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# **Schedule**

7:30 am - 8:30 am	REGISTRATION, CONTINENTAL BREAKFAST and EXHIBITS
SESSION I	Moderator: Ying Ge, Ph.D.
8:30 am - 8:35 am	Welcome: Allan Brasier, M.D.
8:35 am - 9:20 am	Opening Keynote Presentation: Big Data, Health and COVID-19 <b>Michael Snyder, Ph.D.</b>
SESSION II	Moderator: Lingjun Li, Ph.D.
9:20 am – 9:50 am	Leveraging Proteomics and Metabolomics for Precision Medicine during the COVID Pandemic <b>Akilesh Pandey, M.D., Ph.D.</b>
9:50 am - 10:20 am	Discovery and Utilization of Protein Markers in Niemann Pick Type C <b>Stephanie Cologna, Ph.D.</b>
10:20 am - 10:40 am	BREAK, POSTER SESSION and EXHIBITS
10:40 am - 11:10 am	Identifying the Mechanism of Metabolic Regulation During Macrophage Immune Response <b>Jing Fan, Ph.D.</b>
11:10 am - 11:40 am	Metabolomics for Precision Medicine: The Road to 25k Gary Patti, Ph.D.
11:40 am - 1:10 pm	LUNCH, POSTER SESSION and EXHIBITS
SESSION III	Moderator: Judith Simcox, Ph.D.
1:10 pm – 2:40 pm	Rising Star Presentations
2:40 pm – 3:00 pm	BREAK
SESSION IV	Moderator: Martha Vestling, Ph.D.
3:00 pm – 3:30 pm	Chemistry and Biology of Protein ADP-Ribosylation <b>Yonghao Yu, Ph.D.</b>
3:30 pm – 4:00 pm	Targeting Bacterial Virulence Through Two-Component System Signaling <b>Erin Carlson, Ph.D.</b>
SESSION V	Moderator: Ying Ge, Ph.D.
4:00 pm – 4:45 pm	Closing Keynote Presentation: Two Sides of Precision Medicine: Individualizing Assessment and Therapies Jennifer Van Eyk, Ph.D.
4:45 pm – 5:00 pm	POSTER AWARDS and CLOSING REMARKS

Wisconsin Human Proteomics Symposium

# Omics in **Precision Medicine**



## 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 **Omics in Precision Medicine**. Speakers will discuss recent advances in multi-omics technologies, including but not limited to, genomics, proteomics and metabolomics as well as their applications to precision medicine (or precision health). Meeting attendees will also discuss their recent work during poster sessions, including a contest open to graduate students and post-doctoral researchers.

## Honorary Symposium Chair

#### Allan Brasier, M.D.

Senior Associate Dean for Translational and Clinical Research School of Medicine and Public Health University of Wisconsin-Madison, Madison, WI

## **Keynote Speakers**

#### Michael Snyder, Ph.D.

Stanford W. Ascherman Professor and Chair, Department of Genetics Director, Center for Genomics and Personalized Medicine School of Medicine, Stanford University, Stanford, CA

#### Jennifer Van Eyk, Ph.D.

Erika J. Glazer Chair in Women's Heart Health Director, Advanced Clinical Biosystems Institute in the Department of Biomedical Sciences Director, Basic Science Research in the Women's Heart Center Professor, Medicine; Professor, Biomedical Sciences Cedars Sinai, Los Angeles, CA

## Speakers

#### Erin Carlson, Ph.D.

Smith Professor, Department of Chemistry University of Minnesota, Minneapolis, MN

#### Stephanie Cologna, Ph.D.

Associate Professor, Chemistry University of Illinois-Chicago, Chicago, IL

#### Jing Fan, Ph.D.

Assistant Professor of Nutritional Sciences Investigator, Morgridge Institute for Research University of Wisconsin–Madison, Madison, WI

#### Akilesh Pandey, M.D., Ph.D.

Professor, Department of Laboratory Medicine and Pathology, Center for Individualized Medicine Founder and Director, Institute of Bioinformatics Mayo Clinic, Rochester, MN

#### Gary Patti, Ph.D.

Michael and Tanya Powell Associate Professor, Chemistry Washington University in St. Louis, St. Louis, MO

#### Yonghao Yu, Ph.D.

Professor, Department of Molecular Pharmacology and Therapeutics Columbia University Irving Medical Center, New York, NY

## **Session Chairs**

#### Ying Ge, Ph.D.

Professor, Department of Cell and Regenerative Biology and Department of Chemistry

Director of Mass Spectrometry, Human Proteomics Program School of Medicine and Public Health (SMPH) University of Wisconsin–Madison, Madison, WI

#### Lingjun Li, Ph.D.

Vilas Distinguished Achievement Professor, Charles Melbourne Johnson Distinguished Chair of Pharmaceutical Sciences and Chemistry, School of Pharmacy and Department of Chemistry University of Wisconsin–Madison, Madison, WI

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

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

## **Rising Stars**

**Graham Delafield,** Graduate Student, Lingjun Li Laboratory, Department of Chemistry & Ambassador, Wisconsin Alumni Research Foundation, University of Wisconsin–Madison, Madison, WI

**Cara Green,** Postdoctoral Research Associate, Dudley Lamming Laboratory, Department of Medicine, School of Medicine and Public Health, University of Wisconsin–Madison, Madison, WI

**Yuchen He,** Research Assistant, Joshua Coon Laboratory, Department Biomolecular Chemistry, of University of Wisconsin–Madison, Madison, WI

**Morgan Mann,** Graduate Research Assistant, Allan Brasier Laboratory, Department of Medicine, School of Medicine and Public Health, University of Wisconsin–Madison, Madison, WI

**Melissa Pergande,** Ph.D., Postdoctoral Research Associate, Ying Ge Laboratory, Department of Cell and Regenerative Biology, School of Medicine and Public Health (SMPH), University of Wisconsin–Madison, Madison, WI

**David Roberts,** Fellow, Research Assistant, Song Jin Laboratory and Ying Ge Laboratory, Department of Chemistry, University of Wisconsin–Madison, Madison, WI

## **Poster Judges**

#### Daniel Amador-Noguez, Ph.D.

Associate Professor of Bacteriology, University of Wisconsin–Madison, Madison, WI

#### Andrea Galmozzi, Ph.D.

Assistant Professor of Genetics, SMPH, University of Wisconsin–Madison, Madison, WI

Judith Simcox, Ph.D. (Committee Chair and Session Chair)

Assistant Professor of Biochemistry, University of Wisconsin–Madison, Madison, WI

#### Amy Weeks, Ph.D.

Assistant Professor of Biochemistry, University of Wisconsin–Madison, Madison, WI