



SESSION 1

Chair & Moderator: Philip Gordts *UC San Diego*

- 1:00 - 1:10 PM** **Philip Gordts** *UC San Diego*
Opening Remarks
- 1:10 - 1:35 PM** **Samuel Myers** *La Jolla Institute for Immunology*
New Proteomic and Chemical Genetic Tools to Study OGT and O-GlcNAc Signaling
- 1:35 - 2:00 PM** **Christina Sigurdson** *UC San Diego*
PrP glycan interference induces rapidly progressive neurodegeneration
- 2:00 - 2:20 PM** **Rising Star Awardee, Francesca Boscolo Sesillo** *UC San Diego*
Role of proteoglycans in determining muscle stem cell fate during pregnancy
- 2:20 - 2:45 PM** **Philip Gordts** *UC San Diego*
Ironing out Liver Proteoglycans
- 2:45 - 2:50 PM** **Sponsor, Biosynth** *Sarah Kenny*
- 2:50 - 2:55 PM** **Sponsor, New England Biolabs** *Alicia Bielik*
- 2:55 - 3:00 PM** **Sponsor, Sussex Research Laboratories** *Corwin Nycholat*

3:00 - 3:25 PM **Coffee Break - Sponsor Exhibits**

SESSION 2

Chair: Amanda Lewis *UC San Diego*

Moderator: Chelsea Painter *UC San Diego*

- 3:25 - 3:50 PM** **Xi Chen** *UC Davis*
One-pot strategies for chemoenzymatic synthesis of gangliosides and human milk oligosaccharides
- 3:50 - 4:15 PM** **Eva Harris** *UC Berkeley*
A journey of discovery: The role of glycans in NS1 pathobiology
- 4:15 - 4:40 PM** **Christopher Toomey** *UC San Diego*
Analysis of Glycosaminoglycans in Bruch's membrane in Age-related Macular Degeneration
- 4:40 - 4:55 PM** **Chika Kikuchi** *Scripps Research Institute*
Adaptation of human H3N2 influenza virus to human airway receptors
- 4:55 - 5:20 PM** **Mark Fuster** *UC San Diego*
A novel role for targeting glycans in cancer immunity
- 5:20 - 5:45 PM** **Matt Hangauer** *UC San Diego*
Cancer persister cells

5:45 - 8:00 PM **Poster Session - Reception - Sponsor Exhibits**





SESSION 1

Chair & Moderator: Amanda Lewis *UC San Diego*

- 7:30 - 8:30 AM** **Breakfast**
- 8:30 - 8:40 AM** **Amanda Lewis** *UC San Diego*
Opening Remarks
- 8:40 - 9:05 AM** **Amanda Lewis** *UC San Diego*
The UC Glycoscience Consortium for Women's Health
- 9:05 - 9:30 AM** **Adrian Erlebacher** *UC San Francisco*
An unexpected role for antigen glycosylation in fetomaternal tolerance
- 9:30 - 9:45 AM** **Brett Garabedian** *Scripps Research Institute*
Glyco-Immune Checkpoint Therapies Targeting Cancer's Sweet Spot
- 9:45 - 10:10 AM** **Richard Cummings** *Harvard Medical School*
Human Disorders of O-Glycosylation and Autoimmunity

10:10 - 10:35 PM **Coffee Break - Sponsor Exhibits**

SESSION 2

Chair: Amanda Lewis *UC San Diego* **Moderator: Brett Garabedian** *Scripps Research Institute*

- 10:35 - 11:00 AM** **Carlito Lebrilla** *UC Davis*
New methods to characterize glycan-mediated protein-protein interactions on the cell membrane
- 11:00 - 11:25 AM** **Jamey Marth** *Sanford Burnham Prebys*
Innate mechanism of mucosal barrier breakdown in the pathogenesis of acquired colitis
- 11:25 - 11:40 AM** **Chelsea Painter** *UC San Diego*
Investigating the Effects of Human Milk Oligosaccharides on Hyperlipidemia
- 11:40 - 12:05 PM** **Matthew Griffin** *UC Irvine*
Sensing a pattern: modulating host function via microbial glycans

12:05 - 1:45 PM **Lunch Break - Sponsor Exhibits**





SESSION 3

Chair: Philip Gordts *UC San Diego*

Moderator: Chika Kikuchi *Scripps Research Institute*

1:45 - 2:10 PM

Yu Yamaguchi *Sanford Burnham Prebys*

The structure and biology of TMEM2, the key hyaluronidase essential for local and systemic hyaluronan catabolism

2:10 - 2:35 PM

Marianna Alperin *UC San Diego*

Leveraging Non-Invasive Imaging and Glycobiology to Develop Novel Diagnostic and Therapeutic Modalities for Interstitial Cystitis/Bladder Pain Syndrome

2:35 - 2:50 PM

Isabel Salas *Salk Institute*

Astrocyte Glypican 5 overexpression prevents hippocampal synaptic hyperexcitability in Alzheimer's disease mouse model

2:50 - 3:15 PM

Kamil Godula *UC San Diego*

Chemical tools for probing and engineering of the cellular glycocalyx

3:15 - 3:40 PM

Coffee Break - Sponsor Exhibits

SESSION 4

Chair: Philip Gordts *UC San Diego*

Moderator: Kamil Godula *UC San Diego*

3:40 - 4:05 PM

Jim Paulson *Scripps Research Institute*

Evolution of H3N2 influenza to maintain fitness for human airway receptors

4:05 - 4:30 PM

Gulcin Pekkurnaz *UC San Diego*

Nutrient sensing in neurons via O-GlcNAcylation for metabolic efficiency

4:30 - 4:45 PM

Shubham Parashar *UC San Diego*

Abrogation of 9-O-acetylated Sialic acids increases severity of colitis

4:45 - 5:10 PM

Lars Bode *UC San Diego*

Recent Discoveries on Human Milk Oligosaccharide Biosynthesis and Functions

5:10 - 5:20 PM

Amanda Lewis *UC San Diego & Philip Gordts* *UC San Diego*

Closing Remarks

5:30 - 9:30 PM

Dinner Party

