



**Closing Meeting of the INNOGLY COST Action, 2-3rd May 2023, Heraklion,
Crete, Greece**

Venue: Atlantis Aquila Hotel Heraklion

Tuesday May 2nd

09:00-11:00 MC Meeting

11:00-11:30 Coffee break

WP1 Glycans Role in Cancer

11:00-11:10 Summary of WP1 activities by Celso Reis

Chairs: Celso Reis & Sabine L. Flitsch

P1. 11:10 -11:30 Prostate Specific Antigen sialoforms for risk stratification of prostate cancer. *Esther Llop*, Anna Gratacós-Mulleras, Adrià Duran, Montserrat Ferrer-Batallé, Marina Fontan, Rafael de Llorens, Carsten Stephan, Roger Boix, Ana Celma, Juan Morote, Oriol Calaf, Joan Areal Calama, Rosa Peracaula & Josep Comet.

P2. 11:30-11:50 Glycosylation in cancer: molecular characterization and implications for cancer therapy. Henrique Duarte, Joana Gomes, Catarina Gomes, Filipe Pinto, Daniela Freitas,, Ana Magalhães & *Celso A. Reis*.

P3. 11:50-12:10 Targeting hypersialylation in pancreatic ductal adenocarcinoma reverts its malignant phenotype. Laura Miró, Júlia López, Pedro Enrique Guerrero, Neus Martínez-Bosch, Noemí Manero-Rupérez, Mireia Moreno, M. Rosa Ortiz, Esther Llop, Pilar Navarro & *Rosa Peracaula*.

P4. 12:10-12:30 Enzymatic tools for glycoengineering of biopharmaceuticals.

Sabine L Flitsch.

P5. 12:30-12:50 Tuning specificity and topology of lectins through synthetic biology.

Anne Imberty.

P6. 12:50-13:10 Worldwide Glycoscience Informatics Infrastructure: The GlySpace Alliance.

Frederique Lisacek.

13:10-15:00: Lunch

WP2 Glycans Role in Autophagy

15:00-15:10 Summary of WP2 activities by Eeva-Liisa Eskelinen

Chairs: Eeva-Liisa Eskelinen & Niclas G. Karlsson

P7. 15:10-15:30 Glycosylation study of the soluble amyloid precursor protein (APP) in cortex and cerebrospinal fluid in Alzheimer disease. *Inmaculada Cuchillo-Ibáñez*, Inmaculada López-Font, Claudia P Boix, Kaj Blennow, Henrik Zetterberg & Javier Sáez-Valero.

P8. 15:30-15:50 Biglycan-mediated signaling regulates osteosarcoma cell growth and chemoresistance. *Eirini-Maria Giatagana*, Margrethe Gaardløs, Aikaterini Berdiaki, Lydia-Nefeli Thrapsanioti, Sergey A. Samsonov & Dragana Nikitovic.

P9. 15:50-16:10 Carbohydrate-functionalised metal complexes: targeting pathogens.

Joseph P. Byrne.

16:10-16:30 Coffee break

P10. 16:30-16:50 Towards clinical O-glycomics: Application to osteoarthritis.

Niclas G. Karlsson.

P11. 16:50-17:10 Novel lectin-based approaches to target and kill Gb3-positive cancer cells.

Winfried Römer.

P12. 17:10-17:30 Developing Synthetic and Electrochemical Tools to Study the Effect of Modifications on Glycans Binding Preferences. *Mattan Hurevich* & Shlomo Yitzchaik.

17:30-19:00 Networking

20:00 Conference Dinner at the Atlantis Aquila Hotel Heraklion

Wednesday May 3rd

WP3 Glycans Role in Immunity

09:00-09:10 Summary of WP3 activities by Barbara Richichi

Chairs: Barbara Richichi & Gornik Olga

P13. 09:10-09:30 Cellulose nanocrystal-gold nanoparticles hybrid is a modular and functional glyconanomaterial with biomolecular recognition properties. *Giacomo Biagiotti* and Barbara Richichi.

P14. 09:30-09:50 N-glycosylation of plasma proteins and its genetic regulation in type 1 diabetes mellitus. Najda Rudman, Domagoj Kifer, Simranjeet Kaur, Dinko Šoić, Flemming Pociot, Grant Morahan & *Olga Gornik*.

P15. 09:50-10:10 Tumor-associated glycan structures: friend or foe in immunity to cancer? Irene van der Haar Àvila, Victor Lorrain, Laraib Ali, Lenneke A.M. Cornelissen, Athanasios Blanas, Yvette van Kooyk & *Sandra J. van Vliet*.

P16. 10:10-10:30 A microfluidic photo-induced platform to synthesize ultrasmall glyconanoparticles. P. Perez Schmidt, L. Ragona, K. Pagano, L. Lay, Evangelisti, M. Marelli & *L. Polito*.

P17. 10:30-10:50 A nanotechnological approach to potentiate the immunogenicity of pneumococcal glycoconjugate vaccines. Maruthi Prasanna, Rubén Varela Calvino, Daphnée Soulard, Lorenzo Albertazzi, Annie Lambert, Sylvia Pujals, François Trottein, Emilie Camberlein, Noemi Csaba & *Cyrille Grandjean*.

10:50-11:30 Coffee break

WP4 Glycosaminoglycans' Structure and Roles

11:30-11:40 Summary of WP4 activities Serge Perez

Chairs: Serge Perez & Sylvie Ricard-Blum

P18. 11:40-12:00 RHAMM/hyaluronan inhibit β -catenin degradation, enhance downstream signaling, and facilitate fibrosarcoma cell growth. *Aikaterini Berdiaki*, Lydia-Nefeli Thrapsanioti, Eirini-Maria Giatagana, Nikos. K. Karamanos, Rashmin C. Savani, George N. Tzanakakis & Dragana Nikitovic.

P19. 12:00-12:20 Glycosaminoglycans: What Remains to be Deciphered. *Perez, S.*, Makshakova, O., Angulo, J., Bedini, E., Bisio, A., de Paz, J.L., Fadda, E., Guerini, M., Hricovini, L., Hricovini, M., Lisacek, F., Nieto, P.M., Pagel, K., Paiardi, G., Richter, R., Samsonov, S.A., Vivès, R.R., Nikitovic, D. & Ricard Blum, S.

P20. 12:20-12:40 Hyaluronan and Reactive Oxygen Species Signaling—Novel Cues from the Matrix? *Aikaterini Berdiaki*, Monica Neagu, Ioanna Spyridaki, Andrey Kuskov, Serge Perez and *Dragana Nikitovic.*

P21. 12:40-13:00 In situ Glyco-Modification of Synthetic Membranes Derived by a Bacterial GlycosylTransferase. *Olga Makshakova*, Serge Pérez & Winfried Römer.

13:00-14:30 Lunch break

P22. 14:30-14:50 Study of the proteoglycan syndecan-4 as a target of ADAMTS1 proteolytic activity: Consequences on macrophage functionality. Silvia Redondo-Garcva, Rita Caracuel-Peramos, *Juan Carlos Rodriguez-Manzanaque.*

P23. 14:50-15:10 The biological landscape of glycosaminoglycans and their interplay with their protein moieties: what remains to be deciphered? *Sylvie Ricard-Blum*, Romain Vives, Liliana Schaefer, Martin Götte, Rosetta Merline, Alberto Passi, Paraskevi Heldin, C.R. Merry, L. Kjellen, Jessica C. F. Kwok, Spyros S. Skandalis, Nikos K. Karamanos, Serge Perez & Dragana Nikitovic.

15:10-16:10 Networking and free discussions

16:10-16:40 Coffee break

16:40-18:00 Networking and free discussion

18:00-18:15 Farewell speech by Luigi Lay

Poster presentations

Polysaccharides as biomaterials for bone regeneration. Ioannis Gardikiotis, Florina Daniela Cojocaru, Anca-Elena Calistru, *Gianina Dodi*.

Development of a ^{13}C -NMR functional assay for the functional characterisation of arabinosyltransferases. Conceição C A, Almeida V T, Issoglio F, Archer M, *Ventura M R*.

Dextran coating cobalt ferrite nanoparticles as MRI contrast agents. *Cristina M. Uritu*, Silviu I. Filipciuc, Adrian Fifere & Ioana A. Turin-Moleavin.