Fundamentals of Glycomics, Glycoprotemics and GAGS

Virtual Course 2 Schedule

Dec 10-11, 2025

Wednesday, December 10, 2025

9:00 a.m. - 10:30 a.m.

Lecture -*"Overview of Glycoprotein Structures, Biosynthesis and Function"*

Dr. Kelley Moremen

10:30 – 11.00 am **– Break**

11.00 a.m. – 12.00 pm

Lecture –*"Introduction to Glycomics Analysis"*

Dr. Parastoo Azadi

12:00 p.m. – 1:00 p.m. – **Lunch Break**

1:00 p.m. – 3:30 p.m.

Laboratory Discussion: Glycomics Analysis by MALDI-TOF and ESI-MS

- MALDI-TOF Profiling
- Direct Infusion – Mass Spectrometry
- MS/MS and MSn Methods

Laboratory Discussion – Glycopeptide Analysis and Glycoproteomics

- Protease and Enzymatic Treatments
- Chromatography and Instrument Settings
- Data Considerations

Drs.Parastoo Azadi & Stephanie -Hartmann

3:30 p.m. – 4:00 p.m. - **Break**

4:00 p.m. – 5:00 p.m.

Lecture – *"Glycans Linked to Lipids and Lipid Precursors"*

Dr. Michael Tiemeyer

Thursday, December 11, 2025

9:00 p.m. – 10:30 a.m.

Lecture – *"Structure and Function of Glycosaminoglycans in Health and Disease"*

Dr. Ryan Weiss

10:30 a.m. – 11:00 a.m. - **Break**

11:00 a.m. – 12:00 p.m.

"Databases and Software Tools for Glycomics and Glycoproteomics"

Rene Ranzinger

12:00 p.m. – 1:00 p.m. – **LUNCH**

1:00 p.m. – 2:30 p.m.

Lecture – *"Introduction to Glycoproteomics"* Dr. Lance Wells

2:30 p.m. – 3:30 p.m. - **Break**

3:30 p.m. – 4.30 p.m.

Lecture – *"Chemo-enzymatic Synthesis of Glycolipids"*

Dr. Ana Ramirez