Biological Sciences Division

SESSION CHAIRS:

Michael R. Sussman, Ph.D. [Session One]
University of Wisconsin-Madison
Professor, Department of Biochemistry
Director, UW Biotechnology Center

Marion Greaser, Ph.D. [Session Two]
University of Wisconsin-Madison
Professor, Department of Animal Sciences
Director of the Muscle Biology Laboratory

Martha M. Vestling, Ph.D. [Session Three]
University of Wisconsin-Madison
Director of the Mass Spectrometry Facility
Department of Chemistry

William F. Dove, Ph.D. [Session Four]
University of Wisconsin-Madison
George Streisinger Professor of Experimental Biology
Professor of Oncology and Medical Genetics
McArdle Laboratory for Cancer Research
School of Medicine and Public Health

John M. Denu, Ph.D. [Session Four]
University of Wisconsin-Madison
Epigenetics Theme Leader
Wisconsin Institute for Discovery
Professor, Biomolecular Chemistry
School of Medicine and Public Health

SPEAKERS:

Joshua Coon, Ph.D.
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Departments of Chemistry and Bimolecular Chemistry

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Boston University School of Medicine
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Director, Cardiovascular Proteomics Center

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Washington University
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Professor of Immunology and Internal Medicine
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Fred Hutchinson Cancer Research Center
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School of Biological Sciences
Associate Professor, Physiology & Biophysics
School of Medicine

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Northwestern University
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Department of Molecular Biosciences
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NHLBI Proteomics Center at UCLA
NHLBI PPG on Myocardial Ischemic Injury
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Johns Hopkins School of Medicine
Director and Center Investigator
The Johns Hopkins NHLBI Proteomics Center
Director, Bayview Proteomics Center
Professor of Medicine, Division of Cardiology
Biological Chemistry and Biomedical Engineering

Christine C. Wu, Ph.D.
University of Pittsburgh School of Medicine
Associate Professor
Department of Cell Biology and Physiology

Yinsheng Wang, Ph.D.
University of California at Riverside
Professor in Chemistry
Director Environmental Toxicology Graduate Program

Yingming Zhao, Ph.D.
University of Chicago
Associate Professor, The Ben May
Department for Cancer Research

OVERVIEW

The Human Proteomics Program at the University of Wisconsin-Madison and the BioPharmaceutical Technology Center Institute are pleased to offer this excellent program. Nationally recognized researchers in modern mass spectrometry/proteomics will present their current work, with an emphasis on how these technologies will impact human health.

Speakers will address a range of proteomics applications in basic and clinical biomedical research, instrumentation/technique development and potential applications in clinical practice. All talks will be presented in a plenary format. Attendees can expect to hear about cutting-edge proteomics technology developments and proteomics applications in cardiovascular diseases, cancer and neurodegenerative diseases.