



Glycans Bridging Technology & Precision Medicine



International Meeting
of Young Researchers
INNOGLY &
GLYCONanoPROBES

20th-21st April

IASI
2023

Event programme

DAY 1

Registration with coffee reception (13h00-14h00)

Opening ceremony (14h00-14h20)

Session 1: Glycan-Mediated Molecular Interactions (14h20-16h20)

Plenary Lecture 1 – 14h20-15h20

Marko Anderluh: Glycoscience Fights Bacterial Diseases: Case Studies of FimH and Galectin-8 Inhibitors

University of Ljubljana, Slovenia

Oral Presentation 1 – 15h20-15h40

Maria Pia Lenza: Structural Details of Siglec-8 in Complex with a Therapeutic Antibody and a High Affinity Glycomimetic

University of Naples Federico II, Italy

Oral Presentation 2 – 15h40-16h00

Jonathan Ramírez-Cárdenas: Novel Advanced STD NMR Methodology for Investigating Low Affinity Protein-Ligand Interactions

Instituto de Investigaciones Químicas, Spain

Oral Presentation 3 – 16h00-16h20

Calum Haydon: Glycan Functionalised Microbeads to Probe Bacteria-Sugar Interactions

University of Bristol, United Kingdom

Coffee Break + Poster Session (16h20-17h00)

Session 2: Glycobiology in Health and Disease (17h-19h)

Oral Presentation 4 – 17h00-17h20

Kristina Zlatina: Changes of Glycosylation of Porcine Antibodies During Postnatal Development Research Institute for Farm Animal Biology, Germany

Oral Presentation 5 – 17h20-17h40

Najda Rudman: Plasma Protein and IgG N-Glycosylation Changes and Its Genetic Regulation at the Onset of Type 1 Diabetes

University of Zagreb, Croatia

Oral Presentation 6 – 17h40-18h00

Andreea Cislaru: Serum IgG N-Glycosylation in Nephropathic Cystinosis
Maynooth University, Ireland

Oral Presentation 7 – 18h00-18h20

Taya Bosson: Perineuronal Nets as a Barrier Against Neuronal α -Synuclein Internalisation
University of Leeds, United Kingdom

Oral Presentation 8 – 18h20-18h40

Parinaz Hobbi: A Novel Approach to Osteoporosis Treatment: Polyphenolic-based Scaffold from Apple Waste
Université libre de Bruxelles, Belgium

Oral Presentation 9 – 18h40-19h00

Jack Schofield: Changes in Human Corneal N-Glycosylation in Pathological Neovascularisation
University of Galway, Ireland

Social dinner (19h30-...)

Day 2

Session 3 – Glycosylation in Cancer (09h00-12h50)

Plenary Lecture 2 – 09h00-10h00

Sandra J. van Vliet: Tumour-Associated Glycan Structures: Friend or Foe in Immunity to Cancer?

Vrije Universiteit Amsterdam, The Netherlands

Oral Presentation 10 – 10h00-10h20

Adria Duran: Evaluation of Specific Proteins Glycoforms as Tumour Markers for Pancreatic Cancer University of Girona, Spain

Oral Presentation 11 – 10h20-10h40

Ana Filipa Costa: Fluorinated GalNAc as a Novel Inhibitor of Cancer-Associated O-Glycans in Gastrointestinal Cancers

University of Porto, Portugal

Oral Presentation 12 – 10h40-11h00

Henrique Oliveira Duarte: ST6Gal1 Modifies ErbB2 Trastuzumab-Binding Domain in a Site-Specific Manner to Support Molecular Resistance to Trastuzumab

University of Porto, Portugal

Coffee Break + Poster Session (11h00-11h30)

Oral Presentation 13 – 11h30-11h50

Liliana Santos-Ferreira: Glycosylation of Gastric Cancer Patient-Derived Organoids as a Model to Study Cancer Therapy

University of Porto, Portugal

Oral Presentation 14 – 11h50-12h10

M. Carmen Padilla-Pérez: Fluoroglycolipid Mimetics with Anti-Proliferative and Anti-Inflammatory Properties

University of Sevilla, Spain

Oral Presentation 15 – 12h10-12h30

Anna Gratacós-Mulleras: Developement of a Paper-Based Biosensor for the Detection of Prostate Specific Antigen Sialoforms

University of Girona, Spain

Oral Presentation 16 – 12h30-12h50

Rafaela Abrantes: Development of Novel CAR-Ts Directed to Tumor-Associated Glycoepitopes

University of Porto, Portugal

Lunch Break (12h50-13h50)

Session 4 – Young Career Development (13h50-14h10)

Oral Presentation 17 – 13h50-14h10

Amin Shavandi: From Classroom to the World: How Studying and Working Abroad Can Enhance Your Career

Université libre de Bruxelles, Belgium

Session 5: Glycan-Targeting Analytical Workflows (14h10-15h10)

Oral Presentation 18 – 14h10-14h30

Athira Tomy: Saccharide Sensing Based on Anthraquinoline Redox Indicator Assay

Maynooth University, Ireland

Oral Presentation 19 – 14h30-14h50

Julia Simińska-Stanny: Engineering biomaterials using hydrogels based on hyaluronic acid

Université libre de Bruxelles, Belgium

Oral Presentation 20 – 14h50-15h10

Pejman Ghaffari-Bohlouli: Self-Generating and Preserving Oxygen and Hydrogen Peroxide Printable Hyaluronic Acid-Based reactive Oxygen Species Scavenger Hydrogel for Wound Healing

Université libre de Bruxelles, Belgium

Coffee Break + Poster Session (15h10-15h40)

Oral Presentation 21 – 15h40-16h00

Idris Yazgan: Surface Chemistry Dependent Antibacterial Activity of Glycoconjugate Nanoparticles through Carbohydrate-Lectin Interactions

Kastamonu University, Turkey

Oral Presentation 22 – 16h00 -16h20

Filipe M. P. Moraes: Cationic Benzoporphyrins: Synthesis and Antimicrobial Activity

University of Aveiro, Portugal

Oral Presentation 23 – 16h20-16h40

Hannah S. N. Crory: Carbohydrate Functionalised Materials: Towards Antimicrobial Surfaces

University College Dublin, Ireland

Oral Presentation 24 – 16h40-17h00

Entela Haloci: Encapsulation of Essential Oils in β -Cyclodextrin and Their Biological Activity

University of Medicine, Tirana, Albania

Oral Presentation 25 – 17h00-17h20

Mariana M. de Carvalho: Development of β -Glucans Coated Liposomes for Targeting to the Cells of the Immune System

University of Oslo, Norway

Oral Presentation 26 – 17h20-17h40

Hatice Duman: A novel *In-Vitro* Digestion System Designed with Microflora Origin Enzymes to Investigate Glyco-Nanomaterials Functions

Oral Presentation 27 – 17h40-18h00

Liam S. Fitzgerald: Outcome of Docking of Some Simple Sialic Acid Derivatives to Influenza Hemagglutinin and Synthesis of Glycoclusters Based on Tetraphenylethylene Scaffold

National University of Ireland Galway, Ireland

Session 6 – Flash Presentations (18h00-18h30)

Flash Presentation 1

Alessandro Antonio Masi: Exploring the Interaction Between Siglec-7 and Disialylated Gangliosides University of Naples Federico II, Italy

Flash Presentation 2

Edvin Purić: 2-Substituted Galactosides as Selective and Potent Galectin-8 Ligands University of Ljubljana, Slovenia

Flash Presentation 3

Cristiano Conceição: Identification of Novel Drug Targets in Mycobacterium Tuberculosis Using an Innovative Functional NMR Assay Targeting Arabinofuranosyltransferases

Nova University of Lisbon, Portugal

Flash Presentation 4

Eleni Kavetsou: Novel Hybrid, Chemically Crosslinked Hydrogel Networks and their Application in Photodynamic Therapy

National Technical University of Athens, Greece

Flash Presentation 5

Rathna Mathiyalagan: Compounding Tailored Veterinary Chewable Tablets Close to the Point-of-Care by Means of 3D Printing
Åbo Akademi University, Finland

Poster Presentations (7)

Poster Presentation

Alehandra Verhassel: Novel *Vicia villosa* Lectin-Labeled Nanoparticles for Detection of Tn-Antigen of Tumour Cells
University of Turku, Finland

Poster Presentation

Cristina Di Carluccio: Multidisciplinary Approach to Study the $\alpha 2-3$ -Sialylated O-Glycans Recognition by Siglec-Like Adhesins
University of Naples Federico II, Italy

Poster Presentation

Miguel de Azevedo Moreira: Studying the Activity, Substrate Specificity and Enzymatic Kinetics of Sialidase26 using qNMR
University of Naples Federico II, Italy

Poster Presentation

Rotem Edri: Glyco-Decorated Lipids for Targeted Drug Delivery
The Hebrew University of Jerusalem, Israel

Poster Presentation

Cristina Santi: Synthesis of Trehalose-Functionalised μ -Bead for *S. aureus* Detection
University of Bristol, United Kingdom

Poster Presentation

Fadak Howaili: Fabrication of Stimuli-Responsive Nanogel for Drug Delivery Applications
Åbo Akademi University, Finland

Poster Presentation

Alaa Mahran: Rheological and *In-vitro* Evaluation of Xeno-Free Mesoporous Silica Nanocomposite Biomaterial Inks for 3D Printing
Åbo Akademi University, Finland

Closing ceremony (19h00)

Social night out (20h00-...)