

7th Latin American Glycobiology Congress
Latin American Society of Glycobiology
3-6 October 2023, MEXICO CITY - ONLINE

Scientific Program

GlycoPlants **Neurodisease** **Genetics**
Cancer **Biotech & ChemBiol**
Metabolism **Infections & Immunology**



Inaugural Conference



Prof. Carolyn Bertozzi
Stanford University, USA

Nobel Prize in Chemistry 2022

Sponsors



CDG & Allies – PPAIN
CDG & Allies - Professionals and Patient
Associations International Network



**WORLD CDG
ORGANIZATION**
Awareness, Research, Education and Empowerment United
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UNIVERSIDAD AUTÓNOMA DEL ESTADO DE MORELOS, MÉXICO

JOSÉ M. ESTEVEZ, PhD

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ROBERTA SALINAS MARÍN, PhD

UNIVERSIDAD AUTÓNOMA DEL ESTADO DE MORELOS, MÉXICO

Session Chairs

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HÉCTOR MANUEL MORA-MONTES, PhD

UNIVERSIDAD DE GUANAJUATO, MÉXICO

JOSE M. ESTÉVEZ, PhD

FUNDACIÓN INSTITUTO LELOIR, ARGENTINA

OCTAVIO T. RAMÍREZ REIVICH, PhD

UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO, MÉXICO

SOPHIE GROUX-DE GROOTE, PhD

UNIVERSITÉ DE LILLE, FRANCE

TAROH KINOSHITA, PhD

OSAKA UNIVERSITY, JAPAN

TONY LEFEBVRE, PhD

UNIVERSITÉ DE LILLE, FRANCE

Monday October 2, 2023

Pre-meeting course: Fundamentals of Glycobiology Course
Coordinator Roberta Salinas Marín, PhD

(IN SPANISH)

TOKYO (+1 DAY)	ROME	MEXICO CITY GMT - 6h	MEXICO CITY GMT - 6h	SESSION
START	START	START	END	
23:00	16:00	08:00	08:50	Introduction to Glycobiology Ivan Martinez Duncker Universidad Autónoma del Estado de Morelos, Mexico.
23:50	16:50	8:50	9:40	Glycosylation Pathways Roberta Salinas Marin Universidad Autónoma del Estado de Morelos, Mexico.
00:40	17:40	9:40	10:30	Congenital Disorders of Glycosylation Ivan Martinez Duncker Universidad Autónoma del Estado de Morelos, Mexico.
01:30	18:30	10:30	11:00	B R E A K
02:00	19:00	11:00	11:50	Glycans and Cancer Verónica Vallejo Ruíz Instituto Mexicano del Seguro Social, Mexico.
02:50	19:50	11:50	12:40	Immune response and glycans José Luis Sánchez Salgado Universidad Nacional Autónoma de México, Mexico.
03:40	20:40	12:40	13:30	Recombinant glycoproteins Octavio T. Ramírez Revich Universidad Nacional Autónoma de México, Mexico.
04:30	21:30	13:30	14:20	Structural Analysis of Glycan Zoila Vanessa Hernández Alberto Porrás Sanjuanico Universidad Nacional Autónoma de México, Mexico

Tuesday October 3, 2023 (Day 1)

TOKYO (+1 DAY)	ROME	MEXICO CITY GMT - 6h	MEXICO CITY GMT - 6h	SESSION
START	START	START	END	
23:45	16:45	8:45	9:00	Welcome
00:00	17:00	9:00	10:00	INAUGURAL CONFERENCE Carolyn Bertozzi Nobel Prize in Chemistry 2022
01:00	18:00	10:00	13:00	Session 1 - Metabolism Chair: Tony Lefebvre University of Lille, France
01:00	18:00	10:00	10:30	Keynote Fluorescence quenched substrates for quantifying glucocerebrosidase activity within lysosomes David Vocadlo, Simon Fraser University, Canada
01:30	18:30	10:30	10:50	O-GlcNAcylation, a new target for the early management of hemorrhagic shock Benjamin Lauzier, University of Nantes, France
01:50	18:50	10:50	11:10	An overview of metal ion importance in glycosylation: the case of SLC10A7-CDG and TMEM165-CDG Zoé Durin, University of Lille, France
02:10	19:10	11:10	11:40	Keynote How sweet is O-GlcNAc Xiaoyong Yang, Yale School of Medicine, USA
02:40	19:40	11:40	12:00	Regulation of Fatty Acid Synthase (FASN) by the nutrient-dependent modification O-GlcNAcylation Dimitri Vanauberg, University of Lille, France
03:00	20:00	12:00	12:20	How to successfully involve patients and citizens in Glycoscience: learning from CDG and allies, the international community-centric research network for CDG Vanessa dos Reis Ferreira, Universidade Nova, Portugal
03:20	20:20	12:20	12:50	Keynote Potential strategies for the treatment of PMM2-CDG: focus on pharmacochaperones Belén Pérez Universidad Autónoma de Madrid, Spain
03:50	20:50	12:50	13:10	Questions & Answers

Tuesday October 3, 2023 (Day 1)

TOKYO (+1 DAY)	ROME	MEXICO CITY GMT - 6h	MEXICO CITY GMT - 6h	SESSION
START	START	START	END	
06:00	23:00	15:00	17:40	Session 2 - Infections & Immunology Chair: Héctor Mora-Montes University of Guanajuato, Mexico
06:00	23:00	15:00	15:20	Glycoimmunology of <i>Sporothrix schenckii</i> Laura García Carnero University of São Paulo, Brazil
06:20	23:20	15:20	15:40	<i>Botrytis cinerea</i> pmt4 is involved in o-glycosylation, cell wall organization, membrane integrity, adhesion and virulence Luis Castillo Universidad de la Serena, Chile
06:40	23:40	15:40	16:00	Glycan masking of H7 influenza virus HA head domain for epitope-focused immunogen design Cristina Martina, Vanderbilt University, USA
07:10	00:00	16:00	16:30	Keynote N-glycans as key immune-checkpoints at the frontiers of inflammation, autoimmunity and cancer Salome Pinho Institute for Research and Innovation in Health, Portugal
07:30	00:30	16:30	16:50	Surface carbohydrates of <i>Echinococcus</i> and host lectins Álvaro Díaz, Universidad de la República, Uruguay
07:50	00:50	16:50	17:20	Keynote Trans-Sialidase and Virulence in <i>Trypanosoma cruzi</i>: Insights into Immune Modulation and Membrane Protein Trafficking Oscar Campetella Universidad Nacional de San Martín, Argentina
08:20	01:20	17:20	17:30	Flash presentations (5 min/talk)
08:20	01:20	17:20	17:25	Glycosylation patterns of hemocytes from <i>Cherax quadricarinatus</i> after immunostimulation Guluarte Crystal Universidad Nacional Autónoma de México, México
08:25	01:25	17:25	17:30	Proteins and glycoproteins from the anterior midgut of <i>Meccus pallidipennis</i> Olivia A. Reynoso-Ducoing Universidad Nacional Autónoma de México, México
08:30	01:30	17:30	17:50	Questions & Answers

Wednesday October 4, 2021 (Day 2)

TOKYO (+1 DAY)	ROME	MEXICO CITY GMT - 6h	MEXICO CITY GMT - 6h	SESSION
START	START	START	END	
23:10	16:10	08:10	13:15	Session 3 - Cancer Chair: Sophie Groux-Degroote Université de Lille, France
23:10	16:10	08:10	08:30	Harnessing the power of sugars in cancer: advancing therapeutic approaches through glycoimmunology Paula Videira, Universidade NOVA de Lisboa, Portugal
23:30	16:30	08:30	09:00	Keynote Aberrant glycosylation in gastric cancer: novel molecular mechanisms controlling disease progression Ana Magalhaes, University of Porto, Portugal
00:00	17:00	09:00	09:20	Deciphering the role of O-GlcNAcylation of TATA-Box Binding Protein (TBP) in signaling pathways associated with colorectal cancer Quentin Lemaire, CNRS, France
00:20	17:20	09:20	09:50	Keynote Elucidating the role of FUT1&2 alpha1,2 fucosyltransferases in head and neck squamous cell carcinoma Kevin Chandler, Florida International University, USA
00:50	17:50	09:50	10:10	Deciphering aberrant glycosylation in colorectal cancer Julio Madureira de Freitas Junior National Cancer Institute, Brazil
01:10	18:10	10:10	10:40	Keynote Deciphering the context-dependent roles of mannose metabolism in cancer Yoichiro Harada, Osaka International Cancer Institute, Japan
01:40	18:40	10:40	11:00	The Sd^a antigen synthase B4GALNT2 in cancer Fabio Dall'Olio, Università di Bologna, Italy
02:00	19:00	11:00	11:20	Potent immunotherapies of solid tumors targeting cancer-associated O-glycans Hans Wandall, University of Copenhagen, Denmark
02:20	19:20	11:20	11:50	Keynote O-GlcNAcylation in cancer: the establishment of the malignant phenotype in cancer stem cells Gabriela Fuentes-García, Université de Lille, France
02:50	19:50	11:50	12:00	Flash presentations (5 min/talk)
02:50	19:50	11:50	11:55	Role of glycosylation in thrombocytopenia and acute myeloid malignancies associated with RUNX1 Familial Platelet Disorder Débora Andrade-Silva, University of Texas, USA.
02:55	19:55	11:55	12:00	Golgi Phosphoprotein 3 mediates the association between β3GalT-IV and ST3Gal-II and the subcellular localization of ST8Sia-I glycosyltransferases Natalia Martínez Koteski Universidad Nacional de Córdoba, Argentina
03:00	20:00	12:00	12:20	Questions & Answers

Wednesday October 4, 2021 (Day 2)

TOKYO (+1 DAY)	ROME	MEXICO CITY GMT - 6h	MEXICO CITY GMT - 6h	SESSION
START	START	START	END	
05:00	22:00	14:00	17:30	Session 4 – Neurodisease Chair: Dulce Papy-García Université Paris, France
05:00	22:00	14:00	14:30	Keynote Neural Heparan sulfates in tissue homeostasis and disease. The case of Alzheimer’s disease Minh Bao Huynh University Paris Est Créteil, France
05:30	22:30	14:30	14:50	Heparin-binding properties and putative chaperone activity of GAPDH in the extracellular space César Avila, National University of Tucuman, Argentina
05:50	22:50	14:50	15:10	Galectins in the microglial response in a model of Alzheimer’s disease Eleazar Ramirez Hernández Universidad Nacional Autónoma de México, Mexico
06:10	23:10	15:10	15:40	Keynote Heparan sulfate (HS) mimetics; novel therapeutics for CNS repair Sue Barnett, University of Glasgow, UK
06:40	23:40	15:40	16:00	Heparan sulfates and Tgfb1 crosstalk mediating Tau aggregation Rafael Castillo Negrete Gly-CRRET University Paris Est Creteil France and Justus Liebig University Giessen, Germany
07:00	00:00	16:00	16:20	Emerging pathways to neurodegeneration in lysosomal storage disorders Elvira de Leonibus Institute of Biochemistry and Cellular Biology, National Research Council, Italy and Telethon Italie
07:20	00:20	16:20	16:50	Keynote An extracellular matrix therapy to optimize mesenchymal stem cell-based therapy for brain protection and repair after cerebral ischemia Myriam Bernaudin CERVOxy-Imaging and therapeutic strategies for cancers and cerebral tissues University of Caen, France
07:50	00:50	16:50	16:55	Flash presentations (5 min/talk)
				CHO.K1 vs. HEK-293 cell platforms to produce novel neurotherapeutic candidates Francisco Iturraspe, Universidad Nacional del Litoral, Argentina
07:55	00:55	16:55	17:00	Questions & Answers

Thursday October 5, 2021 (Day 3)

TOKYO (+1 DAY)	ROME	MEXICO CITY GMT - 6h	MEXICO CITY GMT - 6h	SESSION
START	START	START	END	
00:00	17:00	09:00	13:00	Session 5 – Biotechnology and Chemical Biology Chair: Octavio Tonatiuh Ramírez Reivich Universidad Nacional Autónoma de México, Mexico
00:00	17:00	09:00	09:30	Keynote Protein glycoengineering: towards novel biotherapeutics Marcos Oggero, Universidad del Litoral, Argentina
00:30	17:30	09:30	09:50	Combined effect of ammonia stress and cell line age on CHO Cell derived VRC01 monoclonal antibody glycosylation Nicholas Sandoval, Tulane University, USA
00:50	17:50	09:50	10:10	Raman spectroscopy-based monitoring of amino acids and antibody N-glycosylation in high cell density perfusion culture Veronique Chotteau The Royal Institute of Technology, Sweden
01:10	18:10	10:10	10:40	Keynote Next-gen glycoengineering: combining cellular and metabolic engineering to fine-tune β1,4-galactosylation Ioscani Jimenez, University College, Ireland
01:40	18:40	10:40	11:00	Alpha mannosidosis, clinical aspects and general overview in Mexico Roberto Sandoval Pacheco & Edith Ivonne Caballero Gudiño Chiesi Global Rare Diseases
02:00	19:00	11:00	11:30	Keynote Chemical Precision Tools to Dissect Protein Glycosylation Benjamin Schumann, Imperial College of London, UK
02:30	19:30	11:30	11:50	A novel system for glycosylation engineering by natural and artificial miRNAs Kerstin Otte University of Applied Sciences Biberach, Germany
02:50	19:50	11:50	12:00	Flash presentations (5 min/talk)
02:50	19:50	11:50	11:55	Albumin-bovine submaxillary core shell nanoparticles as a novel submaxillary antibiotic-delivery system to target <i>Campylobacter jejuni</i> Giovanna Sandoval Larios CIAD, México
02:55	19:55	11:55	12:00	Impact of variants on human α-L-Iduronidase glycosylations displacements Darinka Durán-Gutiérrez, Instituto Politécnico Nacional, México
03:00	20:00	12:00	12:20	Questions & Answers

Thursday October 5, 2021 (Day 3)

TOKYO (+1 DAY)	ROME	MEXICO CITY GMT - 6h	MEXICO CITY GMT - 6h	SESSION
START	START	START	END	
05:00	22:00	14:00	18:00	Session 6 - Genetics Chair: Taroh Kinoshita Osaka University Medical School, Japan
05:00	22:00	14:00	14:30	Keynote Congenital Disorders of Glycosylation - diagnostic challenges solved by glycoproteomics Dirk J. Lefeber Radboud University Medical Center, Netherlands
05:30	22:30	14:30	14:50	TMEM260 is a protein-specific O-mannosyltransferase Adnan Halim, University of Copenhagen, Denmark
05:50	22:50	14:50	15:10	Modeling glycosylation biosynthesis to understand glycogen and glycan structure relationships Kiyoko F. Aoki-Kinoshita, Soka University, Japan
06:10	23:10	15:10	15:40	Keynote Toward finding a cure for NGLY1 deficiency Tadashi Suzuki, Riken, Japan
06:40	23:40	15:40	16:00	Dysregulated lysosomal exocytosis drives protease-mediated cartilage pathogenesis in multiple lysosomal disorders Richard Steet, Greenwood Genetic Center, USA
07:00	00:00	16:00	16:20	Therapeutic targeting of POGLUT1 in a genetic liver disease Hamed Jafar-Nejad Baylor College of Medicine, USA
07:20	00:20	16:20	16:50	Keynote GestaltMatcher, an artificial intelligence that can recognize characteristic phenotypic patterns of many genetic disorders Peter Krawitz, University of Bonn, Germany
07:50	00:50	16:50	17:00	Flash presentations (5 min/talk)
07:50	00:50	16:50	16:55	The transmembrane domain of Endoplasmic Reticulum α-Glucosidase I influences the survival of a MOGS-CDG fission yeast model. Tommy Idrovo-Hidalgo, Universidad de Buenos Aires, Argentina
07:55	00:55	16:55	17:00	Highlighting multidisciplinary collaboration between clinicians and basic researchers accompanying the diagnosis and treatment of CDGs, towards personalized medicine in Latin-American populations Marisa Cubilla, Centro de Metabolopatías Congénitas, Argentina
08:00	01:00	17:00	17:20	Questions & Answers

Friday October 6, 2021 (Day 4)

TOKYO (+1 DAY)	ROME	MEXICO CITY GMT - 6h	MEXICO CITY GMT - 6h	SESSION
START	START	START	END	
00:30	17:30	09:30	11:30	Session 7 - Glycoplants Chair: José M. Estevez Leloir Institute, Argentina
00:30	17:30	09:30	10:00	Keynote Addressing the role of the nucleotide sugar transporter gene family in Arabidopsis thaliana Ariel Orellana, Universidad Andres Bello, Chile
01:00	18:00	10:00	10:30	Keynote Next-Generation Plant Polysaccharides: From Parts Prospecting to Scalable Bioengineering of Cell Walls Cătălin Voiniciuc UF/IFAS Horticultural Sciences Department, USA
01:30	18:30	10:30	11:00	Keynote Structural and biochemical insight into a modular β-1,4-galactan synthase in plants Bree Urbanowicz Complex Carbohydrate Research Center, USA
02:00	19:00	11:00	11:30	Keynote NAC1 directs CEP1-CEP3 peptidase expression and modulates the glycoproteins Extensins linked root hair growth in Arabidopsis José M. Estevez, Leloir Institute, Argentina
02:30	19:30	11:30	11:45	Questions & Answers