



**SOCIEDAD  
MEXICANA DE  
BIOQUÍMICA**



# SCIENTIFIC PROGRAM

**XXXIV Congreso Nacional de Bioquímica**  
October 20-25, 2024 | Mazatlán, Sinaloa

# ***SCIENTIFIC PROGRAM***

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XXXIV CONGRESO NACIONAL DE BIOQUÍMICA

Hour	Sunday 20	Hour	Monday 21	Tuesday 22
		8:00 - 8:15	Coffee	
		8:15 - 8:30	Setting up presentations	
		8:30 - 10:00	Plenary Symposia I Chair: Libia Vega Cinvestav Zacatenco	Plenary Symposia II Hispano – Mexicano Chair: Libia Vega Cinvestav Zacatenco
		10:00 - 11:00	Georgina Hernández CCG UNAM Plenary Lecture 2	Gyorgy Hajnoczky Thomas Jefferson University Plenary Lecture 4
		11:00 - 11:30	Coffee break	
		11:30 - 12:45	Oral Presentations 1,2,3 & simultaneous Technical Talks	Oral Presentations 4,5,6 & simultaneous Technical Talks
		12:45 - 13:45	Alberto Darszon IBT UNAM Plenary Lecture 3	Simultaneous Symposia: 4. Edges in mitochondrial knowledge Chair: Héctor Miranda 5. Insights into plant adaptation: from growth to resilience Chair: Patricia Coello 6. Biochemistry and molecular biology of bacteria Chair: Guadalupe Espin
		13:45 - 14:15	Flash talks 1	
12:15 - 14:15	Registration			
14:15 - 15:15	Lunch break	14:15 - 14:30	Lunch break	Group photo
		14:30 - 15:30		Lunch break
15:15 - 16:45	Registration	15:30 - 17:00	Simultaneous Symposia: 1. Neurobiology Chair: Susana Castro 2. Growth control and metabolism in fungi Chair: Alicia González 3. Advances in protein structure, function and evolution Chairs: Georgina Garza & Alejandro Fernández	Frances Arnold California Institute of Technology Plenary Lecture 5
				Flash talks 2
17:15 - 17:30	Opening Ceremony		Poster session 1 & Having coffee with... 17:00 - 18:00	Poster session 2 & Having coffee with... 17:00 - 18:00
17:30 - 18:15	Opening Lecture Enah Monserrat Fonseca Centro INAH	17:00 - 19:00	Georgina Hdz, Alberto Darszon, Susana Castro, Alicia González, Rafael Vázquez	Gyorgy Hajnoczky, Frances Arnold, Carlos Anerillas, Otto Geiger, Angélica Santana
18:15 - 18:30	Break			
18:30 - 19:30	Plenary Lecture 1 Maria Ávila LIIGH UNAM	19:00 - 20:00		Business session
20:00	Welcome cocktail			

Wednesday 23	Hour	Thursday 24	Friday 25
<i>Coffee</i>			
<i>Setting up presentations</i>			
<i>Plenary Symposia III</i> <b>Chair: Santiago Castillo</b> CCG UNAM	8:30 - 10:00	<i>Plenary Symposia IV</i> <b>Chair: Agustín Guerrero</b> Cinvestav Zacatenco	
<b>José Antonio Arias</b> Cinvestav Zacatenco <i>Plenary Lecture 6</i>	10:00 - 11:00	<b>Amira Klip</b> University of Toronto <i>Plenary Lecture 8</i>	
<i>Coffee break</i>	11:00 - 11:30	<i>Coffee break</i>	
<i>Oral Presentations 7,8,9</i> & simultaneous <i>Technical Talks</i>	11:30 - 12:45	<i>Oral Presentations 10,11,12</i>	
<b>Diego González Halphen</b> IFC UNAM <i>Plenary Lecture 7</i>	12:45 - 13:45	<b>Daisuke Kihara</b> Purdue University <i>Plenary Lecture 9</i>	
<i>Flash talks 3</i>	13:45 - 14:15	<i>Flash talks 4</i>	
<i>Group photo</i>	14:15 - 15:15	<i>Lunch break</i>	
<i>Lunch break</i>			
<i>Simultaneous Symposia:</i> 7. Ros in fungi, turtles and rats: janus favorite molecules <b>Chair: Alejandro de las Peñas</b> 8. Recent progress in signal transduction research <b>Chair: Angélica Rueda</b> 9. Mitochondria in health and disease <b>Chair: Gerardo García Rivas</b>	15:15 -17:15	<i>Poster session 4</i> & <i>Having coffee with...</i> 15:15 a 16:15 <b>Amira Klip,</b> <b>David Romero,</b> <b>Daisuke Kihara</b>	
<i>Poster session 3</i> & <i>Having coffee with...</i> 17:00 - 18:00 <b>Diego González,</b> <b>José A. Arias,</b> <b>Mina Königsberg,</b> <b>Sergio Grinstein,</b> <b>Andrés Opazo</b>	17:15 - 18:15	<b>Sergio Grinstein</b> University of Toronto <i>Closing Lecture</i>	
	18:15 - 18:45	<i>Closing ceremony</i>	
	18:45 - 20:00	<i>Free time</i>	
	20:00	<i>Dinner &amp; Dancing</i>	

## SUNDAY, OCTOBER 20

17:15 - 17:30	<b>Welcome Ceremony</b> (Mazatlán Room 2)
17:30 -18:15	<b>Cultural Talk</b> (Mazatlán Room 2) <b>Baja California Rock Art</b> Enah Montserrat Fonseca. Centro INAH Baja California. Chair: Agustín Guerrero. Cinvestav Zacatenco.
18:30-19:45	<b>Opening Lecture I</b> (Mazatlán Room 2) <b>The genetic history of Mexico seen through a Paleogenomics lens</b> María Ávila Arcos. Laboratorio Internacional de Investigación sobre el Genoma Humano, UNAM. Chair: Lourdes Girard. Centro de Ciencias Genómicas, UNAM.
20:00-22:00	<b>Welcome Cocktail</b> ( <i>Explanada Mantarraya, MIC</i> )
	<b>Oral &amp; Poster sessions</b> (Mazatlán International Center)

## MONDAY, OCTOBER 21

8:30-10:00	<b>Plenary Symposia I</b> (Mazatlán Room 2) <b>Impact of Nanotechnologies Applied to Human Health</b> Chair: Libia Vega Loyo, Cinvestav Zacatenco.
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**Bacterial growth inhibited by hydrophobic nano emulsions**  
Jesús Carlos Ruiz Suárez, Cinvestav Unidad Monterrey.

**Challenges and opportunities of nanobiotechnology in the development of next-generation vaccines**  
Francisca Villanueva Flores, CICATA IPN Unidad Morelos.

**Virus-based enzymatic nanoreactors for enzyme replacement therapy**  
Rafael Vázquez Duhalt, Centro de Nanociencias y Nanotecnología, UNAM.

<b>10:00-11:00</b>	<b>Plenary Lecture II</b> (Mazatlán Room 2)
	<b>The common bean (<i>Phaseolus vulgaris</i>)-<i>Rhizobium etli</i> N-fixing symbiosis: unraveling novel plant regulators through genetic/genomic approach</b> Georgina Hernández Delgado, Centro de Ciencias Genómicas, UNAM. Chair: Lourdes Girard, Centro de Ciencias Genómicas, UNAM.
<b>11:00-11:30</b>	<b>Coffee Break</b>
<b>11:30-12:45</b>	<b>Simultaneous oral Sessions 1, 2, 3</b>

**Session 1**  
(Mazatlán Room 1)  
Chair: Ruth Gutiérrez, Facultad de Medicina, UNAM.

**Joint microbiome in a spondyloarthritis murine model: exploration of GUT-JOINT axis**

Susana Aideé González Chávez, Universidad Autónoma de Chihuahua.

**Energetic impairment in cardiometabolic heart failure: from transcriptomics and mitochondrial complexome profiling to cardiomyocyte respiration**

Abraham Méndez Fernández, Institute for Obesity Research, Tecnológico de Monterrey.

**Restorative effects of (+)-epicatechin in a rodent model of aging induced muscle atrophy: underlying mechanisms**

Carlos Palma Flores. Escuela Superior de Medicina, IPN.

**Targeting Ornithine Decarboxylase for Cancer Therapy: Assessing Inhibitor Efficacy on *in vitro* assays**

Beatriz Irene Arroyo Sánchez, Cinvestav Zacatenco.

**Overview of circulating microRNAs and genomics variants in prediabetes patients presenting different clinical courses: search for novel informative molecules**

Sandra Romero Córdoba, Instituto de Investigaciones Biomédicas, UNAM.

**Session 2. Mazatlán Room 2**  
Chair: Gloria Soberón, Instituto de Investigaciones Biomédicas, UNAM.

***Trichoderma atroviride* small RNA1 targets the Arabidopsis PRIM2 gene to establish a mutualistic relationship**

Sergio Casas Flores, Instituto Potosino de Investigación Científica y Tecnológica A.C.



**Cell division and morphology changes caused by *cenR* overexpression affect the symbiotic nitrogen fixation in *R. etli* CFN42**

María M. Banda Hernández, Centro de Ciencias Genómicas, UNAM.

**The role of the regulatory protein PhbF in the control of accumulation of the biodegradable plastic polyhydroxybutyrate in the bacterium *Azotobacter vinelandii***

Thalía Barrientos Millán, Instituto de Biotecnología, UNAM.

**Linking Elevated Proteolysis with CpxR Regulatory Mechanisms in *Serratia marcescens* HU1848**

Karla Lizeth De Anda Mora, Universidad Autónoma de Nuevo León.

**Effect of Dengue virus serotype 2 (DENV2) on the Pregnane X Receptor (PXR) signaling pathway in mouse peritoneal macrophages**

Carlos Daniel Bautista Olivier, Cinvestav Zacatenco.

**Session 3. Mazatlán Room 3**

Chair: Jesús Alberto Olivares Reyes. Cinvestav

**Oligomeric regulation of cystathionine beta-synthase mediated hydrogen sulfide production modulates UPR induction**

Elias Nieto Zaragoza. Instituto de Fisiología Celular. UNAM

**Multivalent Dynamic Colocalization of Avian Influenza Polymerase and Nucleoprotein by Intrinsically Disordered ANP32A Reveals the Molecular Basis of Human Adaptation**

Aldo Román Camacho Zarco. Université Grenoble Alpes

**Molecular Handcraft of Chimeric Proteins**

José Arcadio Farías Rico. Centro de Ciencias Genómicas. UNAM

**Decoding the mechanism governing the structural stability of wheat germ agglutinin**

Enrique García Hernández. Instituto de Química. UNAM

**Biochemical study of MDM2 and Rb mRNA interaction**

Andrés Usiel Rodríguez Rodríguez. Universidad Autónoma de San Luis Potosí

<b>11:30-12:45</b>	<b>Technical Talks</b> <i>(Carnaval Room 1, 2)</i>
<b>Tools and Solutions for 3D Cell Culture</b> Sebastián Hernández. UNIPARTS	
<b>Quality Analysis Using the Agilent ProteoAnalyzer System and SDS-PAGE. A comparison of sizing and quantification performance</b> Daniel Favato. Genomics Field Application Scientist. Latin America. Agilent Technologies (Patrocinado por Química Valaner)	
<b>12:45-13:45</b>	<b>Plenary Lecture III</b> <i>(Mazatlán Room 2)</i>  <b>Channels of communication in sperm</b> Alberto Darszon, Instituto de Biotecnología, UNAM Chair: Lourdes Girard. Centro de Ciencias Genómicas, UNAM
<b>13:45-14:15</b>	<b>Flash Talks for poster advertising 1</b> <i>(Mazatlán Room 2)</i> Chair: Lourdes Girard. Centro de Ciencias Genómicas, UNAM

**FT1 Characterization and evaluation of the biological activity of the TA-PAsp polymer**

Ileana Castillo Tobías. Universidad Autónoma de Coahuila

**FT2 *In silico* analysis of the C8 clone and toxic activity of the ATP-dependent RNA helicase from the entomopathogenic bacterium *Serratia entomophila* Mor 4.1 in *Phyllophaga blanchardi* larvae (Coleoptera: Melolonthidae)**

Luz Areli Gorostieta Nava. Universidad Autónoma del Estado de Morelos

**FT3 Doing Bionanotechnology with dsDNA and CRISPR-dCas12a: Designing Linear and Branched Nanofibers**

Armando Hernández García. Instituto de Química. UNAM

**FT4 Mechanistic assessment of the biosynthesis of cyanobacterial secondary metabolites: Two cases**

José Alberto Martínez. Yereva Czech Academy of Sciences

**FT5 Characterization of recombinant modified trichocystatin TC-2**

Jaime Ortega López. Cinvestav Zacatenco

**FT6 Effect of prolactin and 17 $\beta$ -estradiol on the adhesion and intracellular persistence of *Staphylococcus aureus* in bovine mammary epithelial cells**

Gladys Romero Corona. Universidad Michoacana de San Nicolás de Hidalgo



**FT7 Immobilization of *thermomyces lanuginosus* lipase (TLL) via ionic-covalent interaction on heterofunctional glyoxyl-agarose supports for biodiesel production**

Cristian David Salcedo Cuarán. Universidad del Valle

**FT8 Characterization of DyP-type peroxidases and their use as biocatalysts in textile dyes decolorization**

Jesús Alberto Segovia Cruz. Instituto de Biotecnología. UNAM

**FT9 Genetic diversity and phenotypic variations in four native strains of *Bacillus* spp. biocontrol agents through pan-genome and BGC analysis**

Hilda Mabel Sosa Esquivel. Universidad Autónoma de Zacatecas "Francisco García Salinas"

**FT10 Physiological evaluation of recombinant forms of granulocyte colony-stimulating factor**

Miguel Ángel Valle Yañez. Cinvestav Zacatenco

**FT11 Purification and Valorization of Urban Effluents Using Photobioreactors Operated with *Anabaena Inaequalis***

Wendy Zárate Hernández. Instituto Tecnológico de Veracruz

**FT12 Dynamics of Bacterial Communities in Response to Disturbances**

Roberto Carlos Alvarez Martínez. Universidad Autónoma de Querétaro

**FT13 Key Proteins for Regeneration in *A. mexicanum*: Transcriptomic Insights from Aged and Juvenile Limbs**

Aylin Del Moral Morales. Universidad Autónoma Metropolitana

**FT14 Functional and structural studies of a novel endolysin from ICPI phage active against multidrug-resistant bacteria**

Laura Angélica Espinosa Barrera. Universidad de Colima

**FT15 Unraveling the distinct biases of the genomic landscape of lung adenocarcinoma from Mexican patients**

Bertha Rueda Zarazúa. Instituto Nacional de Medicina Genómica. UNAM

14:15-15:30

Lunch

15:30-17:00

**Simultaneous Symposia 1, 2, 3**  
(Mazatlán 1, 2, 3)

**1. Symposium on neurobiology**

Mazatlán Room 1

Chair: Susana Castro Obregón, Instituto de Fisiología Celular, UNAM

**Role of autophagy in neurodevelopment and brain aging**

Susana Castro Obregón, Instituto de Fisiología Celular, UNAM

**Circadian rhythms as regulators of energy homeostasis**

Lucía Mendoza Viveros, Instituto Potosino de Investigación Científica y Tecnológica, A. C.

**Social neuroscience and culture of peace**

Roberto Mercadillo Caballero, Universidad Autónoma Metropolitana-Iztapalapa

**2. Growth control and metabolism in fungi  
in memoriam Luis Caspeta Guadarrama**

Mazatlán Room 2

Chair: Alicia González, Instituto de Fisiología Celular, UNAM

**Branched-chain amino acid pathway regulation and its connection to carbon metabolism during yeast diauxic shift**

Ximena Escalera Fanjul, Theoretical Biophysics, Humboldt University, Berlin

**The convergence of molecular and metabolic responses to thermo-acidic stress in yeast**

Alfredo Martínez Jiménez, Instituto de Biotecnología, UNAM

**The ergosterol biosynthesis pathway in *Candida* spp: antifungal compounds and their metabolic implications**

Lourdes Villa Tanaca, Escuela Nacional de Ciencias Biológicas, IPN

**3. Advances in protein structure, function and evolution**

Mazatlán Room 3

Chairs: Georgina Garza Ramos & Daniel Alejandro Fernández. Facultad de Medicina, UNAM

**Redox biocatalysis at the IBt-UNAM: molecular basis and applications of oxidoreductases**

Marcela Ayala Aceves. Departamento de Bioingeniería. Instituto de Biotecnología. UNAM

**Metal-crystallin interactions: The bioinorganic facet of cataract disease**

Liliana Quintanar Vera. Departamento de Química y Centro de Investigación sobre el Envejecimiento. Cinvestav

**Recent progress in predicting the structure and reactivity of peptides and proteins**

Joel Ireta Moreno. Departamento de Química. UAM Iztapalapa

**Search for new bacterial enzymes with potential clinical or biotechnological applications**

Rosario A. Muñoz Clares. Departamento de Bioquímica.  
Facultad de Química. UNAM

<b>17:00-18:00</b>	<b>Having Coffee with ... (Carnaval Room 3)</b>  Georgina Hernández Delgado, Alberto Darszon, Susana Castro Obregón, Alicia González Manjarrez, Rafael Vázquez Duhalt
<b>17:00-19:00</b>	<b>Poster Session 1</b>  BT – BIOTECHNOLOGY I BT1 – BT53 G – GENETICS, EPIGENETICS AND GENETIC REGULATION I G1 – G36 MH – MEDICINE, HEALTH & NUTRITION I MH1 – MH31 NN – NEUROSCIENCES & NEUROBIOLOGY I NN1 – NN27 SB – SYSTEMS BIOLOGY & BIOINFORMATICS I SB1 – SB26 ST – SIGNAL TRANSDUCTION AND CELL DIFFERENTIATION I ST1 – ST31 O – OTHERS I O1 – O40

**TUESDAY, OCTOBER 22**

<b>8:30-10:00</b>	<b>Plenary Symposia II Hispano – Mexicano (Mazatlán Room 2)</b>  <b>New Aspects on Cellular Regulation of Senescence and Differentiation</b> Chair: Libia Vega Loyo, Cinvestav Zacatenco
	<b>Neonatal T-Cells</b> María Angélica Santana Calderón, Centro de Investigación en Dinámica Celular, UAEM
	<b>From Single-Exon to Multiomics: Mapping the Impact of Intronless Genes on Cancer Biology</b> Katia Aviña Padilla, Cinvestav Irapuato
	<b>Reaching new horizons in cellular senescence research by leveraging a brand new multi-senescent cell type catalog</b> Carlos Anerillas Aljama, Centro de Biología Molecular Severo Ochoa. CSIC-UAM. España

<p><b>10:00-11:00</b></p>	<p><b>Plenary Lecture IV</b> (Mazatlán Room 2)</p> <p><b>Mitochondria in global and local intracellular calcium signaling</b> Gyorgy Hajnoczky. Thomas Jefferson University. USA Chair: Agustín Guerrero. Cinvestav Zacatenco</p>
<p><b>11:00-11:30</b></p>	<p><b>Coffee break</b></p>
<p><b>11:30-12:45</b></p>	<p><b>Simultaneous oral Sessions 4, 5, 6</b></p>
<p style="text-align: center;"><b>Session 4</b> Mazatlán Room 1 Chair: Darío Olicón. Escuela Nacional de Ciencias Biológicas, IPN.</p>	
<p><b>Design and production of a H7N3 highly pathogenic avian influenza recombinant vaccine</b> Miguel Ángel Castillo Martínez. Cinvestav Zacatenco</p>	
<p><b>Search for leading molecules targeting the replicative core of the SARS-CoV-2 polymerase for the development of specific antiviral drugs</b> Armando Cruz Rangel. Instituto Nacional de Medicina Genómica</p>	
<p><b>Structural design of a genetic circuit to obtain a biosensor</b> América Selene Gaona Mendoza. Universidad de Guanajuato</p>	
<p><b>Design and implementation of a cell surface display system on <i>Neurospora crassa</i> using native cell wall protein, ACW-1, as anchor</b> Ana Sofía Ramírez Pelayo. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.</p>	
<p><b>Structural Insights into the Glutathione Transferase Sigma Class from <i>Taenia solium</i>: Crystallographic Analysis and Functional Implications</b> Ricardo Miranda Blancas. Instituto de Biotecnología. UNAM</p>	
<p style="text-align: center;"><b>Session 5</b> Mazatlán Room 2 Chair: Gloria Saab. Instituto de Biotecnología, UNAM</p>	
<p><b>Aim11: a novel yeast assembly factor for complex IV and supercomplexes</b> Ulrik Hiram Pedroza Dávila. Instituto de Fisiología Celular, UNAM</p>	
<p><b>Benzopyrene degradation induces changes in antioxidant and detoxifying metabolism in <i>Debaryomyces hansenii</i></b> Francisco Javier Padilla Garfias. Instituto de Fisiología Celular, UNAM</p>	

**$\beta$ -hairpin of *Thermus thermophilus* laccase: A regulator of enzymatic activity?**

Leticia León Luna. Instituto de Biotecnología. UNAM

**Exploring the quaternary assembly of a homomultimeric Catechol 1,2-dioxygenase: An Integrative study**

Arisbeth Guadalupe Almeida Juárez. Instituto de Biotecnología. UNAM

**At physiological pH and temperature, L-tyrosine can inhibit the formation of amyloid fibers of human lysozyme**

Santos Arturo López Guzmán. Universidad Autónoma Metropolitana

**Session 6**

Mazatlán Room 3

Chair: Luis D. Alcaráz. Facultad de Ciencias, UNAM

**OAEVOB: Online-Adjusted EVOLUTIONary Biclustering algorithm to analyze gene expression data**

Edgardo Galán Vásquez. Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas, UNAM

**Regulatory relationships between genes are not linked to direct transcription factor-target interactions in gene regulatory networks**

Diego Arturo Velázquez Trejo. Instituto Nacional de Medicina Genómica. UNAM

**A Modular Toolbox to Study Biological Systems: Real-Time Volatilomics and Mass Spectrometry Imaging under Ambient Conditions**

Robert Winkler. Cinvestav Irapuato

**Effect of co-culture of *A. flavus* and *P. ostreatus* on the expression of genes associated with the biosynthesis of aflatoxins and detoxifying enzymes**

Luis Jesús Martínez Tozcano. Centro de Investigación en Biotecnología Aplicada. IPN

**Design of de novo proteins and enzymes using generative language models**

Sergio Romero Romero. Instituto de Fisiología Celular. UNAM

**11:30-12:45**

**Technical Talks  
(Carnaval Room 1, 2)**

**MACS Technology: Cell Separation**

Laura López. UNIPARTS

**Let's optimize your purification process**

Carlos Bravo. BIO-RAD

12:45-14:15

**Simultaneous Symposia 4, 5, 6**  
(Mazatlán Room 1, 2, 3)

**4. Edges in mitochondrial knowledge**

Mazatlán Room 1

Chair: Héctor Miranda Astudillo. Instituto de Investigaciones Biomédicas, UNAM

**Mitochondrial Complement 1q Binding Protein (C1qbp) interacts with Cyclophilin D and regulates mouse heart Oxidative Phosphorylation and Permeability Transition**

Manuel Gutiérrez Aguilar. Departamento de Bioquímica, Facultad de Química, UNAM

**LRPPRC and SLIRP synergise to maintain sufficient and orderly mammalian mitochondrial translation**

Diana Rubalcava Gracia Medrano. Department of Medical Biochemistry and Biophysics, Karolinska Institutet

**The Divergent Biogenesis of the Respiratory Complex III in Malaria Parasites**

Aldo Garcia Guerrero. Department of Biochemistry, University of Utah School of Medicine

**Mitochondrial respirasome: diversity among conserved function**

Héctor Vicente Miranda Astudillo. Departamento de Biología Molecular y Biotecnología, Instituto de Investigaciones Biomédicas, UNAM

**5. Insights into plant adaptation: from growth to resilience**

Mazatlán Room 2

Chair: Patricia Coello Coutiño. Facultad de Química, UNAM

**Deciphering the epigenetic network of plant stem cell niche maintenance and plasticity**

María de la Paz Sánchez. Instituto de Ecología, UNAM

**Visualizing reactive oxygen species in living plant cells under biotic and abiotic responses**

Luis Cárdenas. Instituto de Biotecnología, UNAM

**Role of beneficial rhizobacteria in plant adaptation to environmental stress**

José López Bucio. IIQB- Universidad Michoacana de San Nicolás de Hidalgo.

**Plant signaling mechanisms under energy stress**

Patricia Coello. Facultad de Química, UNAM



## 6. Symposium on biochemistry and molecular biology of bacteria

Mazatlán Room 3

Chair: Guadalupe Espín Ocampo. Instituto de Biotecnología, UNAM

### Phenazines, biotechnological compounds produced by *Pseudomonas aeruginosa*: gene regulation and overproduction.

Miguel Cocotl Yañez. Departamento de Microbiología y Parasitología. Facultad de Medicina, UNAM

### Genes required for the formation of virulence-provoking bacterial sphingolipids

Otto Geiger. Centro de Ciencias Genómicas, UNAM.

### Towards Enhanced Production of Biodegradable Plastics: Strategies to Improve Yield and Quality in *Azotobacter vinelandii*

Daniel Segura González. Instituto de Biotecnología, UNAM.

14:15-14:30

Group photo

14:15-15:30

Lunch

15:30-16:30

### Plenary Lecture V (Mazatlán Room 2)

#### Innovation by Evolution: Bringing New Chemistry to Life

Frances H. Arnold. California Institute of Technology. USA  
Chair: Agustín Guerrero. Cinvestav Zacatenco

16:30-17:00

### Flash Talks for poster advertising (Mazatlán Room 2)

Chair: Agustín Guerrero. Cinvestav Zacatenco

### FT16 Study of the ABCG transporter family of *Metarhizium guizhouense* HA11-2 during its mycorrhizal association

Víctor Manuel García Vera. Universidad de Guanajuato

### FT17 Relevance of protein O-glycosylation during the interaction of *Sporothrix schenckii* with the host

Manuela Gómez Gaviria. Universidad de Guanajuato

### FT18 Killer yeast and glucose mediated synthesis of nanoparticles with biological effect

Carlos Alberto Molina Vera. Universidad Autónoma de Querétaro.

**FT19 Study of the endophytic capacity of entomopathogenic fungi**  
Jesús Ernesto Ramírez Nieto. Universidad de Guanajuato

**FT20 Whole genome sequencing of candida auris strain isolated in Monterrey, Mexico**

Alí Fernando Ruiz Higareda. Universidad Autónoma de Nuevo León

**FT21 The wild plant *Conopholis alpina*, and their visiting honey bees (*Apis mellifera*) carry identical bacterial strains under natural conditions**  
Mary José Salas Limón. Universidad Autónoma de Puebla

**FT22 Clinical value of gene expression profiling by digital PCR for the detection of leukemic cells in pediatric population**

Adriana del Carmen Aguilar Lemarroy. Instituto Mexicano del Seguro Social

**FT23 Interaction between genetic variants in vitamin D metabolism genes: impact on rheumatoid arthritis susceptibility and hypovitaminosis D**  
Bertha Campos López. Universidad de Guadalajara

**FT24 Insulin pathway changes on the gene expression in adipose tissue modulated by ellagic acid in obese Wistar rat induced with high fat diet**

Ramón Castillo Correa. Escuela Superior de Medicina. IPN

**FT25 Genetic variants related with neoadjuvant chemotherapy response in breast cancer patients**

Luis Felipe Jave Suárez. Universidad de Guadalajara

**FT26 The increase in methylation of the ABCG2 gene is related to the presence of its Q141K allele and lower expression of the gene in peripheral blood of patients with gout and controls**

Ámbar López Macay. Instituto Nacional de Rehabilitación

**FT27 Comparative genomic analysis of *Candida glabrata* clinical isolates to understand antifungal resistance**

Ana Lizbeth López Marmolejo. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**FT28 The forgotten side of the GPN-loop GTPase Npa3: the carboxy-terminal domain is a critical regulator of the GTPase core function**

Manuel de Jesús Ochoa Valdez. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**FT29 Unveiling molecular differences in 3D cell Culture of Triple Negative Breast Cancer cells and their resemblance to Tumor Tissue**  
Mercedes Olvera Valencia. Escuela Nacional de Medicina y Homeopatía. IPN

**FT30 Determination of Antioxidant Activity and Phenolic Compounds in Fermented Cocoa Bean Shell Infusion**

Sebastián Cervera Pereyra. Universidad Juárez Autónoma de Tabasco

<b>17:00-18:00</b>	<b>Having Coffee with ...</b> (Carnaval Room 3)  Gyorgy Hajnoczky, Frances Arnold, Carlos Anerillas, Angélica Santana, Otto Geiger
<b>17:00-19:00</b>	<b>Poster Session 2</b>  BB – BASIC BIOCHEMISTRY I BB1 – BB37 BT – BIOTECHNOLOGY II BT54 – BT100 G – GENETICS, EPIGENETICS AND GENETIC REGULATION II G37 – G71 MH – MEDICINE, HEALTH & NUTRITION II MH32 – MH66 M – MICROBIOLOGY I M1 – M40 ROS – REACTIVE OXYGEN SPECIES ROS1 – ROS25 SB – SYSTEMS BIOLOGY & BIOINFORMATICS II SB27 – SB52
<b>19:00-20:00</b>	<b>Business Session</b> (Carnaval Room 1)

## **WEDNESDAY, OCTOBER 23**

<b>8:30-10:00</b>	<b>Plenary Symposia III</b> (Mazatlán Room 2)  <b>Antimicrobial drug resistance and genomic epidemiology of superbugs</b> Chair: Santiago Castillo Ramírez. Centro de Ciencias Genómicas, UNAM
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**Evolutionary dynamics of carbapenem-resistant *Pseudomonas aeruginosa* in Chile: the impact of the ST654 'high risk' clone**

Andrés Opazo. Universidad de Concepción. Santiago de Chile

**Genomic diversity and antimicrobial resistance genes of *Salmonella enterica* in Mexico**

Adrián Gómez Baltazar. Universidad Autónoma de Querétaro

**One Health and pan genomic epidemiology of a superbug**

Santiago Castillo Ramírez. Centro de Ciencias Genómicas, UNAM

<p><b>10:00 – 11:00</b></p>	<p><b>Plenary Lecture VI</b> (Mazatlán Room 2)</p> <p><b>Histamine: the (relatively) new kid in town</b> José Antonio Arias Montaña. Department of Physiology, Biophysics and Neurosciences. Cinvestav Chair: Irma Romero Álvarez. Facultad de Medicina, UNAM</p>
<p><b>11:00 – 11:30</b></p>	<p><b>Coffee break</b></p>
<p><b>11:30-12:45</b></p>	<p><b>Simultaneous Oral sessions 7, 8, 9</b> (Mazatlán 1,2,3)</p>
<p style="text-align: center;"><b>SESSION 7</b> (Mazatlán Room 1) Chair: Claudia González Espinosa Cinvestav Sede Sur</p>	

**His-tagged proapoptotic KLAQ peptide: A dual purpose strategy and their anticancer activity *in vitro***  
Aldo Omar González Cruz. Universidad Autónoma de Nuevo León

**Exposure to superparamagnetic iron oxide nanoparticles induced hepatorenal toxicity in BALB/C mice**  
Babatunde Oluwafemi Adetuyi. Cinvestav Zacatenco

**New small-molecule CD36 antagonists**  
Marco Velasco Velázquez. Facultad de Medicina, UNAM

**Effects of pollutant phenanthrene on glutathione-dependent enzymes and glutathione content in the shrimp *Penaeus vannamei***  
Laura Camacho Jiménez. Centro de Investigación en Alimentación y Desarrollo, A.C.

**Effect of pH on the GSSG-dependent substrate inhibition of Thioredoxin glutathione reductase. An initial velocity and progress curve-based study**  
Juan Luis Rendón Gómez. Facultad de Medicina. UNAM

<p style="text-align: center;"><b>SESSION 8</b> (Mazatlán Room 2) Chair: Carlos Ricardo González Ruiz. IPICYT.</p>	
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**Wnt signaling in Cancer Stem Cell: Towards the Non-canonical pathway**  
Miguel Ángel Sarabia Sánchez. Facultad de Medicina. UNAM

**Individual miRNAs regulate sets of transcripts that encode for physically interacting specific proteins with each other**

Alma Lilia Hernández Olvera. Instituto Nacional de Medicina Genómica. UNAM

**Transcriptomic Profile of Seq-1 Peptide in Steatotic Hepatocytes: Implications in liver fibrosis**

Sandra Daniela Calixto Tlacomulco. Facultad de Medicina. UNAM

**Exploring chromatin dynamics during *in vitro* decidualization of human endometrial stromal cells**

Alejandra Monserrat Retis Reséndiz. Facultad de Química. UNAM

**The acetogenin laherradurin and the alkaloid liriodenine promote apoptosis and autophagy induction through mitochondrial dynamics dysregulation in colorectal cancer *in vitro***

Izamarly Delgado Waldo. Facultad de Medicina. UNAM

**SESSION 9**

(Mazatlán Room 3)

Chair: Víctor Manuel Ayala García – Universidad Juárez del Estado de Durango

**Characterization of the GlyOx from *Azotobacter vinelandii* and its Application for Glycine Biosensing**

Andrés Zárate Romero. Centro de Nanociencias y Nanotecnología. UNAM

**Consortium of microorganisms for polystyrene biodegradation**

María Marcela Robles Machuca. Universidad Autónoma de Nayarit

**Plant cell wall degrading enzymes in the secretome of *Colletotrichum lindemuthianum* pathotypes**

Karla Morelia Díaz Tapia. Universidad Michoacana de San Nicolás de Hidalgo

**Unveiling the uptake and the early genetic responses of *Arabidopsis* to growth promoting microbial volatiles**

Zulia Fernandina Nieves López. Cinvestav Irapuato

**Functional characterization of a non-specific phospholipase C (*PvNPC4*) in bean-rhizobia symbiosis and root development**

Ronald Pacheco Sánchez. Instituto de Biotecnología. UNAM

11:30-12:45

**Technical Talks**  
(Carnaval Room 1, 2)

**Espectrometría de masas con tecnología Orbitrap y sus principales aplicaciones en ciencias de la vida**

Filippo Bedani, ISASA

	CIENTIFICA SENNA
<b>12:45-13:45</b>	<p><b>Plenary Lecture VII</b> (Mazatlán Room 2)</p> <p><b>Rotary Engines of Life: Exploring ATP Synthase and Cristae Formation in <i>Polytomella parva</i></b> Diego González Halphen. Instituto de Fisiología Celular. UNAM Chair: Irma Romero Álvarez. Facultad de Medicina. UNAM</p>
<b>13:45-14:15</b>	<p><b>Flash Talks for poster advertising 3</b> (Mazatlán Room 2)</p> <p>Chair: Irma Romero Álvarez. Facultad de Medicina. UNAM</p>

**FT31 Characterization of sphenotoxin from *Ophryacus sphenophrys* and its comparison with classic crotoxin**

Tania Corkidi Zajur. Instituto de Biotecnología. UNAM

**FT32 The methionine synthase in plant development**

Sara Margarita Garza Aguilar. Escuela de Ingeniería y Ciencias. Tecnológico de Monterrey

**FT33 Tips to increase the thermal stability of a recombinant protein: the practical case of CGI-58**

Miriam Livier Llamas García. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**FT34 Biochemical characterization of orotate phosphoribosyltransferase from the phytopathogen *Pseudomonas cichorii***

Amelia López Albores. Instituto Tecnológico de Tuxtla Gutiérrez

**FT35 Aldosterone effects on the expression of ryanodine receptors and their participation in the calcium dynamics of rat mesenteric arteries**

Hiram Lozano Ruiz. Cinvestav Zacatenco

**FT36 Subcellular localization plays a determinant role on the functional diversification of the paralogous proteins BAT1 and BAT2**

Yamile Paredes Chiquini. Instituto de Fisiología Celular. UNAM

**FT37 Hinges, springs, and sticky surfaces determine the preferred conformations of CRE in the absence of LOXP and prime it for binding**

Nina Pastor Colón. Universidad Autónoma del Estado de Morelos

**FT38 Characterization of Human Epidermal Growth Factor (hEGF)-induced Ca<sup>2+</sup> release in HeLa Cells**

Amanda Renté Alpizar. Cinvestav Zacatenco



**FT39 Obesity leads to transcriptomic alterations in one-carbon metabolism-related genes: in silico analysis of GTEx study**  
 Jesús Daniel Cantú Ruiz. Institute for Obesity Research. Tecnológico de Monterrey

**FT40 Exploring the Connection Between Vitamin B12 Deficiency and Obesity**  
 Erika Castaño Moreno. Institute for Obesity Research. Tecnológico de Monterrey

**FT41 “Alaches”, quelites that besides being nutritious, have effect on *Helicobacter pylori***  
 Erika Gómez Chang. Facultad de Medicina. UNAM

**FT42 Estrogen modulation of CaMKII and calcium handling proteins in H9c2 hypertrophied myotubes**  
 Silvia Araceli López Morán. Centro de Investigación Biomédica. Tecnológico de Monterrey

**FT43 Ca<sup>2+</sup> Overload-Induced Mitochondrial Dysfunction is an Early Risk Factor for Lethal Ventricular Arrhythmias**  
 Felipe de Jesús Salazar Ramírez. Escuela Nacional de Medicina. Tecnológico de Monterrey

**FT44 Physiological response and organic interactions of berrycactus in wistar rats with metabolic syndrome (MS)**  
 Daniela Joyce Trujillo Silva. CONAHCyT. Instituto Potosino de Investigación Científica y Tecnológica A.C.

<b>14:15-14:30</b>	<b>Group photo</b>
<b>14:15-15:30</b>	<b>Lunch</b>
<b>15:30-17:00</b>	<b>Simultaneous Symposia</b> (Mazatlán Room 1, 2)

**7. ROS in fungi, turtles and rats: janus favorite molecules**  
 (Mazatlán Room 1)

Chair: Alejandro de las Peñas. Instituto Potosino de Investigación Científica y Tecnológica

**Evidence of oxidative stress responses of green turtles (*Chelonia mydas*) to differential habitat conditions in the Mexican Caribbean**  
 Vanessa Labrada Martagón. Facultad de Ciencias. Universidad Autónoma de San Luis Potosí

***Candida glabrata (Nakaseomyces glabratus)* requires the GSH/ Glutathione reductase and Thioredoxin/Thioredoxin reductase systems for mitochondrial function and oxidative stress response**

Guadalupe Gutiérrez Escobedo. División de Biología Molecular. Instituto Potosino de Investigación Científica y Tecnológica

**Targeting senescent cells to decrease oxidative stress and neuroinflammation and prevent cognitive impairment due to chronic obesity in middle-aged female rats.**

Mina Königsberg Fainstein. Departamento de Ciencias de la Salud. Universidad Autónoma Metropolitana - Iztapalapa

## **8. Recent progress in signal transduction research**

(Mazatlán Room 2)

Chair: Angélica Rueda y Sánchez de la Vega. Cinvestav Zacatenco

**Regulation of insulin signaling: multiple factors and molecular mechanisms involved**

Jesús Alberto Olivares Reyes. Departamento de Bioquímica, Cinvestav

**Epithelial to mesenchymal transition in breast cancer: EGF signaling**

Eduardo Monjaraz Guzmán. Instituto de Fisiología. Benemérita Universidad Autónoma de Puebla

**SERCA pumps as key regulators of calcium signaling in blood vessels**

Angélica Rueda y Sánchez de la Vega. Departamento de Bioquímica. Cinvestav

## **9. Mitochondria in health and disease**

(Mazatlán Room 3)

Chair: Gerardo García Rivas. Institute for Obesity Research. TecSalud

**Role of mitochondrial fusion proteins in cell homeostasis**

Antonio Zorzano. University of Barcelona

**Exercise regulation of mitochondrial function in metabolic dysfunction-associated steatotic liver disease**

Rodrigo Troncoso. INTA, Chile

**Depression-like behaviour is comorbidity in a model of heart failure with preserved ejection fraction induced by high-fat diet and L-NAME**

Gerardo García Rivas. IOR, TecSalud

**Avocado oil: a promising alternative against chronic degenerative diseases through its effects on mitochondria**

Christian Cortes Rojo. Universidad Michoacana de San Nicolás de Hidalgo

<b>17:00-18:00</b>	<p><b>Having Coffee with ...</b> (Carnaval Room 3)</p> <p>Diego González Halphen, José Antonio Arias Montaña, Sergio Grinstein, Mina Königsberg, Andrés Opazo</p>
<b>17:00-19:00</b>	<p><b>Poster Session 3</b></p> <p>BB – BASIC BIOCHEMISTRY II BB38 – BB78  BT – BIOTECHNOLOGY III BT101 – BT158  G – GENETICS, EPIGENETICS AND GENETIC REGULATION III G72 – G106  MH – MEDICINE, HEALTH &amp; NUTRITION III MH67 – MH109  M – MICROBIOLOGY II M41 – M83  TP – TOXICOLOGY &amp; PHARMACOLOGY I TP1 – TP25</p>

## **THURSDAY, OCTOBER 24**

<b>8:30-10:00</b>	<p><b>Plenary Symposia IV</b> (Mazatlán Room 2)</p> <p><b>Wanderings in Biochemistry</b> Chair: Agustín Guerrero. Cinvestav Zacatenco</p> <p><b>Tales of a pathogenic yeast</b> Irene Castaño Navarro. Instituto Potosino de Investigación Científica y Tecnológica</p> <p><b>Wanderlust: from genome rearrangements to cell division cycle in Rhizobium</b> David Romero Camarena. Centro de Ciencias Genómicas, UNAM</p> <p><b>The road of cellular communication in different models</b> Teresa Hernández Sotomayor. Sociedad Mexicana de Bioquímica</p>
<b>10:00-11:00</b>	<p><b>Plenary Lecture VIII</b> (Mazatlán Room 2)</p> <p><b>The journey of glucose in the body: from absorption to glucose uptake by the muscle</b> Amira Klip. The Hospital for Sick Children. University of Toronto. Canada Chair: Irma Romero Álvarez. Facultad de Medicina, UNAM</p>
<b>11:00-11:30</b>	<b>Coffee break</b>
<b>11:30-12:45</b>	<b>Simultaneous oral Sessions 10, 11, 12</b>

## SESSION 10

(Mazatlán Room 1)

Chair: Alejandro Zentella Dehesa. Instituto de Investigaciones Biomédicas, UNAM

### **Cytotoxic properties and gene expression modulating effects of cinnamon essential oil (*Cinnamomum zeylanicum*) in cervical cancer cells**

Rubén Piña Cruz. Universidad de Guadalajara

### **BORIS: A Novel Oncogene and Molecular Player in Glioblastoma Pathogenesis**

Ernesto Soto Reyes Solís. Universidad Autónoma Metropolitana Cuajimalpa

### **Crosstalk between Wnt/ $\beta$ -catenin and PI3K/AKT pathways mediated by HOTAIR/HIF1 $\alpha$ axis in cervical cancer**

Samuel Trujano Camacho. Universidad Autónoma Metropolitana Iztapalapa

### **Participation of Exon 18 Variants of the SCN8A Gene in the Proliferation and Metastatic Behavior of Cervical Cancer Cell Lines**

Tonantzin Guadalupe Anguheven Ledezma. Instituto de Fisiología Celular. UNAM

### **LINC01087/miR-130a-3p/FOXA1 axis regulates the cell proliferation, migration and vasculogenic mimicry in breast cancer cells in a three-dimensional (3D) microenvironment**

Sandra Lizeth Alvarado Ortigoza. Universidad Autónoma de la Ciudad de México

## SESSION 11

(Mazatlán Room 2)

Chair: Ángel Andrade Torres. Universidad Autónoma de Nuevo León

### **Identification of differential proteins produced in hypo- and hyper-virulent mutants grown in wheat coleoptiles compared to the wild type strain of *Fusarium graminearum***

Ana Lilia Martínez Rocha. Universidad de Guanajuato

### **Bacterial microbiota during embryonic development: a maternal inheritance**

Yendi Navarro Noya. Universidad Autónoma de Tlaxcala

### **HpGroEL protein is secreted by *Helicobacter pylori* and binds other secreted proteins, its chaperonin activity is maintained at extreme pH**

José de Jesús Olivares Trejo. Universidad Autónoma de la Ciudad de México

**Testosterone and estradiol induce the expression of *Actinobacillus seminis* secreted proteases**

Gerardo Antonio Ramírez Paz y Puente. Facultad de Estudios Superiores Iztacala. UNAM

**Adaptive Stress Response to Nitrogen Limitation in the Antarctic Yeast *Rhodotorula mucilaginosa* M94C9**

Miguel Ángel Rosas Paz. Facultad de Ciencias. UNAM

**SESSION 12**

(Mazatlán Room 3)

Chair: Rodolfo Pastelin Palacios, Facultad de Química, UNAM

**Spontaneous calcium transients in striatal astrocytes: evidence from a preclinical model of autism**

Daniel Reyes Haro. Instituto de Neurobiología. UNAM

**Effect of protein overexpression and silencing EiMyb23 on the encystment of *Entamoeba invadens***

Jatziry Daniela Ocampo Ulloa. Cinvestav Zacatenco

**Resveratrol inhibits the PI3K/Akt insulin pathway by activating classical PKCs**

Karla Daniela Hernández González. Cinvestav Zacatenco

**Physiological effect of the interaction between the mitochondrial maize hexokinase 4 and the beta-glucosidase aggregating factor 1**

Andrés Burgos Palacios. Facultad de Química. UNAM

**Plenary Lecture IX  
(Mazatlán Room 2)**

**12:45-13:45**

**AI Approaches in Protein Bioinformatics**

Daisuke Kihara. Department of Biological Sciences, Department of Computer Science. Purdue University

Chair: Libia Vega Cinvestav Zacatenco

**13:45-14:15**

**Flash Talks for poster advertising 4  
(Mazatlán Room 2)**

Chair: Libia Vega. Cinvestav Zacatenco

**FT45 Anti-*Helicobacter pylori* activity, cytotoxicity and *in vivo* gastroprotective effect of diacetylcurcumin and its metal derivatives**

Almanelly Agabo Martínez. Facultad de Medicina UNAM

**FT46 The combined therapy of diclofenac-itraconazole reduces the size of *Madurella mycetomatis* grains and stimulates cytokines of the Th1 and Th17 profile**

Iván Alejandro Banda Flores. Universidad Autónoma de San Luis Potosí

**FT47 Transcriptional characterization of the antitumor activity of laherradurin on an *in vitro* model of colorectal cancer**

Eduardo Pérez Arteaga. Facultad de Medicina. UNAM

**FT48 Cannabidiol increases adipogenesis on 3T3-L1 pre-adipocytes via PPAR $\gamma$**

Helen Yarimet Lorenzo Anota. Institute for Obesity Research. Tecnológico de Monterrey

**FT49 BUB 1 is a nodular kinase that predicts overall survival in osteosarcoma, liposarcoma, synovial sarcoma, and leiomyosarcoma**

Frida Citlali Rodríguez Izquierdo. UAM Iztapalapa. Instituto Nacional de Cancerología

**FT50 The IL-6 induces metastatic properties in luminal breast cancer cells through GPR30**

Ana Carolina Tirado Garibay. Universidad Michoacana de San Nicolás de Hidalgo

**FT51 Identification of Aim24 as a yeast complex II membrane domain assembly factor**

Yolanda Margarita Camacho Villasana. Instituto de Fisiología Celular. UNAM

**FT52 Agronomic and molecular evaluation of polyploid tomato**

Fátima Clarita Cota Ruiz. Cinvestav Zacatenco

**FT53 p53 Mutants Induce an Aggressive Phenotype through Overexpression of miR-27b-5p in Cancer**

José Edwin Dolores García. Universidad Autónoma Metropolitana Iztapalapa

**FT54 The inhibitory effect of rTBL-1 on colorectal cancers *in vitro* is related to the presence of the epidermal growth factor receptor**

Teresa García Gasca. Universidad Autónoma de Querétaro

**FT55 Modulation of glutamate uptake by the subacute activation of the histamine H<sub>3</sub> receptor in rat cerebro-cortical astrocytes in primary culture**

Yrving Daniel Díaz De Lucio. Cinvestav Zacatenco

**FT56 Impact of Intestinal Low-Grade Inflammation on Purinergic-Calcium Signaling in Enteric Glial Cells**

Irving Israel Vega Juárez. Universidad de Colima

**FT57 *In vivo* role of T $\gamma$  $\delta$  cells in a lupus mouse model induced by NPA stabilization**

Edgar Iván Galarce Sosa. Escuela Nacional de Ciencias Biológicas. IPN



**FT58 *Plasmodium vivax* mitochondrial DNA polymorphism, and its relationship to genes encoding sexual proteins and the infection pattern in mosquitoes *Nyssorhynchus albimanus* and *Anopheles pseudopunctipennis*, Chiapas, Mexico**

Lilia González Cerón. Instituto Nacional de Salud Pública

**FT59 Impact of the form of birth and effect of Flagellin on the activation of neonatal CD4<sup>+</sup> and CD8<sup>+</sup> T cells**

Carlos Jesús Ventura Martínez. Universidad Autónoma del Estado de Morelos

<b>14:15-15:15</b>	<b>Lunch</b>
<b>15:15-17:15</b>	<p><b>Poster Session 4</b></p> <p>BB – BASIC BIOCHEMISTRY III BB79 – BB118          IP – IMMUNOLOGY &amp; PARASITOLOGY IP1 – IP38          M – MICROBIOLOGY III M84 – M124          NN – NEUROSCIENCES &amp; NEUROBIOLOGY II NN28 – NN54          TP – TOXICOLOGY &amp; PHARMACOLOGY II TP26 – TP52          ST – SIGNAL TRANSDUCTION &amp; CELL DIFFERENTIATION II ST32 – ST63          O – OTHERS II O41 – O83</p>
<b>15:15-16:15</b>	<p><b>Having Coffee with ...</b>          (Carnaval Room 3)</p> <p>Amira Klip, Daisuke Kihara, David Romero</p>
<b>17:15-18:15</b>	<p><b>Closing Lecture</b>          (Mazatlán Room 2)</p> <p><b>Membrane remodelling in endocytosis and phagocytosis</b>          Sergio Grinstein. The Hospital for Sick Children. University of Toronto.          Canada          Chair: Agustín Guerrero. Cinvestav Zacatenco</p>
<b>18:15 - 18:45</b>	<b>Final announcements and closing ceremony</b>
<b>20:00-1:00</b>	<b>Farewell dinner</b> (Explanada Mantarraya, MIC)

# ***POSTER SESSION***

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XXXIV CONGRESO NACIONAL DE BIOQUÍMICA

**POSTER SESSION I**  
**MONDAY, OCTOBER 21**  
17:00 - 19:00

## **BIOTECHNOLOGY I**

### **BT1**

***Characterization and evaluation of the biological activity of the TA-PAsp polymer***  
Ileana Castillo Tobías. Universidad Autónoma de Coahuila

### **BT2**

***In silico analysis of the C8 clone and toxic activity of the ATP-dependent RNA helicase from the entomopathogenic bacterium Serratia entomophila Mor 4.1 in Phyllophaga blanchardi larvae (Coleoptera: Melolonthidae)***  
Luz Areli Gorostieta Nava. Universidad Autónoma del Estado de Morelos

### **BT3**

***Doing Bionanotechnology with dsDNA and CRISPR-dCas12a: Designing Linear and Branched Nanofibers***  
Armando Hernández García. Universidad Nacional Autónoma de México

### **BT4**

***Mechanistic assessment of the biosynthesis of cyanobacterial secondary metabolites: Two cases***  
Jose Alberto Martinez Yerena. Czech Academy of Sciences

### **BT5**

***Characterization of recombinant modified trichocystatin TC-2***  
Jaime Ortega López. Cinvestav Zacatenco

### **BT6**

***Effect of prolactin and 17 $\beta$ -estradiol on the adhesion and intracellular persistence of Staphylococcus aureus in bovine mammary epithelial cells***  
Gladys Romero Corona. Universidad Michoacana de San Nicolás de Hidalgo

### **BT7**

***Immobilization of thermomyces lanuginosus lipase (tll) via ionic-covalent interaction on heterofunctional glyoxyl-agarose supports for biodiesel production***  
Cristian David Salcedo Cuarán. Universidad del Valle

### **BT8**

***Characterization of DyP-type peroxidases and their use as biocatalysts in textile dyes decolorization***  
Jesús Alberto Segovia Cruz. Universidad Nacional Autónoma de México

### **BT9**

***Genetic diversity and phenotypic variations in four native strains of Bacillus spp. biocontrol agents through pan-genome and BGC analysis***  
Hilda Mabel Sosa Esquivel. Universidad Autónoma de Zacatecas "Francisco García Salinas"

**BT10*****Physiological evaluation of recombinant forms of granulocyte colony-stimulating factor***

Miguel Ángel Valle Yañez. Cinvestav Zacatenco

**BT11*****Purification and Valorization of Urban Effluents Using Photobioreactors Operated with Anabaena Inaequalis***

Wendy Zárate Hernández. Instituto Tecnológico de Veracruz

**BT12*****Bacteria isolated from an asphaltene rock from the Gulf of Mexico are capable of degrading oil at low temperatures***

Libertad Alejandra Adaya García. Universidad Nacional Autónoma de México

**BT13*****Co-culture of Daldinia eschscholzii and Humphreya coffeata***

Alma Rosa Agapito Ocampo. Universidad Autónoma del Estado de Morelos

**BT14*****Optimization of paramylon production in Euglena gracilis using different light spectra***

Zhaida Itzel Aguilar González. Universidad Nacional Autónoma de México

**BT15*****Expression of chagasin chimeras with 4 epitopes from trypanosoma cruzi antigen, TSA-1, in Pichia pastoris***

Paola Eugenia Agustín Vélez. Cinvestav Zacatenco

**BT16*****Heterologous expression of scorpion toxin from Chihuahua***

Carolina Alvarado González. Universidad Autónoma de Chihuahua

**BT17*****The national laboratory for analysis of biotechnological molecules and drugs (LAMMB) challenges and perspectives***

Elianeth Amaro Encarnación. Universidad Nacional Autónoma de México

**BT18*****Polyuronide synthases in filamentous fungi***

Mariandrea Victoria Aranda Barba. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

**BT19*****Functional and Structural Analysis of Basidiomycete Fungal Lignocellulolytic Enzymes for Biotechnological Applications***

Silvia Armenta Jaime. Universidad Autónoma del Estado de Hidalgo

**BT20*****Intracellular oxidative stress at low temperatures in the phytopathogen bacterium Pseudomonas savastanoi pv. phaseolicola NPS3121***

Jackeline Lizzeta Arvizu Gómez. Universidad Autónoma de Nayarit

**BT21*****CLE14 peptide inhibits regeneration and callogenesis in Arabidopsis***

Adrián Ávalos Rangel. Universidad Michoacana de San Nicolás de Hidalgo

**BT22*****Functional drink from wine industry waste***

José Ramón Barraza Amaya. Universidad Autónoma de Coahuila

**BT23*****Improvement of pigment production by filamentous fungi***

Iliana Geraldine Barreto Flores. Instituto Tecnológico Superior de Irapuato

**BT24*****Optimization of the fermentation process to produce whiskey***

John Carlos Botia Becerra. Universidad de Guanajuato

**BT25*****Enhancing denitrification with electric fields in Paracoccus denitrificans***

Arturo Cadena Ramírez. Universidad Politécnica de Pachuca

**BT26*****Green technologies for the treatment of pesticides in water basins***

David Alfonso Camarena Pozos. Centro de Innovación Aplicada en Tecnologías Competitivas

**BT27*****Production and optimization of induced Serratia marcescens carboxylesterases for the degradation of polyolefins***

Amador Roberto Campos Valdez. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

**BT28*****Solutions based on copper ions as antifungal control in soil against the phytopathogenic fungus Neopestalotiopsis spp.***

Jesús Emiliano Cantador Campos. Instituto Politécnico Nacional

**BT29*****Immobilization of Bacillus subtilis on magnetite nanoparticles for arsenic removal in water***

César Abdiel Cárdenas Villanueva. Instituto Tecnológico de Durango

**BT30*****New biodegradable plastics (Poly-3-Hydroxyalkanoates) produced by Azotobacter vinelandii OP recombinant strains***

Alma Luz Carmona Brito. Universidad Nacional Autónoma de México

**BT31*****Auxin symplastic transport modulates root hairs development of Arabidopsis induced by Azospirillum baldaniorum Sp245***

Elizabeth Carrillo Flores. Universidad Michoacana de San Nicolás de Hidalgo

**BT32*****Identification of antigens in the immunoproteome of listeria monocytogenes***

Kimberly Arisbeth Casal Rodríguez. Universidad Autónoma de Sinaloa

### **BT33**

#### ***Comprehensive strategies for the discovery of plastic-degrading microorganisms and enzymes***

Leticia Casas Godoy. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

### **BT34**

#### ***Enzymatic saccharification of Agave durangensis bagasse for the production of biohydrogen***

Gerardo Javier Chaidez Gurrola. Universidad Juárez del Estado de Durango

### **BT35**

#### ***Regeneration in vitro of jipi palm (Carludovica palmata Ruiz & Pavón) mediated by thidiazuron***

Samuel Alejandro Chan Poot. Centro de Investigación Científica de Yucatán A.C.

### **BT36**

#### ***Hsa-miR-206 effect on tumorigenesis and chemoresistance of HCT116 colorectal cancer cells***

Lizbeth Guadalupe Chávez Ramos. Universidad Autónoma de Sinaloa

### **BT37**

#### ***Molecular and physiological characterization of yqcK locus of Bacillus subtilis and its metabolic role within the ars arsenic response operon***

Elizabeth Cisneros Lozano. Universidad Juárez del Estado de Durango

### **BT38**

#### ***Removal of pharmaceuticals compounds (PCs) used in COVID-19 treatment present in wastewater by constructed wetlands***

Jessica Fernanda Contreras Mojica. Centro de Innovación Aplicada en Tecnologías Competitivas

### **BT39**

#### ***Host-microbiota interactions drive the probiotics enrichment in the microbiota of L. vannamei: A hologenome perspective***

María Fernanda Cornejo Granados. Universidad Nacional Autónoma de México

### **BT40**

#### ***Comparative analysis of the osteogenic effect of the mixture of chitosan hydrogel with bone or bladder ECM hydrogels and bone mineral***

Juan Luis Cota Quintero. Universidad Autónoma de Sinaloa

### **BT41**

#### ***Evaluation of the thermostability of the mutant PET hydrolase***

Danna Marely Cruz Rico. Universidad Autónoma del Estado de Hidalgo

### **BT42**

#### ***Generation and propagation of improved varieties of malt and forage barley: An alternative crop for vulnerable areas in the state of Jalisco***

Dianey Celeste Cruz Muñoz. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.



**BT43*****Identification of Signaling Molecules Involved in Bacterial Communication Isolated from Lichens***

Miriam Joceline Cruz Ramos. Instituto Tecnológico Superior de Irapuato

**BT44*****Characterization of wild blueberry (*Vaccinium leucanthum*) by conventional and FT-IR spectroscopic techniques***

Acela Cuamatzi de Gante. Centro de Investigación en Biotecnología Aplicada-IPN

**BT45*****Exploring esterase/lipase production in *Aspergillus fumigatus* for plastic degradation***

Roberto Javier De la Rosa Mora. Universidad Autónoma de Nayarit

**BT46*****Generation of mutant strain disrupted in *aseR* gene for studying the arsenic response of *ase* operon in *Bacillus subtilis****

Miguel Ángel de la Torre Arellano. Universidad Juárez del Estado de Durango

**BT47*****The genotoxic effect of fluoride presents in endemic soil on onion (*Allium cepa*) bulb cells***

Ángel Ricardo Díaz Duarte. Universidad Juárez del Estado de Durango

**BT48*****Identification of bacterial proteases isolated from a mangrove in Nayarit***

Fernando Díaz Partida. Universidad Autónoma de Nayarit

**BT49*****Development of an Inoculant to Accelerate the Composting Process of Bovine Manure***

Frida Sofía Doroteo Platas. Universidad Autónoma de Puebla

**BT50*****Functional characterization of HUB proteins in the phytohormone signaling network in *Arabidopsis thaliana****

Andrea Duarte Elías. Instituto Tecnológico Superior de Irapuato

**BT51*****Obtaining Starch from *Pachyrhizus erosus* as an Alternative to Conventional Starches***

Jimena Carolina Enríquez Fonseca. Instituto Politécnico Nacional

**BT52*****Antioxidant activity and phenol content of liquid-fermentation of *Morchella esculenta****

Martha Elena Espin Reza. Universidad Autónoma del Estado de Morelos

**BT53*****Induction of the tannase system in marine fungi for PET (polyethylene terephthalate) degradation***

Jossie Fernanda Espinoza Ávila. Universidad de Guadalajara

# GENETICS, EPIGENETICS AND GENETIC REGULATION I

## G1

**Expression of the CCD4-3 gene in different tissues of the N4 and P12 morphotypes of *Bixa orellana* L. by qRT-PCR real time**

Margarita Aguilar Espinosa. Centro de Investigación Científica de Yucatán A.C.

## G2

**Agave as a model to understand the molecular genetic circuits controlling development and cell wall metabolism of hard fibers**

Fulgencio Alatorre Cobos. Centro de Investigación Científica de Yucatán A.C.

## G3

**Determination of NR3C1 gene methylation and expression levels in peripheral blood and post-mortem brain tissue and their association with suicide**

Yazmín Mercedes Amador Segovia. Universidad Juárez del Estado de Durango

## G4

**Association of the SNP HLA-DRB1\*07:01, HLA-B\*55:01 and IgE levels with hypersensitivity reactions to betalactamic antibiotics in COVID-19 patients in the mexican population**

Paola Nataly Andrade Valdez. Instituto Politécnico Nacional

## G5

**Frequency of Kdr mutations in the VGSC of *Aedes aegypti* vector**

Annete Itzel Apodaca Medina. Universidad Autónoma de Occidente

## G6

**MEOX2 as an epigenetic regulator of genes involved in lung cancer carcinogenesis**

Leonel Armas López. Universidad Nacional Autónoma de México

## G7

**Determining the length of the MAOA-UVNTR polymorphism in a sample of suicidal subjects and control subjects**

Samuel Arroyo Carranza. Universidad Juárez del Estado de Durango

## G8

**Chromatin state changes between primary cortex astrocytes induced to senescence and gliosis with palmitate**

Karla Estephania Ávila Galicia. Universidad Autónoma Metropolitana

## G9

**Ellagic acid modulates the mRNA expression of TNF pathway, NLRP3 inflammasome, NFkB1 and FTO in adipose tissue of diet-induced obese Wistar rat**

Antonio Ávila Guerrero. Instituto Politécnico Nacional

## G10

**Generation of the *libR/flcA* mutant of *Azospirillum brasilense* Sp7**

Ana Margarita Balderas Peña. Universidad Autónoma de Puebla

## G11

**MEDIATOR 18 mediator complex subunit association in phosphate scarcity response**

Maria Fernanda Ballesteros Barrera. Universidad Michoacana de San Nicolás de Hidalgo

**G12*****Determination of TPPI gene expression levels in post-mortem brain tissue and its association with suicide***

Norma Gabriela Barraza Méndez. Universidad Juárez del Estado de Durango

**G13*****Effect of the expression of the long NON-CODING RNA XIST regarding the oncogen MYC, in the treatment of patients with acute myeloid leukemia***

Susana Bernardo Hernández. Hospital Regional de Alta Especialidad de Ixtapaluca

**G14*****MIR124-3 polymorphisms and neurodevelopment in children Vfrom Durango, México.***

Katzumy Lizbeth Blancas Olvera. Universidad Juárez del Estado de Durango

**G15*****Ligand-dependent XRE binding patterns of aryl hydrocarbon receptor (AHR) on CYP1A1 gene promoter***

Itzel Adriana Cabildo Delgado. Cinvestav Zacatenco

**G16*****Genotyping of the rs737865 polymorphism of the comt gene in suicidal subjects and control subjects using real-time PCR***

Jesus Eduardo Castañeda Betancourt. Universidad Juárez del Estado de Durango

**G17*****Silencing of ABCG2 gene expression in HCT15 colon cells by transfection of a specific sgRNA using the CRISPR-Cas9 technique***

Jesús Fabián Cervantes Meneses. Instituto Nacional de Rehabilitación

**G18*****Role of Hypoxia Response Factors from Phaseolus vulgaris during a nodule development***

Ana I. Chávez Martínez. Universidad Nacional Autónoma de México

**G19*****Effect of the fliW-gene deletion on the extracellular electron transfer and biofilm production in Geobacter sulfurreducens***

Jessica Cholula Calixto. Universidad Nacional Autónoma de México

**G20*****Msn4 is an important regulator of the Environmental Stress Response in Candida glabrata***

Yazmín Contreras Bravo. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**G21*****Transcription factors and DNA motifs in NaStEP promoter regulate gene expression in self-incompatible Nicotiana glauca***

Yuridia Cruz González Zamora. Universidad Nacional Autónoma de México

**G22*****Association of the rs4986791 polymorphism of the tlr4 gene in outpatients with the severity grade of COVID-19***

Ingrid Cuevas Cárdenas. Universidad Juárez del Estado de Durango

## **G23**

### ***Global DNA methylation levels are associated with cardiometabolic risk and clinical disease activity in systemic lupus erythematosus patients***

Ulises De la Cruz Mosso. Universidad de Guadalajara

## **G24**

### ***Microevolution of *Candida glabrata* in the presence of fluconazole***

Rosa Lilian Díaz Chávez. Instituto Potosino de Investigación Científica y Tecnológica A.C.

## **G25**

### ***Loss of the tumor suppressor miR-122 promotes cell migration and up-regulation of BORIS/CTCF in triple-negative breast cancer***

Mauricio Flores Fortis. Universidad Autónoma Metropolitana Cuajimalpa

## **G26**

### ***Exploring the Transcriptome of MCF-7 Breast Cancer Cells Treated with *Capsicum annum* L. var. *fascinato****

Roberto Jorge García Mendoza. Universidad Autónoma de Querétaro

## **G27**

### ***“La” protein in *Leishmania major*: analysis of its interactions with other proteins and RNA molecules***

Sergio García De la Cruz. Universidad Nacional Autónoma de México

## **G28**

### ***Association of the DNMT1 protein with long non-coding RNAs: *MalaT1*, *UCA1* and *HOTAIR* in cervical cancer***

Janis Aislinn García Flores. Instituto Nacional de Cancerología

## **G29**

### ***rs 2278163 Variant of the DLX3 gene and its relationship to the severity of dental fluorosis in women in Durango city***

Oscar Martin Garcia Rosales. Universidad Juárez del Estado de Durango

## **G30**

### ***Interplay between chaperones and the sorting platform for hierarchical secretion of proteins through the injectisome***

Ricardo Gaspar Lino. Universidad Nacional Autónoma de México

## **G31**

### ***Identification of genetic variants associated with treatment toxicity in pediatric patients with acute lymphoblastic leukemia***

Francisco Javier Gaytán Cervantes. IMSS

## **G32**

### ***Epigenetic analysis in adipocytes differentiated from mesenchymal stem cells of the human umbilical cord of newborns from healthy, obese, and diabetic mothers under high glucose and cholesterol conditions***

Emily Jocelyn Gómez Flores. Instituto Nacional de Perinatología Isidro Espinosa de los Reyes

### **G33**

#### ***Analysis of small non-coding RNAs expression profiles and their impact on Malignant Pleural Mesothelioma Development***

Carolina González Torres. Centro Médico Nacional. IMSS Siglo XXI

### **G34**

#### ***Gene regulation of CTA1 in C. glabrata is controlled by different cis and trans-acting elements after being exposed to different stimuli***

Carlos Ricardo González Ruiz. Instituto Potosino de Investigación Científica y Tecnológica A.C.

### **G35**

#### ***Targeting CTCFL oncogene using CRISPR-Cas13 technology***

Paula González Hernández. Universidad Autónoma Metropolitana

### **G36**

#### ***Chromatin remodeling protein Abf1 regulates expression of adhesin encoding genes in Candida glabrata***

Grecia Hernández Hernández. Instituto Potosino de Investigación Científica y Tecnológica A.C.

## **MEDICINE, HEALTH & NUTRITION I**

### **MH1**

#### ***Genomic analysis of mutations in the bruton tyrosine kinase gene in patient with X-LINKED agammaglobulinemia and gastric cancer***

Dulce Jazmin Alvarez Olvera. Universidad Autónoma de la Ciudad de México

### **MH2**

#### ***Boron derivatives as ACE/AChE inhibitors for the control of hypertension: Design, synthesis and in silico evaluation***

Erik Andrade Jorge. Instituto Politécnico Nacional

### **MH3**

#### ***Differential effect of MSCs on the immunomodulation capacity of breast cancer cells***

Víctor Manuel Arenas Luna. Universidad Panamericana campus Ciudad de México

### **MH4**

#### ***Antiobesogenic effect of D-Limonene, Ellagic acid, Gallic acid, and P-Coumaric acid in the liver of rats fed with high-fat diet***

Luis Alberto Ayala Ruiz. Universidad Michoacana de San Nicolás de Hidalgo

### **MH5**

#### ***Search for genetic biomarkers of risk for secondary failure to sulfonylureas***

Mónica Vianney Ayala Martínez. Universidad Nacional Autónoma de México

### **MH6**

#### ***Estimate of the consumption of NON-Caloric sweeteners in adults and their association with the risk of metabolic diseases***

Edgar Daniel Barreras Duran. Universidad Estatal de Sonora

## **MH7**

### ***Analysis of the expression of enzymatic oncological clinical biomarkers in human saliva***

Silvia Barrios Aguilar. Universidad Autónoma de Sinaloa

## **MH8**

### ***Development of an Enzyme-Linked Immunosorbent Assay (ELISA) for the rapid detection of the non-structural protein 1 (NS1) of the Dengue virus***

Maidoly Batista Fernández. Cinvestav Zacatenco

## **MH9**

### ***Wood smoke extract induces alterations in mitochondrial biogenesis and increased production of reactive oxygen species in normal human fibroblasts***

Carina Becerril Berrocal. Instituto Nacional de Enfermedades Respiratorias Ismael Cosío Villegas

## **MH10**

### ***Effect of glycine betaine on the proliferation of human colon adenocarcinoma cells HT-29***

Eiby Grisell Benitez Ibarra. Universidad de Sonora

## **MH11**

### ***The Importance of Nutrition in Alzheimer´s Disease***

Oswaldo Bivian Paredes. Universidad Autónoma del Estado de Hidalgo

## **MH12**

### ***Sequestosome1 nuclear translocation after DNA damage in lung epithelial cells***

Sandra Cabrera Benítez. Universidad Nacional Autónoma de México

## **MH13**

### ***Effect of empaglifozin treatment on magnesemia in metabolic síndrome***

Juan Carlos Cabrera Ángeles. Instituto Nacional de Cardiología "Ignacio Chávez"

## **MH14**

### ***Analysis of Pulmonary Surfactant Protein C during Aging***

Uriel Camacho Silverio. Universidad Nacional Autónoma de México

## **MH15**

### ***Effect of compounds from the aqueous extract of Erythraea tetramera Schiede on pancreatic lipase activity***

Abelardo Camacho Luis. Universidad Juárez del Estado de Durango

## **MH16**

### ***Polar Fraction of Lophocereus schotti decreases TGFBI Gene Expression in the Progress of Chemically Induced Hepatocarcinogenesis***

Marina Campos Valdez. Universidad de Guadalajara

## **MH17**

### ***Effect of Egregia menziesii Algae Extracts on Viability and Migration of Rat Intestinal IEC-6 Cell Line***

Christian Gidoni Carrión Hernández. Universidad Veracruzana

## **MH18**

### ***Evaluation of the effect of the GgXN polymer on the behavior of induced hemiparkinsonism in rat***

Joshua Imanol Cervantes Andraca. Universidad Nacional Autónoma de México

## **MH19**

### ***Transcriptomic Analysis of Bone Neof ormation in the DBA/1 Mouse Model of Spondyloarthritis: Role of Multiple Osteogenic Mechanisms***

Eduardo Chaparro Barrera. Universidad Autónoma de Chihuahua

## **MH20**

### ***One-carbon metabolism and fetal growth in the princesa cohort***

Carolina Chetirquen Silva. Instituto Nacional de Medicina Genómica

## **MH21**

### ***Intermittent fasting reduces mitochondrial function in the colon to revert obesity-driven oxidative stress by modulation of the gut microbiota and the metabolome profile***

Mary Carmen Citlally Condado Huerta. Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán

## **MH22**

### ***Fungal Metabolites as Inhibitors of Shikimate Kinase from Methicillin-Resistant Staphylococcus aureus***

Azhriel Contreras Chávez. Universidad Juárez del Estado de Durango

## **MH23**

### ***Changes in ovarian morphology and ultrastructure in offspring of mice with polycystic ovary syndrome***

Paola Estefania Del Valle Ruvalcaba. Universidad Nacional Autónoma de México

## **MH24**

### ***Human sperm dysfunction is associated with overweight, obesity and oxidative stress***

Aida Guadalupe Díaz Martel. Universidad Autónoma de Querétaro

## **MH25**

### ***Tumor-Educated Platelets in Hepatocellular Carcinoma: a Multicentric Study***

Mariela Judith Domínguez Domínguez. Universidad Veracruzana

## **MH26**

### ***Curcuminoids effects on antioxidant system in plasma and liver of rats***

María Teresa Espinosa García. Universidad Nacional Autónoma de México

## **MH27**

### ***Antioxidant Charge Reverts High-Density Lipoprotein (HDL)-Induced Endothelial Dysfunction in Women with Acute Coronary Syndrome***

Diego Estrada Luna. Universidad Autónoma del Estado de Hidalgo

## **MH28**

### ***Residual glycosidase activity disguise the effect of commercial digestive enzymes on in vitro digestion of phenolic glycosides***

César Femat Castañeda. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

## **MH29**

### ***Evaluation of HBB protein expression in extracellular vesicles isolated from plasmas of women with BI-RADS 4 classification***

Juan Carlos Fernández Hernández. Escuela Superior de Medicina

## **MH30**

### ***Anosmia, odynophagia, and ageusia in COVID-19 positive patients***

Karen Elizabeth Franco Reyes. Universidad Juárez del Estado de Durango

## **MH31**

### ***Formulation of a cookie with the addition of flour from wine industry residues***

Carlos Emilio Galindo Corona. Universidad Autónoma de Coahuila

## **NEUROSCIENCES & NEUROBIOLOGY I**

### **NN1**

#### ***Cognitive stimulation increases microglial phagocytosis in an Alzheimer's disease model***

David Francisco Aguilar Ávila. Universidad Nacional Autónoma de México

### **NN2**

#### ***Age-related increases in skeletal muscle alpha-synuclein monomeric and oligomeric forms***

Ana Leticia Arriaga Guerrero. Universidad Nacional Autónoma de México

### **NN3**

#### ***Long and very-long chain ceramides promotes an anxiety-like behavior in female mice through microglia activation in cortex***

Sofía Bernal Vega. Universidad Autónoma de Nuevo León

### **NN4**

#### ***Impaired hippocampal neurogenesis and spatial learning deficit in adult Wistar rats with acquired hypothyroidism***

Pablo Edson Bustamante Nieves. Instituto Politécnico Nacional

### **NN5**

#### ***Effects of Acetyl-L-Carnitine and L-Carnitine on the Differentiation Efficiency and the Morphology of Motor Neurons Derived from mouse Embryonic Stem Cells***

Maricela Cabrera Castro. Universidad Nacional Autónoma de México

### **NN6**

#### ***Possible inflammation mediated by NF- $\kappa$ B p65 in the retina on short-term induced-diabetes in a rat model***

Alejandro Canizales Ontiveros. Universidad Nacional Autónoma de México

### **NN7**

#### ***Effect of high-carbohydrate diet on mitophagy and mitochondrial dynamics of the frontal cortex of male Wistar rats***

Karen Carreto Meneses. Universidad Autónoma de Puebla



## **NN8**

### ***LC noradrenergic neurons are involved in the lack Hypothalamus-Pituitary-Thyroid axis response to cold in stressed animals***

Andrea Castillo Campos. Universidad Nacional Autónoma de México

## **NN9**

### ***Co-infection model of cytomegalovirus and ZIKA virus in human neural progenitor cells***

Claudia Castillo Martín del Campo. Universidad Autónoma de San Luis Potosí

## **NN10**

### ***Study of Tibolone administration on NADPH oxidase expression in a murine model of traumatic spinal cord injury***

Nadia Tzayaka Castillo Mendieta. Centro Médico Nacional Siglo XXI. IMSS

## **NN11**

### ***Induction, phosphorylation and protein interactions of PEBP1 under early focal cerebral ischemia/reperfusion in the rat hippocampus***

Febe Elena Cázares Raga. Cinvestav Zacatenco

## **NN12**

### ***Effects of 2-APB on dopaminergic pathways***

Rebeca Chávez Campos. Instituto Politécnico Nacional

## **NN13**

### ***Tibolone improves motor recovery, regulates neuroinflammation and gliosis in a model of traumatic spinal cord injury***

Angélica Coyoy-Salgado CONAHCYT. CMN Siglo XXI. IMSS

## **NN14**

### ***Cephalic alterations produced by conditional inactivation of Plpp3 in the Wnt1 expression domains***

Sheyla Sabel Cruz Cruz. Universidad Nacional Autónoma de México

## **NN15**

### ***Maternal diabetes modifies the transcription of genes important for the division of cortical neural stem cells: Role of FOXP2***

Diana Sarahi De la Merced García. Instituto Nacional de Perinatología Isidro Espinosa de los Reyes

## **NN16**

### ***New antiepileptic targets modified by levetiracetam treatment in dentate gyrus of rats with temporal lobe epilepsy***

Verónica Díaz Villegas. Instituto Politécnico Nacional

## **NN17**

### ***Cognitive stimulation reduces neuroinflammation and increases Klotho levels in the hippocampus of mouse Alzheimer's Disease model***

Gustavo de Jesús Fabián Rodríguez. Universidad Nacional Autónoma de México

## **NN18**

### ***Antioxidant effect of Psacalium decompositum in an Alzheimer's disease mouse model***

Paulina Flores Galicia. Instituto Nacional de Geriatria

## **NN19**

### ***Effect of Sulforaphane or Dasatinib + Quercetin on cognitive impairment and neuroinflammation in an experimental model of chronic obesity in middle-age female Wistar rats***

Rosa Pamela Flores Torres. Universidad Autónoma Metropolitana Iztapalapa

## **NN20**

### ***Study of morphological alterations caused by Plpp3 deficiency in the cephalic neural crest of mouse embryos***

Alejandro Elliot Flores Oliva. Universidad Nacional Autónoma de México

## **NN21**

### ***Maqui berry decreases oxidative stress and inflammation in the hippocampus of ozone-exposed rats***

Christian Guerra Araiza. Centro Médico Nacional "Siglo XXI". IMSS

## **NN22**

### ***Hypothalamic transcriptomics under different high-fat diets***

Ruth Gutiérrez Aguilar. Universidad Nacional Autónoma de México

## **NN23**

### ***Evaluation of the effect of metformin on learning and long-term memory in Type 2 diabetic mice***

Joan Aldae Hernández Poblano. Universidad Autónoma de Coahuila

## **NN24**

### ***Effect of a High-carbohydrate Diet on Inflammation and Microglial Phenotype in the Adenohypophysis of Postpubertal Wistar Rats***

Hugo Hernández Frago. Universidad Autónoma de Puebla

## **NN25**

### ***GH treatment decrease astrogliosis in the post stroke***

Martín Hernández Lucas. Universidad Nacional Autónoma de México

## **NN26**

### ***Leptomerin reduces locomotor and spatial memory deficits caused by intrahippocampal injection of A $\beta$ 1-42***

Dulce Hernández Sacramento. Universidad Autónoma de Puebla

## **NN27**

### ***Role of sodium phenylbutyrate on hippocampal morphological changes of hyperammonemic rats induced with CCl $_4$***

Brenda Hernández Juárez. Universidad Autónoma de Puebla

## **SIGNAL TRANSDUCTION AND CELL DIFFERENTIATION I**

### **ST1**

***Identification of novel c-di-AMP binding proteins that regulate mutagenesis and DNA repair in *Bacillus subtilis****

Karen Abundiz Yáñez. Universidad de Guanajuato

### **ST2**

***Regulation of the activity of insulin-like growth 1 receptor by estradiol in breast cancer cell MCF-7***

Esteban Acosta Ramos. Cinvestav Zacatenco

### **ST3**

***$\alpha$ 1A-Adrenergic receptor function: roles of IL3 and Cterm phosphosites***

Rocío Alcántara Hernández. Universidad Nacional Autónoma de México

### **ST4**

***Thrombin-induced NF $\kappa$ B activation in retinal pigmented epithelium cells (RPE)***

Daniela Alejandra Alvarado Fernández. Universidad Nacional Autónoma de México

### **ST5**

***Effect of proinflammatory cytokines on the expression of molecular markers of the cancer stem cell phenotype in PC3 cells***

Osiris Evelyn Aparicio Carrillo. Universidad Autónoma de Puebla

### **ST6**

***Unlocking the potential of approved drugs for the inhibition of PTP1B in cancer therapy***

Luis Enrique Arias Romero. Universidad Nacional Autónoma de México

### **ST7**

***Leptin modifies the metastatic potential in castration-resistant prostate cancer cells (PC3) through the TRPM7 channel***

Rubén Ávalos López. Universidad Autónoma de Puebla

### **ST8**

***Evaluation the role of Ser176 phosphorylation in the activity and localization of SnRK1***

Beatriz Alejandra Ávila Castañeda. Universidad Nacional Autónoma de México

### **ST9**

***Initiation of intracellular trafficking of the LPA3 receptor after its stimulation***

Elias Uriel Avila García. Universidad Nacional Autónoma de México

### **ST10**

***Adrenoceptor alpha1A (ADRA1A) integrates a signaling signature statistically linked to longer survival of liver hepatocellular carcinoma patients***

Yarely Mabell Beltrán Navarro. Universidad Nacional Autónoma de México

### **ST11**

***Role of HPV16 E1 protein in the activation NF- $\kappa$ B signaling pathway***

Alicia Beltrán Soto. Instituto Nacional de Cancerología

## **ST12**

### ***Ouabain promotes claudin-1, -2, and -4 autophagic degradation through oxidative stress and AMPK activation in MDCK cells***

Jessica Paulina Campos Blázquez. Cinvestav Zacatenco

## **ST13**

### ***Role of AhR in Cell Morphology during Neuronal Differentiation of SH-SY5Y Cells***

Jimena Cris Campos Arce. Cinvestav Zacatenco

## **ST14**

### ***Testosterone increases the expression of KV channels and enhances the airway smooth muscle relaxation induced by P2Y4 and adenylyl cyclase signaling***

Abril Carbajal-García. Universidad Nacional Autónoma de México

## **ST15**

### ***Thyroid Hormone T3 Exerts Distinct Regulatory Effects on Metabolism in White, Brown, and Brite Adipocytes***

Lidia Itzel Castro Rodríguez. Cinvestav Zacatenco

## **ST16**

### ***Participation of E6 and E7 HPV16 oncoproteins in cell invasion and migration mediated by the down regulation of RhoE/Rnd3 GTPase***

Yesenia Cid Cruz. UNAM/Instituto Nacional de Cancerología

## **ST17**

### ***[Ca<sup>2+</sup>]<sub>i</sub> distribution in spermatozoa from two populations of Sceloporus grammicus along an altitudinal gradient***

Gabriela Contreras González. Universidad Autónoma Metropolitana Iztapalapa

## **ST18**

### ***Effect of Corticotropin-Releasing Factor (CRF) on the activation of MAPK and PI3K/Akt pathways induced by Insulin-like Growth Factor-1 (IGF-1) in CHO-K1 cells***

Carlos De Jesús Quiroz. Cinvestav Zacatenco

## **ST19**

### ***PTP1B modulates endothelial-to-mesenchymal transition during TNF-induced endothelial dysfunction***

José Esparza López. Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán

## **ST20**

### ***Effect of VPH16 E6 and E7 on mast cell migration***

Zyanya Patricia Espinosa Riquer. Instituto Nacional de Cancerología

## **ST21**

### ***Role of the Ire1-mediated endoplasmic reticulum stress pathway during the development of the tracheal system in Drosophila melanogaster***

María Fernanda Frutis Osorio. Universidad Nacional Autónoma de México

## **ST22**

### ***Role of STAT5 in energy mitochondrial metabolism genes regulation in cervical cancer cells stimulated with Interleukin 2***

Rubén Alejandro Fuentes Pascacio. Universidad Nacional Autónoma de México

### **ST23**

#### ***Analysis of the relationship between the JAK/STAT pathway and the death receptor CD95 to induce proliferation and survival of cervical cancer cells***

Armando García Velasco. Universidad Nacional Autónoma de México

### **ST24**

#### ***Aberrant Epithelial Reprogramming in the Lung from Mmp8-Mmp13 double knockout mouse impairs fibrosis resolution***

Ángeles García-Vicente. Universidad Nacional Autónoma de México

### **ST25**

#### ***Effect of Insulin on Vascular Endothelial Growth Factor-Induced Actions in Endothelial Cells EA.hy926***

Maikel González Matos. Cinvestav Zacatenco

### **ST26**

#### ***Toll-like receptor (TLR)-4 activation induces mast cell migration and participates on their incorporation to solid tumors***

Daniel Guerrero Morán. Cinvestav Sede Sur

### **ST27**

#### ***STAT3 role in the autophagy activation in cervical cancer cells treated with high doses of IL-2 and DDP***

Adriana Gutiérrez Hoya. Universidad Nacional Autónoma de México

### **ST28**

#### ***Role of MEOX2 in modulating the expression and/or activation of MEKK1/2 promoting cell proliferation in lung cancer***

Brenda Naomi Hernández Ramos. Universidad Nacional Autónoma de México

### **ST29**

#### ***Effect of caffeine on metastatic potential in non-small cell lung cancer (A549)***

Yarely Rocio Herrera Sánchez. Universidad Autónoma de Puebla

### **ST30**

#### ***Jasmonic acid regulates cell death and regeneration in the Arabidopsis roots of a mutant with compromised cell viability***

Pedro Iván Huerta Venegas. UMSNH/Instituto de Ecología A.C.

### **ST31**

#### ***Cell senescence modifies phenotype and function of Mast Cells***

Alfredo Ibarra Sánchez. Cinvestav Sede Sur

## **SYSTEMS BIOLOGY & BIOINFORMATICS I**

### **SB1**

#### ***Dynamics of Bacterial Communities in Response to Disturbances***

Roberto Carlos Álvarez Martínez. Universidad Autónoma de Querétaro

## **SB2**

### ***Key Proteins for Regeneration in *A. mexicanum*: Transcriptomic Insights from Aged and Juvenile Limbs***

Aylin Del Moral Morales. Universidad Autónoma Metropolitana

## **SB3**

### ***Functional and structural studies of a novel endolysin from ICPI phage active against multidrug-resistant bacteria***

Laura Angélica Espinosa Barrera. Universidad de Colima

## **SB4**

### ***Unraveling the distinct biases of the genomic landscape of lung adenocarcinoma from Mexican patients***

Bertha Rueda Zarazua. Universidad Nacional Autónoma de México

## **SB5**

### ***Effect of the Lys62Ala Mutation on the Thermal Stability of BstHPr Protein by Molecular Dynamics***

Salomón de Jesús Alas Guardado. Universidad Autónoma Metropolitana

## **SB6**

### ***Experimental and computational study of benzazepiniones as potential inhibitors of *Mycobacterium tuberculosis* HadAB dehydratase***

Armando Alberto Ambrosio Huerta. Universidad Nacional Autónoma de México

## **SB7**

### ***Analysis of gene variations in tumour and healthy tissues of acral lentiginous melanoma patients***

Orlando Ángeles Martínez. Universidad Mexiquense del Bicentenario

## **SB8**

### ***Identification and Functional Characterization of the Genetic Circuits Controlling Cell Wall Metabolism in Jipi Palm (*Carludovica* spp.)***

Jorge Luis Araujo Sánchez. Centro de Investigación Científica de Yucatán A.C.

## **SB9**

### ***Computational screening to predict microrna targets in the flavivirus 3' untranslated region for antiviral development***

Rodolfo Gamaliel Avila Bonilla. Cinvestav Zacatenco

## **SB10**

### ***Viral metagenomics in hypersaline environments***

María Guadalupe Ayala Rodríguez. Universidad Autónoma del Estado de Morelos

## **SB11**

### ***Clustering Bacterial Promoter Sequences Using Supervised Machine Learning***

Paulo Cambranis Boldo. Universidad Nacional Autónoma de México

## **SB12**

### ***Microalgal peptides against the main protease (Mpro) of SARS-CoV-2: In silico evaluation***

David Mauricio Cañedo Figueroa. Universidad Autónoma de Sinaloa

**SB13*****Evolutionary history and distribution analysis of rhamnosyltransferases in the fungal kingdom***

Joaquín Omar Chávez Santiago. Universidad de Guanajuato

**SB14*****Bioinformatic Analysis of Whole Genomes of Staphylococcus aureus Isolated from the Skin of Atopic Dermatitis Patients and Healthy Subjects***

Sergio Alland Colorado Cortés. Universidad Nacional Autónoma de México

**SB15*****Transcriptomic analysis of the infective process of the mistletoe Psittacanthus calyculatus in the host tree mesquite Prosopis laevigata***

Marco Ramsés Cota Pineda. Centro de Investigación en Alimentación y Desarrollo, A.C.

**SB16*****Early and late transcriptional responses to auxins and cytokinins during the induction of somatic embryogenesis in Coffea canephora***

Marcos David Couoh Cauich. Centro de Investigación Científica de Yucatán A.C.

**SB17*****Microbial community dynamics through metagenomics in two experimental biodigesters for rural community use***

Erika Viridiana Cruz Bonilla. Cinvestav Irapuato

**SB18*****Study of perivascular fiber formation in Agave fourcroydes through a transcriptomic approach***

José Roberto Cruz Balam. Centro de Investigación Científica de Yucatán A.C.

**SB19*****In Silico Inhibitory Potential of Peptides HRA and PK-2 Against the Fusion Protein F of Respiratory Syncytial Virus***

Deyanira Judith De Anda Alejandrez. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**SB20*****How to model the structure-function relationship of proteins?***

Gabriel Del Río Guerra. Universidad Nacional Autónoma de México

**SB21*****Analysing the co-expression and protein-protein interaction networks related to thermotolerance in Arabidopsis thaliana***

Ana Karen Díaz Martínez. Instituto Tecnológico Superior de Irapuato

**SB22*****Theoretical study of the NamH hydroxylase of Mycobacterium tuberculosis as a potential target in the development of new antibiotics***

Roberto Sealtiel Farías Gaytán. Universidad Nacional Autónoma de México

## **SB23**

### ***Phenotypic and genotypic evaluation of antibiotic resistance in *Pseudomonas aeruginosa* isolated from hydrothermal water samples from Chignahuapan, Puebla***

Jennifer Vianey Fernández Doderó. Universidad Autónoma de Puebla

## **SB24**

### ***Developing a Generative AI Assistant for RegulonDB: Enhancing Data on *E. coli* K-12 Transcriptional Regulation***

Ma del Socorro Gama Castro. Universidad Autónoma de la Ciudad de México

## **SB25**

### ***Evaluation of two taxonomic assignment methods for the study of lizard gut microbiome using metagenomic data***

Elizabeth Selene Gomez Acata. Universidad Autónoma de Tlaxcala

## **SB26**

### ***Pipeline implementations using the Galaxy platform for reference assembly of chloroplast genome from transcriptome data***

Ana Carolina González Trillo. Instituto Politécnico Nacional

## **OTHERS I**

### **O1**

#### ***Effect evaluation of Curcumin and Resveratrol compounds on cancer stem cell-enriched cultures derived from cancer cell lines***

Jorge Aguilar Meza. Instituto Nacional de Cancerología

### **O2**

#### ***Mesenchymal-Amoeboid Transition in Triple-Negative Breast Cancer line, MDA-MB-231***

Arturo Aguilar Rojas. Instituto Mexicano del Seguro Social

### **O3**

#### ***Towards big data analysis of a superbug's molecular epidemiology***

Omar Alejandro Aguilar Vera. Universidad Nacional Autónoma de México

### **O4**

#### ***Study of the stability of the Rb protein and its modulation by MDM2***

Gabriel Alonso Pérez. Universidad Autónoma de San Luis Potosí

### **O5**

#### ***Manifestaciones bucales presentes en pacientes con enfermedad de Parkinson de la ciudad de Durango y su relación con la progresión de esta enfermedad***

Leslie Mariana Apodaca Ayala. Universidad Juárez del Estado de Durango

### **O6**

#### ***Molecular Insights into Folate Dynamic Metabolism in Common Bean (*Phaseolus vulgaris*) Seeds During Storage***

Itzel Astrid Aviña Ávalos. Tecnológico de Monterrey



**O7**

***Common bean transcription factors from the AGL/MADS and SPL families drive the expression of the Mir172c gene, a key regulator of common bean N-fixing symbiosis***

Litzy Ayra Pardo. Universidad Nacional Autónoma de México

**O8**

***Rapid identification of bioactive compounds from agave by MS-DART as potential biomarkers for archeological studies***

Emanuel Bojórquez Quintal. El Colegio de Michoacán, A.C.

**O9**

***Studying nucleophagy in the longest-lived rodent, the Naked Mole-Rat***

Luis Antonio Buendía Sánchez. Universidad Nacional Autónoma de México

**O10**

***Laccase proton relay mechanism from Thermus thermophilus HB27***

María Cristina Cardona Echavarría. Universidad Nacional Autónoma de México

**O11**

***Resistin and adiponectin modulate ABCA1 and ABCG2 transporters in an in vitro placenta model***

Amanda Bexidiu Castillo Escoto. Instituto Nacional de Perinatología Isidro Espinosa de los Reyes

**O12**

***Rapid characterization of commercial essential oils major components by direct methods (ATR-IR and MS-DART)***

Ana V. Coria Téllez. El Colegio de Michoacán, A.C

**O13**

***SERCA pumps counteract tetanic contractions while maintaining the force amplitude of single twitch contractions***

Adan Dagnino Acosta. Universidad de Colima

**O14**

***Purification and characterization of the esterase TA0887 from Thermoplasma acidophilum***

Alejandro Delgado Rey. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**O15**

***Characterization of the Inhibitory Effects of Coagulase-Negative Staphylococci from Healthy Subjects on the Growth of Staphylococcus aureus Isolated from Atopic Dermatitis Patients***

Leticia Itzel Diaz Ramos. Universidad Nacional Autónoma de México

**O16**

***Molecular docking of glycerol kinase driven monophosphorylations of small alcohols***

Wendy Itzel Escobedo Hinojosa. Universidad Nacional Autónoma de México

**O17**

***Generation of Human Antibodies in NSG Mice Against Specific Targets of Alzheimer´s Disease***

Jeniffer Espinoza Hernández. Instituto Politécnico Nacional

**O18**

***Studies of the effect of the interaction of the E1B- 55K protein with RNA on transcription and splicing of adenovirus late viral mRNA***

Diana Laura Flores Garcia. Universidad Autónoma del Estado de Morelos

**O19**

***Gender leadership in bacteriology and Archaea research in Latin America***

Luis Ernesto Fuentes Ramírez. Universidad Autónoma de Puebla

**O20**

***Cyclic Nucleotide-Gated Ion Channels: A Potential New Player in Plant Antiviral Defense Against Begomovirus Infection***

Ana María García Montelongo. Universidad de Colima

**O21**

***HGF modulates the MAPK/ERK 1/2 pathway to exert its hepatoprotective effect in a murine model of experimental cholestasis***

Maricruz García Barrera. Universidad Autónoma Metropolitana Iztapalapa

**O22**

***Relationship between external pH, Ca<sup>2+</sup> oscillations and intracellular pH in human spermatozoids***

Ángela Raquel García Martínez. Universidad Nacional Autónoma de México

**O23**

***Study of calcium oscillations induced by membrane depolarizing pulses in human sperm***

Mariam Gasga Tehuintle. Universidad Nacional Autónoma de México

**O24**

***Sequence space analysis of homologous proteins with ( $\beta/\alpha$ )<sub>8</sub> fold***

Estefani Gaytan Nuñez. Universidad Nacional Autónoma de México

**O25**

***Surface engineering of the encapsulin nanocompartment of Myxococcus xanthus for the generation of protein delivery vehicles***

Sac Nicté Gómez Barrera. Universidad Nacional Autónoma de México

**O26**

***Phylogeography of *Zamia loddigesii* Miq in the Gulf of Mexico***

Marcel Arturo Gómez García. Universidad Veracruzana

**O27**

***The role of the ubiquitination in the replication of the neurotropic astrovirus VAI***

Jaqueline Gómez Reyes. Universidad Nacional Autónoma de México

**O28**

***Role of SERCA pumps in the shape of the contraction-relaxation kinetics of soleus muscle and its effect on force production and fatigue***

Ana Marcela González Bedoy. Universidad de Colima

**O29**

***Description of SYCP3 accumulations in primary spermatocytes of the first spermatogenic wave of prepubertal mice***

Luis Pablo Guzmán Vargas. Universidad Nacional Autónoma de México

**O30**

***Effects of melatonin on human sperm in vitro capacitation***

Gabriela Hernández Silva. Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán

**O31**

***Nanovaccines design against Vibrio cholerae***

Alejandro Huerta Saquero. Universidad Nacional Autónoma de México

**O32**

***Expression of MICAL2 protein in oral squamous cell carcinoma. Bibliographic review pilot study***

José Manuel Huizar Reyes. Universidad Juárez del Estado de Durango

**O33**

***Participation of estrogen and progesterone receptors, and PKA signaling in the expression regulation of unfolded protein response genes during decidualization in immortalized human endometrial stromal cells***

Jesús Iván Jiménez Rivera. Universidad Nacional Autónoma de México

**O34**

***Uso del examen escrito para evaluar algunas competencias en la asignatura de Bioquímica y Biología Molecular: Una nueva perspectiva para un viejo instrumento***

Kevin David Laguna Maldonado. Universidad Nacional Autónoma de México

**O35**

***Bioprospecting of endophytic fungi from macroalgae of the mexican caribbean sea***

Ixchel Adriana Loa Ramírez. Universidad Nacional Autónoma de México

**O36**

***Vigor characterization of wild and cultivable amaranth seeds***

Alberto Antonio Lomelí Bernal. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**O37**

***Fluoracil's Senolytic Potential: Targeting Selective Cell Death in Senescent Cells***

Norma Edith López Díaz Guerrero. Universidad Autónoma Metropolitana Iztapalapa

**O38**

***Antitumour and antimigratory activity of glaucolid E in breast cancer cells***

Hugo Aramís López Meléndez. Universidad Nacional Autónoma de México

**O39**

***Subcellular localization of phosphomimetic forms of Rb***

Leonardo Lozoya Lozoya. Universidad Autónoma de San Luis Potosí

**O40**

***In silico determination of pKa AND logD of novel voltage-gated potassium ion channel blockers based on 4-aminopyridine***

Jair Alejandro Madera Hurtado. Universidad de Guadalajara

**POSTER SESSION II**  
**TUESDAY, OCTOBER 22**  
17:00 – 19:00

## **BASIC BIOCHEMISTRY I**

### **BB1**

***Evaluation of specific L-glutaminase activity in the unconventional yeast***

***Rhodotorula mucilaginosa***

Paola Itzel Acosta Valdelamar. Universidad Nacional Autónoma de México

### **BB2**

***Are Zea mays HXK7-8 glucose sensors?***

David Acosta Muro. Universidad Nacional Autónoma de México

### **BB3**

***Overexpression of TIMP3 decreases migration in A549 cell line***

Arantxa Melissa Aguilar López. Instituto Nacional de Enfermedades Respiratorias "Ismael Cosío Villegas

### **BB4**

***Inhibition of p62 reduces mobility and intracellular calcium in mouse spermatozoa***

Charmina Aguirre Alvarado. IMSS

### **BB5**

***Effect of chitosan on the permeability of different yeasts strains***

Minerva Araiza Villanueva. Universidad Nacional Autónoma de México

### **BB6**

***The C-terminal fragment of one of the asparaginyl endopeptidases (AEPs) of***

***Trichomonas vaginalis works as an AEP proteolytic activity inhibitor***

Rossana Arroyo Verastegui. Cinvestav Zacatenco

### **BB7**

***Phenotypical responses of seedlings from Arabidopsis thaliana mpk3 and mpk6 mutants to high temperatures***

David Fernando Barrera Gómez. Universidad Nacional Autónoma de México

### **BB8**

***Chemical Remotion of Glycan Moieties to Enhance Protein Identification by LC-MS/MS***

Esaú Bojórquez Velázquez. Instituto de Ecología

### **BB9**

***Development of a Tool for the Assessment of Critical Thinking in Medical Students***

Oliva Briz Tena. Universidad Nacional Autónoma de México

**BB10*****Relationship between the enzyme glucose-6-phosphate dehydrogenase (ZWF1) and hydrogen sulfide production in the yeast Saccharomyces cerevisiae***

María Jatziry Camacho Campos. Universidad Nacional Autónoma de México

**BB11*****Role of the KINrg1 and KIRtg3 proteins from K. lactis in glucose repression, retrograde response and mitochondrial DNA integrity***

Carlos Campero Basaldua. Universidad Nacional Autónoma de México

**BB12*****The moonlight protein Alt1***

Eduardo Cardona Guerrero. Universidad Nacional Autónoma de México

**BB13*****Hepatoprotective effect of bacterial cyclodipeptides in obesity rats model***

Ángela Regina Castillo Jiménez. Universidad Michoacana de San Nicolás de Hidalgo

**BB14*****Phloem exudate proteins of grafted and non-grafted beans (Phaseolus sp.) cultivated under irrigation and water restriction during grain filling***

Martha Itzel Cayetano Marcial. Colegio de Postgraduados

**BB15*****A biocomputational and site-directed mutagenesis approach to recover the acid phosphatase/phytase activity of EhHAPP49, an atypical amoebic enzyme***

Guadalupe Alejandra Chávez Melendrez. Universidad Autónoma de Baja California

**BB16*****Fumarate reductase in Rhodotorula mucilaginosa and its possible physiological roles***

Natalia Chiquete Félix. Universidad Nacional Autónoma de México

**BB17*****Introgression of drought tolerance of Phaseolus acutifolius A. Gray to Phaseolus vulgaris L***

Marcela Cilia García. Colegio de Postgraduados

**BB18*****pBr-2-APB is an inefficient endoplasmic reticulum calcium releasing agent***

Rodrigo Contreras Gaytán. Cinvestav Zacatenco

**BB19*****DPE2 activity in bean fruit pericarp is post-translationally regulated***

Gerardo Contreras Ruiz. Universidad Nacional Autónoma de México

**BB20*****Lactate deshydrogenasa and Its Relevance in Cancer Biology: Regulation, Isoenzymes, and Inhibition Mechanisms***

Carla Isabela Cuevas Bañuelos. Instituto Politécnico Nacional

**BB21*****Chlorotracker: a photoactivable 1,8-naphthalimide derivative as a probe for chloroplast imaging***

Karen Melissa Dahlman Cabrera. Universidad Nacional Autónoma de México

**BB22*****Engineering of nanocompartments based on encapsulin a from myxococcus xanthus for use as a protein release system***

Willy Ángel Delgado Tapia. Universidad Nacional Autónoma de México

**BB23*****Evaluation of the antifungal effect of the extract of Moringa oleifera on Aspergillus parasiticus***

Edmar de Jesús Díaz García. Universidad Autónoma Benito Juárez de Oaxaca

**BB24*****MCT11 Transporter overexpression in vitro leads to lipid accumulation***

Zuleima Natali Domínguez. Velázquez. Cinvestav Zacatenco

**BB25*****Evaluation of the changes in carbon fixation and carbohydrate content between diverse bread wheat genotypes tolerant and sensitive to heat stress***

Ana Laura Encinas Montes. Centro de Investigación en Alimentación y Desarrollo, A.C.

**BB26*****Identification and Evaluation of Tannins and Flavonoids of Nephelium lappaceum of industrial interest***

Adelma Escobar Ramírez. Universidad Juárez Autónoma de Tabasco

**BB27*****Impact of the W165F Mutation in pkBADH on the Formation of the pkBADH-NAD<sup>+</sup> Complex***

Anabel Félix Arredondo. Universidad de Sonora

**BB28*****Defining essential and non-essential chloroplast ribosomal proteins in Nicotiana tabacum and Arabidopsis thaliana***

Emanuel Osmar Flores Camargo. Instituto Politécnico Nacional

**BB29*****The combination of three drugs modifies the metabolism in colorectal cancer cells***

Laura Cecilia Flores García. UNAM. Instituto Nacional de Cancerología

**BB30*****The translation factor eIF4E is a key mediator of Doxorubicin resistance: Insights from a triple-negative breast cancer model***

Héctor Frayde Gómez. Universidad Autónoma de Baja California

**BB31*****Determination of the activity of the enzymes in the primary assimilation of nitrogen in the embryogenic system of Coffea canephora***

Laura Chanel Fuentes Vázquez. Centro de Investigación Científica de Yucatán A.C.

**BB32**

***Isolation of intact *P. parva* and *C. reinhardtii* plastids for the standardization of an in vitro protein import model***

Sergio Fuentes Hernández. Universidad Nacional Autónoma de México

**BB33**

***Fluoride concentration in the breast milk of lactating women in the city of Durango***

Sergio Alberto Galindo Najera. Universidad Juárez del Estado de Durango

**BB34**

***Characterization of mitochondrial Ca<sup>2+</sup> regulation in HeLa cells***

Martín Leonardo Gallegos Gómez. Cinvestav Zacatenco

**BB35**

***Challenges in the Solubility and Folding of Recombinant Lipases: The Case of LipGOM6***

Elena Lizbeth García Villegas. Universidad Autónoma del Estado de Morelos

**BB36**

***Specificity and Mechanisms of c-type Cytochrome Biogenesis in Malaria Parasites***

Aldo E. García Guerrero. University of Utah

**BB37**

***Characterization of the VDAC family in maize and the physiological role of the isoforms ZmVDAC1b and ZmVDAC4b in drought stress***

Donají Azucena García Ortiz. Universidad Nacional Autónoma de México

## ■ BIOTECHNOLOGY II

**BT54**

***Insights in the antibacterial structure-function relationship of the pepper defensin J1-1***

Georgina Estrada Tapia. Centro de Investigación Científica de Yucatán A.C.

**BT55**

***Overproduction of medically and biotechnologically relevant phenazines using a mutant in *rsma* of *Pseudomonas aeruginosa* ID4365 with attenuated virulence***

Misael Josafat Fabían Del Olmo. Universidad Nacional Autónoma de México

**BT56**

***Identification of an antigenic protein from *Helicobacter pylori* through prediction of T and B epitopes and production of the recombinant protein in *Escherichia coli****

Brenda Yarely Fernández Madrid. Instituto Tecnológico de Durango / TecNM

**BT57**

***Colorimetric evaluation and pigment content in leaves of different varieties of *A. hypochondriacus*, *A. hybridus* and *A. caudatus* in vegetative stage***

Guadalupe Abigail Flores Pérez. Instituto Politécnico Nacional

**BT58*****Finding novel alkyl glucoside-producing and methanol-tolerant variants from an AmyA alpha-amylase library***

Kimberly Flores Rivera. Universidad Nacional Autónoma de México

**BT59*****Cellulolytic activity optimization of enzymatic extracts from a native strain of Bacillus subtilis isolated from Agave durangensis bagasse***

Miguel Antonio Franco Vazquez. Universidad Juárez del Estado de Durango

**BT60*****Synthesis of gold nanoparticles using a lipid-rich extract from mexican avocado seed and evaluation of its cytotoxicity on murine melanoma cells***

Minerva Frutis Murillo. Universidad Michoacana de San Nicolás de Hidalgo

**BT61*****Construction of an expression vector for the SPSK\_04019 gene encoding an Hsp70 from Sporothrix schenckii and expression of the rHSP70 Protein***

Connie Gallegos Rivera. Universidad Juárez del Estado de Durango

**BT62*****Identification and isolation of strains of agronomic interest in agricultural soil with clay texture***

Jesus Garcia Pereyra. Instituto Tecnológico del Valle del Guadiana

**BT63*****Evaluation of the effect of zinc oxide nanoparticles on jalapeño pepper (Capsicum annuum) crop. Bioaccumulation, metabolic profile and bacteriome***

Luis Alberto García Casillas. Universidad de Guadalajara

**BT64*****Green synthesis of silver nanoparticles and its effects on plants***

Cristina Garcidueñas Piña. Universidad Autónoma de Aguascalientes

**BT65*****Effect of dissolved oxygen in the growth of a recombinant glycoprotein-producing Pichia pastoris***

Rogelio Diego Gaytan Castro. Universidad Nacional Autónoma de México

**BT66*****Expression of membrane receptors in cell-free systems from Escherichia coli and their use in the generation of biosensors***

Karen Stephania González Ponce. Universidad de Guanajuato

**BT67*****Metzal as a texturizing agent in the development of barley (Hordeum vulgare)***

Neftali Esteban Guzmán Mendoza. Universidad Autónoma del Estado de Hidalgo

**BT68*****Plant Growth-Promoting Bacteria enhances the biomass of Agastache mexicana subsp mexicana and improves the production of high-value secondary metabolites in greenhouse conditions***

Héctor Daniel Hermenegildo Rosas. Universidad Autónoma del Estado de Morelos



**BT69*****Expression of the recombinant BoDef1: a Class I Defensin from Bixa orellana***

Raquel Fabiola Hernández Díaz. Centro de Investigación Científica de Yucatán A.C.

**BT70*****Identification of virulence gen fimh in clinic isolates of Klebsiella pneumoniae***

Nubia Francelica Hernández Sánchez. Universidad Autónoma de Sinaloa

**BT71*****In silico analysis of hotspots in replicative polymerases and their relationship with gynecological cancer***

Kayley Aileen Hernández Ramírez. Universidad Autónoma del Estado de Hidalgo

**BT72*****Biotechnological synthesis of precursors of interest in the production of SSRIs***

Olga Livier Jasso Durón Instituto Politécnico Nacional

**BT73*****Molecular Identification of a Highly Polyhydroxybutyrate-Producing Strain***

Alfonso Jiménez Adón. Instituto Politécnico Nacional

**BT74*****Ex situ fermentation biomass monitoring by impedance spectroscopy***

José Raúl Junco Carmona. Instituto Politécnico Nacional

**BT75*****Amylase production from solid state fermentation and submerged liquid fermentation by thermotolerant filamentous fungi obtained from the Tolantongo caves***

Adriana Jazmín Legorreta Castañeda. Instituto Politécnico Nacional

**BT76*****Analysis of the effect of vascular and mesophyll expression of a common bean aquaporin PvAQP1 on Arabidopsis thaliana growth***

Valeria Alexandra López Toledo. Cinvestav Zacatenco

**BT77*****Identification of antigens in the immunoproteome of porphyromonas gingivalis: progress***

Héctor Samuel López Moreno. Universidad Autónoma de Sinaloa

**BT78*****R-LuxHR: Quantitative homologous recombination reporter system***

Eduardo López Urrutia. Universidad Nacional Autónoma de México

**BT79*****O/W emulsions stabilized with modified chipilin protein (Crotalaria longirostrata)***

Diana Itzel López Monterrubio. Universidad Autónoma de Chapingo

**BT80*****Extracellular Fragmented Self DNA acts a damage signal in Neochloris oleoabundans***

Nancy Edith Lozoya Pérez. Centro de Innovación Aplicada en Tecnologías Competitivas, A.C.

**BT81*****Phenological evaluation in Capsicum annum plant by the application of chitosan nanoparticles***

Eva Mariela Lunar Mata. Universidad de Guanajuato

**BT82*****Cloning of flippase IA of Giardia intestinalis***

Carmen Alejandra Luque Camacho. Universidad Autónoma de Sinaloa

**BT83*****Evaluation of microalgae growth Porphyridium cruentum in relation to light intensity***

Mildred Yael Manriquez Zamora. Instituto Politécnico Nacional

**BT84*****Systematic evaluation of selective antimicrobial peptides***

Gabriel Marcelino Pérez. Universidad Nacional Autónoma de México

**BT85*****Phylogenetic analysis of Aspergillus flavus enzymes with high potential for PET (polyethylene terephthalate) degradation***

Noemí Marchena Echeverría. Universidad de Guadalajara

**BT86*****Advancements in barley variety development: technologies and applications***

Julio Armando Massange Sánchez. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

**BT87*****Effect of different C:N and magnesium ratios on PHB accumulation in Bacillus thuringiensis***

Yazmin Melendez Xicohtencatl. Instituto Politécnico Nacional

**BT88*****Relation between environmental conditions and organic fertilizers in corn seeds quality***

Lucila Méndez Morán. Universidad de Guadalajara

**BT89*****Characterization of a recombinant protease inhibitor from broccoli (Brassica oleracea var. italica)***

Maria Fernanda Mendoza Acosta. Universidad de Guanajuato

**BT90*****Formulation and characterization of raspberry-based products produced in Huejotzingo, Puebla***

Maricarmen Meneses Juárez. Instituto Politécnico Nacional

**BT91*****Encapsulation of the Bacillus subtilis PAD123-Pars::gfpmut3a biosensor in alginate beads for the detection of arsenic in water***

Noé de Jesús Miranda Breceda. Universidad Juárez del Estado de Durango

**BT92**

***Antimicrobial and growth-promoting properties of silver nanoparticles from Beta vulgaris L. leaves on M. bombycina and S. undatus in vitro***

José Francisco Morales Domínguez. Universidad Autónoma de Aguascalientes

**BT93**

***Genetic transformation of Mimosa tenuiflora for the establishment of hairy root cultures***

Jorge Humberto Mundo Ariza. Universidad Autónoma del Estado de Morelos

**BT94**

***Unveiling Remote Homologs of Fungal Cell Wall Proteins Using AI-Based Structural Predictions***

Pablo Valentín Navarro Enguilo. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

**BT95**

***Formulation of an organo-mineral fertilizer inoculated with plant growth-promoting bacteria***

Melissa Nuñez Valdés. Universidad Autónoma de Puebla

**BT96**

***Agavin promotes beneficial microbes in the shrimp microbiota***

Adrián Ochoa Leyva. Universidad Nacional Autónoma de México

**BT97**

***Separation and characterization of the charge variants of the monoclonal antibody bevacizumab***

Maricela Olvera Rodríguez. Instituto de Biotecnología

**BT98**

***Synthesis of xanthan gum derivatives and its biological properties***

Karen Onofre Rentería. Universidad Autónoma de Coahuila

**BT99**

***Bioinformatic analysis of the relationship between the environment and microorganisms for maize yield simulation***

Jimena Ortiz Laris. Instituto Tecnológico Superior de Irapuato

**BT100**

***Effect of SO<sub>x</sub> from simulated flue gas on growth and gene expression of S-compounds in the microalgae Desmodesmus abundans RSM***

Adriana Pacheco Moscoa. Tecnológico de Monterrey

## **GENETICS, EPIGENETICS AND GENETIC REGULATION II**

**G37**

***Clinical value of gene expression profiling by digital PCR for the detection of leukemic cells in pediatric population***

Adriana del Carmen Aguilar Lemarroy. Instituto Mexicano del Seguro Social

**G38*****Interaction between genetic variants in vitamin D metabolism genes: impact on rheumatoid arthritis susceptibility and hypovitaminosis D***

Bertha Campos López. Universidad de Guadalajara

**G39*****Insulin pathway changes on the gene expression in adipose tissue modulated by ellagic acid in obese Wistar rat induced with high fat diet***

Ramón Castillo Correa. Instituto Politécnico Nacional

**G40*****Genetic variants related with neoadjuvant chemotherapy response in breast cancer patients***

Luis Felipe Jave Suárez. Universidad de Guadalajara

**G41*****The increase in methylation of the ABCG2 gene is related to the presence of its Q141K allele and lower expression of the gene in peripheral blood of patients with gout and controls***

Ámbar López Macay. Instituto Nacional de Rehabilitación

**G42*****Comparative genomic analysis of Candida glabrata clinical isolates to understand antifungal resistance***

Ana Lizbeth López Marmolejo. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**G43*****The forgotten side of the GPN-loop GTPase Npa3: the carboxy-terminal domain is a critical regulator of the GTPase core function***

Manuel de Jesús Ochoa Valdez. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**G44*****Unveiling molecular differences in 3D cell Culture of Triple Negative Breast Cancer cells and their resemblance to Tumor Tissue***

Mercedes Olvera Valencia. Instituto Politécnico Nacional

**G45*****Epigenetic regulation of ATP2A3 and CACNA1H genes in HepG2 cells***

Guadalupe Hernández Martínez. Universidad Veracruzana

**G46*****Functional study of Maf1 in the protozoan parasite Leishmania major***

Aldo Rodrigo Hernández Zamarripa. Universidad Nacional Autónoma de México

**G47*****Metabolic processes associated with chemotaxis responses in Kosakonia cowanii***

María Inés Hernández Castellanos. Universidad Autónoma de Querétaro

**G48*****Detection of single-nucleotide polymorphisms in BLK, STAT4 and IRF5 genes associated with pediatric antiphospholipid syndrome by real-time PCR genotyping***

Tanya Paola Hidalgo Romero. IMSS

#### **G49**

##### ***MCF-7 cells modify capacitive calcium entry (CCE) by exposure to methanolic extracts of *Capsicum annum L. var. Fascinatum (FAS)****

Joel Hurtado Patiño. Universidad Autónoma de Querétaro

#### **G50**

##### ***Evaluation of the expression of miRNAs contained in extracellular vesicles of patients diagnosed with COVID-19***

Nancy Vanessa Iglesias Vázquez. Hospital Regional de Alta Especialidad de Ixtapaluca

#### **G51**

##### ***Role of flotillin from *Phaseolus vulgaris* during a mutualistic interaction with *Rhizobium tropici****

Pamela Jiménez Chávez. Universidad Nacional Autónoma de México

#### **G52**

##### ***Estradiol, medroxyprogesterone, and camp differentially regulate unfolded protein response genes during decidualization in human immortalized endometrial stromal cells***

Miguel Ángel Jiménez Beltrán. Universidad Nacional Autónoma de México

#### **G53**

##### ***Identification of SNORNAS that interact with lipids using the LIPID-RNA SEQ technique in *Saccharomyces cerevisiae****

Irma Angélica Jiménez Ramírez. Centro de Investigación Científica de Yucatán A.C.

#### **G54**

##### ***Unveiling the landscape of LINC00052 molecular mechanisms in breast cancer cells by bioinformatic and experimental analyses***

Miguel Ángel Juárez Mancera. Instituto Nacional de Medicina Genómica

#### **G55**

##### ***Analysis of the interaction network between non-coding RNAs and the transcription factors c-Jun and c-Fos and its effect on the expression of genes that mediate renal hypertrophy***

Isaac Virgilio Martínez Cárdenas. Universidad Autónoma de la Ciudad de México

#### **G56**

##### ***Post-translational regulation of tissue-specific basic Helix-Loop-Helix transcription factors through heterodimerization***

Kenya Lizbeth Mena Garcés. Instituto Nacional de Enfermedades Respiratorias Ismael Cosío Villegas

#### **G57**

##### ***In silico and cellular differences associated to the cell division process between the A and B races of the colonial microalga *Botryococcus braunii****

Xóchitl Morales de la Cruz. Cinvestav Irapuato

#### **G58**

##### ***Characterization of ABC-type transporters in *Candida glabrata****

Mariana Montserrat Morales Avila. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**G59*****Study of promoter activity, subcellular localization, and overexpression of ERULUS during mutualistic interactions***

Rogelio Morales Sotelo. Universidad Nacional Autónoma de México

**G60*****Genomic sequencing of four pathotypes of Colletotrichum lindemuthianum and analysis of virulence genes***

Ma. Irene Morelos Martínez. Universidad Michoacana de San Nicolás de Hidalgo

**G61*****An interplay between histone exchange and tRNA expression impacts cellular proteostasis and aging***

Ericka Moreno Méndez. Universidad Nacional Autónoma de México

**G62*****Detection of Human Papillomavirus using PCR in situ in Prostatic Cancer***

Guadalupe Morquecho Ramos. Instituto Politécnico Nacional

**G63*****Regulation of the antifungic alkylresorcinol lipid production by phosphate in Azotobacter vinelandii***

Andrea Viridiana Moyao Mejía. Universidad Nacional Autónoma de México

**G64*****Molecular study of Tau131, subunit of transcription factor TFIIIC, in the human pathogen Trypanosoma brucei***

Leonardo Munguía Aguirre. Universidad Nacional Autónoma de México

**G65*****PEROXIDASE 35 gene is involved in lateral root primordium morphogenesis and is regulated at the epigenetic level***

Selene Napsucyaly Mendivil. Universidad Nacional Autónoma de México

**G66*****Differential display of expressed genes of Trichoderma asperellum during growth on PET (Polyethylene terephthalate)***

Adriana Guadalupe Orozco García. Universidad de Guadalajara

**G67*****Study of SYCP3 and its perinuclear accumulations in primary spermatocytes during the rat first spermatogenic wave***

Sebastián Pacheco Gutiérrez. Universidad Nacional Autónoma de México

**G68*****GST, NQO1, and CC16 polymorphisms as potential disease severity biomarkers in influenza-related pneumonia***

Margarita Isabel Palacios Arreola. Instituto Nacional de Enfermedades Respiratorias  
Ismael Cosío Villegas

**G69*****Tripartite Motif Containing 25 is upregulated in glioblastoma***

Eva Guadalupe Palacios Serrato. Universidad Autónoma de la Ciudad de México

### **G70**

***A comparative study in the regulome of Gallibacterium anatis strain ESV200 against Pasteurellaceae family and E. coli bacteria***

Nain Gabriela Pedroza Viveros. Universidad Autónoma de Puebla

### **G71**

***Exploring the genetic bases of retrotransposon expression and its impacts on cellular aging***

Cesia Daniela Pérez Aguilar. Cinvestav Irapuato

## **— MEDICINE, HEALTH & NUTRITION II**

### **MH32**

***Inhibition of the early development of fibrosis in chronic kidney disease***

Juan Carlos Gallardo Pérez. Instituto Nacional de Cardiología "Ignacio Chávez"

### **MH33**

***Etiology, treatment and survival of patients with hepatocellular carcinoma in Veracruz, México***

Mariela Judith Domínguez Domínguez. Universidad Veracruzana

### **MH34**

***Evaluation of the effect of a guar gum derivative in a murine model of obesity***

Ehekatzin García Valdés. Instituto Politécnico Nacional

### **MH35**

***The effect of oxLDL on a cellular model of HER2+ breast cancer***

Jeshua Johayra Garcia Soberanes. Universidad Autónoma de Baja California

### **MH36**

***Effect of two O-GLCNAc transferase inhibitor drugs on VPH-positive cervical cancer cells***

Ulises González González. Universidad Autónoma Benito Juárez de Oaxaca

### **MH37**

***The microbiota and the production of secondary and tertiary bile acids depend on the type of protein consumed***

Omar Granados Portillo. Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán

### **MH38**

***Mitochondrial expression of Kir5.1 and Kir6.2 channels in the progression of triple-negative breast carcinoma***

María del Carmen Gutiérrez Galván. Universidad de Colima

### **MH39**

***Nopal and Pirfenidone Improve Body and Liver Weights, and Insulin Resistance in a Mouse Obesity Model with Diethylnitrosamine***

Jorge Gutiérrez Cuevas. Universidad de Guadalajara

#### **MH40**

##### ***Kinetic and structural characterization of small molecules capable of inhibiting Src homology-2-containing protein tyrosine phosphatase 2***

Brenda Paola Gutiérrez Soto. Universidad Juárez del Estado de Durango

#### **MH41**

##### ***Tear proteins as potential biomarkers in retinoblastoma***

Jesús Hernández Monge. Universidad Autónoma de San Luis Potosí

#### **MH42**

##### ***Alterations in the functioning of the heart induced by changes in energy metabolism due to tumoral growth***

Maria de la Luz Hernández Esquivel. Instituto Nacional de Cardiología "Ignacio Chávez"

#### **MH43**

##### ***Effect of *Ibervillea sonorae* (Wereke) on oxidative stress in the kidney during diabetes***

Ana Lilia Hernández Alba. Instituto Nacional de Cardiología "Ignacio Chávez"

#### **MH44**

##### ***Effect of cancer cells-derived conditioned medium on cardiomyocyte energy metabolism***

Fernando Emiliano Jiménez Mondragón. Instituto Nacional de Cardiología "Ignacio Chávez"

#### **MH45**

##### ***Blackberry juice fermented with two consortiums of lactic acid bacteria: physicochemical and antioxidant properties during storage***

Liliana Lugo Zarate. Universidad Autónoma del Estado de Hidalgo

#### **MH46**

##### ***Effect of Glycine Betaine on P53 and Cas3 Expression in Human Colon Adenocarcinoma Cells HT-29***

Lizeth Anahí López Castro Universidad de Sonora

#### **MH47**

##### ***Evaluation electroacupuncture effect in patients with neuropathy diabetic by genetic markers of CD4 polarization***

Carina López Leyva. IMSS

#### **MH48**

##### ***Maternal polycystic ovary syndrome changes the architecture and cell function of pancreatic islets in mouse descendants***

Rosa Isela López Castellero. Universidad Nacional Autónoma de México

#### **MH49**

##### ***Metabolic and ultrastructural modifications in liver of offspring born of polycystic ovary syndrome mouse model***

Erick Gabriel López Cruz. Universidad Nacional Autónoma de México

#### **MH50**

##### ***Anti-fibrogenic role of IFC-305 in fibroblasts from patients with Idiopathic Pulmonary Fibrosis and its effects on mitochondrial function***

Erika Rubí Luis García. Instituto Nacional de Enfermedades Respiratorias Ismael Cosío Villegas



#### **MH51**

##### ***Effect of Callistemon citrinus phytosomes on brain and gut microbiota of High Fat Diet rat model***

Oliver Rafid Magaña Rodríguez. Universidad Michoacana de San Nicolás de Hidalgo

#### **MH52**

##### ***Identification of Endometrial Stem Cell Markers in Menstrual Blood***

Gloria Erika Mejía Carmona. Universidad Autónoma de Ciudad Juárez

#### **MH53**

##### ***Resveratrol and Quercetin Improve Sarcopenic Obesity by Regulating the Angiotensin II/AT1 Pathway and Myostatin Concentrations in a Metabolic Syndrome Rat Model***

Jimena Alejandra Méndez Castro. Instituto Nacional de Cardiología "Ignacio Chávez"

#### **MH54**

##### ***Participation of calreticulin in human fetal membranes***

Montserrat Mijares Rodríguez. Instituto Nacional de Medicina Genómica

#### **MH55**

##### ***Characterization of cardiovascular risk phenotypes and their association with clinical activity and metabolic endotoxemia in systemic lupus erythematosus patients***

Paulina Esmeralda Mora García. Universidad de Guadalajara

#### **MH56**

##### ***Evaluation of a potential signaling pathway involved in the antihypertrophic effect of cannabidiol(CBD) in cardiac myoblasts***

Carolina Morales Ochoa. Instituto Tecnológico de Estudios Superiores de Monterrey

#### **MH57**

##### ***Proteomic analysis of targets deregulated by the miRNAs miR-221, miR-145 and Let-7c involved in prostate cancer***

Gabriela Carolina Morales Sandoval. Instituto Politécnico Nacional

#### **MH58**

##### ***Efectividad del óxido de aluminio sobre la adhesión de bracket en esmalte fluorótico***

Anareli Mota Morales. Universidad Juárez del Estado de Durango

#### **MH59**

##### ***Development of a biopolymer as a system delivery for antidiabetic secondary metabolites from purple sweet potato***

Alethia Muñoz Ramírez. Instituto Potosino de Investigación Científica y Tecnológica A.C.

#### **MH60**

##### ***Characterization of Nrf2 role and modulation effect in a chemoresistant Breast Cancer model***

Andrea Muñoz Ayala. Universidad Autónoma de Baja California

#### **MH61**

##### ***Antilipemic effect of the ethanol fraction of Justicia spicigera on the liver of rats fed with a high-fat diet***

Marina Murillo Villicaña. Universidad Michoacana de San Nicolás de Hidalgo

## **MH62**

### ***Effect of consuming standardized meals with different macronutrient proportions of metabolic flexibility***

Charlotte Olivares Yañez. Universidad Nacional Autónoma de México

## **MH63**

### ***Resistina induce migración e invasión en células de cáncer prostático PC3: Rol de vesículas extracelulares***

Mario Israel Oregel Cortez. Universidad Autónoma de Baja California

## **MH64**

### ***Effect of diazoxide and moderate-intensity exercise on the function of mitochondria isolated from skeletal muscle during obesity***

Jessica Ortega Pérez. Universidad Michoacana de San Nicolás de Hidalgo

## **MH65**

### ***Antioxidant capacity of pigmented maize from Mexico***

Estela Eiko Osawa Martínez. Cinvestav Zacatenco

## **MH66**

### ***Genetic Detection of Dengue Virus Serotypes using the CRISPR-Cas12a System***

Marco Antonio Piñón Chávez. Universidad Nacional Autónoma de México

## **— MICROBIOLOGY I**

### **M1**

#### ***Study of the ABCG transporter family of *Metarhizium guizhouense* HA11-2 during its mycorrhizal association***

Víctor Manuel García Vera. Universidad de Guanajuato

### **M2**

#### ***Relevance of protein O-glycosylation during the interaction of *Sporothrix schenckii* with the host***

Manuela Gómez Gaviria. Universidad de Guanajuato

### **M3**

#### ***Killer yeast and glucose mediated synthesis of nanoparticles with biological effect***

Carlos Alberto Molina Vera. Universidad Autónoma de Querétaro

### **M4**

#### ***Study of the endophytic capacity of entomopathogenic fungi***

Jesús Ernesto Ramírez Nieto. Universidad de Guanajuato

### **M5**

#### ***Whole genome sequencing of *Candida auris* strain isolated in Monterrey, Mexico***

Alí Fernando Ruiz Higareda. Universidad Autónoma de Nuevo León

### **M6**

#### ***The wild plant *Conopholis alpina*, and their visiting honey bees (*Apis mellifera*) carry identical bacterial strains under natural conditions***

Mary Jose Salas Limón. Universidad Autónoma de Puebla

## **M7**

### ***Effect of Epinephrine and Norepinephrine in the Gallibacterium anatis biofilm composition and structure***

Alicia Noemi Aguilar Fuentes. Universidad Nacional Autónoma de México

## **M8**

### ***Reversion of antibiotic-resistant phenotype in escape bacteria through actinobacteria secondary metabolites***

Vanessa N. Alcántara Garduño. Instituto Politécnico Nacional

## **M9**

### ***Bridging Nutritional Gaps: The Role of Microbiomes in host productivity***

Luis D. Alcaráz. Universidad Nacional Autónoma de México

## **M10**

### ***Plant response to the plant growth promoting rhizobacterium Achromobacter sp. 5B1 under phosphate and nitrate deprivation***

Joseline Suhail Alejo Guerra. Universidad Michoacana de San Nicolás de Hidalgo

## **M11**

### ***Identification through transcriptomics, of genes involved in the swarming of Pectobacterium brasiliense BF20 overexpressing exl1 gene, and its relation to expansin Exl1***

Gloria Alejandra Altamirano Cruz. Universidad Nacional Autónoma de México

## **M12**

### ***The sweet competition: the bacterial lectin PirB vp from Vibrio parahaemolyticus and its implication in the colonization of ecological niches***

Cassandra Adilenne Alvarado Verdín. Universidad Autónoma de Nayarit

## **M13**

### ***Analysis of diversity in the CRISPR-Cas system of Cronobacter sakazakii isolated from food samples***

Ana Karen Álvarez Contreras. Instituto Politécnico Nacional

## **M14**

### ***Identification and characterization of contemporaneous clinical isolates of Candida glabrata***

Oscar Daniel Aranda Moreno. Instituto Potosino de Investigación Científica y Tecnológica A.C.

## **M15**

### ***Identification of molecules with antibacterial activity from different fungal pathogens***

Jesús Antonio Arroyo García. Instituto Potosino de Investigación Científica y Tecnológica A.C.

## **M16**

### ***Exploring the impact of glyphosate on orange tree microbiomes: a meta- taxonomic approach***

Diana Montserrat Baeza Magaña. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

## **M17**

### ***Phenotypic and Bioinformatic Study of gene cdgE of Azospirillum baldaniorum Sp245***

Nora Georgina Barrera Olvera. Universidad Autónoma de Puebla

## **M18**

### ***Study of the mechanism of control of C-5 alginate epimerases by the second messenger c-di-GMP***

Víctor V Barrios Rafael. Universidad Nacional Autónoma de México

## **M19**

### ***Structural models of the phosphatase enzyme and mutants in Escherichia coli involved in the synthesis of trehalose and bacterial desiccation***

Alejandra Bernabé Allende. Universidad Autónoma de Puebla

## **M20**

### ***Distribution of Huanglongbing in orange fruit producer zone of San Luis Potosí and neighboring states***

Karla Grisel Calderón González. Universidad Autónoma de San Luis Potosí

## **M21**

### ***Effect of bacterial cyclodipeptides on gut microbiota composition and nutrient absorption in an obesity model***

Marlene Estefania Campos Morales. Universidad Michoacana de San Nicolás de Hidalgo

## **M22**

### ***Gene of no ortodoxe multisensor histidine kinase is involved in motility type swarming and swimming in the rhizobacterium Azospirillum baldaniorum Sp245***

Uriel Cardona Baltazar. Universidad Autónoma de Puebla

## **M23**

### ***Study of the histidine-kinase RetS as part of the multi-kinase system GacS (MKN-GacS) in Azotobacter vinelandii***

Miguel Castañeda Lucio. Universidad Autónoma de Puebla

## **M24**

### ***Isolation and biochemical identification of Lactobacillus spp. extracted from products of animal origin***

Azul Castrillo Sanchun. Universidad Autónoma Metropolitana Xochimilco

## **M25**

### ***Genetic study of melanin synthesis in Azotobacter vinelandii***

María Fernanda Chávez Jacobo. Universidad Autónoma de Puebla

## **M26**

### ***Phenotypic and genomic characterization of Streptomyces pakalii sp. nov., a novel species of Mexican actinomycete with anti-biofilm and anti-quorum sensing activity in ESKAPE bacteria***

Michelle A. Chávez Hernández. Instituto Politécnico Nacional

## **M27**

### ***Expression of Specialized Metabolites by an OSMAC Approach Applied to Streptomyces***

Uriel Colin Camacho. Universidad Nacional Autónoma de México

## **M28**

### ***Bacteria from the skin microbiota of the axolotl Ambystoma altamirani show growth-inhibitory activity against antibiotic-resistant strains of Staphylococcus aureus***

Cynthia Margarita Concepción Acosta. Universidad Nacional Autónoma de México

### **M29**

#### ***Cloning and overexpression of fliC gene from Azospirillum argentinense REC3 in the expression vector pGEX-4T1***

Ana Gabriela Cordova Mejía. Universidad Autónoma de Puebla

### **M30**

#### ***Impact of the over expression of a gene codifying for a hybrid C-DI-GMP regulating protein of Azospirillum baldaniorum SP245***

David Ricardo Cortés Sotres. Universidad Autónoma de Puebla

### **M31**

#### ***Study of the small RNA regulator (sRNA) ErsA involved in the synthesis of alginates in Azotobacter vinelandii***

Juan Carlos De Lima Mar. Universidad Autónoma de Puebla

### **M32**

#### ***The loss-of-function of the methyltransferase KMT6 on Trichoderma atroviride modifies the expression of secondary metabolite gene clusters that compromise the root gravitropism of Arabidopsis***

Saraí Esparza Reynoso. UGA. LANGEBIO. Cinvestav Irapuato

### **M33**

#### ***The complex regulation of sigma factor RpoS proteolysis in Azotobacter vinelandii***

Elda Guadalupe Espín Ocampo. Universidad Nacional Autónoma de México

### **M34**

#### ***Symbiosis induction between Rhizobium etli and Saccharomyces cerevisiae***

Ilse Berenice Espinoza Hernández. Universidad Nacional Autónoma de México

### **M35**

#### ***The administration of a recombinant Tepary bean (Phaseolus acutifolius) lectin affects rat bacteriome***

Juan Brandon Araujo Mendoza. Universidad Autónoma de Querétaro

### **M36**

#### ***Isolation of pathogens from food and assessment of their antimicrobial resistance***

Maricela Esteban Méndez. Instituto Politécnico Nacional

### **M37**

#### ***Isolation and Characterization of Spoilage Molds of Strawberry (Fragaria x ananassa Duchense) marketed in Durango***

Cinthia Andrea Estrada Rodríguez. TecNM/Instituto Tecnológico de Durango

### **M38**

#### ***Effects of chitosan on growth of fungal species involved in building biodeterioration***

Joshua Fernandez Jasso. Instituto Politécnico Nacional

### **M39**

#### ***Analysis of blaOXA-72 gene regulatory region in Acinetobacter baumannii***

Diana Flores Percino. Universidad Autónoma de Puebla

## **M40**

### ***Effect of Iron on the Growth and Virulence of Pseudomonas syringae pv. phaseolicola NPS3121***

Kenia Franquez Gómez. Universidad Autónoma de Nayarit

## **REACTIVE OXYGEN SPECIES**

### **ROS1**

#### ***Determination of Antioxidant Activity and Phenolic Compounds in Fermented Cocoa Bean Shell Infusion***

Sebastián Cervera Pereyra. Universidad de Guanajuato

### **ROS2**

#### ***YwqN Encodes a NADP(H)/FMN-Dependent Quinone Reductase That Protects Bacillus subtilis from Oxygen Radical Genotoxicity***

Karen Abundiz Yáñez. Centro de Investigación en Alimentación y Desarrollo, A.C.

### **ROS3**

#### ***Enzymatic antioxidant response during physiological cardiac hypertrophy induced by pregnancy***

José Bruno Apodaca Fuentes. Universidad de Sonora

### **ROS4**

#### ***Effect of vitamin C on renal markers of oxidative stress induced by methotrexate in psoriasis***

Elodia Nataly Díaz De la Cruz. Universidad Michoacana de San Nicolás de Hidalgo

### **ROS5**

#### ***Effect of potential hydrogen on hydrogen sulfide production in Saccharomyces cerevisiae***

Mariana Michell García Reyes. Universidad Nacional Autónoma de México

### **ROS6**

#### ***Effect of Oxidative Stress on the mRNA Levels of IL-1 $\beta$ , IL-6, and IL-10 in the Intestine of Rats Exposed to Ozone***

Denisse García Sánchez. Universidad Nacional Autónoma de México

### **ROS7**

#### ***Hydrogen peroxide detoxification through of the thioredoxin system in the cysticerci of Taenia***

Alberto Guevara Flores. Universidad Nacional Autónoma de México

### **ROS8**

#### ***Partial purification and biochemical characterization of thioredoxin reductase (TrxR) from the insect Shelfordella tartara***

Iván Emilio Ibarra Estrada. Universidad Nacional Autónoma de México

### **ROS9**

#### ***Antioxidant effect of the water: methanol fraction of the ethyl acetate extract of Potentilla indica on renal mitochondria of rats with type 2 diabetes mellitus***

Cinthia Itzel Landa Moreno. Universidad Michoacana de San Nicolás de Hidalgo

## **ROS10**

### ***Assessment of oxidation markers, MAPK activation and their potential association in cervical cancer***

Karen Andrea Larrauri Rodríguez. Universidad Autónoma de Puebla

## **ROS11**

### ***Cyanidin effects on oxidative stress and mitochondrial biogenesis in PAE cells, during hypoxia-reoxygenation***

Melani León Martínez. Instituto Nacional de Cardiología "Ignacio Chávez"

## **ROS12**

### ***Characterization of the cytosolic and mitochondrial antioxidant system of *Ustilago maydis* under oxidative conditions***

Aranzazú López Jaime. Facultad de Ciencias Biológicas. BUAP

## **ROS13**

### ***Effect of selenium supplementation on asexual reproduction of *Taenia crassiceps cisticerci****

José de Jesús Martínez González. Universidad Nacional Autónoma de México

## **ROS14**

### ***Exploratory analysis of antioxidant and detoxification enzymatic systems in *Dendroctonus* genus (Coleoptera Curculionidae)***

José de Jesús Martínez González. Universidad Nacional Autónoma de México

## **ROS15**

### ***8-OxoG Leads to Stress Survival and Evolution in *Bacillus subtilis****

Lissett Esther Martínez Magaña. Universidad de Guanajuato

## **ROS16**

### ***Evaluation of the antioxidant activity of the damage suppression protein (Dsup) of the tardigrade *Ramazzottius varieornatus****

Mariel Alexis Quiven Feria. Cinvestav Zacatenco

## **ROS17**

### ***Resveratrol as an antioxidant potential in the regulation of oxidative stress in the prefrontal cortex during aging in Wistar rats***

Raúl Vladimir Ramírez Olmos. Universidad Autónoma de Puebla

## **ROS18**

### ***Elucidation of a DisA-independent checkpoint mechanism during germination/ outgrowth of *Bacillus subtilis* spores***

Alejandra Rangel Mendoza. Universidad de Guanajuato

## **ROS19**

### ***In vitro studies of iron chelating capacity and antioxidant activity of the ethanolic extract of *Eryngium carlinae****

María de los Ángeles Rangel Rosales. Universidad Michoacana de San Nicolás de Hidalgo

## **ROS20**

### ***Effect of PCL/F-68 nanoparticles loaded with curcumin on the viability of *Taenia crassiceps Cysticerci* (CESTODA)***

Lucero Reyes García. Universidad Nacional Autónoma de México

### **ROS21**

***Evaluation of antioxidant capacity of various Moringa oleifera based herbal products using cytochrome C***

Carlos Alejandro Rocha Martinez. Universidad Juárez del Estado de Durango

### **ROS22**

***Differential changes in redox state induced by senolytic and senomorphic treatments in the serum of middle-aged female rats during chronic obesity***

Verónica Salas Venegas. Universidad Autónoma Metropolitana Iztapalapa

### **ROS23**

***Evaluation of the photo-protection and repair effects exerted by the carotenoids (lutein, zeaxanthin and  $\beta$ -carotene) against photodamage caused by UV radiation in human keratinocytes***

Judith Guadalupe Santos Ceseña. Universidad Autónoma de Querétaro

### **ROS24**

***Xanthine Oxidase-Regulation of 8-OxoG-Promoted Bacillus subtilis Fitness***

María José Toledo Ramírez. Universidad de Guanajuato

### **ROS25**

***Partial purification of thioredoxin reductase (TrxR) from Dendroctonus valens***

César Vásquez Lima. Universidad Nacional Autónoma de México

## **SYSTEMS BIOLOGY & BIOINFORMATICS II**

### **SB27**

***Comparative transcriptomics of the pharmacological response to the compound AZD5363 in two human ductal adenocarcinoma cell lines***

Rebeca González Ortiz. Universidad Nacional Autónoma de México

### **SB28**

***Plant thermomorphogenesis: protein-protein interaction and gene coexpression networks in Arabidopsis thaliana***

Fernanda Lizeth Gutiérrez Palomeque. Instituto Tecnológico Superior de Irapuato

### **SB29**

***Searching for structural transitions in a parallel protein network***

Juan Martín Hernández Castillo. Universidad Nacional Autónoma de México

### **SB30**

***In silico study of galanin receptors as potential targets for the treatment of depression***

Beatriz Hernández Estrada. Universidad Autónoma de Querétaro

### **SB31**

***Detection of transcriptional determinants of cellular longevity in human tissues using a machine learning-based approach***

Jorge Adrián Islas Ortiz. INMEGEN. Universidad Nacional Autónoma de México



**SB32*****Search for selective inhibitors on PTP1B of peptide nature***

Rodolfo Aarón Lizárraga Valadez. Universidad Nacional Autónoma de México

**SB33*****Identification of molecular markers, SNPs, associated with morphological characteristics of Bixa orellana L.***

Ana Lucía López Gurgua. Centro de Investigación Científica de Yucatán A.C.

**SB34*****Molecular Dynamics and Docking Analysis of Quercetin and Patuletin of Evaluating Antitumor Activity***

Aarón Saúl López Carrasco. Universidad Nacional Autónoma de México

**SB35*****Modeling Krebs cycle from rat liver, heart, and hepatoma mitochondria***

Álvaro Marín Hernández. Instituto Nacional de Cardiología "Ignacio Chávez"

**SB36*****Prediction of the structural effect of variants of uncertain significance detected by NGS in Mexican children with B-cell acute lymphoblastic leukemia***

Daniel Alejandro Martínez Anaya. Instituto Nacional de Pediatría

**SB37*****Vector capacity of Aedes aegypti through the horizontal infection mechanism of the dengue larva-larva virus***

Mayra Mejía Sánchez. Universidad Autónoma de Sinaloa

**SB38*****Unveiling the Plastic-Degrading Potential of Eukaryotes: A Computational Approach***

Andrés Méndez Zamora. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

**SB39*****Role of the PAS Domain in the activity of Diguanylate Cyclase or Phosphodiesterase of the CdgD Protein in Azospirillum baldaniorum Sp245***

Dulce Andrea Montes Pérez. Universidad Autónoma de Puebla

**SB40*****Exploring the therapeutic potential of berry cactus in rat microbiota composition with Metabolic Syndrome***

Cesaré Ovando Vázquez. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**SB41*****Evolution of hypoxia response factors in the Plantae kingdom***

Janet Palacios Martínez. Universidad Nacional Autónoma de México

**SB42*****Prediction of the three-dimensional structure of the Nrg1-Rtg3 chimeric complex***

Edgar Adrián Ramírez González. Universidad Nacional Autónoma de México

### **SB43**

#### ***PhaZ as a possible PET degrader?***

Graciela Jesed Reyes Trujillo. Universidad Autónoma de Puebla

### **SB44**

#### ***Analysis of the interaction between TMPRSS2, ACE2, and furin against spike of SARS-COV-2***

Víctor Rodríguez Escobar. Universidad Autónoma Benito Juárez de Oaxaca

### **SB45**

#### ***Machine learning prediction of bacterial-phage specificity using genomic fingerprints obtained by virtual hybridization***

Juan Antonio Rodríguez de la Cruz. Instituto Politécnico Nacional

### **SB46**

#### ***Structural analysis of SARS-CoV-2 Mpro protease variants for the discovery of broad-spectrum inhibitory drugs using in silico tools***

Carlos Alfonso Sánchez López. Instituto Tecnológico Superior de Irapuato

### **SB47**

#### ***In silico analysis of the binding of the OppA protein of Yersinia pseudotuberculosis with different lipases***

Andrea Sánchez Ríos. Universidad Autónoma de Puebla

### **SB48**

#### ***AI Revolutionizing Water Quality: Harnessing Microalgae and Bacteria for Sustainable Remediation***

Mishael Sánchez Pérez. Instituto Potosino de Investigación Científica y Tecnológica A.C.

### **SB49**

#### ***Differential molecular interactions between iberiotoxin and human SLO3 and SLO1 potassium channels***

Jorge Arturo Torres Juárez. Universidad Autónoma de Querétaro

### **SB50**

#### ***Microbial Diversity Analysis via Metagenomics in 'El Iztete' Public Landfill, Tepic Nayarit***

Jesús Alberto Urbar Ulloa. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

### **SB51**

#### ***Comparative genomic analysis of cuticular biosynthesis in fleshy fruits***

José Alberto Valenzuela Avilés. Centro de Investigación en Alimentación y Desarrollo, A.C.

### **SB52**

#### ***Unlocking nitrogen's role during somatic embryogenesis induction of C. canephora: A transcriptomic view***

Brigitte Valeria Vargas Morales. Centro de Investigación Científica de Yucatán A.C.

**BASIC BIOCHEMISTRY II**

**BB38**

***Characterization of sphenotoxin from ophryacus sphenophrys and its comparison with classic crotoxin***

Tania Corkidi Zajur. Universidad Nacional Autónoma de México

**BB39**

***The methionine synthase in plant development***

Sara Margarita Garza Aguilar. Tecnológico de Monterrey

**BB40**

***Tips to increase the thermal stability of a recombinant protein: the practical case of CGI-58***

Miriam Livier Llamas García. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**BB41**

***Biochemical characterization of orotate phosphoribosyltransferase from the phytopathogen *Pseudomonas cichorii****

Amelia López Albores. Instituto Tecnológico de Tuxtla Gutiérrez

**BB42**

***Aldosterone effects on the expression of ryanodine receptors and their participation in the calcium dynamics of rat mesenteric arteries***

Hiram Lozano Ruiz. Cinvestav Zacatenco

**BB43**

***Subcellular localization plays a determinant role on the functional diversification of the paralogous proteins BAT1 and BAT2***

Yamile Paredes Chiquini. Universidad Nacional Autónoma de México

**BB44**

***Hinges, springs, and sticky surfaces determine the preferred conformations of Cre in the absence of loxP and prime it for binding***

Nina Pastor Colón. Universidad Autónoma del Estado de Morelos

**BB45**

***Characterization of Human Epidermal Growth Factor (hEGF)-induced Ca<sup>2+</sup> release in HeLa Cells***

Amanda Renté Alpizar. Cinvestav Zacatenco

**BB46*****Impact of drought stress and recovery irrigation on amino acid accumulation and antioxidant activity in Mexican soybean***

Julio César García Rodríguez. Cinvestav Irapuato

**BB47*****Molecular interaction between P53, P21 and biomolecules present at Manilkara zapota seeds***

Vanessa García Alcudia. Universidad Juárez Autónoma de Tabasco

**BB48*****Cloning, Expression and Purification of Recombinant Hemagglutinins from Avian Influenza Virus Type A***

Margarita Fernanda Gómez Meza. Instituto Nacional de Pediatría

**BB49*****Relationship between maize cell cycle-related regulators and the repair protein RAD51A***

Estefany Damaris Guerrero Molina. Universidad Nacional Autónoma de México

**BB50*****Exploring the structural and functional changes of Vibrio cholerae pyruvate kinase***

Gloria Hernández Alcántara. Universidad Nacional Autónoma de México

**BB51*****In vitro study of physicochemical properties of novel voltage-gated potassium ion channel blockers based on 4-Aminopyridine***

Karen Sofía Hernández Medina. Universidad de Guadalajara

**BB52*****Structure and phylogeny of crotoxin subunits A and B***

David Hernández Herrera. Instituto Politécnico Nacional

**BB53*****Evaluation of the DNA gyrase inhibitory effect of natural products and derivatives with known anti-Helicobacter pylori activity***

Erick Hernández Hipólito. Universidad Nacional Autónoma de México

**BB54*****Red and Infrared light as an enhancer for mitochondrial respiration of keratinocytes cells***

Manuel Alejandro Herrera López. Universidade De São Paulo

**BB55*****Study of peripheral domains in structure-function of isocitrate lyase (ICL) from Pseudomonas aeruginosa***

Mildred Jiménez Báez. Universidad Michoacana de San Nicolás de Hidalgo

**BB56*****Purification and characterization of chimeric recombinant variants of human deubiquitinase USP2 in relation to its specificity for ubiquitin K63 chains***

Josahandy Jiménez Peralta. Universidad Nacional Autónoma de México

**BB57*****Effect of growth temperature on catalase activity of Rhodococcus equi***

Francisco Javier Juárez Castañeda. Universidad Juárez del Estado de Durango

**BB58*****The glucose sensor HXK1 is involved in the cold acclimation and freezing survival of Arabidopsis thaliana plants***

Beatriz King Díaz. Universidad Nacional Autónoma de México

**BB59*****A novel central metabolism control by cell cycle***

Aurora Lara Núñez. Universidad Nacional Autónoma de México

**BB60*****Study of the cell death induced by the Iztli peptide 1 in Saccharomyces cerevisiae reveals an unknown genetic connection between arrest, metabolism and mating***

Ma. Teresa Lara Ortiz. Universidad Nacional Autónoma de México

**BB61*****Studies on the physiological role of the putative gentisaldehyde dehydrogenase from Pseudomonas aeruginosa***

Alexey Llopiz. Universidad Nacional Autónoma de México

**BB62*****Characterization of the Cdk subunit regulators TvCKS1 and TvCKS2 in Trichomonas vaginalis***

Karla Concepción López Pacheco. Universidad Nacional Autónoma de México

**BB63*****A Seasonal Proteomic Study of Centruroides exilicauda venom from Baja California, México***

Joaquín López Carrillo. Centro de Investigación Científica y de Educación Superior de Ensenada

**BB64*****Mitochondrial iron metabolism is disrupted in a murine model of liver steatosis***

Luis Alberto Luévano Martínez. Tecnológico de Monterrey

**BB65*****Peptide VSAK derived from the C-terminal region of CETPI, attenuates cellular responses associated with LPS***

Ismael Luna Reyes. Universidad Nacional Autónoma de México

**BB66*****A computational and experimental approach to develop a FRET-based substrate for assessing the proteolytic activity of Mycobacterium tuberculosis MarP***

Pablo Alfonso Madero Ayala. Universidad Autónoma de Baja California

**BB67*****Effect of a triazaspiran-type molecule on migration and invasion of MDA-MB-231 tumor cells***

Jesús Omar Medina Cruz. Universidad Autónoma de Baja California

**BB68*****Wolbachia spp. infection in Drosophila melanogaster***

Ofelia Mendez Romero. Universidad Nacional Autónoma de México

**BB69*****Phenolic Profiling of Native Chromatic Corn Varieties***

Liliana Hortencia Méndez Barredo. Instituto de Ecología, A.C.

**BB70*****Pitavastatin: Its Potential Adverse Effect Evaluate in Hypercholesterolemic CD-1 Male Mice***

Rodrigo Miranda Zamora. Universidad Nacional Autónoma de México

**BB71*****Analysis of fatty acid transport mediated by the MCTII transporter***

Nicole Justine Moreno Licona. Cinvestav Zacatenco

**BB72*****Characterization of the roles PRIMPOL in DNA integrity maintaining in Arabidopsis thaliana***

Johan Olalde Hernández. Universidad Nacional Autónoma de México

**BB73*****Metabolic factors associated with metabolically healthy obesity***

Marisol Olivares Arévalo. Universidad Nacional Autónoma de México

**BB74*****A new ER Ca<sup>2+</sup> release agent synthesized from 2-APB tested in HeLa cells***

David Olvera Rangel. Cinvestav Zacatenco

**BB75*****Induction of systemic resistance in Arabidopsis against phytopathogens by the beneficial fungus Trichoderma atroviride through modulation of serine biosynthesis***

Daniel David Pacheco Rodríguez. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**BB76*****Alpha amylase inhibition by silver nanoparticles biosynthesized with Cnidocolus aconitifolius***

Eduardo Padilla Camberos. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

**BB77*****Proteomic analysis of the response to gibberellic acid in Capsicum annuum***

Diego de Jesús Pantoja Gutiérrez. Instituto Tecnológico de Celaya

**BB78*****Modulation of the Hexosamine Biosynthetic Pathway and O-GlcNAcylation Influences the Localization of the CD36 Receptor in Macrophages***

Yobana Pérez Cervera. Universidad Autónoma Benito Juárez de Oaxaca

### BT101

***In vitro assisted refolding of the recombinant Trypanosoma cruzi antigen TSA-1***

Esdras Enoc Pacindo Cabrales. Cinvestav Zacatenco

### BT102

***Antifungal Effect of Clove Ethanol Extract (Syzygium aromaticum) on the in vitro and biochemical inhibition of Phytophthora sp***

Adolfo Padilla Mendiola. Universidad Juárez del Estado de Durango

### BT103

***B. licheniformis  $\alpha$ -amylase engineering guided by machine learning-coupled directed evolution to introduce transglycosidic activity***

José Alberto Parra Espinoza. Universidad Nacional Autónoma de México

### BT104

***Purification and characterization of cytotoxic molecules from a LIPID-RICH extract from mexican avocado seed (Persea americana var. drymifolia)***

María Guadalupe Pérez Esquivel. Universidad Michoacana de San Nicolás de Hidalgo

### BT105

***Study of an isolated Penicillium sp that uses plastic polymers as carbon source***

Martha Lizeth Pérez Méndez. Universidad de Guanajuato

### BT106

***Evaluation of the interaction between bacteria and photobionts isolated from lichens***

Britany Irlanda Pérez Barrón. Instituto Tecnológico Superior de Irapuato

### BT107

***Impact of phosphite on gene expression in the filamentous fungus Trichoderma atroviride***

Camilo Pérez Salazar. UGA-LANGEBIO. Cinvestav

### BT108

***Humanization of Chimeric Anti-CD20 Antibody Rituximab via CDR-Grafting***

Daniel Jesús Pérez Vega. Instituto Politécnico Nacional

### BT109

***Design and generation of a genetic construction for ectopic expression of the ArsR C104S mutant repressor in Bacillus subtilis for organic arsenic detection***

Miguel de Jesús Piña Mena. Universidad Juárez del Estado de Durango

### BT110

***Metabolic changes in HTB 177 lung cancer cells in response to the anticancer extract of Coleus hadiensis***

Karla Ramírez Estrada. Universidad Autónoma de Nuevo León

**BT111*****Muscle growth promotion by a chimeric myostatin immunogen delivery by an antigen display and gene delivery baculovirus vector***

Vianey Ramírez Andoney. Universidad Nacional Autónoma de México

**BT112*****One way to evolve C family DNA polymerases***

Andrea Ramón García. Universidad Autónoma del Estado de Hidalgo

**BT113*****Isolation and characterization of native strains from Lithium-Containing mining tailings***

Kevin Samuel Renteria Ortiz. Instituto Tecnológico de Durango

**BT114*****Modifying the product specificity by protein engineering of an archaeal cyclomaltodextrin glucanotransferase from a deep-sea hydrothermal vent***

Ana María Rincón Murillo. Instituto Tecnológico de Colima

**BT115*****Production of a  $\beta$ -1,4-Endoglucanase enzyme from *Bacillus subtilis* in *Saccharomyces cerevisiae****

Joel Rios Alvarado. Instituto Tecnológico de Durango

**BT116*****Facile Synthesis of PEGylated Fe<sub>0</sub> Au heteronanoparticles, as high potential biomedical use***

Maria Ana Rivera Soto. Universidad Autónoma de la Ciudad de México

**BT117*****Isolation and functional characterization of collagen from fish scales***

Crisalejandra Rivera Pérez. Centro de Investigaciones Biológicas Del Noroeste S.C.

**BT118*****Newest insights into bixin biosynthesis in achiote, *Bixa orellana* L.***

Renata Rivera Madrid. Centro de Investigación Científica de Yucatán A.C.

**BT119*****Methodological strategies for biosynthesis and characterization of iron nanoparticles using *Trichoderma harzianum****

Ángeles Alitzel Rivera Román. Universidad Autónoma del Estado de Hidalgo

**BT120*****Treatment of dairy wastewater using natural coagulants derived from agro-industrial wastes***

Ana Rosa Rocha Vallejo. Centro de Innovación Aplicada en Tecnologías Competitivas

**BT121*****Soluble expression of chagasin chimeras harbouring four TSA-1 epitopes in *Escherichia coli****

Marco Ibrim Rodríguez Sánchez. Cinvestav Zacatenco



**BT122**

***Modification of nopal pectin with quaternary ammonium salts to give it antibacterial, anticancer and biocompatibility properties***

Tania Milena Rodríguez Amaya. Universidad Autónoma de Coahuila

**BT123**

***Study of interaction mechanisms between *Pleurotus ostreatus* and heavy metals (chromium and lead) in cultivation media primarily composed of lignocellulosic residues***

Pamela Romo Rodríguez. TecNM Campus Pabellón de Arteaga

**BT124**

***Humanization of an IgE antibody: recombinant expression and strategy to recover affinity towards its allergen***

Edgard David Rosas Ramírez. Instituto Politécnico Nacional

**BT125**

***Improving xylose metabolism in *Saccharomyces cerevisiae****

Jaime Rosas Díaz. Universidad Nacional Autónoma de México

**BT126**

***Evaluation of the interaction between lichenic bacteria and non-lichenic fungi***

Julieta Rosas Vallejo. Instituto Tecnológico Superior de Irapuato

**BT127**

***Antifungal activity of *Erigeron canadensis* and its establishment of callus in vitro culture***

Andrea Ruiz Betancourt. Universidad Autónoma Metropolitana Iztapalapa

**BT128**

***In vitro antifungal activity of ethanolic extracts from leaf and stem residues of Mexican oregano (*Lippia graveolens* Kunth) on *Fusarium* spp.***

Estela Ruiz Baca. Universidad Juárez del Estado de Durango

**BT129**

***SHINE3 and MYB31 transcription factors regulate cuticle biosynthesis and cell wall remodeling during soursop (*Annona muricata*) fruits ripening***

Héctor Adán Ruiz Ortega. Centro de Investigación en Alimentación y Desarrollo, A.C.

**BT130**

***Immobilization of  $\alpha$ -amylase for alkyl-glucosides production***

Gloria Saab Rincón. Universidad Nacional Autónoma de México

**BT131**

***Identifying bacteria with cutinase activity for the degradation of plastic from the Tepetitlic Lagoon***

Magdiel Salas Montenegro. Universidad Autónoma de Nayarit

**BT132**

***Analysis of cell migration and proliferation in exposure to mefloquine on the MDA-MB-231 cell line***

Andrey Salazar Mendoza. Universidad Autónoma de Baja California

**BT133*****Neutralization of the neurotoxin activity of Alpha-latrotoxin from the black widow spider using monoclonal antibodies***

Fátima Sánchez Ramírez. Universidad Nacional Autónoma de México

**BT134*****Phytotoxicity and genomic instability of the interaction using nanoparticles with nitrogenated fertilizers in the In vivo Allium Cepa and Capsicum Model***

Alejandro Sánchez González. Universidad Autónoma de Baja California

**BT135*****Development of an edible coating and film from carboxymethylcellulose, mesquite GUM, and a dairy industry waste product***

Maria Cristina Sánchez Aguirre. Universidad Autónoma de Coahuila

**BT136*****Characterization of protease enzymes from the ZH2 strain of the genus Geobacillus spp.***

Eric Alejandro Sánchez Rosas. Instituto Politécnico Nacional

**BT137*****GMO Study Landscape: Content, Citation, and Geography***

Cinthia Valentina Soberanes Gutiérrez. Consejo Nacional de Humanidades, Ciencias y Tecnologías

**BT138*****Search for a DNA aptamer to identify Acinetobacter baumannii using the cell-SELEX technique***

Emili kenya Solís López. Universidad Autónoma de la Ciudad de México

**BT139*****Production In silico of new cancer immunotherapeutic chimeric protein designed with PD-1 IgV-domain-Fc***

Eva Cristina Sosa Sillas. Universidad Autónoma de Sinaloa

**BT140*****Antioxidant and antimicrobial evaluation of in vitro cultures of Ludwigia octovalvis (Jacq.)***

Raven Stephany Abigail Tadeo. Cuenca Universidad Autónoma Metropolitana

**BT141*****Evaluation of the implementation of the CRISPR-Cas9 system for the modification of the ATP6 gene of Paracoccus denitrificans***

Sergio Aarón Tinajero Vargas. Cinvestav Zacatenco

**BT142*****Screening method for the directed evolution of a fungal peroxygenase able to catalyze the oxidation of emerging pollutants***

Alina Elizabeth Torres Aguirre. Universidad Nacional Autónoma de México

**BT143*****Design of a PCR-RFLP for malaria genomic surveillance in Mexico***

Ramón Gabriel Trejo. Sánchez. Instituto Politécnico Nacional

**BT144*****Proteomic an metabolite profile during the germination of amaranth seeds (Amaranthus spp.)***

Fernando Daniel Urbieta Villalobos. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**BT145*****Generation and characterization of albumin-cystatin microparticles for the control of plant pathogens***

Silvia Edith Valdés Rodríguez. Cinvestav Irapuato

**BT146*****Exploring Fluorescent Protein iLOV as Versatile Intragenic Reporter in Capsicum annum L***

Lilian Gabriela Valencia Turcotte. Universidad Nacional Autónoma de México

**BT147*****Estimation of arsenic concentration in drinking water wells using the As BIOSENSOR BsWCBgfpmut3a***

Luz Idalia Valenzuela García. Centro de Investigación en Materiales Avanzados

**BT148*****Design and generation of a genetic construction for the disruption of the Bacillus subtilis arsR gene***

Evelin Aylin Valenzuela Villalobos. Universidad Juárez del Estado de Durango

**BT149*****Importance of understanding the correlation between chronic inflammation, the immune response and membrane remodeling, as a restorative treatment strategy***

Alba Adriana Vallejo Cardona. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

**BT150*****Elucidation of lactose metabolism in Actinobacillus succinogenes 130Z***

Nadia Mariela Varela Pérez. Universidad Nacional Autónoma de México

**BT151*****Revaluation of metzal residue as a texturizing agent in the vegetative development of lettuce (Lactuca sativa L.)***

Carlos Getzael Vazquez Osorno. Universidad Autónoma del Estado de Hidalgo

**BT152*****Lipid and carotenoid producing yeast recovered from urban wastewater: an evaluation of their biotechnological potential***

Dana Lorena Vázquez de los Reyes. Universidad Nacional Autónoma de México

**BT153*****Immunoproteomic Identification of a Type 1 Fimbriae in Klebsiella pneumoniae***

Ulises Vega Castillo. Universidad Autónoma de Sinaloa

**BT154*****Evaluation of the effect of RNAi silencing on the putative Hyaluronic Acid Synthase (HAS) gene of Mucor lusitanicus***

Claudia Cecilia Vega García. Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.

**BT155*****Evaluation of the microbiological and enzymatic susceptibility of acrylic hydrogels crosslinked with lignin-modified***

Gilberto Velázquez Juárez. Universidad de Guadalajara

**BT156*****Determination of parameters for low-frequency electromagnetic stimulation of MDA-MB-231 cells in vitro***

Fernando Verduzco Valdez. Universidad Autónoma de Baja California

**BT157*****Effect of vaccine HB-ATV-8 on cell signalling in a 3D in vitro model of atherosclerosis***

Gloria Stephanie Villa Jaimes. Universidad Nacional Autónoma de México

**BT158*****A Novel cis-Element as a Potential Regulator in Begomovirus Complementary Strand Synthesis***

Daniel A. Mendoza Magaña. Universidad de Colima

## **GENETICS, EPIGENETICS AND GENETIC REGULATION III**

**G72*****The role of Arabidopsis sRNA2 and sRNA3 and their potential target At\_IncRNA1 in establishing a mutualistic relationship with Trichoderma***

Kumari Rashmi. Instituto Potosino de Investigación Científica y Tecnológica A.C.

**G73*****Evolving the theory of Hypermobility Ehlers-Danlos Syndrome from connective tissue disease to a mechanosensing pathology***

Ishar Arad Retana Arellano. Universidad Nacional Autónoma de México

**G74*****Identification of differential expressed microRNAs in gastric carcinogenesis***

Diego Reyna Colín. Universidad Autónoma Metropolitana Cuajimalpa

**G75*****Long Non-coding RNA LINC00115 in response to 5-FU pharmacological treatment in colorectal cancer***

Lil Rodríguez Aboy. Universidad Nacional Autónoma de México

**G76*****TFIIIC subunit Tau131 in Trypanosoma brucei: identification of its protein interactors***

Mariani Guadalupe Rodríguez López. Universidad Nacional Autónoma de México

**G77** *Evolution of the early recombinosome in plants*

Arnaud Ronceret. Universidad Nacional Autónoma de México

**G78**

***Epigenetic changes in the GAPDH gene during hypoxia and reoxygenation stress in *Penaeus vannamei****

Jesús Adelmo Rosas Anaya. Centro de Investigación en Alimentación y Desarrollo, A.C.

**G79**

***rs2070935, rs2289671 and rs17027 variants of GFAP and their association with neurological sequelae of COVID-19***

Alma Cristina Salas Leal. Universidad Juárez del Estado de Durango

**G80**

***Modulation of the Killer effect by replacing  $K^+$  with  $Na^+$  in the culture medium***

Jorge Salinas Celestino. Universidad Autónoma de Querétaro

**G81**

***Role of the oncogene BORIS (CTCF) in transcriptional regulation of the VEGFA gene promoter***

Ana Sofía Salmerón Oms. Universidad Autónoma Metropolitana Cuajimalpa

**G82**

***Transcriptional evaluation of key genes involved in the tissue regeneration process of *Ambystoma mexicanum****

Cynthia G. Sámano Salazar. Universidad Autónoma Metropolitana Cuajimalpa

**G83**

***LncRNAs landscape during the hypoxia-induced vasculogenic mimicry in breast cancer cells***

Gricelda Sánchez Sánchez. Universidad Autónoma de la Ciudad de México

**G84**

***CXCR4 splicing isoform expression in response to typical Hypersensitivity Pneumonitis signaling***

Daniela Fernanda Sánchez Sánchez. Instituto Nacional de Enfermedades Respiratorias  
Ismael Cosío Villegas

**G85**

***miR-193b and its possible influence over DDR genes through ANRIL regulation in triple-negative breast cancer-derived cell lines***

Julio Alejandro Sánchez Pérez. Universidad Nacional Autónoma de México

**G86**

***Role of CREBA and CREMT in the regulation of the murine CATSPER3 promoter***

Diego Eduardo Sánchez Jasso. Cinvestav Zacatenco

**G87**

***Effect of Panobinostat (LBH589) on gene acetylation regulation of  $Ca^{2+}$  signaling during epithelial-mesenchymal transition in the breast MCF10A cell line***

Ana Cecilia Sánchez Trujillo. Universidad Nacional Autónoma de México

## **G88**

### ***Identification of Post-transcriptional Regulatory Sequences ERE-Type in Cancer-Related Genes***

César Augusto Sánchez Bocanegra. Universidad Autónoma de Querétaro

## **G89**

### ***Telomere and Subtelomere Organization in Ustilago maydis Chromosomes***

Adriana Inclán Popoca. Universidad Autónoma de Puebla

## **G90**

### ***Study of mitochondrial DNA variants associated to breast cancer development***

Jessica Jazmin Saucedo Rivas. Instituto Nacional de Medicina Genómica

## **G91**

### ***Is there a conserved machinery of executive function evolution and development across mammalian species? A comparative transcriptomics perspective***

María Fernanda Shehín Mina. INMEGEN. Universidad Nacional Autónoma de México

## **G92**

### ***Solanum lycopersicum cv. Micro-Tom as a tool to characterize carotenoid cleavage dioxygenases from Bixa orellana L.***

Diana Laura Sierra Ulín. Centro de Investigación Científica de Yucatán A.C.

## **G93**

### ***Epigenetic characterization of ADAMTS17 gene promoter during tissue regeneration in Ambystoma mexicanum***

Violeta Guadalupe Silva Díaz. Universidad Autónoma Metropolitana

## **G94**

### ***Effect of pharmacological inhibition of Crm1 on cardiac dysfunction in a progeria mouse model***

Angélica Soberano Nieto. Cinvestav Zacatenco

## **G95**

### ***Study of the signaling pathways that maintain the DNA integrity in mitochondria and chloroplast in plants***

Diana Solano Arguello. Universidad Nacional Autónoma de México

## **G96**

### ***Transcriptional contribution of a human heterodimeric basic Helix-Loop-Helix Transcription Factor when isolated from the human cell context***

Ana Lilia Torres Machorro. Instituto Nacional de Enfermedades Respiratorias Ismael Cosío Villegas

## **G97**

### ***Detection of fusion genes in patients diagnosed with acute lymphoblastic leukemia***

Ruth Trejo Martínez. Universidad Autónoma de San Luis Potosí

## **G98**

### ***Autophagy characterization during aging in human dermal fibroblasts***

Juan José Unzueta Mendoza. Universidad Autónoma Metropolitana Iztapalapa

### **G99**

#### ***Mechanosensing and inflammation in Premature Rupture of Membranes***

Lourdes Vadillo Pérez. INMEGEN. Universidad Nacional Autónoma de México

### **G100**

#### ***Analysis of the DNA methylation pattern of the SFN gene promoter in early stages of the K14E7 murine model***

Luz del Carmen Valerio Jácome. Cinvestav Zacatenco

### **G101**

#### ***Use of Neural Networks for the Analysis and Classification of Gliomas through their Epigenetic Patterns***

David Valle García. Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez

### **G102**

#### ***Genetic variant rs2074192 of the ACE2 gene and its association with COVID-19 severity***

Jason Enrique Vázquez Navarro. Universidad Juárez del Estado de Durango

### **G103**

#### ***Can the biochemical interaction between Killer strains and non-toxinproducing strains of Saccharomyces cerevisiae result in resistance?***

Azul Vázquez López de la Fuente. Universidad Autónoma de Querétaro

### **G104**

#### ***Abf1 is a DNA binding protein involved in different DNA processes in Candida glabrata***

Laura Angélica Vera Salazar. Instituto Potosino de Investigación Científica y Tecnológica A.C.

### **G105**

#### ***IRF4 regulates TNFAIP3 expression in CD4+ T cells of cutaneous T cell lymphoma and T cell acute lymphoblastic leukemia***

Georgina Victoria Acosta. Hospital Juárez de México

### **G106**

#### ***Epigenetic mechanisms associated with the expression of Protocadherin 18 in a model of Epithelial-Mesenchymal Transition in MCF10A, MCF7, and MDA-MB-231 cells***

Pablo Sinuhé Gómez González. Universidad Nacional Autónoma de México

## **MEDICINE, HEALTH & NUTRITION III**

### **MH67**

#### ***Obesity leads to transcriptomic alterations in one-carbon metabolism-related genes: in silico analysis of GTEx study***

Daniel Cantú Ruiz. Tecnológico de Monterrey

### **MH68**

#### ***Exploring the Connection Between Vitamin B12 Deficiency and Obesity***

Erika Castaño Moreno. Tecnológico de Monterrey

## **MH69**

***“Alaches”, quelites that besides being nutritious, have effect on Helicobacter pylori***

Erika Gómez Chang. Universidad Nacional Autónoma de México

## **MH70**

***Estrogen modulation of CaMKII and calcium handling proteins in H9c2 hypertrophied myotubes***

Silvia Araceli López Morán. Instituto Tecnológico de Estudios Superiores de Monterrey

## **MH71**

***Ca<sup>2+</sup> Overload-Induced Mitochondrial Dysfunction is an Early Risk Factor for Lethal Ventricular Arrhythmias***

Felipe de Jesús Salazar Ramírez. Tecnológico de Monterrey

## **MH72**

***Physiological response and organic interactions of berrycactus in wistar rats with metabolic syndrome (MS)***

Daniela Joyce Trujillo Silva. Instituto Potosino de Investigación Científica y Tecnológica A.C.

## **MH73**

***Hyperglycemia and oxidant stress in an adult population from Mexico City***

Irais Poblete Naredo. Cinvestav Zacatenco

## **MH74**

***Mitochondrial Dysfunction in the Model of Spondyloarthritis in DBA/1 Mice***

Rodrigo Prieto Carrasco. Universidad Autónoma de Chihuahua

## **MH75**

***Comparison of chemo cytotoxicity in a 2D vs 3D model by LDH in primary cell culture from patients with pancreatic cancer***

Valeria Punzo Mora. Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán

## **MH76**

***Unlocking the lithium potential: a review of its anticancer properties***

Laura Itzel Quintas Granados. Universidad Autónoma de la Ciudad de México

## **MH77**

***Evaluation of the apoptotic effect of the OIP4BAD peptide in jurkat cells of acute lymphoblastic leukemia and PBMC***

Ana Mayra Reséndiz Corona. Universidad Autónoma de Querétaro

## **MH78**

***Identification of biomarkers for diagnosis and prognosis of pediatric medulloblastoma***

Alicia María Reveles Espinoza. Instituto Politécnico Nacional

## **MH79**

***Analysis of DAPK1 Methylation in Apoptosis Resistance in Idiopathic Pulmonary Fibrosis derived Fibroblasts***

Mariana Río de la Loza Rodríguez. Universidad Nacional Autónoma de México



## **MH80**

### ***Impact of periodontal disease on mental health***

Andrea Yamile Rivas Escobedo. Universidad Juárez del Estado de Durango

## **MH81**

### ***Expression of SERCA2 and SERCA3 genes in a model of Epithelial-Mesenchymal Transition in MCF10A cells and breast cancer cell lines in response to Resveratrol***

Gabriela Rodríguez Rodríguez. Universidad Nacional Autónoma de México

## **MH82**

### ***Evaluation of first- and second-generation platforms for messenger RNA synthesis as a potential technology in vaccine development***

Griselda Rodríguez Martínez. Hospital Infantil de México Federico Gómez

## **MH83**

### ***Correlation of Gonadotropin-Releasing Hormone Receptor Expression in Breast Cancer Cell Lines and Its Implication as a Therapeutic Target***

Daniela Rodríguez Cruz. IMSS. Cinvestav

## **MH84**

### ***Prevalence and classification of C-shaped Canal and Radix in Mandibular Molars using Cone-Beam Computed Tomography in Mexican Population***

Ángel Gustavo Romo Mireles. Universidad Juárez del Estado de Durango

## **MH85**

### ***Looking for molecular biomarker's childhood acute lymphoblastic leukemia***

Eliel Ruiz May. Instituto de Ecología

## **MH86**

### ***Novel anti-giardial compounds in *Larrea tridentata* and their in vitro effects on *Giardia lamblia* trophozoites***

Ángela Daniela Saldaña Alvarado. Universidad Autónoma de Coahuila

## **MH87**

### ***Mexican *Ganoderma lucidum* mushroom extracts induce "BRCAness" phenotype and metabolic vulnerabilities in triple-negative breast cancer: A complementary medicine study***

Ivan Salido Guadarrama. Instituto Nacional de Perinatología Isidro Espinosa de los Reyes

## **MH88**

### ***Autophagy induction after lung exposure to *Saccharopolyspora rectivirgula* in C57BL6 mice***

Andrea Sánchez Barajas. Universidad Nacional Autónoma de México

## **MH89**

### ***A skinomic approach to the study of health, pathologies, aging and anti-aging of the skin***

Juan Manuel Sánchez Contreras. Universidad Nacional Autónoma de México

## **MH90**

### ***Damage heterogeneity during induction of Hepatocarcinogenesis by chronic administration of DEN and 2-AAF through 13- and 18- weeks in Wistar Rats***

Jaime Sánchez Meza. Universidad de Guadalajara

## **MH91**

### ***Exploring SARS-CoV-2 Gene Expression in Mexican Patients: Insights from Molecular Analysis***

Joana Sánchez Medina. Universidad Nacional Autónoma de México

## **MH92**

### ***Gli1 expression associated with overall survival in locally advanced cervical cancer***

Gabriela Carolina Morales Sandoval. Universidad Nacional Autónoma de México

## **MH93**

### ***$\beta$ 3 subunit expression in normal breast epithelial cells and highly metastatic triple-negative breast cancer cells***

Juan Manuel Sandoval Valverde. Universidad de Colima

## **MH94**

### ***Discovery of Potential Inhibitors of Dehydroquinase Dehydratase from Methicillin-Resistant Staphylococcus aureus through Computer-Aided Drug Design***

Ana Karina Segovia Parra. Universidad Juárez del Estado de Durango

## **MH95**

### ***Detection of EMT markers in the renal carcinogenic process of an in vivo experimental model***

José Dolores Solano Becerra. Universidad Nacional Autónoma de México

## **MH96**

### ***O-GlcNAcylation decreases the expression of alpha2-6 sialic acid by activating the PI3-kinase/Akt pathway in oral cavity squamous cell cancer***

Carlos Josué Solórzano Mata. Universidad Autónoma Benito Juárez de Oaxaca

## **MH97**

### ***Ibervillea sonorensis (wereke) enhances glucose signaling in the skeletal muscle of diabetic rats***

Vanessa Wendi Suarez Barrios. Instituto Nacional de Cardiología "Ignacio Chávez"

## **MH98**

### ***Antioxidant effect of the unsaponifiable fraction of avocado oil on oxidative stress and glucose metabolism in animal model of non-alcoholic fatty liver disease***

Olin Torres Isidro. Universidad Michoacana de San Nicolás de Hidalgo

## **MH99**

### ***Influence of ECM Stiffness and Geometric Constraints on the Morphology and Mechanical Response of Lung Fibroblasts***

Maria Fernanda Toscano Marquez. Instituto Nacional de Enfermedades Respiratorias  
Ismael Cosío Villegas

### **MH100**

***PIEZO1-RHO/PMLC/IGF1 axis in skeletal muscle under micronutrients effects in an aging model***

Anya Ayelen Valdez Hernández. Instituto Politécnico Nacional

### **MH101**

***Design of a novel multiplex qPCR system to detect pathogenic Mucoralean fungi from clinical human samples***

Marco Iván Valle Maldonado. Universidad Michoacana de San Nicolás de Hidalgo

### **MH102**

***Modulatory effect of avocado oil on mitochondrial permeability transition pore in wistar rats fed a high-fat and high-fructose diet***

Manuel Alejandro Vargas Vargas. Universidad Michoacana de San Nicolás de Hidalgo

### **MH103**

***The unsaponifiable fraction of avocado oil improves mitochondrial function in rats with non-alcoholic fatty liver disease***

Manuel Alejandro Vargas Vargas. Universidad Michoacana de San Nicolás de Hidalgo

### **MH104**

***Evaluation of platelet function in women post-chemotherapy for breast cancer: a pilot study***

Itzel Patricia Vásquez Martínez. Universidad Autónoma Benito Juárez de Oaxaca

### **MH105**

***Fisetin and regular aerobic exercise enhance glutathione redox status in the brain of rats with diabetes***

Gabriel Vazquez Arredondo. Universidad de Guanajuato

### **MH106**

***Characterization of benzimidazole derivatives as inhibitors of Src homology 2 domain-containing protein tyrosine phosphatase 1***

Héctor Abdel Vázquez Lechuga. Universidad Juárez del Estado de Durango

### **MH107**

***Analysis of potential drugs with leptin-binding capacity***

Brandon Jorge Romero Rodríguez. Instituto Politécnico Nacional

### **MH108**

***Nicotinamide decreases protein oxidation in the retina, RPE, and LIVER in a hyperglycemic model***

Juan David Villeda González. Universidad Nacional Autónoma de México

### **MH109**

***Hepatoprotective effect of Empagliflozin/Metformin co-treatment in Metabolic Syndrome***

Oscar René Zambrano Vásquez. Instituto Nacional de Cardiología "Ignacio Chávez"

### **M41**

#### ***Genetic variability of tuberculosis complex in livestock farmers in Oaxaca***

Heidi Paola Galván Antonio. Universidad Autónoma Benito Juárez de Oaxaca

### **M42**

#### ***Effect of flavonoid compounds on the multidrug-resistant yeast *Candida auris****

Jonathan García Hernández. Instituto Politécnico Nacional

### **M43**

#### ***Point mutations in *Salmonella Typhimurium InvF* transcriptional regulator affect its function***

Laura Elena García Cortés. Instituto Politécnico Nacional

### **M44**

#### ***Interaction of *Wickerhamomyces anomalus* with fungi isolated from crops of economic interest***

Karina García Gutiérrez. Instituto Politécnico Nacional

### **M45**

#### ***Metagenomic sequencing of respiratory syncytial virus from isolates in northeastern Mexico***

Julio César Garza Cabello. Universidad Autónoma de Nuevo León

### **M46**

#### ***Identification of SR proteins in *Ustilago maydis****

Mayra Patricia Gaspariano Cholula. Benemerita Universidad Autónoma de Puebla

### **M47**

#### ***Obtaining bioethanol from brewer's malt bagasse***

Venus Melissa Gómez Lagunas. Universidad Autónoma de San Luis Potosí

### **M48**

#### ***Phenotypic, genotypic and metabolomic characterization of *Streptomyces albidoflavus* J29 *ori2* with antifungal activity on *Candida* spp.***

Adilene González Silva. Instituto Politécnico Nacional

### **M49**

#### ***Identification of virulence factors (*efaA*, *asa1*, *acel* and *esp*) in biofilm-forming *Enterococcus faecium* and *E. faecalis****

Christian González Reyes. Universidad Autónoma de Nayarit

### **M50**

#### ***Role of the *S. cerevisiae* orthologous proteins *KINrg1* and *KIRtg3* from the aerobic yeast *K. lactis* in respiratory metabolism***

Yael González Tinoco. Universidad Nacional Autónoma de México

### **M51**

#### ***Structural study of TLA-1 $\beta$ -lactamase in complex with tazobactam***

César Alberto González Guzmán. Universidad Nacional Autónoma de México

## **M52**

### ***Uncovering the functional role of the RND pumps in R. etli CFN42***

Adrián González Martínez. Universidad Nacional Autónoma de México

## **M53**

### ***The mitochondrial fusion protein Fzo1 is essential in the fungus Podospora anserina***

Mariana Aline González Manríquez. Universidad Nacional Autónoma de México

## **M54**

### ***Participation of the ORF PA2305/ambB in the virulence of Pseudomonas aeruginosa PAO1***

Ximena Hernandez Ramos. Universidad Michoacana de San Nicolás de Hidalgo

## **M55**

### ***Identification of proteins associated with isoforms of the eukaryotic Translation Initiation Factor 5A (eIF5A) in Fusarium graminearum***

Jorge Eduardo Hernández Espinosa. Universidad de Guanajuato

## **M56**

### ***Antimicrobial resistance in meat samples***

Hugo Antonio Hernández Pérez. Universidad Nacional Autónoma de México

## **M57**

### ***Characterization of the mycelial growth of fungi from an arid environment***

Miguel Emiliano Hernández Fernández. Instituto Politécnico Nacional

## **M58**

### ***Microbiological and physicochemical characterization of kombucha***

Liliana Alejandra Hernández Espinosa. Instituto Politécnico Nacional

## **M59**

### ***Microbiological characterization of Tenate cheese through a microbiological-genomic analysis***

Mariana Hernández Suárez. Universidad Autónoma del Estado de Hidalgo

## **M60**

### ***Risk of the prevalence of Staphylococcus aureus in artisanal cheeses sold in Mexico city***

Marcos Francisco Hernández Robles. Instituto Politécnico Nacional

## **M61**

### ***Variability of longitudinal clinical isolates of Candida glabrata***

Marco Josué Hernández Chávez. Instituto Potosino de Investigación Científica y Tecnológica A.C.

## **M62**

### ***The pqsA mutation in Pseudomonas aeruginosa PAO1 modifies the production of virulence factors depending on the growth stages***

Jaime Adrian Hurtado Solorzano. Universidad Michoacana de San Nicolás de Hidalgo

## **M63**

### ***Transcription factors involved in root cap development drive root growth direction upon inoculation with the beneficial rhizobacterium Achromobacter sp. 5B1***

Kirán Rubí Jiménez Vázquez. Universidad Michoacana de San Nicolás de Hidalgo

**M64*****The qscR mutation in Pseudomonas aeruginosa PAO1 modifies the biosynthesis of acyl homoserine lactones dependent on the growth phase***

Kevin Ledesma Muñiz. Universidad Michoacana de San Nicolás de Hidalgo

**M65*****Study of Bacillus cereus from food samples: Prevalence, Toxigenic Profile and Antibiotic resistance response***

Brenda Sofía Loaeza Cruz. Instituto Politécnico Nacional

**M66*****Isolation and genome sequencing of Vibrio parahaemolyticus strains in Litopenaeus vannamei specimens from an aquaculture farm in Sonora***

Jesús Daniel López Loera. Universidad Autónoma de Sinaloa

**M67*****The plant growth promoting rhizobacterium Achromobacter sp. 5B1, rescues Arabidopsis seedlings from alkaline stress by enhancing root organogenesis and hormonal responses***

José López Hernández. Universidad Michoacana de San Nicolás de Hidalgo

**M68*****Role of cell-end protein TEA-5 in the growth and development of Neurospora crassa***

Pedro Alejandro López García. Centro de Investigación Científica y de Educación Superior de Ensenada

**M69*****Search for pathogenic bacteria and antibiotic resistance in the water of Xochimilco canals***

Daniel López Pastrana. Universidad Nacional Autónoma de México

**M70*****Determination of isoniazid tolerance of BCG pasteur ATCC 35734 and its isogenic mutant derivative BCGDBCG1419c as planktonic and biofilm cultures***

Luis Manuel Lorenzo Rodríguez. Universidad de Guadalajara

**M71*****Antimicrobial activity from Magnolol and Honokiol from Magnolia spp on periimplantitis causing pathogen***

Jesús Agustín Loyola Alonso. Universidad de Guanajuato

**M72*****Anti-quorum sensing effect of the cyclodipeptide cyclo (Pro-Tyr), cyclo (Pro-Val), and cyclo (Pro-Phe) on the Rhl system in Pseudomonas aeruginosa PAO1***

Valeria Madrigal Pineda. Universidad Michoacana de San Nicolás de Hidalgo

**M73*****Design of a multiplex PCR for the detection of Mycoplasma and Ureaplasma species associated with reproductive disorders in cattle***

Anabelle Manzo Sandoval. Instituto Nacional de Investigaciones Forestales Agrícolas y Pecuarias

**M74*****Antifungal activity of immobilized cystatin microparticles of albumin***

María Karina Manzo Valencia. Cinvestav Irapuato

**M75*****Microbiological analysis of indoor air quality in the Universidad Iberoamericana Torreón***

José Antonio Martínez Villalba. Universidad Iberoamericana Torreón

**M76*****Effect of epinephrine and norepinephrine on the expression of virulence factors in *Pasteurella multocida****

Mayra Martínez Alfonzo. Universidad Nacional Autónoma de México

**M77*****Actinomycete metabolites isolated from Mexican jungle soils with antimicrobial and anti-virulence activity against antimicrobial-resistant pathogenic bacteria***

Araceli Martínez Larios. Instituto Politécnico Nacional

**M78*****Assessing Antibiotic Resistance in Bacteria Isolated from Street Food Stalls***

Rubén Martínez Rojas. Instituto Politécnico Nacional

**M79*****Analysis of NAD<sup>+</sup> self-sufficiency in *Avibacterium paragallinarum****

Sergio Alberto Matias Vera. Universidad Autónoma de Puebla

**M80*****Identification and implications of the N501Y mutation in SARS-CoV-2 isolates from a Mexican population***

Ángel Medina Reyes. Universidad de Guadalajara

**M81*****Bacterial adhesins implicated in root and gut attachment***

Gerardo Mejía Vázquez. Universidad Nacional Autónoma de México

**M82*****Microbial Examination of Food: Comparative study of Faecal Coliforms Presence in Cooked vs. Uncooked Foods***

Ángel Alejandro Meneses Sánchez. Instituto Politécnico Nacional

**M83*****Production and Characterization of Chitinase Activity by *Bacillus* spp. Strains with Antagonistic Activity Against *Fusarium verticillioides****

Ma. Fernanda Meneses Hernández. Universidad Nacional Autónoma de México

**TOXICOLOGY & PHARMACOLOGY I****TP1*****VIAN-c4551 in eye drops reaches the retina in supratherapeutic concentrations and reverses diabetes-induced excessive vasopermeability in the retina of rodents***

Elva Adán Castro. Universidad Nacional Autónoma de México

## **TP2**

### ***Effect of pioglitazone on renal function after exposure to cadmium in Wistar rat***

Daniel Isaac Alcántara Jara. Universidad Autónoma de Puebla

## **TP3**

### ***Chlorophyll quantification in aquatic plant (*Elodea canadensis*) exposed to heavy metal stibnite ( $Sb_2S_3$ ) in bioassay***

Ana Paola Rivera Torres. Universidad Juárez del Estado de Durango

## **TP4**

### ***Genotoxic effect in onion bulbs (*Allium cepa*) due to exposure to sphalerite ( $ZnS$ )***

Gerardo Alfonso Anguiano Vega. Universidad Juárez del Estado de Durango

## **TP5**

### ***Antitumor activity of incomptine a in a murine breast cancer model by downregulation of hexokinase II***

Ángel Giovanni Arietta García. Universidad Autónoma Metropolitana Iztapalapa

## **TP6**

### ***Effect of chronic ozone pollution on IL-6 and CD4 levels in the hippocampus of rats***

Pamela Barragán Reséndiz. Universidad Nacional Autónoma de México

## **TP7**

### ***Oleic Acid Induce Neuroprotection in Brain Regions of Rats treated with Dexrazoxane***

David Calderón Guzmán. Instituto Nacional de Pediatría

## **TP8**

### ***Exploring Lithium Salts for Autophagy Induction and Cell Viability: Novel Therapeutic Strategies for Cervical Cancer***

Alejandro Israel Castillo Montoya. Universidad Nacional Autónoma de México

## **TP9**

### ***Evaluation of ecotoxic effects of estibanite ( $Sb_2S_3$ ) in aquatic plant model (*Elodea canadensis*)***

Luis Adolfo Ceniceros Morales. Universidad Juárez del Estado de Durango

## **TP10**

### ***Identification of Potential Agonists from Natural Sources for PPAR- $\gamma$ in the Era of Machine Learning***

Flavio F. Contreras Torres. Tecnológico de Monterrey

## **TP11**

### ***Differential Expression of Piezo1 in Prostate Cancer Cell Lines***

Jesús Emiliano Covarrubias Lobatón. Universidad Nacional Autónoma de México

## **TP12**

### ***Molecular coupling of Diels-Alder adduct derived from anthranilic acid on COX 1 and 2***

Eric Surriel Cruz Ruiz. Instituto Politécnico Nacional

## **TP13**

### ***Changes in liver function in rats chronically exposed to fluoride prenatally and postnatally***

Fernanda Marlen Enríquez Sánchez. Universidad de Guadalajara



#### **TP14**

##### ***Efficacy of the cytotoxic effect of 6-pentadecyl salicylic anacardic acid in olive oil nanodrops in different cell lines***

Elizabet Estrada Muñiz. Cinvestav Zacatenco

#### **TP15**

##### ***Evaluation of the administration of a phytochemical to a murine model of acute gastritis***

Verónica Edith Gallegos Hernández. Universidad Nacional Autónoma de México

#### **TP16**

##### ***Impact of Lithium Chloride and Lithium Carbonate on DNA Repair and Apoptosis in Cervical Cancer Cells***

Juan Carlos García Acosta. Universidad Nacional Autónoma de México

#### **TP17**

##### ***Bactericidal and bacteriostatic activity of secondary metabolites from *Magnolia vovidesii* against oral bacteria***

Alma Rosa González Pérez. Universidad de Guanajuato

#### **TP18**

##### ***Evaluation of the antiviral activity against Chikungunya of the dichloromethane extract of the stem of *Ocimum basilicum* in vitro***

José Carlos González Arce. Instituto Politécnico Nacional

#### **TP19**

##### ***VIAN-c4551 in eye drops inhibits the retinal vasopermeability induced by the intravitreal injection of VEGF in rats and mice***

Daniela Granados Carrasco. Universidad Nacional Autónoma de México

#### **TP20**

##### ***Anacardic 6-Pentadecyl Salicylic Acid Modifies the Expression of Cell Cycle-Related Proteins in Jurkat and Peripheral Blood Mononuclear Cells***

Gabriela Guerrero Palomo. Cinvestav Zacatenco

#### **TP21**

##### ***Repositioning imipramine for in vitro antiparasitic effects in *Giardia lamblia****

Xareni Zinereth Herrera Valero. Universidad Autónoma de Coahuila

#### **TP22**

##### ***Electrophysiological Analysis of *Centruroides exilicauda* Venom on Ion Channel Activity in Mouse Dorsal Root Ganglion Neurons***

Darién Huerta González. Centro de Investigación Científica y de Educación Superior de Ensenada

#### **TP23**

##### ***Effect of chronic $\beta$ -carotene treatment on stem markers of breast cancer cell lines***

Juan Carlos Juárez Cruz. Universidad Autónoma de Guerrero

#### **TP24**

##### ***Discovering Potential Analgesics from Baja California Bark Scorpion Venom (Centruroides exilicauda) Using a Metabolomic Approach***

Eugenio Leyva Figueroa. Centro de Investigación Científica y de Educación Superior de Ensenada

#### **TP25**

##### ***Study of the effect of glutathione peroxidase in organotypical cultures of rat cartilage exposed to nanoparticles with glutathione***

Laura Denise López Barrera. Universidad Nacional Autónoma de México

## **POSTER SESSION IV**

**THURSDAY, OCTOBER 24**

**15:15 - 17:15**

## **BASIC BIOCHEMISTRY III**

#### **BB79**

##### ***Redesign of shikimate dehydrogenase toward cofactor specificity exchange using artificial intelligence***

Raúl Iván Pérez Bermúdez. Universidad Nacional Autónoma de México

#### **BB80**

##### ***Screening of a chemical fragment library for the search of inhibitors against the acyl***

homoserine lactone synthase of *Acinetobacter baumannii*

Jesús Ricardo Pérez Velázquez. Instituto Nacional de Pediatría

#### **BB81**

##### ***Choosing sides in LOXP and the importance of the initial colonization by CRE***

Marco Antonio Pérez Castillo. Universidad Autónoma del Estado de Morelos

#### **BB82**

##### ***Changes in lipid and proteome composition of the inner and outer liver's mitochondrial membranes and its correlation with mitochondrial respiration in experimental type 1 diabetes***

Ramiro Perusquía García. Universidad Nacional Autónoma de México

#### **BB83**

##### ***Identification of *Paramecium multimicronucleatum* mitochondrial ATP synthase***

Maria Guadalupe Quintanar Solis. Universidad Nacional Autónoma de México

#### **BB84**

##### ***Generation of a quantification system for *Galleria mellonella* apolipophorin-III***

Uriel Ramírez Sotelo. Universidad de Guanajuato

**BB85**

***Partial purification and characterization of the NADH dehydrogenase of the respiratory chain of *Bacillus subtilis****

Alexia Ramírez Ávila. Universidad Nacional Autónoma de México

**BB86**

***The pyruvate kinase from *Pyrobaculum aerophilum* shares with other Thermoproteales unique features of the catalytic lid.***

Leticia Ramírez Silva. Universidad Nacional Autónoma de México

**BB87**

***Evaluation of the Intensity of the Killer Effect in *Saccharomyces cerevisiae* using different carbon sources and its relationship with Mitochondrial Biogenesis***

Eric Ramos Ojeda. Universidad Autónoma de Querétaro

**BB88**

***Kill me if you can, the long-lived yeast *Rhodotorula mucilaginosa****

Carolina Ricardez García. Universidad Nacional Autónoma de México

**BB89**

***Kinetic characterization of eukaryotic mitochondrial ATP synthases***

Anaiza Rico Luna. Universidad Nacional Autónoma de México

**BB90**

***Biochemical response of four bread wheat genotypes subjected to heat stress***

Edgar Robles Rodríguez. Centro de Investigación en Alimentación y Desarrollo, A.C.

**BB91**

***Kinetics of Two Recombinant *Capsicum Annuum* L. Soluble Inorganic Pyrophosphatases with Different Phylogenetic Origin***

Rogelio Rodríguez Sotres. Universidad Nacional Autónoma de México

**BB92**

***Effect of Metabolic Syndrome on the expression of the ryanodine receptor and the SERCA pump in rat cerebral arteries***

Daniela Rodríguez Benito. Cinvestav Zacatenco

**BB93**

***Identifying a hydrophobin class I from *Agaricus bisporus*: production of different amyloid-like fibrils***

Jesús Rojas Osnaya. Universidad Autónoma Metropolitana Cuajimalpa

**BB94**

***Metabolic Changes and Antioxidant Response in *Ustilago maydis* Grown in Acetate***

Lucero Romero Aguilar. Universidad Nacional Autónoma de México

**BB95**

***Antioxidant capacity of asparagus under different growing methods***

Adela Guadalupe Rosas Rosas. Universidad Autónoma de Chapingo

**BB96*****Phylogenetic distribution and reconstruction of ancestral phytases***

Rogelio Iván Rosas López. Universidad Nacional Autónoma de México

**BB97*****Cannabidiol attenuates palmitic acid-induced inflammatory signaling in human macrophages by cannabidiol: insights into metabolic stress mitigation***

Mayte Rueda Munguía. Instituto Tecnológico de Estudios Superiores de Monterrey

**BB98*****The roles of transcription factor SOG1 of Arabidopsis thaliana beyond of its nuclear function in root***

Karem Sánchez Martínez Universidad Nacional Autónoma de México

**BB99*****The use of Thioflavin T to estimate the Plasma Membrane Potential (PMP) in different yeast strains and the effect of pH***

Norma Silvia Sánchez Sánchez. Universidad Nacional Autónoma de México

**BB100*****Akt and PKC inhibitors activate an ER Ca<sup>2+</sup> leak involving Sec61 translocon in HeLa cells***

Lizeth Sandoval Vázquez. Cinvestav Zacatenco

**BB101*****Zika virus regulates cell survival through modulation of miR-125a expression and mitochondrial function***

María E Santana Román. Universidad Nacional Autónoma de México

**BB102*****In silico, In vitro and In vivo analyzes demonstrate that arsenic affects cellular respiration by interacting with cytochrome C and ubiquinone***

Erick Sierra Campos. Universidad Juárez del Estado de Durango

**BB103*****Effect of the Ethanolic Leaves Extract of Callistemon citrinus on the Antioxidant Activity in the Liver of Rats Administered with Indomethacin***

Uriel Noe Solano Candia. Universidad Michoacana de San Nicolás de Hidalgo

**BB104*****Morphological and genetic characterization of fruit dehiscence in Bixa orellana L.***

Rocío Tamayo García. Centro de Investigación Científica de Yucatán A.C.

**BB105*****Expression, Purification, and Characterization of 3-dehydroquinase synthase (DHQS) from Acinetobacter baumannii***

Atl Emiliano Tarbuck Valle. Universidad Nacional Autónoma de México

**BB106*****Fermentation of cacao to modulate its content of active compounds***

Tatiana Torres Loera. Cinvestav Zacatenco

**BB107*****Crystallization of the catechol 1,2-dioxygenase enzyme from Stutzerimonas stutzeri GOM2***

Dalia Isabel Torres Aguirre. Universidad Autónoma del Estado de Morelos

**BB108*****Functional analysis of the catalase-peroxidase of phytopathogenic fungus Ustilago maydis***

Marisol Ubaldo Aguilar. Universidad Nacional Autónoma de México

**BB109*****¿Why Bacillus licheniformis can make an aerobic respiratory whit cyanide in the media?***

Daniel Uribe-Ramírez. Instituto Politécnico Nacional

**BB110*****Characterization of mitochondrial complex I from the diatom Phaeodactylum tricornutum***

Gloria Vargas Romero. Universidad Nacional Autónoma de México

**BB111*****Determination of LCM and  $\beta$ -glucosidase in Naltel Maize sprouts from the Sierra Norte, Oaxaca***

Pedro Ronel Vásquez Díaz. Instituto Tecnológico de Oaxaca

**BB112*****Physicochemical properties of the B domain (catalytic lid) of the pyruvate kinase from Thermofilum pendens***

Alicia Vega Segura. Universidad Nacional Autónoma de México

**BB113*****The substrate of glucose-6-phosphate dehydrogenase of Pseudomonas aeruginosa induces a change in its quaternary structure***

Roberto Velasco García. Universidad Nacional Autónoma de México

**BB114*****Structural keys behind unusual product diversification of a non-classical CGTase***

Beatriz Velazquez Cruz Universidad de Colima

**BB115*****On the role of Pro16 in the stability, folding kinetics and function of the LAO binding protein from Salmonella typhimurium***

Alejandro Fernández Velasco. Universidad Nacional Autónoma de México

**BB116*****Effect of Pleurotus djamor on mitochondrial function and expression of GRP-75 and uncoupling proteins in an insulin-resistant model***

Erica Karime Ventura García. Universidad Autónoma de Coahuila

**BB117*****EFL1 interdomain communication is disrupted as a consequence of the R1086Q mutation***

Jonathan Alejandro Zúñiga Domínguez. Universidad Nacional Autónoma de México

## **BB118**

***Characterization of sucrose synthase gene family in common bean (*Phaseolus vulgaris* L.) subjected to moisture restriction during pod filling***

Norma Cecilia Morales Elias. Colegio de Postgraduados.

# **IMMUNOLOGY & PARASITOLOGY**

## **IP1**

***In vivo role of  $T\gamma\delta$  cells in a lupus mouse model induced by NPA stabilization***

Edgar Iván Galarce Sosa. Instituto Politécnico Nacional

## **IP2**

***Plasmodium vivax mitochondrial DNA polymorphism, and its relationship to genes encoding sexual proteins and the infection pattern in mosquitoes *Nyssorhynchus albimanus* and *Anopheles pseudopunctipennis*, Chiapas, México***

Lilia González Cerón. Instituto Nacional de Salud Pública

## **IP3**

***Impact of the form of birth and effect of Flagellin on the activation of neonatal  $CD4^+$  and  $CD8^+$  T cells***

Carlos Jesús Ventura Martínez. Universidad Autónoma del Estado de Morelos

## **IP4**

***Role of metalloproteinases in the midgut of *Aedes aegypti* mosquitoes infected with dengue virus***

Sofía Alanís Muñoz. Instituto Nacional de la Salud Pública

## **IP5**

***Involvement of the  $\alpha$ Masa6 from *E. histolytica* in the repair of plasma membrane damage induced by pore-forming proteins***

Sairy Yarely Andrade Guillen. Universidad de Guanajuato

## **IP6**

***Macrophage migration inhibitory factor (MIF) contributes to macrophage-M1 polarization by regulating mitochondrial function***

Antonio Andrade Meza. Universidad Nacional Autónoma de México

## **IP7**

***Exosomes secreted by PBMCs infected with *Helicobacter pylori* transport  $TNF-\alpha$  modulates EMT, migration and invasion in AGS cells***

Josefina Atrisco Morales. Universidad Autónoma de Guerrero

## **IP8**

***Induction of trained immunity by bovine respiratory disease vaccine in cattle***

Marisol Báez Magaña. Universidad Michoacana de San Nicolás de Hidalgo

## **IP9**

***Mitochondrial dynamics in B cell response against lipidic antigens***

Giovanna Berenice Barrera Aveleida. Instituto Politécnico Nacional

### **IP10**

***Analysis of entomopathogenic properties of *P. syringae* CDBB-B1293 against *Aedes aegypti*, the main vector of the dengue virus***

Valeria Calderón Frontana. Cinvestav Zacatenco

### **IP11**

***Effect of supplementation with L-arginine and L-serine on the cytokine profile of neonates born by cesarean section and vaginal delivery***

Ingrid Yaritzit Carreón Cortés. Universidad Autónoma del Estado de Morelos

### **IP12**

***Association of the metabolic state and activation response of neonatal and adult CD4<sup>+</sup> and CD8<sup>+</sup> T lymphocytes***

Francisco Castañeda Gómez. Universidad Autónoma del Estado de Morelos

### **IP13**

***Stimulating the immune function of neonatal CD4<sup>+</sup> T cells with cytokines***

Alejandra Cedillo Baños. Universidad Autónoma del Estado de Morelos

### **IP14**

***Nucleolar factor Pescadillo is required for cell proliferation in the human parasite *Trypanosoma brucei****

Laila Espinosa Renteria. Universidad Nacional Autónoma de México

### **IP15**

***Molecular study of the Pseudouridine synthase Cbf5 in the human pathogen *Leishmania major****

Luis Enrique Florencio Martínez. Universidad Nacional Autónoma de México

### **IP16**

***Characterization of Tau138 and its role in RNA Pol III transcription and chromatin organization in trypanosomatid parasites***

Eduardo García Huerta. Universidad Nacional Autónoma de México

### **IP17**

***The deletion of Smad7 enhances the inhibitory effect of TGF- $\beta$  on the effector functions of CD8<sup>+</sup> T lymphocytes***

Verónica Yutsil García Rasilla. Universidad Nacional Autónoma de México

### **IP18**

***Obtention of human neutralizing antibodies against dengue virus through the selection of B-cells***

Dulce Desireé Izar Marín. Instituto Politécnico Nacional

### **IP19**

***Study of NFAT activation in porcine alveolar macrophages via hrGFP reporter gene expression***

Eunice López Ahumada. Universidad Nacional Autónoma de México

### **IP20**

***B55 $\beta$  as a pivotal molecule in arthritis development and anti-TNF- $\alpha$  therapy***

Dulce Malvaez Luis. Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán

### **IP21**

#### ***Effect of two conditionings of Citrus aurantium on the proliferation of Entamoeba histolytica trophozoites cultured in vitro***

Ivette Andrea Martínez Santiago. Universidad Nacional Autónoma de México

### **IP22**

#### ***Identification of protein factors involved in the atypical biogenesis of the 60S ribosome subunit in the human pathogen Leishmania major***

Aldo Yael Miranda Muñoz. Universidad Nacional Autónoma de México

### **IP23**

#### ***Population regulation of Schinus molle on trophozoites of Entamoeba histolytica in axenic culture***

Arely Morales Vaca. Universidad Nacional Autónoma de México

### **IP24**

#### ***Variante rs10109853C/T de IDO2 y su relación con artritis reumatoide***

Betsabe Guadalupe Najera Ruiz. Universidad Autónoma de Guerrero

### **IP25**

#### ***Prevalence of Virulence Genes in Staphylococcus aureus Isolated from Patients with Atopic Dermatitis and Their Effect on TSLP Production by Human Keratinocytes***

Claudia Leticia Vanegas Flores. Universidad Nacional Autónoma de México

### **IP26**

#### ***The sialomucin CD43 induces autophagy-dependent cell death in lymphoid tumors during starvation***

Erick Israel Pérez García. Universidad Nacional Autónoma de México

### **IP27**

#### ***The NS1 protein of the dengue virus promotes early secondary tissue infection of Aedes aegypti mosquitoes***

Edgar Quezada Ruiz. Cinvestav Zacatenco

### **IP28**

#### ***Activation of NKT cells and Tgδ lymphocytes in response to mycobacterial lipids***

Claudia Albany Reséndiz Mora. Instituto Politécnico Nacional

### **IP29**

#### ***Study on the anti-inflammatory potential of DL-3-hydroxy-3-ethyl-3-phenylpropionamide, an anticonvulsant drug, in microglia derived from mice with epilepsy***

Claudia Albany Reséndiz Mora. Instituto Politécnico Nacional

### **IP30**

#### ***Immunometabolic control of neonatal CD4<sup>+</sup> T cell responses***

Jonathan Ricardo Robles Reyes. Universidad Autónoma del Estado de Morelos

### **IP31**

#### ***6-Pentadecyl Salicylic Acid Modifies the Secretion of Cytokines of Human Natural Killer Cells in Vitro***

Christyna de los Ángeles Rosales González. Cinvestav Zacatenco

### **IP32**

#### ***New liposomal amphotericin B derivative: A potential chagas disease treatment***

Lisset Torres Martínez. Universidad Nacional Autónoma de México



### **IP33**

#### ***Optimizing Human Serum Pretreatment Blood Serum Pretreatment for Accurate Total Endotoxin Quantification Using LAL Assay***

Keren Tovar Presas. Universidad Autónoma de Ciudad Juárez

### **IP34**

#### ***Identification of perchloric acid-soluble proteins from Trichomonas vaginalis***

Laura Isabel Vázquez Carrillo. Universidad Autónoma de la Ciudad de México

### **IP35**

#### ***Evaluation of the immune response in rats during physiological cardiac hypertrophy induced by pregnancy***

José Alberto Verduzco Palafox. Universidad de Sonora

### **IP36**

#### ***Macrophage polarization analysis in a mouse model of Systemic Lupus Erythematosus triggered by lipid antigens***

Carlos Wong Baeza. Instituto Politécnico Nacional

### **IP37**

#### ***Immunological Endotypes of Atopic Dermatitis in the Mexican Population: Differential Expression of CLA+ T Cells and CCR4/CCR10 Receptors***

Luis Carlos Zumaya Pérez. Universidad Nacional Autónoma de México

### **IP38**

#### ***KLF10: A Crucial Transcription Factor in Macrophage Defense Against Mycobacterium tuberculosis***

Hilda C. Leyva Sánchez. Universidad Nacional Autónoma de México

## **■ MICROBIOLOGY III**

### **M84**

#### ***Microbiological characterization of Mother of Vinegar and its inhibitory effect***

Gloria Beatriz Molina Valdés. Instituto Politécnico Nacional

### **M85**

#### ***The post-transcriptional regulator RsmA mediates the protective response against pyocyanin overproduction in Pseudomonas aeruginosa ID4365***

Luis Fernando Montelongo Martínez. Universidad Nacional Autónoma de México

### **M86**

#### ***The chorionic gonadotropin hormone decreases the expression of possible virulence factors of Klebsiella pneumoniae in vitro***

Juan Fernando Montes García. Universidad Nacional Autónoma de México

### **M87**

#### ***Identification of a pesticidal crystal protein (Cry8Ba) in the genome of the Metarhizium brunneum***

Aida Gabriela Mora Acebedo. Universidad de Guanajuato

## **M88**

### ***Role of Sargassum fluitans as a Biological Reducer of Gold in the Synthesis of Nanoparticles and its Bactericidal Impact***

Bryan Leonardo Naredo Rojas. Universidad Autónoma de Puebla

## **M89**

### ***Study of the role of the histidine-kinase RPFC2 in alginate biosynthesis in Azotobacter vinelandii***

Mariana Ochoa López. Universidad Autónoma de Puebla

## **M90**

### ***Development of a biosensor for the detection of Streptococcus pneumoniae***

José de Jesús Olivares Trejo. Universidad Autónoma de la Ciudad de México

## **M91**

### ***Biotechnological Potential of Thermotolerant Wastewater Yeasts for High-Temperature Biofuel Production***

Miguel Ángel Orozco González. Universidad Nacional Autónoma de México

## **M92**

### ***Modulation of the Virulence of Multidrug-Resistant E. coli O104:H4 by Subinhibitory Concentrations of Ampicillin***

Yaraymi Ortiz Reyes. Universidad Autónoma de Nuevo León

## **M93**

### ***Visualization of the Neurospora crassa developmental cycle in mutant strains lacking hydrophobins***

Omar Páez Gómez. Universidad Nacional Autónoma de México

## **M94**

### ***Mitochondria proteome of mosquito cells infected with dengue virus***

Victoria Pando Robles. Instituto Nacional de Salud Pública

## **M95**

### ***Interaction of the MibR protein with the regulatory region of the ipdC gene of Azospirillum brasilense Sp7***

José Cristian Pérez Gómez. Universidad Autónoma de Puebla

## **M96**

### ***Characterization of the anti-quorum sensing and anti-biofilm activity of diverse actinomycetes isolated from soils of the Mexican jungle against pathogenic bacteria resistant to antibiotics***

Itzel Plascencia Ortiz. Instituto Politécnico Nacional

## **M97**

### ***Evaluation of the immunogenic properties of surface proteins from Gallibacterium anatis 12656-12***

Ana Karen Ponce Quiroz. Universidad Autónoma de Puebla

## **M98**

### ***The unexplored diversity of yeasts from open fermentations in Mexico***

Nancy Judit Quintana Rodríguez. UGA. Cinvestav Irapuato

### **M99**

***Genome analysis of Gluconacetobacter sp. UAPS01-405, isolated from the non-photosynthetic parasitic plant Conopholis alpina***

Rigel Quintero Luis. Universidad Autónoma de Puebla

### **M100**

***Aldehyde Dehydrogenase Diversity and 6-OL-ALDH overexpression in Azospirillum genomes***

Albverto Ramírez Mata. Universidad Autónoma de Puebla

### **M101**

***Biochemical and microbiological characterization of the intestinal microbiome of the Tenebrio molitor larva***

Axel Reyes Coatl. Universidad Autónoma de Puebla

### **M102**

***Phenotypic characterization of the libR gene of Azospirillum brasilense sp7***

Sandra R. Reyes Carmona. Universidad Autónoma de Puebla

### **M103**

***Physiological and symbiotic differences of pyruvate carboxylase and phosphoenolpyruvate carboxylase in Rhizobium phaseoli***

Alma Ruth Reyes González. Universidad Nacional Autónoma de México

### **M104**

***Avin 41190: A Novel Regulatory Element in the Multikinase Network GacS (MKN-GacS) in Azotobacter vinelandii***

Itzel Rodríguez Guerra Universidad Autónoma de Puebla

### **M105**

***The BARA/SIRA and CSR systems regulates the expression of a putative carbonic anhydrase enzyme encoded in the PSLT virulence plasmid of salmonella enterica serovar typhimurium***

Yoselin Xiomara Rodríguez Muñoz. Universidad Nacional Autónoma de México

### **M106**

***The potential of Periconia macrospinoso HA<sub>G</sub>J2 isolated from agave tequilana to control plant pathogens***

Fernando Uriel Rojas Rojas. Universidad Nacional Autónoma de México

### **M107**

***The role of Epinephrine and Norepinephrine in promoting the growth and virulence factor expression of Mannheimia haemolytica is significant.***

Verónica Rosales Islas. Universidad Nacional Autónoma de México

### **M108**

***Study of splicing and Nonsense Mechanism Decay (NMD) factors in Ustilago maydis***

Kate Ariadna Rossano Gutiérrez. Universidad Autónoma de Puebla

**M109**

***Elucidating the function of Azotobacter vinelandii phasins proteins: PhbP2 and PhbP3 are required for the degradation of the biodegradable plastic polyhydroxybutyrate***

Jessica Ruiz Escobedo. Universidad Nacional Autónoma de México

**M110**

***Characterization of gut microbiota in cafeteria diet-fed mice model of obesity***

Jessica Ruvalcaba Galindo. Universidad de Colima

**M111**

***Identification of antibiotic resistance in oral bacteria from dogs with periodontal disease***

Yosahandy Palacios Castañon. Universidad La Salle Bajío

**M112**

***Search of maize seed endophytes with antagonistic activity against Fusarium verticillioides***

Stefhany Segoviano Correa. Universidad Nacional Autónoma de México

**M113**

***Study of bacteriophages to control of multi-drug resistant bacteria***

Omar Alejandro Sepúlveda Robles. CMN. Siglo XXI. IMSS

**M114**

***Study and characterization of new compounds with antivirulence and antifungal activity produced by Streptomyces albidoflavus J25 isolated from Mexican jungle soil***

Daniela Elysa Solorio Escamilla. Instituto Politécnico Nacional

**M115**

***Genomic insights into three clinical Serratia marcescens strains of environmental origin***

Faviola Tavares Carreón. Universidad Autónoma de Nuevo León

**M116**

***Detection of Bacillus cereus as a strategy to assess food safety in Mexico City***

María Denisse Tejada Ramírez. Instituto Politécnico Nacional

**M117**

***Nernst Equation versus Killer effect in Saccharomyces cerevisiae***

Brenda Tellez de la Garza. Universidad Autónoma de Querétaro

**M118**

***Antimicrobial potential of heliotropium angiospermum against Salmonella SP., isolated from chicken***

David Tirado Torres. Universidad de Guanajuato

**M119**

***Evaluation of the antimicrobial activity of buddleja scordioides against Salmonella SP., isolated from chicken***

Guadalupe Vázquez Rodríguez. Universidad de Guanajuato

**M120**

***Risk of the presence of Escherichia coli in vegetables marketed in Mexico city***

Carlos Ramón Vázquez Quiñones. Instituto Politécnico Nacional

**M121**

***Bioinformatic analysis of glycine derivative of 22-oxocolestenyl as potential anti-cancer agent***

Ana Karen Villa Merlán. Universidad Autónoma de Puebla

**M122**

***Mitogen-Activated Protein Kinase Hog1: Key Regulator for Enhancing Riboflavin Overproduction in the Yeast *Debaryomyces hansenii****

Diana Villarreal Huerta. Universidad Nacional Autónoma de México

**M123**

***Analysis of genes *cdgE* and *hkhB* in *Azospirillum baldanorium* Sp245 involved in biofilm formation and motility***

María Luisa Xiqui Vázquez. Universidad Autónoma de Puebla

**M124**

***Characterization of the antibiotic effect and metal resistance in the C4 strain of *Providencia stuartii****

Gokabeth Zarco Hernández. Instituto Politécnico Nacional

## **NEUROSCIENCES & NEUROBIOLOGY II**

**NN28**

***Modulation of glutamate uptake by the subacute activation of the histamine H3 receptor in rat cerebro-cortical astrocytes in primary culture***

Yrving Daniel Díaz De Lucio. Cinvestav Zacatenco

**NN29**

***Impact of Intestinal Low-Grade Inflammation on Purinergic-Calcium Signaling in Enteric Glial Cells***

Irving Israel Vega Juárez. Universidad de Colima

**NN30**

***Resveratrol as a modulator of the glutathione system and its neuroprotective effect on the prefrontal cortex***

Brenda Hernández Pérez. Universidad Autónoma de Puebla

**NN31**

***Sex-dependent effects on neurodevelopment of perinatal exposure to glyphosate herbicides in the rat***

Isela Hernández Plata. Universidad Nacional Autónoma de México

**NN32**

***Effect of agomelatine on the CPF 5-HT<sub>2c</sub> receptor in a rat model of major depression***

Daniel Juárez Serrano. Universidad Autónoma de Puebla

### **NN33**

#### ***Catalase as a biomarker of oxidative stress related to depressive disorders***

Francisco Javier Lievanos Ruiz. Universidad Michoacana de San Nicolás de Hidalgo

### **NN34**

#### ***RNA-seq and cytokine secretion comparison in primary rat cerebral cortex astrocytes induced to cellular senescence or gliosis with palmitate***

Michel López Teros. Universidad Autónoma Metropolitana Iztapalapa

### **NN35**

#### ***Depression-like behaviour is comorbidity in a model of heart failure with preserved ejection fraction induced by high-fat diet and L-NAME***

Roger Alexis Maldonado Ruiz. Tecnológico de Monterrey

### **NN36**

#### ***Mutation analysis in the RCBTB1 gene causing retinal dystrophy: a model for mapping related genes in Mexico***

Claudia Mancilla Simbro. Universidad Autónoma de Puebla

### **NN37**

#### ***Functional characterization of human embryonic stem cell derived-chromaffin cells***

Hilda Angélica Martínez Becerril. Universidad Nacional Autónoma de México

### **NN38**

#### ***Obesity induced by a diet rich in fats and sugars affects spatial memory in ovariectomized female CD1 mice***

Heidy Martínez Pacheco. Universidad Veracruzana

### **NN39**

#### ***Alterations in spatial memory of CD-1 mice strain feed with Mexican cafeteria diet***

César Amador Mendoza Calles. Universidad Veracruzana

### **NN40**

#### ***Sensitivity of TUBB4A to microtubule stabilization and depolymerization***

Aurora Citlalli Montes Centeno. Universidad de Guanajuato

### **NN41**

#### ***Mitochondrial Dynamics in the Retina at the Early Onset of Diabetes in a Rat Model of Type I Diabetes***

Frida Paulina Muñiz Ruvalcaba. Universidad Nacional Autónoma de México

### **NN42**

#### ***Unraveling the Cortical Origins and Dopaminergic Modulation of Beta Oscillations in Parkinson's Disease Models***

Aidán Alejandro Ortega García. Universidad Nacional Autónoma de México

### **NN43**

#### ***Characterization and differentiation of human induced pluripotent stem cells into midbrain dopaminergic neurons***

Andrés Paredes Rocha. Universidad Nacional Autónoma de México

#### **NN44**

##### ***Muscarinic modulation of Calcium currents in striatal ChAT's interneurons: the impact of M1 receptor***

Yohana Parrado Quintana. Universidad Nacional Autónoma de México

#### **NN45**

##### ***Role of testosterone in the gain of stemness characteristics in cells derived from human glioblastoma***

Juan Carlos Quintero Gallegos. Instituto Nacional de Perinatología. UNAM

#### **NN46**

##### ***The calcium hypothesis in Alzheimer's disease***

Luis Ángel Ramírez Cipriano. Universidad Autónoma del Estado de Hidalgo

#### **NN47**

##### ***Metabolic and epigenetic effects of $\beta$ -hydroxybutyrate during the differentiation of human pluripotent cells to dopaminergic neurons***

Margareht Reyes Aldana. Universidad Nacional Autónoma de México

#### **NN48**

##### ***Inactivation of Plpp3 in neural crest cells leads to neonatal cardiac failure***

Erick Antonio Rojas Pacheco. Universidad Nacional Autónoma de México

#### **NN49**

##### ***Impact of Dual Inhibition of Pak1 and CaMK2 Kinases on Glioblastoma Oncogenesis***

Héctor Iván Saldívar Cerón. Universidad Nacional Autónoma de México

#### **NN50**

##### ***Enhancement of locomotor function and attenuation of apoptosis by the use of tibolone as a treatment for traumatic spinal cord injury***

Stephanie M. Sánchez Torres. CONAHCYT. Centro Médico Nacional Siglo XXI. IMSS

#### **NN51**

##### ***Activity modulation of striatal cholinergic interneurons mediated by activation of dopamine D1-like receptors***

Maricela Lizbeth Saucedo Bello. Universidad Nacional Autónoma de México

#### **NN52**

##### ***Molecular cloning, functional characterization, and differential expression of two novel GABA<sub>A</sub>-like subunits from red swamp crayfish *Procambarus clarkii****

Iván Uriel Valladares Hernández. Cinvestav Zacatenco

#### **NN53**

##### ***Progesterone treatment restores normal blood-brain barrier function in a rat model of chronic cerebral hypoperfusion***

Amairani Maydelin Vázquez Espadin. Universidad Autónoma Metropolitana Iztapalapa

#### **NN54**

##### ***Epigenetic control of neuron activation and memory in aging***

G. Aleph Prieto. Universidad Nacional Autónoma de México

## **SIGNAL TRANSDUCTION AND CELL DIFFERENTIATION II**

### **ST32**

***Cannabidiol increases adipogenesis on 3T3-L1 pre-adipocytes via PPAR $\gamma$***

Helen Yarimet Lorenzo Anota. Tecnológico de Monterrey

### **ST33**

***BUB 1 is a nodular kinase that predicts overall survival in osteosarcoma, liposarcoma, synovial. sarcoma, and leiomyosarcoma***

Frida Citlali Rodríguez Izquierdo. UAM I / Instituto Nacional de Cancerología

### **ST34**

***The IL-6 induces metastatic properties in luminal breast cancer cells through GPR30***

Ana Carolina Tirado Garibay. Universidad Michoacana de San Nicolás de Hidalgo

### **ST35**

***Spermatozoa adhesion to an immobilized fibronectin matrix alters their physiology and increases their survival***

Coral Yamilet Jorge Cruz. Cinvestav Zacatenco

### **ST36**

***Possible Involvement of Pak1 and CaMKII in Insulin Secretion by Pancreatic Beta Cells***

Nely Gisela López Desiderio. UNAM/Instituto Politécnico Nacional

### **ST37**

***Insights into the regulation of SnRK1 through phosphorylation by upstream kinases***

Carmen Aitana López Zequeira. Universidad Nacional Autónoma de México

### **ST38**

***Lipid droplets in plant cells: interaction with nuclei and the endoplasmic reticulum***

Alejandro López Hernández. Universidad Michoacana de San Nicolás de Hidalgo

### **ST39**

***Thrombin-induced activation of focal adhesion proteins in the Retinal Pigment Epithelium (RPE)***

Katya Manzanita Quintero. Universidad Nacional Autónoma de México

### **ST40**

***The role of apoptosis in the development of the Drosophila tracheal system and its relationship with protruding cells of the tracheal dorsal trunks***

Pedro Alberto Marmolejo Cruz. Universidad Nacional Autónoma de México

### **ST41**

***Specific Temporal Requirement of Prox1 Activity During Pancreatic Acinar Cell Development***

Angélica Sofía Martínez Ramírez. Northwestern University

### **ST42**

***Activation of the IGF-1/IGF-1R increases chemoresistance to paclitaxel of non-small cell lung cancer cell line (A549)***

Max Alejandro Maximino Rojas. Universidad Autónoma de Puebla



### **ST43**

#### ***Interferon-stimulated gene 15 and ISGylation levels are modulated by IFN-gamma in medulloblastoma cells***

Karen Haidee Medina Abreu. Universidad Autónoma de la Ciudad de México

### **ST44**

#### ***Mechanisms of Action and Secretion of the TGF- $\beta$ Cytokine in Colorectal Cancer***

Christian Daniel Meza Juárez. Universidad Nacional Autónoma de México

### **ST45**

#### ***Evaluation of the effect of amiodarone and desethylamiodarone on cell proliferation and migration in lung cancer cells, A549***

Zurisadai Morales Herrera. Universidad Autónoma de Puebla

### **ST46**

#### ***RANKL differentially regulates breast cancer stem cells according to RANK or LGR4 activation***

Alejandro Ordaz Ramos. Instituto Nacional de Medicina Genómica

### **ST47**

#### ***Diastolic dysfunction, excitation-contraction coupling defects and arrhythmias in absence of mitochondria Ca<sup>2+</sup> uptake***

Julieta Palomeque. Tecnológico de Monterrey

### **ST48**

#### ***Role of indoleamine serotonin in modulating cell death in the root meristem of *Arabidopsis thaliana****

Ramón Pelagio Flores. Universidad Michoacana de San Nicolás de Hidalgo

### **ST49**

#### ***Participation of the Rac1 GTPase in progressive motility in guinea pig and mouse sperm***

Danelia Ramirez Ramirez. Cinvestav Zacatenco

### **ST50**

#### ***Pxd1 and organelle trafficking: Implications for Sexual Development in *Podospira anserina****

Matías Ramírez Noguez. Universidad Nacional Autónoma de México

### **ST51**

#### ***Loss-of-function of MEDIATOR 12 or 13 subunits causes the swelling of root hairs in response to sucrose and abscisic acid in *Arabidopsis****

Javier Raya González. Universidad Michoacana de San Nicolás de Hidalgo

### **ST52**

#### ***Effect of 17 $\beta$ -estradiol on salbutamol-induced airway smooth muscle relaxation***

Jorge Eduardo Reyes García. Universidad Nacional Autónoma de México

### **ST53**

#### ***Evaluation of a triazaspirane-type derivative on cell viability, proliferation and migration in MDA-MB-231 breast cancer cells***

Bryan Alexis Rivera Suárez. Universidad Autónoma de Baja California

### **ST54**

#### ***TMEM16A regulates sperm cell volume through RhoA and the actin cytoskeleton***

Ana Lilia Roa Espitia. Cinvestav Zacatenco

### **ST55**

#### ***Role of STAT3 on the regulation of critical genes for metabolic rearrangement in cervical cancer cells after IL-2 treatment***

Rodrigo Rojas Mercado. Universidad Nacional Autónoma de México

### **ST56**

#### ***Sperm viability is regulated by intracellular calcium levels through the CaSR/PI3K/Akt pathway, which probably regulates TRPV channels in guinea pig sperm***

Mónica Lizbeth Salgado Lucio. Cinvestav Zacatenco

### **ST57**

#### ***Expression and associated epigenetic mechanisms of DSC3 and DSG3 during Epithelial-Mesenchymal Transition induced by TGF- $\beta$ and EGF in breast cancer cell lines***

Ángel Salmerón Hernández. Universidad Nacional Autónoma de México

### **ST58**

#### ***Trachea-epidermis interactions as a model of coordinated morphogenesis in Drosophila development***

Eduardo Sánchez Cisneros. Universidad Nacional Autónoma de México

### **ST59**

#### ***Discovery of PTP1B ligands through drug repurposing for type 2 diabetes therapy: in silico and in vitro studies***

Ximena Valeria Sánchez Nava. Universidad Nacional Autónoma de México

### **ST60**

#### ***The expression of TAZ transcriptional co-regulator is induced by TGF- $\beta$ /SMAD pathway in hepatic cancer cells***

Marcela Sosa Garrocho. Universidad Nacional Autónoma de México

### **ST61**

#### ***Study of the role played by the non canonical Wnt/Ca<sup>2+</sup> pathway in the chemoresistance of colon cancer cells***

Andrea Terán Ramos. Universidad Nacional Autónoma de México

### **ST62**

#### ***Thrombin-induced cytokine secretion from retinal Müller glia***

Naomi Vargas Martínez. Universidad Nacional Autónoma de México

### **ST63**

#### ***The Protein Tyrosine Phosphatase 1B (PTP1B) Promotes the Migration of Colon Cancer Cells Through the Activation of a VAV1-Rac1 Signaling Pathway***

Olga Villamar Cruz. Universidad Nacional Autónoma de México

## **TOXICOLOGY & PHARMACOLOGY II**

### **TP26**

***Anti-Helicobacter pylori activity, cytotoxicity and in vivo gastroprotective effect of diacetylcurcumin and its metal derivatives***

Almanelly Agabo Martínez. Universidad Nacional Autónoma de México

### **TP27**

***The combined therapy of diclofenac-itraconazole reduces the size of Madurella mycetomatis grains and stimulates cytokines of the Th1 and Th17 profile***

Iván Alejandro Banda Flores. Universidad Autónoma de San Luis Potosí

### **TP28**

***Transcriptional characterization of the antitumor activity of laherradurin on an in vitro model of colorectal cancer***

Eduardo Pérez Arteaga. Universidad Nacional Autónoma de México

### **TP29**

***Kidney and liver damage from a combined NSAID-antifungal therapy for treatment of eumycetoma***

Manuel Martínez Hernández. Universidad Autónoma de San Luis Potosí

### **TP30**

***Evaluation of Antineoplastic Compounds in Breast Cancer Cell Lines***

Natalia Mata de los Rios. Universidad Autónoma de Chihuahua

### **TP31**

***Behavioral and GABAergic alterations after chronic atrazine exposure in the female albino rat***

María Soledad Mendoza Trejo. Universidad Nacional Autónoma de México

### **TP32**

***Evaluation of artichoke (Cynara scolymus) extract and weight control in a model of induced menopause***

Nazarett Tabita Mendoza Centeno. Universidad Nacional Autónoma de México

### **TP33**

***Curcumin and Metformin enhances cytotoxicity and cell death on cervical cancer cell lines***

Marisol Mir García. Instituto Nacional de la Salud Pública

### **TP34**

***Antimicrobial activity of synthetic peptides derived from scorpion Superstitionia donensis***

Rodolfo Miranda Espino. Universidad Nacional Autónoma de México

### **TP35**

***Antifungal miconazole inhibits Kv10.1 and Nav1.7 ion channels***

Enikar Manuel Morales Patlán. Universidad Nacional Autónoma de México

### **TP36**

#### ***Machine Learning Innovates Drug Discovery Processes: Potential Ligands for Cannabinoids***

Ana C. Murrieta. Tecnológico de Monterrey

### **TP37**

#### ***Protective effect of an aqueous extract of Maqui Berry in an acute model of carbon tetrachloride-induced liver injury in Wistar rats***

Carlos Enrique Orozco Barrios. Centro Médico Nacional Siglo XXI. IMSS

### **TP38**

#### ***Characterization of the Venom of the Scorpion *Nullibrotheas allenii****

Nancy Sarai Ortiz Ventura. Universidad Nacional Autónoma de México

### **TP39**

#### ***p,p'-DDE alters monocyte-to-macrophage differentiation markers of human peripheral blood mononuclear cells***

José Ricardo Palacios Valladares. Cinvestav Zacatenco

### **TP40**

#### ***Antimicrobial and antifungal properties of methanolic extracts from three species of *Magnoliopsida****

Angélica Eulalia Pérez Cid. Instituto Politécnico Nacional

### **TP41**

#### ***Urinary 1-hydroxypyrene as a biomarker of exposure to polycyclic aromatic hydrocarbons in pregnant women in the Puebla City***

Jesús Azahel Piña López. Universidad Autónoma de Puebla

### **TP42**

#### ***Preparation and characterization of matrix microspheres of acetylsalicylic acid and acetaminophen, using sodium alginate by the ionic gelation technique***

Edith Cecilia Rivera Meza. Instituto Politécnico Nacional

### **TP43**

#### ***Biophysical and physicochemical characterization of novel potassium channel blocker 3-Fluoro-5-Methylpyridin-4-Amine***

Marina Sofía Rodríguez Rangel. Universidad de Guadalajara

### **TP44**

#### ***Establishment of a Doxorubicin-Resistant SW620 Cell Line for Multidrug Resistance Studies***

Yanet Eunice Rodríguez López. Universidad Nacional Autónoma de México

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#### ***Synergical effect of *spc13*-dic whit commonly used antibiotics in gram negative, positive and multi-resistant bacteria***

Carmen Itzamatul Rodríguez Alejandro. Universidad Autónoma del Estado de Morelos

### **TP46**

#### ***Pharmacological potential of the sap of *Sedum rubrotinctum* R.T. Clausen for the treatment of eye infections***

Anuar Salazar Gómez. Universidad Nacional Autónoma de México

**TP47*****Anticancer effects of morin hydrate targeting cytochromes P450 in pediatric rhabdomyosarcoma cells***

Rebeca Santes Palacios. Instituto Nacional de Pediatría

**TP48*****In vitro gene therapy model to assess the anticancer activity of the proapoptotic peptide CTMP-4***

María Teresa Silva Guzmán. Universidad Autónoma de Nuevo León

**TP49*****Does SPC13, an antimicrobial activity found in the venom of the Scolopendra vpolymorpha, also have histone H3 properties?***

Lucero Valladares Cisneros. Universidad Autónoma del Estado de Morelos

**TP50*****Identification of anti-CD36 antibodies and characterization of their biological activity***

Marco Velasco Velázquez. Universidad Nacional Autónoma de México

**TP51*****Lithium-Induced Regulation of Cellular Processes in Colorectal Cancer: An In Vitro Analysis***

Edgar Yebran Villegas Vázquez. Universidad Nacional Autónoma de México

**TP52*****Immune characterization effect of scorpion venom from municipality of Coronado, Chihuahua***

Adrian Rivas Muñoz. Universidad Autónoma de Chihuahua

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Yolanda Margarita Camacho Villasana. Universidad Nacional Autónoma de México

**O42*****Agronomic and molecular evaluation of polyploid tomato***

Fatima Clarita Cota Ruiz. Cinvestav Zacatenco

**O43*****p53 Mutants Induce an Aggressive Phenotype through Overexpression of miR-27b-5p in Cancer***

José Edwin Dolores García. Universidad Autónoma Metropolitana Iztapalapa

**O44*****The inhibitory effect of rTBL-1 on colorectal cancers in vitro is related to the presence of the epidermal growth factor receptor***

Teresa García Gasca. Universidad Autónoma de Querétaro

**O45*****Analysis of the binding of Mdm2 protein with Rb mRNA***

Alondra Mariana Martínez Partida. Universidad Autónoma de San Luis Potosí

**O46*****Surveillance of Natural Killer Cells in Patients with Tick-Borne Diseases***

Mariana Ivonne Martínez Rivera. Universidad Autónoma de Chihuahua

**O47*****Characterization of the functional relationship between the retrograde pathway and cell longevity in *Saccharomyces cerevisiae****

Paola Abril Medina Flores. Universidad Nacional Autónoma de México

**O48*****Dinamic of phosphatidylserine exposure during capacitation in human sperm***

Ivonne Medina Ruiz. Universidad Nacional Autónoma de México

**O49*****The E1B-55KDa oncoprotein binds to the adenoviral genome and regulates gene transcription***

Eduardo Mundo Nájera. Universidad Autónoma del Estado de Morelos

**O50*****Life after death?***

Christopher Navarro Martínez. Universidad Nacional Autónoma de México

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**O52*****MDM2 controls the expression levels of p53 and RB tumour suppressors***

Vanessa Olivares Illana. Universidad Autónoma de San Luis Potosí

**O53*****IFC-305 treatment induces apoptosis mediated by miR92a-3p in liver cancer cells***

Bibiana Ortega Domínguez. Universidad Nacional Autónoma de México

**O54*****GM1 dimerization induces an increase in the intracellular Ca<sup>2+</sup> concentration and the acrosome reaction in capacitated human sperm***

Iván Oseguera López. Universidad Nacional Autónoma de México

**O55*****Post-embryonic activation of the primary root apical meristem cells in some *Cactaceae* species***

Juan Manuel Palacios Corona. Universidad Nacional Autónoma de México

**O56*****Carvacrol improves the contractile properties of skeletal muscle under low-intensity electrical stimulation***

Daniel Perea Ruiz. Universidad de Colima

**O57*****Charge distribution contributes to in vitro protein desiccation protection of a group of highly charged anhydrobiotic intrinsically disordered proteins***

Diego Pérez Villanueva. Universidad Nacional Autónoma de México

**O58*****miR-107 Expression as a Potential Predictor of Castration Resistance in Prostate Cancer liquid biopsies***

Jonathan Puente Rivera. UACM. Hospital Juárez de México

**O59*****Mitigation of Emerging Diseases in Wild Animals through Pharmacimicrobiomics***

Jimena Ramírez Villarreal. Universidad Autónoma de Querétaro

**O60*****The common bean mutant (Phaseolus vulgaris) non-nodulating mutant: nnod(2114) is affected in the infection thread development during symbiosis with rhizobia***

Rocio Rejero Saavedra. Universidad Nacional Autónoma de México

**O61*****Unveiling the Proteomic Impact of Calcium Carbide Ripening on Maradol Papaya Seeds***

Francisco Antonio Reyes Soria. Instituto de Ecología, A.C.

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Cinthya Alejandra Rocha Sánchez. Universidad Nacional Autónoma de México

**O63*****Measuring Macromolecular Crowding in Arabidopsis Root Cells from Different Developmental Zones***

Delia L. Rodríguez Bustos. Universidad Nacional Autónoma de México

**O64*****Comparative analysis of the septin 2 interactome in mosquito cells (Aag2) infected and not infected with dengue virus***

Jose Ángel Rubio Miranda. Cinvestav Zacatenco

**O65*****Protein conformational dynamics and thermal adaptation***

Jorge Emiliano Salinas López. Universidad Nacional Autónoma de México

**O66*****The common bean (Phaseolus vulgaris) non-nodulating mutant nnod(1895) is affected in the initial step of rhizobial infection during the N-fixing symbiosis***

Karina San Vicente Trujillo. Universidad Nacional Autónoma de México

**O67*****Development of a Single-Cycle Non-Classical HAstV Replicon System for Studying Viral Replication and Inhibitors***

Guadalupe Sánchez Flores. Universidad Autónoma del estado de Morelos

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***Effect of Zinc Oxide Nanoparticles Against Rotavirus Infectivity***

Juan Diego Siary Leyva. Universidad de Sonora

**O69**

***The follicle stimulating hormone modulates protein tyrosine phosphorylation, hyperactivation and acrosome reaction during human sperm capacitation***

Viridiana Estefany Solis Ayala. Universidad Nacional Autónoma de México

**O70**

***Molecular modeling of the effect of non-synonymous ABCC4 mutations over MRP4 conformation and substrate binding***

Valeria Jacqueline Soto Ontiveros. Universidad Autónoma de Querétaro

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***In Silico Analysis of Structural Motifs in Antibodies with Biotherapeutic Potential Against SARS-CoV-2***

Wanda Yael Tlalmis Guzmán. Instituto Politécnico Nacional

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Diego Torres Pech. Centro de Investigación Científica de Yucatán A.C.

**O73**

***Phytochemical profile of mexican myrtle (Psidium sartorianum) leaves extracts and infusion by traditional method***

José Guadalupe Torres Salazar. Universidad Autónoma de Occidente

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***A kalanchoe flamma extract in combination with drugs can help reduce the tumor growth of cancer cell lines in an in vivo model***

Heriberto Abraham Valencia González. Instituto Nacional de Cancerología/UNAM

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***Beneficial element or not? Exploring the effects of TiO<sub>2</sub> nanoparticles on common bean (Phaseolus vulgaris L.)***

Jessica Denisse Valle García. Cinvestav Zacatenco

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***Molecular characterization of binding site of  $\beta$ -CCB in oligodendroglial GABA<sub>A</sub> receptor  $\alpha 3\beta 2\gamma 1$***

María Berenice Varela Correa. Universidad Nacional Autónoma de México

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***Targeting Conserved Epitopes of Influenza Virus Proteins to Dendritic Cells for Generating a Heterotypic Immune Response***

Felipe de Jesús Vázquez Alba. Universidad Autónoma del Estado de Morelos

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***Functional Role Assessment of Deltasatellites in the Accumulation Dynamics of Begomoviral Titles in Host Plants***

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Miriam Vázquez Acevedo. Universidad Nacional Autónoma de México

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Ligia Vega Becerra. Instituto Potosino de Investigación Científica y Tecnológica A.C.

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***Poly(vinyl formal) membranes in catheter manufacturing: a study of crosslinking effects and ai-enhanced drug release predictions***

Igor Garcia Atutxa. Instituto Politécnico Nacional

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Julian L. Wissner. Universidad Nacional Autónoma de México



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