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# Schedule

7:30–8:30 REGISTRATION, CONTINENTAL BREAKFAST and EXHIBITS

#### SESSION I Chair: Ying Ge, Ph.D

8:30–8:35 Welcome Richard Moss, Ph.D.
8:35–9:20 Keynote Address: Understanding the Molecular Defect in Cystic Fibrosis John R. Yates III, Ph.D.

#### SESSION II Chair: Lingjun Li, Ph.D.

- 9:20–9:50 Mass Spectrometry Imaging for Anatomic Pathology and Oncology Nathalie Y.R. Agar, Ph.D.
- 9:50–10:20 Proteomics of Right Versus Left Colon Cancer Amanda Hummon, Ph.D.
- 10:20–10:40 BREAK, POSTER SESSION and EXHIBITS

#### SESSION III Chair: Lloyd Smith, Ph.D.

- 10:40–11:10 Applications of Ultrafast Database Searching in Proteomics Alexey Nesvizhskii, Ph.D.
   11:10–11:40 Expanding our View of the Surfaceome: New Disinformation Table and Tables in Tables in Tables.
- Bioinformatic Tools and Technologies for Mapping Glycoproteins from Small Sample Sizes and Human Primary Cells Rebekah Gundry, Ph.D.
- 11:40–1:30 LUNCH, POSTER SESSION and EXHIBITS

#### SESSION IV Chair: Mike Sussman

- 1:30-2:00Native Mass Spectrometry: A Structural Biology Tool<br/>Vicki Wysocki, Ph.D.2:00-2:30Post-Translationally Modified Proteins in Extracellular<br/>Vesicles as Biomarkers for Breast Cancer<br/>Andy Tao, Ph.D.2:30-3:00Quantitative Proteomics for Epigenetic Cancer
- Mechanisms Benjamin A. Garcia, Ph.D.
- 3:00–3:15 BREAK, POSTER SESSION and EXHIBITS

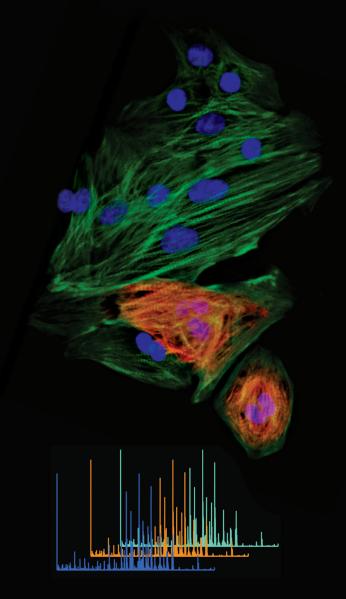
#### **SESSION V** Chair: Martha Vestling, Ph.D.

- 3:15–4:45 **Presentations from Rising Stars** Anthony Cesnik, Anastasia Lindahl, Nicholas Riley, Trisha Tucholski and Xiaofang Zhong
- 4:45–5:00 POSTER AWARDS and CLOSING REMARKS
- 5:00–6:00 RECEPTION, POSTER SESSION and EXHIBITS

Reception sponsored by Michael Best & Friedrich LLP

Wisconsin Human Proteomics Symposium

# Advancing Proteomics in Human Disease



AUGUST 10, 2018 | 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. The theme of this year's exciting program is Advancing Proteomics in Human Disease. Speakers will present a range of topics in cutting-edge proteomics technology developments for understanding, diagnosis and treatment of human diseases. Meeting attendees will also discuss their recent work during poster sessions, which will include a contest open to graduate students and postdoctoral researchers.

## 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; School of Medicine and Public Health, University of Wisconsin-Madison, Madison, WI

### Keynote Speaker

#### John R. Yates III, Ph.D.

Ernest W. Hahn Professor, Molecular Medicine and Neurobiology The Scripps Research Institute, La Jolla, CA

## **Session Chairs**

#### 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

#### Lingjun Li, Ph.D.

Vilas Distinguished Achievement Professor, Janis Apinis Professor of Pharmaceutical Sciences and Chemistry, School of Pharmacy and Department of Chemistry. University of Wisconsin-Madison, Madison, WI

#### Lloyd M. Smith, Ph.D.

W.L. Hubbell Professor of Chemistry; Hall-Fischer Professor of Chemistry; Director, Genome Center of Wisconsin. University of Wisconsin-Madison, Madison, WI

#### Michael R. Sussman

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

#### Martha M. Vestling, Ph.D.

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

## Speakers

#### Nathalie Y.R. Agar, Ph.D.

Associate Professor of Neurosurgery, Associate Professor of Radiology, Harvard Medical School, Brigham and Women's Hospital; Department of Cancer Biology, Dana-Farber Cancer Institute, Boston, MA

#### Benjamin A. Garcia, Ph.D.

Presidential Professor, Professor of Biochemistry and Biophysics Director of Quantitative Proteomics Penn Epigenetics Institute, Department of Biochemistry and Biophysics. University of Pennsylvania School of Medicine, Philadelphia, PA

#### Rebekah L. Gundry, Ph.D.

Associate Professor of Biochemistry; Director, Center for Biomedical Mass Spectrometry Research. Medical College of Wisconsin, Milwaukee, WI

#### Amanda B. Hummon, Ph.D.

Associate Professor, Department of Chemistry and Biochemistry, The Ohio State University, Columbus, OH

#### Alexey I. Nesvizhskii, Ph.D.

Professor, Department of Pathology; Professor, Department of Computational Medicine and Bioinformatics Director, Proteomics Resource Facility; Director, Proteome Informatics of Cancer Training Program. University of Michigan, Ann Arbor, MI

#### W. Andy Tao, Ph.D.

Professor, Departments of Biochemistry, Chemistry, Medicinal Chemistry and Molecular Pharmacology, Purdue Center for Cancer Research. Purdue University, West Lafayette, IN

#### Vicki Wysocki, Ph.D.

Professor, Ohio Eminent Scholar of Macromolecular Structure and Function Director; Campus Chemical Instrument Center Department of Chemistry and Biochemistry. The Ohio State University, Columbus, OH

# New Symposium Feature: Rising Stars Session

Five UW-Madison graduate students will share their work in a special late afternoon session:

Anthony Cesnik, Lloyd M. Smith Research Group, Department of Chemistry

Anastasia Lindahl, John Denu Research Group, Wisconsin Institute for Discovery

Trisha Tucholski, Ying Ge Research Group, Department of Chemistry

Nicholas Riley, Joshua J. Coon Research Group, Department of Biomolecular Chemistry

Xiaofang Zhong, Lingjun Li Research Group, School of Pharmacy

## **Poster Contest Judges**

#### John Denu, Ph.D.

Professor of Biomolecular Chemistry; Theme Director of Epigenetics at the Wisconsin Institute for Discovery. University of Wisconsin-Madison, Madison, WI

#### Jing Fan, Ph.D.

Assistant Professor of Nutritional Sciences; Investigator-Morgridge Institute for Research. University of Wisconsin-Madison, Madison, WI

Martha M. Vestling, Ph.D. (see above)

Sergei Saveliev, Ph.D. Senior Research Scientist 3. Promega Corporation, Madison, WI