

Collaboration Talks on Glycobiology

12.04.2024, online via Zoom

Link: https://www.zoom-x.de/meeting/register/u5Yvd-2srT8oHNYcSn8I9670c6I_0mHiFqng

Zoom Meeting ID: 622 0443 4262

Passcode: 497977

Organizers: Prof. Dr. Martin Götte & Dr. Jessica Onyeisi
Supported by the Brazil Centre of the University of Münster

10:00 - 10:05 Introduction (Prof. Dr. Martin Götte - Münster University/Germany)

10:05 - 10:20 Prof. Dr. Kay Grobe (Münster University/Germany)

Evolution of SARS-CoV-2 spike protein towards optimized heparan sulfate cross-linking and inter-chain mobility

10:25 - 10:40 Prof. Dr. Mauro Pavão (Federal University of Rio de Janeiro/Brazil)

Non-anticoagulant Heparin-like glycan from a bivalve mollusk and its effect on tumor metastasis: a translational approach"

10:45 - 11:00 Prof. Dr. Andreas Hensel (Münster University/Germany)

Antiadhesive polysaccharides against virulence factors of Gram-negative pathogens: from Campylobacter to Enterobacter cloacae

11:05 - 11:20 Prof. Dr. Giuseppe Palmisano (University of São Paulo/Brazil)

Elucidation of protein glycosylation during T. cruzi-host interaction

11:25 - 11:35 Anja Grecko Lorenz (Managing Director of the Brazil Centre)

The Brazil Centre & Funding Possibilities

11:40-11:45 Concluding remarks (Dr. Jessica Onyeisi & Prof. Dr. Martin Götte)

11:45 End of the Collaboration Talks

The participants

The Brazil Centre

For more than 50 years, the University of Münster (UM) has maintained intensive contact with scientists and universities in Brazil. Since 2010, these collaborations have been bundled by the Brazil Centre as an interdisciplinary association of researchers at the UM with activities in Brazil. Whether research, research transfer, teaching or studying, the Brazil Centre offers comprehensive support and advice to members of the University of Münster. Moreover, a contact point is offered to students and researchers in Brazil with the Brazil Centre's liaison office in São Paulo. The main goal of the Brazil Centre is to strengthen and further develop the cooperation between the UM and Brazil and to initiate new collaborations. More recently, the Brazil Centre has initiated collaborations in other Latin American countries.

Prof. Dr. Martin Götte

Prof. Dr. Martin Götte is a Professor at the Department of Gynecology and Obstetrics of Münster University Hospital, Münster, Germany. He is the spokesman of the University in the Federal State network for stem cell research and chairman of the board for the reproduction section of the German Society for Endocrinology. The Götte laboratory has long-standing experience in the field of extracellular matrix/proteoglycan pathobiology, in particular in breast cancer and inflammatory diseases.

Dr. Jessica Onyeisi

Dr. Jessica Onyeisi is currently a postdoctoral fellow at the University of Münster, Germany and recipient of the prestigious Alexander-von-Humboldt fellowship. She was a visiting researcher at the Politecnico di Milano, where she helped to develop nanoparticles for the delivery of heparanase inhibitors as a novel anticancer therapy. Currently, Dr. Onyeisi is studying the role of syndecan-4 in the tumor microenvironment, using siRNA and CRISPR/Cas-approaches in a panel of human breast cancer cell lines in complex 3D co-culture systems with endothelial cells and cancer-associated leukocyte populations.

Prof. Dr. Kay Grobe

Prof. Dr. Kay Grobe currently works at the Institute of Physiological Chemistry and Pathobiochemistry at the University of Münster in Germany. Prof. Dr. Kay does research in Cell Biology, Cell Biology and Developmental Biology and his focus is on heparan sulfate proteoglycan biology and their role in the regulation of Hedgehog morphogens *in vitro* and *in vivo*.

Prof. Dr. Mauro Pavão

Prof. Dr. Mauro Pavão is a scientist of the state of Rio de Janeiro - FAPERJ. He has been a cnpq researcher since 1995, when he joined UFRJ as a professor in 1994. In 2018, he was awarded 2 projects funded by Decit and Decis/Scitie-Ministry of Health, involving the implementation of the reproduction and fattening nucleus of the mollusc *nodipecten nodosus* and the laboratory for the production of biopharmaceuticals from marine biodiversity at HUCFF/UFRJ. He has 3 technological processes (patents). His line of research involves the study of proteoglycans and glycosaminoglycans in tumor progression and the possible antimetastatic effect of heparin analogues obtained from marine invertebrates.

Prof. Dr. Andreas Hensel

Prof. Dr. Andreas Hensel currently works at the Institute of Pharmaceutical Biology and Phytochemistry, University of Münster. The research group of Prof. Dr. Andreas Hensel, located within the Faculty of Chemistry and Pharmacy (School of Pharmacy) is working on functional aspects of natural products, especially polyphenols and plant-derived polysaccharides. A special focus is made on glycosylated natural products from medicinal plants.

Prof. Dr. Giuseppe Palmisano

Prof. Dr. Giuseppe Palmisano is currently professor at the Department of Parasitology, University of São Paulo. He has experience in protein chemistry with special focus on analytical methods applied to protein on a large scale. His areas of expertise are proteomics, post-translational modifications, cell signalling, mass spectrometry and plant proteomics.