



Glycostructures in Biological Systems XIII

Symposium of the Resource Center 470

Glycostructures in Biological Systems - Synthesis and Function

University of Hamburg December 1 - 3, 2004

Invitation & Program

Wednesday, December 1

14.00	Joachim Thiem Dean, Dept. of Chemistry	Opening
14.15	Bernard Henrissat Marseille, France	The Carbohydrate-Active Enzymes Database
14.55	Terri Camesano Worcester, USA	Probing the Properties of Microbial Polysaccharides with Atomic Force Microscopy and Single-Molecule Force Spectroscopy
15.35		Coffee & Poster Session
16.05	Thisbe Lindhorst Kiel, Germany	Mannose-Specific Bacterial Adhesion: Sugar Binding to FimH
16.45	Piet Herdewijn Leuven, Belgium	Properties of Nucleic Acids with a Six- Membered 'Carbohydrate Mimic' in the Backbone Structure
17.25	John Gunn Columbus, USA	Regulated Modification of Bacterial LPS
18.05		End of Session

Thursday, December 2

9.00	Philippe Gallay La Jolla, USA	Interplay Between HIV and Host Sulfations
9.40	Jeff Kaplan Newark, USA	A Novel Glycosyl Hydrolase that Degrades Biofilm Matrix Polysaccharides
10.20		Coffee & Poster Session
11.10	Armin Geyer Marburg, Germany	Sugar Helices with a Cap: NMR Analysis of a Homologous Series of Oligosaccharides from Cyanobacteria
11.50	Minoru Fukuda La Jolla, USA	Functional Diversity of Mammalian Glycans
12.30		Lunch Break
14.30	Thomas Peters Lübeck, Germany	NMR Studies on Retaining and Inverting Galactosyltransferases - Mechanistic Implications
15.10	Chris Whitfield Guelph, Canada	Biosynthesis of the Core Oligosaccharide Region of Lipopolysaccharides in the Enterobacteriaceae
15.50		Coffee & Poster Session
16.20	Feng Ni Montreal, Canada	Quantitative NMR Relaxation Dispersion Experiments in the Design of Polypeptide Therapeutics
17.00	Koichi Honke Osaka, Japan	Biological Functions of Sulfoglycolipids
17.40		End of Session

Friday, December 3

9.00	Johannes Hübner Boston, USA	Role of Capsular Polysaccharides and Biofilm in the Pathogenesis of Enterococcal Infections
9.40	Biao Yu Shanghai, China	Plant Saponins: Synthesis and Antitumor Activities
10.20		Coffee & Poster Session
11.10	Andrej Hasilik Marburg, Germany	Lessons from Lysosomal Glycostructures, their Functions and Processing
11.50	Michael Schreiber Hamburg, Germany	The Role of N-Glycans in HIV-1 Infection
12.30		Lunch Break
14.30	Masakatsu Hato	Synthetic Glycolipid/Water Systems
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15.10	Corinna Herrmann Konstanz, Germany	Activation of the Innate Immune System by Bacterial Glycolipids
15.10 15.50	Corinna Herrmann Konstanz, Germany	Physicochemical and Biochemical Features - Activation of the Innate Immune System by Bacterial Glycolipids Coffee & Poster Session
15.10 15.50 16.10	Corinna Herrmann Konstanz, Germany Monica Palcic Edmonton, Canada	Physicochemical and Biochemical Features - Activation of the Innate Immune System by Bacterial Glycolipids Coffee & Poster Session Structure-Function Studies on Mutant ABO Glycosyltransferases

The Sonderforschungsbereich 470, a collaborative research grant, was awarded by the Deutsche Forschungsgemeinschaft (DFG) to fund research focused on molecules containing carbohydrate structures related to biological systems. The proposal was initiated to stimulate interdisciplinary research between biophysicists, chemists, biologists, biochemists, and physicians. Many of the projects are built around long existing collaborations. The collaborative research is comprised of three major sections:

- Section A: Preparation of structures containing carbohydrates
- Section B: Structure elucidation of carbohydrate containing molecules
- Section C: Function of carbohydrate containing molecules.

The individual research groups with a total of seventeen research projects are located at the University of Hamburg in the Chemistry Department, in the Biology Department, and at the Medical School, at the Bernhard-Nocht-Institute for Tropical Medicine in Hamburg, at the Research Center at Borstel, at the University of Kiel, and at the University of Lübeck.

INFORMATION / REGISTRATION

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CONFERENCE VENUE:

University of Hamburg, Department of Chemistry, Library North Wing, Martin-Luther-King-Platz 6, 20146 Hamburg, Germany

Organizing Committee:

Sabine Gronow - Bernd Meyer - Thomas Peters - Joachim Thiem - Christoph Wagener *Hotels:*

Most attendants' hotels will be within walking distance to the conference venue. For those who are staying further away public transport is facile and recommended. *Public Transport to the Conference Venue:*

- **S 11** to **Dammtor** Station, then Metrobus 4 or 5 to 2nd stop (Grindelhof), then 300 m walking distance or
- **U 2** to **Schlump** Station, then 500 m walking distance

Lunch Breaks:

Monday and Tuesday: Individual arrangements; please find numerous small restaurants and lunch places in close proximity to the venue.

Sponsored by the Verein zur Förderung der Glycowissenschaften