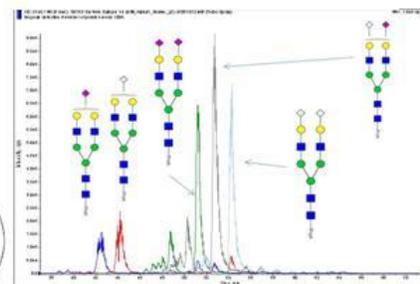
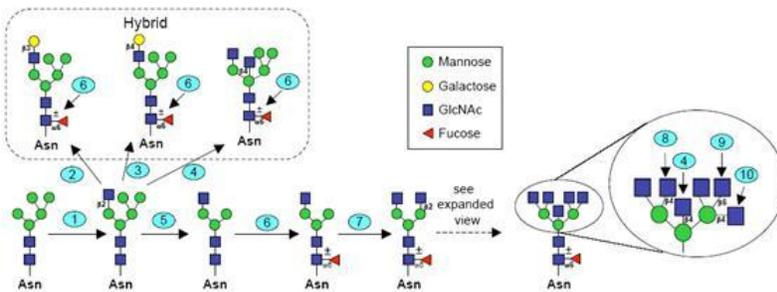
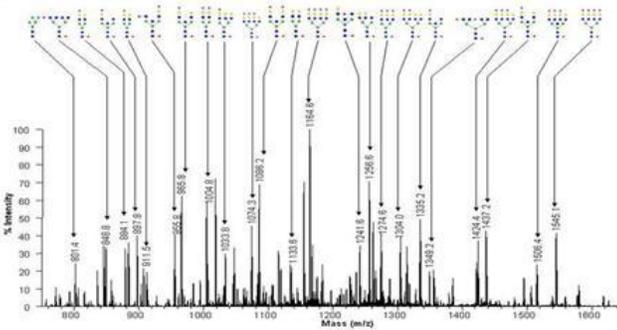
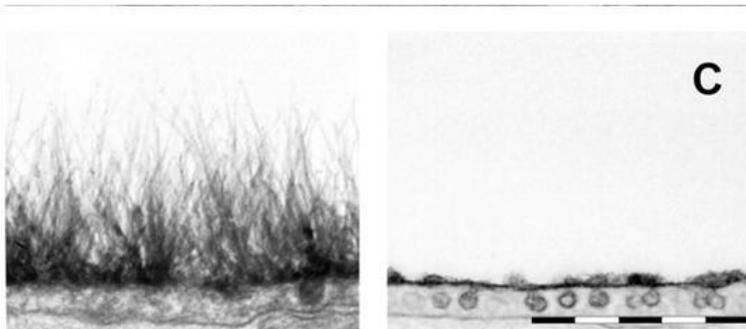
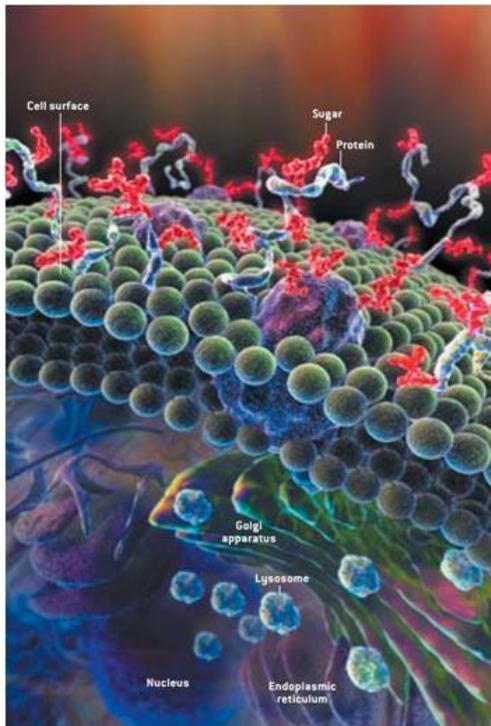


## Satellite Education Workshop (SW2): Mass Spectrometry of Glycoproteins and their Glycans



Saturday March 2, 2013  
Palm Springs, California

***Workshop Description:***

This full day workshop is designed for scientists who would like an overview of the mass spectrometric approaches (MS and MS/MS) used for the characterization of glycans and glycoproteins. The course covers the fundamental aspects of glycobiology, sample preparation and handling, mass spectrometry (hardware and software), and bioinformatic tools for interpretation of results.

***Organizer:***

Ron Orlando, Complex Carbohydrate Research Center, University of Georgia

***Education Committee Liaison:***

Brian Searle, Proteome Software Inc.

***Instructors:*****Ron Orlando, Ph.D.**

Ron is currently a senior investigator in the NCCR Glycomics Center and Director of the Mass Spectrometry Laboratory at the Complex Carbohydrate Research Center (CCRC). He has over 27 years of experience with mass spectrometry, 23 of these years focused on the identification/characterization of proteins and their post-translational modifications with MS. He has authored/co-authored over 100 publications in peer reviewed journals, has given over 100 invited lectures at various conferences, and is currently a Co-editor-in-Chief of the Journal of Biomolecular Techniques (JBT). He has organized/taught short-courses on the Analysis of Glycoproteins by Mass Spectrometry at prior to meetings of the American Society for Mass Spectrometry (ASMS) and International Symposium and Exhibit on the Separation of Proteins, Peptides & Polynucleotides (ISPPP). He founded and is past-chair of the ABRF Glycoprotein Research Group, and is frequently invited to give lectures on my mass spectrometry based research.

**Marshall Bern, Ph.D.**

Marshall Bern is principal scientist at the Palo Alto Research Center, a Xerox company, and vice president of Protein Metrics Inc, a bioinformatics startup company. He has an MA in Applied Mathematics and Statistics and a PhD in computer science. He has about 30 years of experience in algorithm design and scientific software, and has authored/co-authored over 100 articles in peer reviewed journals in areas such as combinatorial optimization, computational geometry, robust statistics, and bioinformatics. He has worked in the area of mass spectrometry data analysis, especially proteomics and glycomics, since 2004.

**Agenda:**

7:00 am – 8:00 am	<b>Continental Breakfast</b>
8:00 am – 8:30 am	<b>Introduction to Glycans, Glycosylation, Glycobiology</b> – Ron Orlando
8:30 am – 9:00 am	<b>Derivatization and Classical Carbohydrate Characterization</b> – Ron Orlando
9:00 am – 10:00 am	<b>Issues related to Glycoproteins, and Glycan Biosynthesis</b> – Ron Orlando
10:00 am – 10:30 am	<b>Morning Break</b>
10:30 am - 12:00 pm	<b>Glycoproteins -- Release and Analyze, and Glycoproteomic Approaches</b> – Ron Orlando
12:00 pm – 1:00 pm	<b>Lunch</b>
1:00 pm – 2:00 pm	<b>Glycopeptides and Methods for Site-specific Analysis</b> – Ron Orlando
2:00 pm – 3:00 pm	<b>Glycan Quantitation</b> – Ron Orlando
3:00 pm – 3:30 pm	<b>Afternoon Break</b>
3:30 pm – 4:30 pm	<b>Bioinformatics of Glycans and Glycoproteins</b> – Marshall Bern

**Acknowledgements:**

We would like to extend our gratitude to the Education Committee and the ABRF for providing critical and necessary support for this workshop.

We would also like to thank New England BioLabs for their financial sponsorship of this workshop.

