

**CDMX
MEXICO**
PALACE OF THE SCHOOL
OF MEDICINE

**OCTOBER
4 - 7**



Centro de
Investigación en
Dinámica Celular



CONACYT
Consejo Nacional de Ciencia y Tecnología



Instituto de
Investigación en
Ciencias
Básicas y
Aplicadas



UNIVERSIDAD AUTÓNOMA DEL
ESTADO DE MORELOS



4th CONGRESS
**LATIN AMERICAN
OF GLYCOBIOLOGY**



SOCIEDAD MEXICANA
DE INMUNOLOGÍA
En la lucha contra las enfermedades
infecciosas, autoinmunes, alergias y el cáncer



WEDNESDAY, OCTOBER 4

8:00 - 18:00 Pre-meeting course “Fundamentals of Glycobiology”

8:30-9:30	Principles of Glycobiology Iván Martínez Duncker
9:30-11:00	N-glycosylation Tania Villanueva
11:00-12:00	O-glycosylation Kathya Gutiérrez
12:00-12:30	Coffee Break
12:30-14:00	Congenital Disorders of Glycosylation Iván Martínez Duncker
14:00-15:00	Lunch
15:00-16:00	Glycobiology and Cancer Verónica Vallejo Ruíz
16:00-17:00	Glycobiology and Metabolic Disease Yobana Pérez
17:00-18:00	Structural analysis of glycans Gleysin Cabrera
14:00-18:00	Registry
19:00-21:00	Cocktail reception

THURSDAY, OCTOBER 5

08:30-09:00

Inauguration
Iván Martínez Duncker
President of the Latin American Society for Glycobiology
Head of the Glycoscience in Health Thematic Network

PRESIDIUM

- 1. Dr. Germán Fajardo Dolci, Director de la Facultad de Medicina UNAM**
- 2. Dr. Arturo Edgar Zenteno Galindo, Comité Organizador**
- 3. Dra. Verónica Bunge Vivier, Directora de Redes e Infraestructura Científica-Conacyt**
- 4. Lic. Pablo Zazueta Carpinteyro/Lic. Alma Delia Pérez Villanueva, Programa de Redes-Conacyt**
- 5. Dr. Octavio Tonatiuh Ramirez Reivich, Director del Instituto de Biotecnología UNAM**

09:00-10:00

OPENING CONFERENCE
Robert Sackstein
Professor, Harvard Medical School, USA
Director, Program of Excellence in Glycosciences

10:00-10:30

Coffee Break

Session 1: Glycobiology of pathogens

Chair - Everardo López

10:30-11:00

**Keynote: Héctor Manuel Mora Montes -
Universidad de Guanajuato, Mexico
Bringing glycobiology and immunology
together, a fungal perspective**

11:00-11:20

**Gustavo Niño Vega - Universidad de
Guanajuato, Mexico
Molecular mechanisms of fungal cell wall
assembly and remodeling, as potential
targets for the design of antifungal
strategies**

11:20-11:50

**Keynote: Leila Lopes Bezerra -
Universidad do Estado do Rio de Janeiro,
Brazil**

**The human endothelial cell proteome is
modulated by a cell wall polysaccharide
of an opportunistic fungal pathogen**

11:50-12:20

**Keynote: Luis Carlos Castillo Barahona -
Universidad La Serena, Chile**

**N and O-Glycosylation are involved in cell
wall organization, adhesion and virulence
in the ubiquitous plant pathogen *Botrytis
cinerea***

12:20-12:40

Poster “Lightning talks”

12:40-14:00

Lunch

Session 2: Microbial and pathogen glycobiology

Chair - Héctor Mora

14:00-14:30

Keynote: Gerardo Vasta - University of Maryland, USA

Role(s) of galectin-glycan interactions in microbial and parasitic infection

14:30-14:50

Juana Elizabeth Reyes Martínez -

Universidad de Guanajuato, Mexico

Biocatalysis for the synthesis of complex carbohydrates

14:50-15:20

Coffee Break

15:20-16:00

Keynote: Sabine Flitsch - University of Manchester, UK

Tools for structure-function studies of glycoconjugates

16:00-16:20

Igor C. Almeida - University of Texas at El Paso, USA

Synthetic glycan- and peptide-based vaccines protect against heart inflammation and parasite burden in a nonhuman primate model of Chagas disease

16:20-17:00

Selected oral presentations

17:00-19:00

Poster Session 1

FRIDAY, OCTOBER 6

Session 3: Glycobiotechnology

Chair - Sabine Flitsch

09:00-09:20

Gleysin Cabrera Herrera - Centro de Ingeniería Genética y Biotecnología, Cuba
Treatment with Heberprovac changes of O-glycans profile in prostate cancer patients

09:20-09:40

Asapanalitica

09:40-10:00

Laura Alicia Palomares Aguilera - Instituto de Biotecnología, UNAM
Redox potential and the N-glycosylation profile of monoclonal antibodies

10:00-10:20

Octavio Tonatiuh Ramirez Reivich - Instituto de Biotecnología, UNAM
Influence of bioprocessing conditions on the glycosilation profile of recombinant proteins

10:20-11:00

Selected oral presentations

11:00-13:00

Poster Session 2

13:00-14:00

Thematic Network: Challenges and Opportunities

14:00-15:00

Lunch

16:00-----

Tour at Historical Center of CDMX

SATURDAY, OCTOBER 7

Session 4 Metabolic and degenerative disease Chair - Edgar Zenteno

9:00-9:30	Keynote: Dulce Papy-García - Université Heparan sulfate in the Alzheimer brain. Are these glycans involved in the development of the pathology?
9:30-9:50	Marie-Ange Krzewinski Reichhi - Université de Lille, France State of the art of CDG in Europe... and in Lille (France)
9:50-10:20	Keynote: Hudson Freeze - Sanford Burnham Prebys Medical Discovery Institute, USA Congenital Disorders of Glycosylation: Progress and perspectives
10:20-10:40	Vanessa Dehennaut Lefebvre - Institut de Biologie de Lille, France O-GlcNAcylation: a new link between nutrition, epigenetics and colorectal cancer?
10:40-11:10	Keynote: Tony Lefebvre - Université de Lille 1-Sciences et Technologies, France OGT: an enzyme standing out from usual glycosyltransferases
11:10-11:30	Coffee Break
11:30-12:00	Keynote: Chihiro Sato - Nagoya University, Japan Mechanisms that SNPs of the ST8SIA2/STX gene lead to psychiatric disorders
12:00-14:00	Lunch

Session 5 Sialic acid in cancer and immunology

Chair - Patricia Gorocica

14:00-14:20	Annick Pierce - Université des Sciences et des Technologies de Lille, France Crosstalk between posttranslational modifications regulates delta-lactoferrin antitumoral activities
14:20-14:50	Keynote: Bo Rueda - Massachusetts General Hospital, USA Targeting the Sialyl-Thomsen-nouveau (STn) antigen to develop treatment strategies for high grade ovarian cancer
14:50-15:10	Verónica Vallejo Ruiz - Centro de Investigación Biomédica de Oriente, Mexico Human papillomavirus oncoproteins modulate glycogene expression profiles
15:10-15:30	Coffee Break
15:30-15:50	Myron R. Szewczuk - Queen's University, Canadá Sialylation facilitates 3D multicellular tumor spheroid formation and cancer initiation
15:50-16:10	Keynote: Ken Kitajima, Nagoya University, Japan Differential fate of medaka fish, <i>Oryzias latipes</i>, with different point-mutations in the CMP-sialic acid synthetase gene

16:10-16:30	Ismael Secundino Velázquez - Instituto de Biotecnología, UNAM, Mexico Erythrocyte sialoglycoproteins bind Siglec-9 to maintain neutrophil quiescence in the bloodstream
16:30-16:50	Tania María Villanueva Cabello - Universidad Autónoma del Estado de Morelos, Mexico Novel sialoglycoconjugates in T CD4+ cells
16:50-17:10	Sophie Groux-Degroote - Université de Lille, France Molecular mechanism of TNF-induced sialyl-Lewis expression in human bronchial mucosa and effect on bacterial adhesion
17:10-18:00	Closing Session Rafael Rubio García, University of Virginia, USA The role of endothelial luminal glycosylated structures and their recognition by lectins in endothelial functions
20:00	DINNER