

Wednesday May 4th

Biology

09:00-09:30 Registration

9:30-12:30 MC Meeting

12:30-14:00 Lunch break

14:00-14:30 Inaugural ceremony

Prof. Milena Properzi (Director of Department of Innovative Technologies SUPSI)
Prof. Andrea Danani (Local Organizer, MC for Switzerland)
Prof. Luigi Lay (Chair of the INNOGLY Cost Action)

**SESSION 1: Glycosylation in Cellular Mechanisms of Health and Disease
(Chairwoman: Sandra Van Vliet)**

14:30 - Celso Reis: *Glycosylation in cancer: molecular characterization and implications for cancer therapy*

14:50 - Romain Vives: *Human HSulf-2: a sweet sulfatase*

15:10 - Niclas G. Karlsson: *Osteoarthritis-A life science glycoprotein*

15:30 - Marei Sammar: *Mucin-like placental CD24 is associated by Siglec-10 and is down regulated in Preeclampsia : in-vitro and in-vivo*

15:50 - Jessica Kwok: *Manipulation of chondroitin sulfate reactivates neuroplasticity for memory enhancement in ageing*

16:10-16:40 Coffee break

**SESSION 2: Extraction, Characterization, and Molecular Interactions of Glycans
(Chairman: Fulvio Reggiori)**

16:40 - Sebnem Tavman: *Extraction and characterization of chondroitin sulphate from chicken sternum*

17:00 - Pavlína Nekvasilová: *Glycosidase engineering and their use in the synthesis of human milk oligosaccharides*

17:20 - Ramón Hurtado-Guerrero: *Molecular basis of FUT8 recognition on N-glycans*

18:00 - 19:00 Poster session

19:15 - Social dinner

Thursday May 5th

Biophysics

**SESSION 3: Computer Simulations, Bioinformatics and AI
(Chairman: Serge Perez)**

09:00 - Mateusz Marcisz: *Repulsive Scaling Replica Exchange Molecular Dynamics in docking Glycosaminoglycans*

09:20 - Tomasz Kobiela: *Biophysical and computational approach to melanoma treatment selection using glycosylation-based biomarkers*

09:40 - Frederique Lisacek: *Artificial Intelligence and glycoinformatics*

10:00 - Giulia Paiardi: *Molecular dynamics simulations to investigate the antiviral effect of heparin in sars-cov2 spike infection*

10:20 -Sergey Samsonov: *Modeling Biologically Relevant Interactions of Glycosaminoglycans*

10:40 - 11:10 Coffee break

**SESSION 4: Biophysical Methods for investigating macromolecular properties
(Chairman: Manfred Wuhrer)**

11:10 - Davide Ret: *N-glycan analysis "via direttissima". From sample preparation to result*

11:30 - Giacomo Biagiotti: *Deciphering the glyco-code using ad hoc glyco and glycans-targeting fluorescent probes: versatile tools in glycobiology.*

11:50 - Jesús Angulo: *Novel Multifrequency STD NMR Tools to gain 3D Structural Information on Weak Protein-Glycan Complexes*

12:10 - Viktoria Heine: *Monovalent vs multivalent - Finding efficient galectin inhibitors and elucidating galectin binding behavior*

12:30 - Shlomo Yitzchaik: *Glycan based electrochemical biosensors for enzymes catalysis vs. recognition*

12:50-14:15 Lunch break

14:15-16:15 WG meetings

16:15-16:45 Coffee break

16:45-17:30 WG Plenary

17:30 Poster session

Friday May 6th

Medicine

**SESSION 5: The Role of Glycans in Infectious Diseases
(Chairwoman: Barbara Richichi)**

09:00 - Manfred Wuhrer: *The role of afucosylated IgG responses in alloimmune and infectious diseases*

09:20 - Cyrille Grandjean: *Towards novel glycoconjugate vaccine generation*

09:40 - Laura Petrosilli: *Synthesis of Streptococcus pneumoniae 6A/6C oligosaccharides*

10:00 - Maria Rita Ventura: *Towards a novel functional assay for the discovery of membrane proteins involved in mycobacteria cell wall biosynthesis*

10:20 - Malgorzata Sulewska: *Exploitation of K5 lyase B from E. coli K5B bacteriophage for heparosan degradation and detection*

10:40 - 11:10 Coffee break

**SESSION 6: Glycans in Cancer and inflammation
(Chairman: Celso Reis)**

11:10 - Sandra Van Vliet: *Glycan-dependent signalling routes and transcriptional programs in human dendritic cells after triggering of the c-type lectin receptor mgl.*

11:30 - Francesca Levi Schaffer : *Siglec-7 is expressed and functional on human colon cancer cells*

11:50 - Rosa Peracaula: *Characterization of mesothelin glycosylation in pancreatic cancer: decreased core fucosylated glycoforms in pancreatic cancer patients' sera*

12:10 - Dragana Nikitovic: *Biglycan regulate osteosarcoma cell growth by modulating canonical and non-canonical IGF-IR and β -catenin signaling*

12:30-13:00 Poster award

Closure ceremony