

**GlycoBootcamp 2019 Schedule**

**Week 1**

Time	Monday, July 15, 2019	Tuesday, July 16, 2019	Wednesday, July 17, 2019	Thursday, July 18, 2019	Friday, July 19, 2019
<b>Lecturer</b>	<i>Jeffrey Esko &amp; Ryan Porell</i>	<i>Jeffrey Esko</i>	<i>Kamil Godula</i>	<i>Kamil Godula</i>	<i>Alejandro Gomez-Toledo</i>
<b>Topic</b>	<b>Overview (JE) &amp; Glycolipids (RP)</b>	<b>GAGs</b>	<b>N-Linked Glycans</b>	<b>O-Linked Glycans</b>	<b>Glycoproteomics</b>
<b>8:30 - 9:30</b>	<b>Breakfast and Lecture (Overview)</b> BRF2 4A03 (Conference Room)	<b>Breakfast and Lecture</b> BRF2 4A03 (Conference Room)	<b>Breakfast and Lecture</b> BRF2 4A03 (Conference Room)	<b>Breakfast and Lecture</b> BRF2 4A03 (Conference Room)	<b>Breakfast and Lecture</b> BRF2 4A03 (Conference Room)
<b>9:30 - 9:45</b>	<b>Lecture (Glycolipids)</b> BRF2 4A03 (Conference Room)	<b>Lab Orientation</b> BRF2 4A03 (Conference Room)	<b>Lab Orientation</b> BRF2 4A03 (Conference Room)	<b>Lab Orientation</b> BRF2 4A03 (Conference Room)	<b>Lab Orientation</b> BRF2 4A03 (Conference Room)
<b>9:45 - 10:20</b>	<b>Lab Orientation</b> BRF2 4A03 (Conference Room)	<b>O-Glycan Workup</b> BRF2 4243 (Lab)	<b>O-Glycan Cleanup</b> BRF2 4243 (Lab)	<b>Start Mono/Sia</b> BRF2 4243 (Lab)	<b>DMB Tagging and UPLC Setup</b> BRF2 4243 (Lab)
<b>10:40 - 12:10</b>	<b>Ganglioside Extraction</b> BRF2 4243 (Lab)	<b>Lyophilization (N-Gly, O-Gly)</b> BRF2 4243 (Lab)	<b>2-AB Sample Prep</b> BRF2 4243 (Lab)	<b>2-AB Tagging</b> BRF2 4243 (Lab)	<b>2-AB Profiling</b> BRF2 4243 (Lab)
			<b>GAG Digestion Sample Prep</b> BRF2 4243 (Lab)	<b>GAG-DP2 Workup</b> BRF2 4243 (Lab)	<b>Dry Aniline Tag (Speed Vac)</b> BRF2 4243 (Lab)
			<b>GAG Digestion</b> BRF2 4243 (Lab)		
<b>12:10 - 1:00</b>	<b>Lunch</b> BRF2 4th Floor South Patio	<b>Lunch</b> BRF2 4th Floor South Patio	<b>Lunch</b> BRF2 4th Floor South Patio	<b>Lunch</b> BRF2 4th Floor South Patio	<b>Lunch</b> BRF2 4th Floor South Patio
<b>1:00 - 2:15</b>	<b>PNGaseF Digestion</b> BRF2 4243 (Lab)	<b>N-Glycan Purification by SPE</b> BRF2 4243 (Lab)	<b>PAGE-PNGaseF</b> BRF2 4243 (Lab)	<b>DMB Sample Prep</b> BRF2 4243 (Lab)	<b>Data Analysis (Mono)</b> BRF2 4243 (Lab)
<b>2:15 - 3:00</b>	<b>O-Glycan Release (Reductive β-Elimination)</b> BRF2 4243 (Lab)	<b>GAG Purification (DEAE + PD10)</b> BRF2 4243 (Lab)		<b>HPAEC-PAD</b> BRF2 4243 (Lab)	<b>Data Analysis (2-AB-N-Gly)</b> BRF2 4243 (Lab)
<b>3:00 - 3:10</b>	<b>Coffee Break</b> BRF2 4th Floor South Patio	<b>Coffee Break</b> BRF2 4th Floor South Patio	<b>Coffee Break</b> BRF2 4th Floor South Patio	<b>Coffee Break</b> BRF2 4th Floor South Patio	<b>Coffee Break</b> BRF2 4th Floor South Patio
<b>3:10 - 4:00</b>	<b>GAG Release (Pronase Digestion)</b> BRF2 4243 (Lab)	<b>GAG Purification contd.</b> BRF2 4243 (Lab)	<b>PAGE-PNGaseF contd.</b> BRF2 4243 (Lab)	<b>2-AB Workup</b> BRF2 4243 (Lab)	<b>DMB-UPLC-FL</b> BRF2 4243 (Lab)
<b>4:00 - 5:30</b>	<b>Ganglioside Analysis</b> BRF2 4243 (Lab)			<b>Aniline Tagging</b> BRF2 4243 (Lab)	<b>Data Analysis (Sia)</b> BRF2 4243 (Lab)
<b>5:30 +</b>				<b>Happy Hour</b> Rock Bottom Restaurant & Brewery	

**Week 2**

Time	Monday, July 22, 2019	Tuesday, July 23, 2019	Wednesday, July 24, 2019	Thursday, July 25, 2019	Friday, July 26, 2019
<b>Lecturer</b>	<i>Nissi Varki</i>	<i>Kamil Godula</i>	<i>Ryan McBride</i>	<i>Tim Scott</i>	<i>Rob Woods</i>
<b>Topic</b>	<b>Histology</b>	<b>Glycoengineering</b>	<b>Lectins &amp; Microarrays</b>	<b>Biotechnology</b>	<b>Modeling</b>
<b>8:30 - 9:30</b>	<b>Breakfast and Lecture</b> BRF2 4A03 (Conference Room)	<b>Breakfast and Lecture</b> BRF2 4A03 (Conference Room)	<b>Breakfast and Lecture</b> BRF2 4A03 (Conference Room)	<b>Breakfast and Lecture</b> BRF2 4A03 (Conference Room)	<b>Breakfast and Lecture</b> BRF2 4A03 (Conference Room)
<b>9:30 - 9:45</b>	<b>Lab Orientation</b> BRF2 4A03 (Conference Room)	<b>Lab Orientation</b> BRF2 4A03 (Conference Room)	<b>Lab Orientation</b> BRF2 4A03 (Conference Room)	<b>Lab Orientation</b> BRF2 4A03 (Conference Room)	<b>Practical Training on Glycan Modeling</b> BRF2 4A03 (Conference Room)
<b>9:45 - 10:35</b>	<b>GRIL-LC-MS</b> BRF2 4243 (Lab)	<b>Data Analysis</b> BRF2 4243 (Lab)	<b>Process Microarrays and Glycosidase Treatment</b> BRF2 4243 (Lab)	<b>Probe Microarrays with Lectins and Antibodies</b> BRF2 4243 (Lab)	<b>Lunch and End-of-Bootcamp Happy Hour Party</b> BRF2 4103 (Conference Room)
<b>10:40 - 12:10</b>	<b>PM-O-Glycan</b> BRF2 4243 (Lab)	<b>Cyclooctyne Fluorophore Treatment</b> BRF2 4218 (Tissue Culture Room)			
<b>12:10 - 1:10</b>	<b>Lunch</b> BRF2 4th Floor South Patio	<b>Lunch</b> BRF2 4th Floor South Patio	<b>Lunch</b> BRF2 4th Floor South Patio	<b>Lunch</b> BRF2 4th Floor South Patio	
<b>1:10 - 2:10</b>	<b>Lectin Histology</b> BRF2 4217 (Lab)	<b>Lectin Histology Secondary</b> BRF2 4217 (Lab)	<b>Discussion of GlycoAnalytics</b> BRF2 4243 (Lab)	<b>Data Analysis and Presentation Prep</b> BRF2 4103 (Conference Room)	<b>Final Presentation (9)</b> BRF2 4103 (Conference Room)
<b>2:10 - 3:30</b>		<b>Cell Fluorescence Imaging</b> BRF2 4218 (Tissue Culture Room)			
<b>3:30 - 3:45</b>	<b>Coffee Break</b> BRF2 4th Floor South Patio	<b>Coffee Break</b> BRF2 4th Floor South Patio	<b>Coffee Break</b> BRF2 4th Floor South Patio	<b>Coffee Break</b> BRF2 4th Floor South Patio	
<b>3:45 - 5:30</b>	<b>Cell Culture Setup</b> BRF2 4217 (Lab)	<b>Microarray Printing</b> BRF2 4243 (Lab)	<b>Discussion of GlycoAnalytics contd.</b> BRF2 4243 (Lab)	<b>Data Analysis and Presentation Prep contd.</b> BRF2 4103 (Conference Room)	

<b>COLOR</b>	Ganglioside Analysis	O-Glycan Analysis	Monosaccharide Analysis	Metabolic Analysis	Common for All Glycan Types
<b>LEGEND</b>	N-Glycan Analysis	GAG Analysis	Lectin Histology	Microarray Analysis	Happy Hour Party