



November 10-14, 2024
 Cancun, Quintana Roo,
 Mexico
 Convention Center of the Grand Oasis Hotel
**XV INTERNATIONAL CONGRESS
 OF CELL BIOLOGY
 CANCUN, MEXICO**

	SUNDAY 10	MONDAY 11	TUESDAY 12	WEDNESDAY 13	THURSDAY 14	FRIDAY 15
9:00-10:00		KEYNOTE LECTURE Bill Earnshaw UE, SCOTLAND, UK Room Cancun	PLENARY I Wanderley de Souza URJ, BRAZIL Room Cancun	PLENARY II Marco Igor Valencia-Sanchez UNAM, MEXICO Room Cancun	PLENARY III Nohi Franklin-Tong UB, ENGLAND, UK Room Cancun	
10:00-10:30		BREAK	BREAK		BREAK	
10:30-12:30	SYMPOSIUM 1 Room Cancun Dynamic organization of nuclear function	SYMPOSIUM 2 Room Merida Phase separation in Cell Biology	SYMPOSIUM 5 Room Cancun Cell Biology of Parasitic Protozoa	SYMPOSIUM 6 Room Merida Cellular Microbiology	SYMPOSIUM 7 Room Queretaro Cell organelle dynamics and interactions	SYMPOSIUM 11 Room Cancun Membrane and ATPases
12:30 - 15:00	LUNCH TIME					
15:00-16:30			POSTER SESSION I	POSTER SESSION II		
16:30-18:00	REGISTRATION					
18:00 - 18:30	SYMPOSIUM 3 Room Cancun Physics and Cell Biology of mitotic chromosome formation	SYMPOSIUM 4 Room Merida CSCB-IFCB Organelle interactions and regeneration	SYMPOSIUM 8 Room Cancun New applications in Cellular Immunology	SYMPOSIUM 9 Room Merida Membrane Dynamics	SYMPOSIUM 10 Room Queretaro Pluripotent stem cells: genetic, manipulation, directed differentiation and organoids	SYMPOSIUM 12 Room Queretaro Tissue engineering
18:30 - 19:30	OPENING CEREMONY			SYMPOSIUM 13 Room Merida Special Cell Biology Symposium: Students and posdoc	SYMPOSIUM 16 Room Cancun Innovations in Biotechnology: cells and organs on chip	SYMPOSIUM 14 Room Cancun Cell aging
					SYMPOSIUM 17 Room Merida Advances in cryoelectron microscopy	SYMPOSIUM 15 Room Merida Cell biology of plants
					CLOSING CEREMONY	

SCIENTIFIC PROGRAM

SUNDAY

OPENING CEREMONY

Sunday, November 10, 18:00-19:00 h

ROOM CANCUN

MONDAY

Keynote Lecture

Monday, November 11, 9:00-10:00 h

ROOM CANCUN

William C. Earnshaw, FRS



**Professor and Wellcome Principal Research Fellow, Institute of Cell Biology,
University of Edinburgh, SCOTLAND, UK**

*“Approaching mitotic chromosome structure from all
directions”*

Monday, November 11, 10:30-12:30 h **ROOM CANCUN**

Symposium 1 DYNAMIC ORGANIZATION OF NUCLEAR FUNCTION

Chairpersons: **Sui Huang**, Northwestern University, Chicago, USA

Thoru Pederson, University of Massachusetts Medical School, USA

10:30-10:47 **Enrique Castaño de la Serna**, Unidad de Biología Integrativa, Centro de Investigación Científica de Yucatán, Calle 43, Número 130, Chuburná de Hidalgo, Mérida, Yucatán CP 97205, México.

“Fibrillarin: evolution, function and its implications in cancer”

10:53-11:10 **Paul Kaufman**, University of Massachusetts Chan Medical School

“Triggering nuclear body formation with extracellular signals”

11:11-11:28 Justin Bodner^{1,2}, Pranathi Vadlamani^{1,2}, Alexander S. Lee^{1,2}, Shashank Srivastava^{1,2}, **Daniel R. Foltz** ^{1, 2, 3}, ¹Department of Biochemistry and Molecular

Genetics, Northwestern University Feinberg School of Medicine, 2Simpson Querrey
Institute for Epigenetics, 3Robert H. Lurie Comprehensive Cancer Center

“Selective regulation of linker histone H1 at the histone locus body”

11:29-11:46 **Prasanth Kumar Kannanganattu**, Department of Cell and
Developmental Biology, University of Illinois at Urbana-Champaign

*“Chromatin-associated lncRNA-splicing factor condensates regulate hypoxia
responsive RNA processing of genes pre-positioned near nuclear speckles”*

11:46-12:13 **Sui Huang**, Northwestern University, Chicago, USA

“PNC, nucleoli, and anti-cancer therapeutics”

Monday, November 11, 10:30-12:30 h **ROOM MERIDA**

Symposium 2 PHASE SEPARATION IN CELL BIOLOGY

Chairperson: **Rosa E. Navarro**, UNAM. Mexico

10:30-10:55 **Won-Jing Wang**, National Yang-Ming University, Taiwan

“Phase separation in the control of cilia initiation”

10:55-11:20 **Steven Boeynaems**, Baylor College of Medicine, USA

“Biomolecular condensates at the nexus of innate immunity and venoms”

11:20-11:45 **Andrea Putnam**, Jieon Lee University of Wisconsin-Madison, USA

“Maternal mRNA localization in embryos”

11:45-12:10 Coral Martínez-Martínez, Teresa B. Nava-Ramírez, Marisa S. Otegui,
Alejandra Covarrubias, Biotechnology Institute, UNAM, México

*“A plant stress protein: structural flexibility and cellular organization under water
deficit”*

12:10-12:30 **Rosa E. Navarro**, Valeria A. Ramírez-Ramírez, Arianne M. Cristino-
Miranda y Andrea V. Cervantes-Ayala

Cell Physiology Institute, UNAM, México

“Stress-Induced Biomolecular Condensates in the C. elegans Germline”

Monday, November 11, 16:30-18:30 **ROOM CANCUN**

Symposium 3 PHYSICS AND CELL BIOLOGY OF MITOTIC CHROMOSOME FORMATION

Chairperson: **William Earnshaw**, Edinburgh, Scotland, UK

16:30-17:00 **Ed Banigan**, MIT Cambridge, USA

“The hidden structure of mitotic chromosomes”

17:00-17:30 **Dave Thirumalai**, University of Texas Austin, USA

“Role of Motors in Genome Folding”

17:30-18:00 **Johan Gibcus**, University of Massachusetts, USA.

“Rules of engagement for condensins and cohesins guide mitotic chromosome formation”

18:00-18:30 **Fernanda Cisneros-Soberanis**, University of Edinburgh, Scotland.

“Chromosome formation: insights from light and electron microscopy”

Monday, November 11, 16:30-18:30 h **ROOM MERIDA**

Symposium 4 CSCB-IFCB. ORGANELLE INTERACTIONS AND REGENERATION

Chairpersons: **Ye-Guang Chen**, Tsinghua University, China

Lijian Hui, Shanghai Institute of Biochemistry and Cell Biology, China

16:30-16:55 **Ye-Guang Chen**, Tsinghua University, China

“Intestinal Epithelial Homeostasis and Regulation”

16:55-17:20 **Lijian Hui**, Shanghai Institute of Biochemistry and Cell Biology, China

“Cell Identity Conversion and Liver Regeneration”

17:20-17:45 **Quan Chen**, College of Life Sciences, Nankai University, China

“Molecular regulation of mitochondrial homeostasis and its contribution to aging associated diseases”

17:45-18:10 **Xin-Hua Feng**, Life Sciences Institute, Zhejiang University, Hangzhou, Zhejiang 310058, China.

“Understanding TGF- β Actions in Cancer”

18:10-18:30 **Xue-Biao Yao**, MOE Key Laboratory for Cellular Dynamics, China

“Centromere Plasticity and Cell Division Control”

TUESDAY

Plenary I

Tuesday, November 12, 9:00-10:00 h

ROOM CANCUN

Wanderley de Souza



Federal University of Rio de Janeiro (UFRJ), Brazil

“The Cytoskeleton of Parasitic Protists”

Tuesday November 12, 10:30-12:30 h **ROOM CANCUN**

Symposium 5 CELL BIOLOGY OF PARASITIC PROTOZOA

Chairperson: **Martha Espinosa Cantellano**, CINVESTAV, México

10:30-11:00 **Martha Espinosa Cantellano**, Karla Acosta-Virgen, Adolfo Martínez-Palomo, Department of Infectomics and Molecular Pathogenesis, Center for Research and Advanced Studies, Mexico City, Mexico.

"A tale of two amebas"

11:00-11:30 Juliett Anders¹, Michel-Ruben Glagowski¹, Antonia Müller², David Holthaus², Rebecca Eler¹, Constantin König¹, Christian Klotz², **Iris Bruchhaus**^{1*}
¹Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany; ²Robert Koch Institute, Berlin, Germany

"How does Entamoeba histolytica interact with the human intestine?"

11:30-12:00 **Rossana Arroyo-Verástegui**, Department of Infectomics and Molecular Pathogenesis, Center for Research and Advanced Studies (Cinvestav), Mexico City, Mexico.

"Peptidases in the virulence of Trichomonas vaginalis: A deep study of two legumain-like cysteine peptidases, TvLEGU-1 and TvLEGU-2"

12:00-12:30 **Jaime Ortega-López**, Departamento de Biotecnología y Bioingeniería, CINVESTAV, Mexico

"A Therapeutic Chagas Vaccine: more than a decade of a multidisciplinary effort"

Tuesday, November 12, 10:30-12:30 H **ROOM MERIDA**

Symposium 6 CELLULAR MICROBIOLOGY

Chairperson: **Fernando Navarro-García**, CINVESTAV, Mexico

10:30-11:00 **B. Brett Finlay**, OC, OBC, FRSC, FCAHS. CIFAR Senior Fellow and Co-Director Michael Smith Laboratories. University of British Columbia, Vancouver, B.C., Canada

"Pathogenic E. coli- a master cell biologist"

11:00-11:30 **Alfredo G. Torres**, University of Texas Medical Branch, USA

"Gastrointestinal Melioidosis and the role of the T6SS in Burkholderia pseudomallei pathogenesis"

11:30-12:00 **Fernando Navarro-García**, Department of Cell Biology. Centro de Investigaciones y Estudios Avanzados del IPN (CINVESTAV). Mexico City, México

"Enteraggregative E. coli Pic is a key factor for interacting with intestinal goblet cells"

12:00-12:30 **José Luis Puente**. Instituto de Biotecnología. Universidad Nacional Autónoma de México (UNAM). Cuernavaca, Morelos, México

"The locus of enterocyte effacement of enteropathogenic E. coli: a unique toolbox for virulence gene regulation"

Tuesday, November 12, 10:30-12:30 h **ROOM QUERETARO**

Symposium 7 CELL ORGANELLE DYNAMICS AND INTERACTIONS

Chairperson: **Jesús Aguirre**, UNAM, México

10:30-11:00 **Gyorgy Hajnoczky**, Benjamin Cartes Saavedra, Victor Hugo Sanchez Vazquez, Arijita Ghosh, Raghavendra Singh, David Weaver. MitoCare Center for Mitochondrial Imaging Research and Diagnostics, Thomas Jefferson University, USA.

“Mitochondrial Calcium Homeostasis and Fusion Dynamics”

11:00-11:30 **Jesús Aguirre**. Instituto de Fisiología Celular, Universidad Nacional Autónoma de México, México.

“Regulation of Mitochondrial Division and Actin Depolymerization by Reactive Oxygen Species”

11:30-12:00 **Alicia González**. Instituto de Fisiología Celular, Universidad Nacional Autónoma de México, México.

*“A Novel Chimeric Transcriptional Modulator Maintains Mitochondrial DNA Integrity in the Yeast *Saccharomyces cerevisiae*”*

12:00-12:30 A. Becerril-Cuevas, Hen-Ming W., A. Cheung, J. Palacios-Martínez, A. I. Chávez-Martínez, P. Jiménez-Chávez, R. Morales-Sotelo, T. J. Parra-Aguilar, J. Olivares-Grajales, O. Santana-Estrada, S. Ryken, M. Bezanilla, **Luis Cárdenas**. Instituto de Biotecnología, Universidad Nacional Autónoma de México, México.

“Plant Polar Growth Requires a Specific and Dynamic Distribution of Organelles to Coordinate Apical Growth and Responses to Biotic Interactions”

Tuesday, November 12, 16:30-18:30 h **ROOM CANCUN**

Symposium 8 NEW APPLICATIONS IN CELLULAR IMMUNOLOGY

Chairperson: **Gabriel López-Velázquez**, National Institute of Pediatrics, México

16:30-17:00 **Paul de Vos (1)**, Cynthia Fernández Lainez (2), Gabriel López Velázquez (2), (1) University Medical Center Groningen, Netherlands, (2) National Institute of Pediatrics, México

“Fructan dietary fibers and immunological effects”

17:00-17:30 **Pedro Gutiérrez Castrellón**, International Scientific Council for Probiotics, México

“New applications in cellular immunology: Gut and respiratory microbiota and role of probiotics on human immunology”

17:30-18:00 **Cynthia Fernández-Lainez (1)**, Paul de Vos (2), Gabriel López-Velázquez (3), (1) Laboratorio de Errores Innatos del Metabolismo y Tamiz, Instituto Nacional de Pediatría, CDMX, México. (2) Immunoendocrinology, Division of Medical Biology, Department of Pathology and Medical Biology, University of Groningen and University Medical Center Groningen, Groningen, The Netherlands. (3) Laboratorio de Biomoléculas y Salud Infantil, Instituto Nacional de Pediatría, Secretaría de Salud, CDMX, México.

“Immune intestinal rescuing effects of two Agave fructans against the Giardia virulence factor arginine deiminase”

18:00-18:30 **Enrique A. Sanhueza-Carrera**, INP, México

“Cellular immunomodulation exerted by agave fructans and probiotic exopolysaccharides through the NF- κ B/AP1 pathway”

Tuesday, November 12, 16:30-18:30 h **ROOM MERIDA**

Symposium 9 MEMBRANE DYNAMICS

Chairperson: **Ruey-Hwa Chen**, Academia Sinica, Taiwan

16:30-17:00 **Ruey-Hwa Chen**, Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan

“Bro1 proteins govern multivesicular body fate switch to regulate exosome secretion and cancer progression”

17:00-17:30 **Yu-Chun Lin**, Institute of Molecular Medicine, National Tsing Hua University, HsinChu, Taiwan

“Precise control of microtubule structure and intracellular trafficking in living cells and behaving animals”

17:30-18:00 Fei-Yang Tzou, Cheng-Li Hong, Kai-Hung Chen, John P. Vaughen, Wan-Syuan Lin, Chia-Heng Hsu, Yi Hsiao, Shu-Yi Huang, **Chih-Chiang Chan***
Graduate Institute of Physiology, National Taiwan University, Taiwan

“A genetic platform for functional profiling and visualization of the sphingolipid metabolic network”

18:00-18:30 **Ya-Wen Liu**, Institute of Molecular Medicine, National Taiwan University
“Roles of cardiolipin conversion in mitochondrial dynamics and quality control”

Tuesday November 12, 16:30-18:30 h **ROOM QUERETARO**

Symposium 10 PLURIPOTENT STEM CELLS: GENETIC, MANIPULATION, DIRECTED DIFFERENTIATION AND ORGANIDS

Chairperson: **Iván Velasco**, UNAM, Mexico

16:30-17:30 Jonathan Bayerl¹, Bryan Pavlovic², Julia Bernard^{1,3}, Varsha Desai⁵, Neha Saxena⁵, Melissa Holmes⁴, Julia Brunner⁶, Lydia Finley⁶, Alex Pollen², Siddharth Dey⁵, and **Diana J. Laird**^{1,2}, ¹Department of ObGyn and Eli and Edythe Broad Center for Regeneration Medicine, University of California, San Francisco (UCSF); ²Weill Institute for Neurosciences and Eli and Edythe Broad Center for Regeneration Medicine, University of California, San Francisco (UCSF); ³Bakar Aging Research Institute (BARI), University of California, San Francisco (UCSF); ⁴Department of Psychology, University of Toronto, Mississauga, Toronto; ⁵Department of Chemical

Engineering, University of California, Santa Barbara; 6Cell Biology Program, Memorial Sloan Kettering Cancer Center, New York, USA.

“States of longevity in the eusocial mammal, the Naked mole-rat”

17:30-18:30 **Iván Velasco**, César Meléndez-Ramírez, Xóchitl Flores Ponce, Fernando Becerra-Vélez, Juan Jair Santillán-Cigales, Adolfo López-Ornelas, Enrique Estudillo, Itzel Escobedo-Avila, Instituto de Fisiología Celular Neurociencias, Universidad Nacional Autónoma de México. Laboratorio de Reprogramación Celular en el Instituto Nacional de Neurología y Neurocirugía, Mexico.

“Neuronal differentiation of pluripotent stem cells in monolayer and organoids”

WEDNESDAY

Plenary II

Wednesday, November 13, 9:00-10:00 h

ROOM CUNCUN

Marco Igor Valencia-Sánchez



NYU Grossman School of Medicine, NY, USA
/ Instituto de Fisiología Celular UNAM, Mexico City, Mexico

“Structural basis of the read-write and erase mechanisms of histone H2AK119 monoubiquitination by Polycomb Repressive Complexes”

Wednesday, November 13, 10:30-12:30 **ROOM CUNCUN**

Symposium 11 **MEMBRANE AND ATPases**

Chairperson: **Rubén G. Contreras**, CINVESTAV, Mexico

10:30-11:00 **Leandro Augusto Barbosa**¹, Sayonarah Carvalho Rocha¹, José Augusto FP Villar¹, Ruth Rincón-Heredia², Rubén G. Contreras², 1- Universidade Federal de São João del-Rei, Brazil; 2- CINVESTAV, Mexico.

“Effect of 21-gamma benzylidene digoxin (21-BD) on cell adhesion and cell migration”

11:00-11:30 **Liora Shoshani**, Depto de Fisiología, Biofísica y Neurociencias, CINVESTAV, Zacatenco, Mexico

“New insights on cell-cell adhesion mediated by AMOG/b2 subunit of Na,K-ATPase”

11:30-12:00 Gladis Sánchez¹, Shameem Sultana Syeda², Narsihmulu Cheryala², Jeff McDermott¹, Henry Wong², Gunda I. Georg², and **Gustavo Blanco¹**
1Department of Cell Biology and Physiology, University of Kansas Medical Center, Kansas City, Kansas, USA. 2Department of Medicinal Chemistry, College of Pharmacy, University of Minnesota, Minneapolis, Minnesota, USA.

“The testis specific Na,K-ATPase; a “pump” specifically dedicated to sperm function”

12:00-12:30 **Rubén G. Contreras**, Catalina Flores-Maldonado, Jessica Campos-Blázquez, José Bonilla, Karen Michelle Delgado Minjares, Marcelino Cereijido, Aida Castillo, Department of Physiology, Biophysics and Neurosciences, Center for Research and Advanced Studies (Cinvestav), México City, México

“Na⁺/K⁺-ATPase: a unique multifunctional protein, serving as a sodium pump, an adhesion molecule, and a signaling receptor, crucial in controlling cell adhesion”

Wednesday, November 13, 10:30-12:30 h **ROOM QUERETARO**

Symposium 12 TISSUE ENGINEERING

Chairperson: **María Cristina Velasquillo**, Instituto Nacional de Rehabilitación Luis Guillermo Ibarra Ibarra (INR), Mexico

10:30-11:00 **Rosario Ortíz Hernández**. Electron Microscopy, Facultad de Ciencias, UNAM, Mexico

“Tissular Biology and Tissue Engineering”

11:00-11:30 **Rosa Helena Bustos Cruz** Universidad De La Sabana – Chía, Cundinamarca. Research in nanotechnology applied in human health, Colombia

“Application of nanotechnology in biotechnology”

11:30-12:00 **Araida Hidalgo-Bastida**, Department of Life Sc, Manchester Metropolitan University, UK

“Biomaterials for regenerative Medicine”

12:00-12:30 **María Cristina Velasquillo** Martínez, Tissue Engineering, Cell Therapy and Regenerative Medicine Unit, Instituto Nacional de Rehabilitación “Luis Guillermo Ibarra Ibarra”, Facultad de Ciencias, UNAM, Mexico

“Neocartilage by tissue engineering. Potential applications for auricular reconstruction”

Wednesday, November 13, 16:30-18:30 h **ROOM MERIDA**

Symposium 13 SPECIAL CELL BIOLOGY SYMPOSIUM: STUDENTS AND POSDOCS

Chairperson: **Marlene Benchimol**, CENABIO - Centro Nacional de Biología Estrutural e Bioimagem, Universidade Federal do Rio de Janeiro Brazil and UNIGRANRIO- Universidade da Grande Rio, Rio de Janeiro, Brasil

16:30-16:45 **João Augusto Diniz Moura**¹, Carlos Gabriel Coutinho da Silva¹, Vinícius Mengal²; Sonia Alves Gouvea^{1, 2}. ¹Postgraduate Program in Biotechnology – UFES, Vitória, Espírito Santo, Brazil; ²Postgraduate Program in Physiological Sciences - UFES. Vitória, Espírito Santo, Brazil

“Analysis of oxidative stress in MCF-7 cells treated with L-arginine”

16:45-17:00 **Estefanía Morales Ruiz**, Islas-Flores Tania, Villanueva Marco A. Unidad Académica de Sistemas Arrecifales, ICML-UNAM, Puerto Morelos, Quintana Roo, México.

“The Role of SBiP1 in Protein Synthesis and Nitrogen Metabolism in Symbiodinium microadriaticum”

17:00-17:15 **Griselda Ávila-Soria** 1,2, 1 Department of Biochemistry and Molecular Biology, School of Pharmacy and Molecular Sciences, James Cook University, Townsville, Qld 4814, Australia. 2 Anáhuac University, Campus Cancún, 77565, México.

“Nematocyst Venom Components of Box Jellyfish Malo kingi: Molecular Characterization, Structural in silico Analysis and Their Potential Cellular Targets”

17:15-17:30 **Melisa Karina Chacón Lázaro**, Dora Angélica Silva Olivares¹ y Abigail Betanzos Fernández¹, ¹Department of Infectomics and Molecular Pathogenesis, Center for Research and Advanced Studies (CINVESTAV) of the National Polytechnic Institute. IPN 2508 Avenue, San Pedro Zacatenco, 07360 Mexico City, Mexico.

“Association between Helicobacter pylori infection and diabetes type 2 in a murine model”

17:30-17:45 **Normanda Souza-Melo**, Giovanna Henriques de Souza, Wanderley de Souza, Laboratório de Ultraestrutura Celular Hertha Meyer, Instituto de Biofísica Carlos Chagas. Rio de Janeiro. Brazil.

“The Role of the Flagellar Adhesion Zone in Trypanosoma cruzi Infectivity: New Insights from TcFLA-1BP and TcGP72 Knockouts”

17:45-18:00 **Miriam Guadalupe Mateo Cruz**, Rossana Arroyo, Department of Infectious Disease and Molecular Pathogenesis. The Center for Research and Advanced Studies of the National Polytechnic Institute. Av. IPN 2508, Mexico City, CDMX, CP 07360, Mexico.

“Cysteine protease CP A4: study of its participation as autophagin in the autophagic process of Trichomonas vaginalis”

18:00-18:15 **Lizbeth Sánchez Ayala**, Rossana Arroyo, Department of Infectomics and Molecular Pathogenesis, Center for Research and Advanced Studies (Cinvestav), Av. IPN 2508, 07360, CDMX, Mexico.

“Trichomonas vaginalis aspartic proteinase (Tv-AP): an analysis of the protein expression, localization and enzymatic activity in different trichomonad isolates and its regulation by iron”

18:15-18:30 **Oscar Said Quiroz-Zerecero**^{1,2,3}, Ingrid Augusto^{2,3}, Reyna Lara-Martínez¹, Claudia Geraldine León-Ramírez⁴, Maria de Lourdes Segura-Valdez¹, Jose

Ruiz-Herrera⁴, Kildare Miranda^{2,3} Luis Felipe Jiménez-García ^{1*}, 1 Departamento de Biología Celular, Facultad de Ciencias, UNAM, Universidad Nacional Autónoma de México, Circuito de la Investigación Científica, C.U., 04510, Mexico City, Mexico; 2 Centro Nacional de Biología Estructural e Bioimagem, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil; 3 Laboratório de Ultraestrutura Celular Hertha Meyer, Centro de Pesquisa em Medicina de Precisão, Instituto de Biofísica, Carlos Chagas Filho, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil; 4 Departamento de Ingeniería Genética, Unidad Irapuato, Centro de Investigación Y de Estudios Avanzados del Instituto Politécnico Nacional, Km 9.6, Libramiento Norte, Carretera Irapuato-León, 36821, Irapuato, Guanajuato, México.

*“Three-dimensional reconstruction and cytochemical analysis of the nucleolus in the *Ustilago maydis* fungus”*

THURSDAY

Plenary III

Thursday, November 14, 9:00-10:00 h

ROOM CANCUN

Noni Franklin-Tong



University of Birmingham (UB), UK

*“Recognition of “self”: Uncovering new components that regulate *Papaver* self-incompatibility using a “poppidopsis” SI-PCD model system”*

Thursday, November 14, 10:30-12:30 h **ROOM CANCUN**

Symposium 14 CELL AGING

Chairpersons: **Mauricio Rojas**, Ohio State University, USA

Annie Pardo, UNAM México

10:30 **Mauricio Rojas**, Division of Pulmonary, Critical Care and Sleep Medicine, The Ohio State University, Columbus, Ohio, USA

“Introduction”

10:40- 11:00 **Alexander de Luna**, Centro de Investigación sobre el Envejecimiento, Cinvestav, Mexico

“Towards a systems-level understanding of cellular aging in yeast”

11:00-11:20 **Ya-Hui Chi**, Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Taiwan

“Linking Nuclear Envelope Dysfunction to Cellular Senescence”

11:20-11:45 **Ana Mora**, Division of Pulmonary, Critical Care and Sleep Medicine, The Ohio State University, Columbus, Ohio, USA

“Mitochondrial Dysfunction at the Crossroad of Aging and Lung Fibrosis”

11:45-12:05 **Susana Castro-Obregón**, Departamento de Neurodesarrollo y Fisiología, Instituto de Fisiología Celular, UNAM. Circuito Escolar SN, Ciudad Universitaria, Coyoacán 04510. CDMX. México.

“Mechanisms of neuronal senescence”

12:05–12:30 **Annie Pardo**, Facultad de Ciencias, Universidad Nacional Autónoma de México, Mexico

“Fibroaging a dismissed player regulated by extracellular matrix”

Thursday, November 14, 10:30-12:30 h **ROOM MERIDA**

Symposium 15 CELL BIOLOGY OF PLANTS

Chairperson: **Javier Andrés Juárez-Díaz**, UNAM, México

10:30-10:47 **Berenice García Ponce de León**, Instituto de Ecología, UNAM, Mexico

“XAANTAL1 and 2 in flowering transition and meristems maintenance”

10:47-11:04 **Kalpna Nanjareddy**, ENES-León, UNAM, Mexico

“Unlocking symbiosis: How SnRK1 regulates P. vulgaris partnerships”

11:04-11:21 **Roberto Ruiz Medrano**, CINVESTAV-IPN Unidad Zacatenco, Ciudad de México

“Long distance transport of RNA in plants”

11:21-11:38 **Arihel Hernández Muñoz**, Instituto de Biotecnología, UNAM, Mexico

“Marchantia polymorpha GOLDEN2-LIKE transcriptional factor is a key protein for chloroplast differentiation and plant vegetative development”

11:38-11:55 **Javier Andrés Juárez Díaz***, Andre Zaragoza Gomez, Felipe Cruz García, James Gonzalez, Víctor Hugo Anaya Muñoz, Emilio García Caffarel, Yuridia Cruz Zamora, *Facultad de Ciencias, UNAM, Mexico.

“Beyond the classical pathway: Understanding unconventional protein secretion in plant cells”

11:55-12:12 **Felipe Cruz García**, Facultad de Química, UNAM, Mexico

“Cellular insights into the S-RNase-based self-incompatibility system”

12:12-12:30 **Matt Joens**, Thermo Fisher Scientific, USA.

“Electron Microscopy and the Frontiers of Plant Research”

Thursday, November 14, 16:30-18:30 h **ROOM CANCUN**

Symposium 16 INNOVATIONS IN BIOTECHNOLOGY: CELLS AND ORGANS ON CHIP

Chairperson: **Tatiana Fiordeliso**, UNAM, Mexico

16:30-16:55 **Pierre Henry Puech**, Laboratory of adhesion and inflammation, LUMINI, Marseille, France

“Some aspects in t lymphocytes mechanobiology”

16:55-17:20 **Laurent Limozin**, Laboratory of adhesion and inflammation, LUMINI, Marseille, France

“Studying dynamic cell interactions in vitro with Celldetective”

17:20-17:45 **Iván Nicolás Pérez Osorio**, Edda Lydia Sciutto Conde, Universidad Nacional Autónoma de México, Instituto de Investigaciones Biomédicas, Departamento de Inmunología, UNAM, México

“Blood-brain barrier-on-a-chip: A novel tool to study neuroinflammation”

17:45-18:10 **Yair Romero López**, UNAM, Mexico

“Lung regeneration via 3D cultures of progenitor cells”

18:10-18:30 **Diana Velázquez**, UNAM, Mexico

“Characterization of transmigration and effect of NK cell geometry”

Thursday, November 14, 16:30-18:30 h **ROOM MERIDA**

Symposium 17 ADVANCES IN CRYO-ELECTRON MICROSCOPY

Chairperson: **Wanderley de Souza**, Rio de Janeiro, Brazil

16:30-17:00 **Ming-Daw Tsai**, Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan

“Cryo-EM in enzymology and conformational dynamics”

17:00-17:30 Jitendra Maharana, Li-An Tsai, Chun-Hsiung Wang, Yi-Ting Liao, Lourriel S. Macale, Ronelito J. Perez, Melvin C. Shen, Sunil Tewary, Todd L. Lowary, **Meng-Chiao Ho** Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan

“Cryo-EM and Cryo-ET in visualizing host interaction and genome ejection mechanism of mycobacteriophage”

17:30-18:00 **Jaap Brink**, TEM Product Manager for Life Sciences, Jeol

“High throughput, high resolution imaging using the JEOL CRYO ARM platform”

18:00-18:30 **Matt Joens**, Thermo Fisher Scientific, USA

“Cellular machinery revealed by cryo electron tomography and cryo spin mill tomography”

Thursday, November 14, 16:30-18:30 **ROOM QUERETARO**

Symposium 18 CELL BIOLOGY EDUCATION

Chairpersons: **María de Lourdes Segura-Valdez**, UNAM, Mexico

Luis F. Jiménez-García, UNAM, Mexico

16:30-17:00 **Marco Antonio Carballo-Ontiveros (1)**, Marcos Nahmad (2), América Nitxin Castañeda Sortibrán (1), (1) Department of Cell Biology, Facultad de Ciencias, Universidad Nacional Autónoma de México (UNAM), Mexico, (2) Department of Physiology, Biophysics and Neurosciences, Centro de Investigación y Estudios Avanzados del IPN (Cinvestav-IPN), Mexico

"Enhancing Critical Thinking in Undergraduate Biology Students: The Effect of Gradual Active Learning Strategies"

17:00-17:30 **Parsifal Islas (1)**, Ruy Echavarría (2), Martha Rodriguez (2), Martha Romero (2), Alberto Partida (2), Lourdes Segura-Valdez (2), Yudy Tibaduiza (2), Adolfo Martinez Palomo (1), Luis F. Jiménez-García (2), UNAM, CINVESTAV, Mexico

"Leeuwenhoek and the microscopy tradition in Mexico: novel approaches and discoveries in the history of microscopy in the Americas for innovation of cell biology education"

POSTER SESSION I

Tuesday, November 12, 15:00-16:30 h **ROOM CANCUN (POSTERS AREA)**

Poster no. 1

Extranucleolar ribonucleoproteic particles ultrastructure in members of the Pinophyta group

Agredano-Moreno L.T.1, Segura-Valdez M. de L.1, Muñoz-Díaz de León M. A.2, Jiménez-García L.F.1

1Department of Cell Biology and 2Department of Comparative Biology, Faculty of Sciences, UNAM, México

Poster no. 2

Nrf2 transcriptional activation after exposure to inorganic arsenic in hepatocellular carcinoma cells

Julio A. Alcocer-Zuñiga(1); Luz del Carmen Sánchez-Peña(2); Emilio J. Córdova(3) and Araceli Hernández-Zavala(1).

(1) National Institute Polytechnique, Mexico City, Mexico. (2) Center of Studies and Advance Research, Mexico City, Mexico. (3) National Institute of Genomic Medicine, Mexico City, Mexico.

Poster no. 3

Functional Characterization of Sulfate Transporter 3 in Phaseolus vulgaris During Symbiosis with Rhizobium

Manoj-Kumar Arthikala, Nataly Palomino, Miguel Lara, Kalpana Nanjareddy Ciencias Agrogenómicas, Escuela Nacional de Estudios Superiores Unidad León, Universidad Nacional Autónoma de México (UNAM), León 37689, Mexico.

Poster no. 4

Different cell death pathways induced by Quercetin and Quercetagenin in cervical cancer cells

Bahena-Salmerón D., Sánchez-Sánchez L., López-Muñoz H., Alvarado-Sansininea J., Torres- Ramírez N., Echeverría O.M., Muñoz-Velasco I., Juárez-Chavero S., Escobar M.L.

Facultad de Ciencias, UNAM.

Poster no. 5

Study of the correlation between stress granules and mitochondria in *C. elegans*

Bernal-Palacios A.E., Campos-Martínez G., Salinas L.S. and Navarro, R.E.

Departamento de Biología Celular y Desarrollo.

Instituto de Fisiología Celular, Universidad Nacional Autónoma de México. Ciudad de México, México.

Poster no. 6

Genetic alterations and expression of factors that regulate mitochondrial genes in breast cancer

Susana Brito Molina, Karla G. Calderón González Juan Pedro Luna-Arias

Cell Biology Department, Center for Research and Advanced Studies of the National Polytechnic Institute (Cinvestav).

Poster no. 7

Analysis of Pulmonary Surfactant Protein C during Aging

Uriel Camacho-Silverio, Tania Valdivia-Herrera, Mariana Río de la Loza, David A. Lizcano, Remedios Ramírez, Fernanda Toscano-Márquez, Moisés Selman, Annie Pardo, Yair Romero.

Facultad de Ciencias, UNAM, Mexico

Poster no. 8

SIAH2 is potentially related to HIF- α increase in human and rat experimental renal cell carcinoma cell lines

Copado-Romero Jorge Luis, Solano-Becerra José Dolores, Ibarra-Rubio María Elena*
Lab F-225

Department of Biology, Faculty of Chemistry, UNAM. C.U. Mexico City. 04510, Phone +52(55)56223869. jlcopado24@gmail.com, meir@unam.mx*

Poster no. 9

Viridicatin isolated from the antarctic fungus *Penicillium* sp. shows neuroprotective effect on HMC-3 microglia cells and prevents HO-1 traslocation to the nucleus under H₂O₂ oxidative stress

Nicole Cortez, y Cristian Paz

Laboratory of Natural Products & Drug Discovery, Universidad de La Frontera, Center CEBIM, Temuco, Chile.

Poster no. 10

Three-dimensional analysis of interchromatin granules in the reptile *Sceloporous torquatus*

Cruz-Gómez S.J., Acosta-Cárdenas J., Mendoza-von der Borch A. P., González-Ruiz K.D., Labastida-Negrete R.E., Martínez-Flores K.G., Jiménez-García, L.F., Segura-Valdez M.L.

Cell Nanobiology Laboratory, Department of Cell Biology, Faculty of Sciences, UNAM, Mexico

Poster no. 11

Evaluation of fibrillar components of extracellular matrix in the vaginal wall in women with pelvic organ prolapse

Lizandra Maia de Sousa (a), Luana Amorim Hassun (b), Juliana do Carmo Fazzolari (b), Luiz Gustavo Oliveira Brito (b), Sílvio Roberto Consonni (a)

a Department of Biochemistry and Tissue Biology, Institute of Biology (IB), State University of Campinas (Unicamp), Campinas, Brazil b Department of Tocogynecology, School of Medical Sciences, State University of Campinas (Unicamp), Campinas, Brazil.

Poster no. 12

NOX-mediated Downregulation of VEGF function by Omega-3-fatty acid in aortic smooth muscle cell cultures treated with High Glucose and Palmitic acid

Gursev Dhaunsi and Maira Alsaeed

Department of Pediatrics, College of Medicine, Kuwait University, Jabriya, Kuwait.

Poster no. 13

Annexin A1 Deficiency Exacerbates Liver Pathology in a Type 1 Diabetes Mouse Model: Insights into Hepatocyte Protection Mechanisms

Diego Dias dos Santos¹; Rafael André da Silva²; Antônio Thiago Pereira Campos³; Luiz Phillipe de Souza-Ferreira¹; Carlos Lenz-César³; Cristiane Damas Gil^{1,2*}.

¹ Structural and Functional Biology Graduate Program, Universidade Federal de São Paulo (UNIFESP), São Paulo, SP 04023-900, Brazil. ² Biosciences Graduate Program, Institute of Biosciences, Letters and Exact Sciences, Universidade Estadual Paulista (UNESP), São José do Rio Preto, SP 15054-000, Brazil. ³ National Institute of Photonic Applied to Cell Biology, Universidade Estadual de Campinas (UNICAMP), Campinas, SP 13083-865, Brazil. *Corresponding Author: Department of Morphology and

Genetics, Universidade Federal de São Paulo, Rua Botucatu 740, Edifício Lemos Torres - 3º andar, São Paulo, SP 04023-900, Brazil.

Poster no. 14

Morphological aspects and immunolocalization of hormone receptors in the uterine cervix of primiparous and multiparous senescent mice during pregnancy and postpartum

Rafaela Dias Neves a,b, Lizandra Maia de Sousa b, Sílvia Roberto Consonni b
a School of Medical Sciences (FCM), State University of Campinas (Unicamp), Campinas, Brazil; b Department of Biochemistry and Tissue Biology, Institute of Biology (IB), State University of Campinas (Unicamp), Campinas, Brazil.

Poster no. 15

Differentiation into osteoblasts of Wharton's Gelatin-derived Mesenchymal cells on gelatin-hyaluronic acid scaffolds loaded with microspheres containing BMP-2 and VEGF

Gamero Buendía S.1, Castell Rodríguez A.1, Piñón Zarate G.1, Ángeles Castellanos A.2, Herrera Enríquez M.A.1, Hernández Téllez B.1, Aguilar Sandoval M.1, Jarquín Yáñez K.1. Laboratorio de Inmunoterapia e Ingeniería de Tejidos, Departamento de Biología Celular y Tisular1, Departamento de Anatomía2, Facultad de Medicina, Universidad Nacional Autónoma de México, México, CDMX, Mexico.

Poster no. 16

Ultrastructural Stereopairs analysis of the archaea *Haloferax volcanii*

Raziel Eduardo Garza-Melchor*, Paulina Mendoza von der Borch, Sarai de Jesús Cruz-Gómez, Segura Valdez M.L., Jiménez-García L.F.*
Cell Nanobiology Laboratory, Department of Cell Biology, Faculty of Sciences, UNAM, México
Posgrado en Ciencias Biológicas, UNAM, México

Poster no. 17

Ultrastructure of the nucleolus of *Taxodium mucronatum*

Karla Daniela González-Ruiz, Saraí de Jesús Cruz-Gómez, Ana Paulina Mendoza von der Borch, María de Lourdes Segura-Valdez, Luis Felipe Jiménez-García
Facultad de Ciencias, Universidad Nacional Autónoma de México.

Poster no. 18

Development of a murine organoid model for the study of tuft cells during the colonic regenerative process

Ma. Gabriela Guaita-Gavilanes1*, Karla Acosta-Virgen1, Jonatan Castillo-Millán1, Adolfo Martínez-Palomo1, Martha Espinosa-Cantellano1

1Department of Infectomics and Molecular Pathogenesis, Center for Research and Advanced Studies, Mexico City, Mexico

Poster no. 19

Mutational analysis of genes related to the antibiotic resistance in different *Helicobacter pylori* strains

Dulce Alheli Guzmán González¹, Luis Esaú López Jácome², Angélica Silva Olivares¹, Abigail Betanzos¹, Melisa Karina Chacón Lázaro¹

¹Department of Infectomics and Molecular Pathogenesis, Center for Research and Advanced Studies of the National Polytechnic Institute, Av Politécnico Nacional 2508, San Pedro Zacatenco, Gustavo A. Madero, C.P. 07360, CDMX ²Clinical Microbiology Laboratory, Division of Infectology, National Institute of Rehabilitation, Calz. México-Xochimilco 289, Coapa, delegación Tlalpan, C.P. 14389, CDMX, Mexico.

Poster no. 20

Analysis of TFIID Transcriptional Complex Components and Their Contribution to Heat Shock Response in Breast Cancer Cells

Edgar Hernández-Martínez; María Luisa Labra-Barrios; Rodolfo Moreno-Castillo; Iván de Jesús Salgado-Ramos; Juan Pedro Luna-Arias

Department of Cell Biology, Center for Research and Advanced Studies of the National Polytechnic Institute (Cinvestav-IPN), Av. I.P.N. 2508, Col. San Pedro Zacatenco, Alcaldía Gustavo A. Madero, C.P. 07360 Mexico City, Mexico.

Poster no. 21

Role of Gp32 protein in the induction of H66 prophage to the lytic cycle

1Emanuel Mejía-Jiménez 1Jair Martínez-Martínez & 1Gabriel Guarneros

¹Department of Genetics and Molecular Biology. Address: Av. Instituto Politécnico Nacional 2508, San Pedro Zacatenco, Gustavo A. Madero, 07360 Mexico City, CDMX, Mexico.

Poster no. 22

Identification of Integrins associated with metastasis in breast cancer cell extracellular vesicles by flow cytometry

Olivo-Escalante Karen Donají (1), López-Pacheco Cynthia Paola (1,2), Vergara-Bahena Irene (1), Herrera Juan Sebastian (1), Ortega-Soto Enrique (1) and Soldevila Gloria (1,2).

1. Department of Immunology, Biomedical Research Institute, UNAM, Mexico City, Mexico. 2. National Laboratory of Flow Cytometry, Biomedical Research Institute, UNAM, Mexico City, Mexico.

Poster no. 23

SYCP3 yields accumulations in primary spermatocytes during the first spermatogenic wave in murine models (*Rattus norvegicus* and *Mus musculus*)

Ortiz-Hernández Rosario 1, Pacheco-Gutierrez Sebastian 1, Guzmán-Vargas Luis Pablo 1, Torres-Ramírez Nayeli 1, Espinoza-Simón Emilio 2, Romero-López Yair 3, Sánchez-Mejía Sandra Nicole 1, Echeverría-Martínez Olga M 1

1.- Departamento de Biología Celular, UNAM, CDMX, México. 2.- Departamento de Bioquímica y Biología Estructural, Instituto de Fisiología Celular, UNAM, CDMX, México.

POSTER SESSION II

Wednesday, November 13, 15:00-16:30 h **ROOM CANCUN (POSTERS AREA)**

Poster no. 24

Cross-Neutralizing Anti-Dengue 2 IgG Antibodies from Patients and BALB/c Mice against Chikungunya Virus

Araceli Posadas-Mondragón1; José A. Santiago-Cruz1; Angélica Pérez-Juárez1; Norma E. Herrera-González1; Yessica S. Tapia-Guerrero2; Jessamyn R. Crespo-Sandoval1; Rocio Jiménez-Jiménez1; Nadia M. Vargas-Freyre1; J. Leopoldo Aguilar-Faisal1.

1.-Instituto Politécnico Nacional, Ciudad de México, México; 2.-Instituto Nacional de Rehabilitación, Ciudad de México, México.

Poster no. 25

Evaluation of Oxidative Stress and Therapeutic Resistance in MCF-7 cells Treated with L-arginine and Doxorubicin

Lorena Souza Rittberg Mauricio¹, Carlos Gabriel Coutinho da Silva¹, Vinícius Mengal²; Sonia Alves Gouvea^{1, 2}, ¹Postgraduate Program in Biotechnology – UFES, Vitória, Postgraduate Program in Physiological Sciences - UFES. Vitória, Espírito Santo, Brazil

Poster no. 26

Identification of peroxisomal proteins (Peroxin 4 and ACSL4) in *Entamoeba histolytica*

Rivera Reséndiz Miguel Ángel, Acosta-Virgen Karla, Lizbeth Salazar-Villatoro, Martínez-Palomo Adolfo, Espinosa-Cantellano Martha

Department of Infectomics and Molecular Pathogenesis, Center for Research and Advanced Studies, Mexico.

Poster no. 27

Evidence that the EPO receptor is necessary for the cellular protective activity of EPOrh in Neuro-2a cells exposed to damage by oxygen and glucose deprivation

Rodríguez Jaramillo Karen, Beas Zárate Carlos, Rivera Cervantes Martha Catalina
Licenciatura en Biología, estudiante de Doctorado en Ciencias en Biología Molecular
en Medicina, Universidad de Guadalajara, Mexico

Poster no. 28

Analysis of virulence factors in extracellular vesicles secreted by *Naegleria fowleri*

Rodríguez-Mera Itzel Berenice, Carrasco-Yépez María Maricela, Rojas-Hernández Saúl.

Universidad Nacional Autónoma de México, FES Iztacala, Laboratorio de Microbiología Ambiental, México.

Poster no. 29

Autophagy Activation in a Mouse Model of Hypersensitivity Pneumonitis induced by *Saccharopolyspora rectivirgula* exposure

Andrea Montserrat Sánchez Barajas, Miguel Gaxiola, Annie Pardo Cemo, Moises Selman Lama, Sandra Cabrera Benítez.

Laboratorio de Biopatología Pulmonar Ciencias-INER, Facultad de Ciencias, UNAM, Circuito interior S/N, Ciudad Universitaria, Coyoacán, 04510 CDMX.

Poster no. 30

Glycine effects on orphan receptors and APP expression in Wistar rat neonatal glial cells culture

Moisés Sánchez Coria

Escuela Superior de Medicina, IPN, Mexico

Poster no. 31

Antibody neutralizing capacity of anti-Chikungunya IgG against Dengue Virus type 2 from patients and BALB/c mice

José Angel Santiago-Cruz¹; J. Leopoldo Aguilar Faisal¹; Angelica Pérez Juárez¹; Norma E. Herrera González¹; Yessica S. Tapia Guerrero²; Paola Juárez Trujillo¹; Jessamyn R. Crespo Sandoval¹; Rocio Jiménez Jiménez¹; Araceli Posadas-Mondragón¹

1.-Instituto Politécnico Nacional, Ciudad de México, México; 2.-Instituto Nacional de Rehabilitación, Ciudad de México, México

Poster no. 32

Microscopic evidence of contamination in hepatocytes of *Anolis porcatius* (SQUAMATA: POLYCHROTIDAE)

Sanz-Ochotorena A.C¹, I. Estrada Acosta¹, Y. Rodríguez-Gómez¹, R. Lara Martínez², V. Falcón-Cama³, S. Tehuacanero-Cuapa⁴, ML. Segura-Valdéz² and LF. Jiménez-García²

1Faculty of Biology. University of Havana. 2Faculty of sciences. National Autonomous University of Mexico. 3Center for Genetic Engineering and Biotechnology Havana. 4Institute of Physics, National Autonomous University of Mexico

Poster no. 33

Scanning electron microscopy of the undulating membrane in spermatozoa of amphibians from Cuba

Sanz-Ochotorena A.C1, Y. Rodríguez-Gómez¹, R. Lara Martínez², ML. Segura-Valdéz² and LF. Jiménez-García²;

¹Faculty of Biology. University of Havana. ²Faculty of Sciences. National Autonomous University of Mexico.

Poster no. 34

Parthenogenetic eggs of *Bombyx mori* L. (LEPIDOPTERA, BOMBYCIDAE)

Sanz-Ochotorena A.C1, A. Ruiz Bárcenas², J. Pita Diaz² D. Pérez Almazan², ML. Segura-Valdéz³ and L.F. Jiménez-García³

¹Faculty of Biology. University of Havana. ²Center for Research in Protein Plants and Bionatural Products. Havana City ³Faculty of Sciences National Autonomous University of Mexico.

Poster no. 35

Correlation between *Helicobacter pylori* Infection with Metabolic Syndrome in a population of Mexico City

Mizel Alonso Saucedo Jaime

Centro de Investigación y Estudios Avanzados (CINVESTAV), IPN, Mexico

Poster no. 36

An up-close look at the larval development of red harvester ants

Natalia Terpan Arenas¹, Ian A. E. Butler¹, Alberto Carlos Martínez², Ingrid A. Fetter Pruneda¹

¹ AntLab, Instituto de Investigaciones Biomédicas, UNAM. ² Laboratorio de Microscopia electrónica. Instituto Nacional de Rehabilitación, Mexico.

Poster no. 37

Mitochondrial dysfunction in ovary of offspring of mice with polycystic ovary syndrome

Nayeli Torres-Ramírez, Paola del Valle, Carlos García, Emilio Espinoza-Simón, David Barrera, James González, Silvia Juárez, Luisa Escobar, Olga Echeverría
Facultad de Ciencias, UNAM, Mexico.

Poster no. 38

Morphological and metabolic characteristics in the pancreas and liver of male offspring of a polycystic ovary syndrome mouse model

Nayeli Torres-Ramírez¹, Erick López-Cruz¹, Rosa López-Castillero¹, Emilio Espinoza-Simón², David Barrera³, Rosario Ortiz¹, Luisa Escobar¹, Olga Echeverría¹

¹Departamento de Biología Celular, UNAM, México; ²Departamento de Bioquímica y Biología Estructural, IFC, UNAM, México; ³Departamento de Biología de la Reproducción, INCMNSZ, México.

Poster no. 39

Aging related epigenetic derepression of LINE-1 retrotransposon in Idiopathic Pulmonary Fibrosis

Tania Valdivia-Herrera, Mariana Río de la Loza, Marco Espina-Ordoñez, Uriel Camacho-Silverio, Remedios Ramírez, Annie Pardo, Moisés Selman Lama, Yair Romero

Laboratorio de Biopatología Pulmonar Ciencias-INNER, Mexico

Poster no. 40

Characterization of the effect of white, red and blue LED light in the growth, photosynthesis and phycocyanin content in *Arthrospira maxima*

Perales Vela Hugo Virgilio; Salcedo Álvarez Martha Ofelia, Vega de Luna Félix, Gavia González Llará Carolina, Esquivel Saldaña Haide

Laboratorio de Bioquímica, Unidad de Morfología y Función. Facultad de Estudios Superiores Iztacala. UNAM, Mexico.