Neurobiology Meeting of the Mexican Society for Biochemistry

April 3 – 7, Oaxaca, México

PROGRAM

2022

Sociedad Mexicana
de Bioquímica
Neurobiología

SMB

PROGRAM

IV Neurobiology Meeting of the Mexican Society for Biochemistry

Mision de los Angeles Hotel, Oaxaca City, Oaxaca, México
April 3-7, 2022

Organizing Committee:

Leonor Pérez Martínez, Instituto de Biotecnología, UNAM in Cuernavaca.
Yazmín Macotela, Instituto de Neurobiologia, UNAM in Queretaro.
Oscar Galicia, Departamento de Psicologia, Universidad Iberoamericana in Mexico City.
Oscar Zamora, Facultad de Psicologia, UNAM in Mexico City.
Arturo Ortega, Cinvestav, IPN in Mexico City.
Gustavo Pedraza, Instituto de Biotecnología, UNAM in Cuernavaca.
Iván Velasco, Instituto de Fisiologia Celular, UNAM and Instituto Nacional de Neurologia y Neurocirugia in Mexico City.

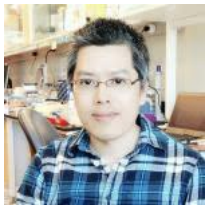
SUNDAY, APRIL 3

Pre-Meeting course
Organoids and single-cell sequencing in Neuroscience

Organizers: Dr. Leonor Pérez-Martínez / Dr. Iván Velasco
Instituto de Biotecnología, UNAM / Instituto de Fisiología Celular, UNAM and Instituto Nacional de Neurología y Neurocirugía.





9:00-10: 00 *Computational methods used for single-cell sequencing of brain cells*
Dr. Jiaqian Wu / Dr. Raquel Cuevas-Díaz Durán
The University of Texas Health Science Center at Houston, MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences, USA / Tecnológico de Monterrey, Monterrey, México

10:00-11:00 *Building multilevel atlases one cell at a time using patch-seq technology*
Dr. Violeta Lopez-Huerta
Instituto de Fisiología Celular, UNAM, Mexico City

11:00-11:30 *Coffee break*

11:30-12:30 *Understanding the nervous system of C. elegans one neuron at a time*
Dr. Julián Valdés
Instituto de Fisiología Celular, UNAM, Mexico City

12:30-13:30 *Reactive astrocyte heterogeneity in inflammation and neurodegenerative disease*
Dr. Shane A. Liddelow
Neuroscience Institute, NYU Grossman School of Medicine, New York, NY, USA.

13:30-14:30 **Lunch**

14:30–15:30 *Modeling human brain development and disorders using brain organoids*
Dr. Zhexing Wen
Emory University School of Medicine, Atlanta, GA, USA

15:30–16:15 *Round table*

SUNDAY, APRIL 3

Open House for the public / Día de Puertas Abiertas

Chair: Dr. Gustavo Pedraza
Instituto de Biotecnología, UNAM



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11:00-11:30 ***De vacas y vacunas. La historia de cómo los humanos logramos domesticar a las pandemias***
Dra. Karla F. Meza Sosa
Instituto de Biotecnología, UNAM

11:30-12:00 ***¿Cómo puede dañar la COVID-19 a tu cerebro?***
Dr. Juan Carlos González-Orozco
Instituto de Fisiología Celular, UNAM

12:00-12:30 ***Generación de nuevas neuronas en el cerebro de adultos ¿Qué son las células troncales neurales?***
Dra. Itzel Escobedo Ávila
Instituto de Fisiología Celular, UNAM

12:30-13:00 ***Diferentes acercamientos para estudiar la conducta animal***
Dra. Citlalli Netzahualcoyotzi Piedra
Instituto de Fisiología Celular, UNAM

13:00-13:30 ***Alexa, ¿van a destruirnos los robots? Presente y futuro de la inteligencia artificial***
Dr. David Valle García
Instituto de Biotecnología, UNAM

13:30-14:00 ***Todo lo que querías saber sobre la marihuana pero temías preguntar***
Dr. Oscar Galicia
Universidad Iberoamericana, Ciudad de México

SUNDAY, APRIL 3

IV Neurobiology Meeting

17:45-18:00 **Welcome ceremony**

18:00–19:00 **Opening Talk**

"What do reactive astrocytes (really) do?"

Dr. Shane A. Liddelow

Neuroscience Institute, NYU Grossman School of Medicine, New York, NY, USA

Chair: Dr. Leonor Pérez-Martínez
Instituto de Biotecnología, UNAM

19:00 **Welcome cocktail**

MONDAY, APRIL 4




9:00–11:00 **Symposium I**

EPIGENETICS, GENE REGULATION AND NEURODEVELOPMENTAL DISEASES

Chair: Dr. Leonor Pérez-Martínez
Instituto de Biotecnología, UNAM

Environmental effects on C. elegans behavior, from hiperglycemia to starvation
Dr. Julián Valdés
Instituto de Fisiología Celular, UNAM, México

Dynamic landscape of chromatin accessibility and transcriptomic changes during differentiation of human embryonic stem cells into dopaminergic neurons
Dr. Raquel Cuevas-Díaz Durán
Tecnológico de Monterrey, Monterrey, México

In vivo gene editing to study neurodevelopmental disorders
Dr. Violeta Lopez-Huerta
Instituto de Fisiología Celular, UNAM, México

Modeling Fragile X syndrome with 3D human brain organoids
Dr. Zhexing Wen
Emory University School of Medicine, Atlanta, GA, USA

11:00 – 11:20
Mapeo neuronal en 3D a alta velocidad. Technical presentation
I.Q. Alejandro Olvera
Product Application & Sales Support Team. CARL ZEISS.

11:20 – 11:40 **Coffee break**

11:40 – 12:40

Plenary Lecture I

Integrative study of gene expression and transcriptional regulation in the CNS
Dr. Jiaqian Wu
The University of Texas Health Science Center at Houston / MD Anderson Cancer Center, Houston, USA

Chair: Dr. Iván Velasco
Instituto de Fisiología Celular, UNAM

12:40–13:40 **Four oral presentations selected from the abstracts I**

Chair: Dr. Oscar Zamora
Facultad de Psicología, UNAM, Mexico City

Peroxiredoxin 5 overexpression decreases oxidative stress and dopaminergic cell death in a Parkinson´s Disease cellular model
Ana Patricia Duarte Jurado
Facultad de Medicina. Universidad Autónoma de Nuevo Léon

Social support and cognitive function in people living with HIV
Enrique Berra Ruiz
Facultad de Ciencias de la Salud. Universidad Autónoma de Baja California

Proteogenomic of Primary Brain Tumors Using Liquid Biopsies, for Diagnosis and Precision Medicine
María del Carmen Abrahantes Pérez
Laboratorio de Oncología Traslacional de Precisión. Instituto Nacional de Medicina Genómica

Stabilization of basal dopamine in inorganic nanoreservoirs for controlled delivery in Parkinson's disease
Francisco J. Padilla-Godínez
Instituto de Fisiología Celular, UNAM. / UAM - Xochimilco

13:40 -15:00 **Lunch**




15:00–17:00 **Symposium II**

BEHAVIOR AND PHARMACOLOGY

Chair: Dr. Oscar Galicia
Departamento de Psicologia, Universidad Iberoamericana, Mexico City

The role of neuropeptides in social behavior and reproduction in ants
Dr. Ingrid Fetter-Pruneda
Instituto de Investigaciones Biomédicas, UNAM, Mexico City

Endocannabinoids in juvenile stages of development modulate gene expression changes that affect learning and time perception
Dr. Mario Buenrostro Jauregui
Departamento de Psicología. Universidad Iberoamericana, Mexico City

Genome-wide detection of transcriptional determinants of neurological decline
Dr. Humberto Gutiérrez
Instituto Nacional de Medicina Genómica, Secretaría de Salud, Mexico City

Prepronociceptin-expressing neurons in the extended amygdala signal darting away from an aversive odor
Dr. Jose Rodríguez-Romaguera
The University of North Carolina at Chapel Hill, USA

17:00 – 17:05 **1 min talks for poster advertisings**

Chair: Dr. Arturo Ortega
Cinvestav, México City

Striatal Cholinergic Interneurons Contribute to Specific Behavioral Updates in a Classical Conditioning Task
Hector Alatriste-León
Instituto de Fisiología Celular, UNAM

Light and temperature cycles as zeitgebers in the circadian locomotor activity rhythm of the snake Crotalus molossus
Angel Bernardo Villarreal Medina
Instituto de Biología, UNAM

Evaluation of Superoxide dismutase enzyme activity in the prefrontal cortex of neonatal rats subjected to postnatal stress
Dennis Paniagua Camacho
Centro de Investigación Biomédica del Noreste. IMSS

Exogenous hydrogen sulfide improves hypertension induced by traumatic brain injury in rats through vasopressor sympathetic outflow inhibition and H2S-synthesizing enzymes restoration
Saúl Huerta de la Cruz
Departamento de Farmacobiología. Cinvestav Sede Sur

Analysis of density and distribution of astrocytes and microglial cells at the hippocampal formation of autistic-like C58/J mice.
Carlos Noé Vázquez-Moreno
Instituto de Investigaciones Biomédicas, UNAM

17:05 – 19:00 **Poster Session I (Even numbers)**

TUESDAY, APRIL 5





9:00 – 11:50 **Symposium III**

NEUROIMMUNE INTERACTIONS

Chair: Dr. Yazmín Macotela
Instituto de Neurobiología, UNAM, México

Maternal microbiome modulation of brain development processes
Dr. Helen Vuong
University of California Los Angeles, USA

Microbiota-gut-brain axis and behavior across the lifespan
Dr. Livia Hecke Morais
California Institute of Technology, USA

Gut Microbiome neuroactive compounds in children from an Indigenous Me´phaa community and Mexico City
Dr. Isaac González Santoyo
Facultad de Psicología, UNAM

10:30 – 10:50 **Coffee break**

Neuronal regulation of lung infection and pulmonary defense
Dr. Pankaj Baral
Kansas State University, USA

Neuroimmune interactions during experimental pulmonary tuberculosis
Dr. Rogelio Hernández-Pando
Instituto Nacional de Ciencias Médicas y Nutrición “Salvador Zubirán”, Mexico City

11:50 – 12:10 *Technical presentation*

Líneas Celulares autenticadas como herramientas para las Neurociencias / Authenticated Cell Lines as a Tool for Neurosciences Research
M. en C. Francisco Calderón Estrella. CIENTÍFICA SENNA

12.10 – 13:10 **Plenary Lecture II**

Microbiota and neuroimmune interactions in gut homeostasis and CNS inflammation
Dr. Dan R. Littman,
Skirball Institute, USA

Chair: Dr. Gustavo Pedraza
Instituto de Biotecnología, UNAM, México

13:10 - 14:30 **Lunch**

14:30–15:30 **Four oral presentations selected from the abstracts II**

Chair: Dr. Oscar Zamora
Facultad de Psicología, UNAM, Mexico City

Transcriptional adaptive responses to ischemia linked to DNA methylation in astrocytes
Luis B. Tovar-y-Romo
Instituto de Fisiología Celular. UNAM

Characterization of layer 5 sensorimotor cortex neurons projecting to red nucleus and pons
Verónica López Virgen
Instituto de Neurobiología. UNAM

Spinal a6GABAA receptor activation induces antinociception under physiological and pathological conditions
Erick J. Rodríguez-Palma
Departamento de Farmacobiología. Cinvestav Sede Sur

An enriched environment restores metabolic homeostasis by reducing inflammation in the adipose tissue and hypothalamus of obese mice
María del Sol Diaz de Leon Guerrero
Instituto de Biotecnología.




15:30 – 17:30 **Symposium IV**

GLIAL CELLS IN HEALTH AND DISEASE

Chair: Dr. Arturo Ortega
Cinvestav, México City

Glutamate transporters: non-traditional roles in CNS myelination
Dr. Babette Fuss
Virginia Commonwealth University, USA

A functional signature in the developing cerebellum: evidence from a preclinical model of autism
Dr. Daniel Reyes-Haro
Instituto de Neurobiología, UNAM campus Juriquilla, México

Modulation of Tissue Injury and Repair by Microglia During Autoimmunity
Dr. Astrid Cardona
University of Texas, San Antonio, TX, USA

Astrocytes in aging: The case of the aryl hydrocarbon receptor and neurodegeneration
Dr. Mónica Torres Ramos
Instituto Nacional de Neurología y Neurocirugía, Mexico City

17:30 – 17:35 **1 min talks for poster advertisings**

Chair: Dr. Oscar Galicia
Departamento de Psicologia, Universidad Iberoamericana, Mexico City

The Suprachiasmatic nucleus controls sleep delay-induced hyperglycemia.
Gabriela Hurtado-Alvarado
Instituto de Investigaciones Biomédicas. UNAM

Maternal immune activation impairs morphophysiological properties of CA1 pyramidal neurons from dorsal hippocampus of the offspring
Ernesto Griego Melo
Departamento de Farmacobiología. Cinvestav Sede Sur

Analysis and comparison of protein content of serum derived exosomes obtained from patients with Major Depressive Disorder (MDD): responders versus non-responders to pharmacological treatment
Diana Gutierrez Buenabad
Instituto Nacional de Psiquiatría "Ramón de la Fuente Muñiz". Facultad de Psicología. UNAM

Sympathoadrenomedular system mediates anti-inflammatory and glycemic reflex to endotoxin
Esteban Santacruz-Martínez
Instituto de Investigaciones Biomédicas. UNAM

In Vivo Transfection in a Murine Model of Tubulinopathy
Diego Carmona Montiel
Departamento de Ingeniería Química, Electrónica y Biomédica.Universidad de Guanajuato

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17:35 – 19:30 **Poster Session II (Odd numbers)**

19:30-20:00 ***Having a beer with the speakers***

WEDNESDAY, APRIL 6

9:00 – 12:00 **Free time**

12:00 – 13:00 **Four oral presentations selected from the abstracts III**

Chair: Dr. Yazmín Macotela
Instituto de Neurobiologia, Queretaro, Mexico.

Neurotoxicity induced by methylmercury in an in vitro model and its relationship with the development of Alzheimer's disease.
Angela Alvarez Dominguez
Universidad Autónoma de San Luis Potosí

Chronic copper exposure as an in vivo model of non-genetic Parkinson's disease
Alfredo González Alcocer
Facultad de Medicina. Universidad Autónoma de Nuevo Léon

Changes in the number and morphology of dendritic spines in the hippocampus and prefrontal cortex of the C58/J mouse model of autism
Isabel Barón Mendoza
Instituto de Investigaciones Biomédicas. UNAM

Putative single nucleotide polymorphisms associated with Alzheimer's disease by artificial intelligence strategy
Erick Cuevas Fernández
Universidad Autónoma del Estado de Morelos

13:00 – 14:00 **Plenary Lecture III**

Transgenerational inheritance of epigenetic signatures in mice
Dr. Yuta Takahashi
The Salk Institute, San Diego, CA, USA

Chair: Dr. Leonor Pérez-Martínez
Instituto de Biotecnología, UNAM

14:00 - 15:30 **Lunch**



15:30 – 17:30 **Symposium V**

THE SCIENTIFIC LEGACY OF LATE PROFESSOR RICARDO TAPIA

Chair: Dr. Lourdes Massieu / Dr. Clorinda Arias
Instituto de Fisiología Celular / Instituto de Investigaciones Biomedicas, Mexico City

Ricardo Tapia. A pioneer of Neurochemistry in Mexico
Dr. Lourdes Massieu
Instituto de Fisiología Celular, UNAM, Mexico City

Non-canonical gating control by the cytoplasmic T1 domain of Kv channels
Dr. Manuel Covarrubias
Thomas Jefferson University, Philadelphia, USA.

Electrophysiological biomarkers of epileptogenesis: new insights about its utility in the neurobiology of the hippocampus and clinic
Dr. Laura Medina-Ceja
Universidad de Guadalajara, Mexico

17:30 – 18:30 **Closure Lecture**

Death after a long journey; how local circuit neurons adjust their numbers
Dr. Arturo Álvarez-Buylla
University of California San Francisco, USA

Chair: Dr. Yazmín Macotela
Instituto de Neurobiología, UNAM

18:30 - 18:40 **Closing Ceremony**

19:00 – 20:00 **Business Meeting**

20:30 - **Farewell Dinner**

THURSDAY, APRIL 7

9:00 - 11:00 **Breakfast**

12:00 **Departure**

Poster Sessions

Posters Session I Even numbers

Monday April 4. 17:05 – 19:00

COGNITION & BEHAVIOR

2	*Striatal Cholinergic Interneurons Contribute to Specific Behavioral Updates in a Classical Conditioning Task* **Hector Alatriste-León.** Cellular Physiology Institute. UNAM
4	*Early behavioral characterization of the murine model of autism induced by valproic acid* **Noé Samuel Bravo Rivero**. Facultad de Psicología, SUA, UNAM
6	*Short-memory disfunction induced by haloperidol in the thalamic reticular nucleus in the rat* **Christian A Evangelista Arzate**. Escuela Nacional de Ciencias Biológicas. I.P.N.
8	*Perception of regular and irregular stimuli in single trials in humans* **Marina Fuentes Dávila.** Instituto de Neurobiología, UNAM
10	*Lateral habenula participation during aversive sugar memory formation, as well as after flavor familiarization* **Jocelyn Lucero Lomeli-Castillo.** Instituto de Neurobiología, UNAM
12	*Establishing the link between Speech-to-speech Synchrony and General Auditory-Motor synchronization skills* **Cecilia Mares.** Instituto de Neurobiología, UNAM
14	*Effect of High-fat diet on the Central Nervous System in CD-1 mouse* **César A. Mendoza-Calles**. Instituto de Ciencias de la Salud. Universidad Veracruzana
16	*Starvation increases attraction to odorants through CRH-1/CREB activity in the nervous system and intestine of Caenorhabditis elegans.* **Francisco Pinta Castro**. Instituto de Fisiología Celular, UNAM
18	*Involvement of CB2 receptors of the anterior cingulate cortex on the modulation of palatable food intake in rats with binge-type behavior* **Juan Carlos Rodríguez-Aguilar.** FES Iztacala. UNAM
20	*Light and temperature cycles as zeitgebers in the circadian locomotor activity rhythm of the snake Crotalus molossus* **Ángel Bernardo Villarreal-Medina.** Instituto de Biología. UNAM

DEVELOPMENT & AGING

22	*The amniotic epithelium confers a bias to human embryonic stem cells to differentiate toward the neuroectoderm lineage* **Daniela Ávila González.** CIATEJ / INPER

24	*The role of GDNF in the axonal growth of motor neurons and in the establishment of the neuromuscular junction* **José Fernando Becerra Vélez.** Instituto de Fisiología Celular. UNAM
26	*Axonal degeneration in an in vitro model of neuronal senescence* **Gisselle A. Campos-Martínez.** Instituto de Fisiología Celular, UNAM
28	*TRa1andTRb1expression in the neurogenic nicheof the hippocampus* **Edna Ahtza Esparza Arellano.** Neuroscience Lab. University of Guanajuato
30	*Taurine plays a key role in the differentiation process of neural progenitor cells from SVZ through GABA receptor interaction* **Nadia Estefanía Gutiérrez-Castañeda.** Facultad de Medicina, UNAM
32	*Generation and characterization of human midbrain organoids* **Angel Polanco.** Instituto de Fisiología Celular, UNAM
34	*Generation of mouse and human embryonic stem cells for doxycycline inducible GDNF expression.* **Melanie Trinidad Peralta.** Instituto de Fisiología Celular, UNAM

TEACHING & SCIENTIFIC KNOWLEDGE DISSEMINATION

36	*How to give good public engagement talks? A pilot workshop aimed at researchers and students at IFC* **Camila del Río Castro.** Instituto de Fisiología Celular, UNAM

EPIGENETICS

38	*Identification of Enhancer Regions of Midbrain Dopaminergic Neurons using Histone Modification ChIP-Seq* **Mayela Giacomán-Lozano.** Tecnológico de Monterrey, Escuela de Medicina y Ciencias de la Salud
40	*DNA methyltransferases as an epigenetic barrier in Müller cells reprogramming* **Victoria-Chávez Rebeca Yael.** Dept. de Farmacobiología. Cinvestav Sede Sur

STRESS

42	*Effect of chronic stress on the expression of mucins and cytokines in different intestinal regions of female BALB/c mice* **Jennifer Karume1 Gutiérrez-Galicia.** Escuela Superior de Medicina. IPN
44	*Maternal consumption of trans-resveratrol, epigenetic and behavioral effects in prenatally stressed rats* **Gerardo Vega Juárez.** Instituto Nacional de Perinatología
46	*Evaluation of Superoxide dismutase enzyme activity in the prefrontal cortex of neonatal rats subjected to postnatal stress* **Dennis Paniagua Camacho.** Centro de Investigación Biomédica de Michoacán, IMSS

48	*Brain and peripheral oxidative damage during the development of obesity* **Elena Salazar-Hernández.** Universidad Autónoma de Guerrero
50	*Exposure to acute stress in young offspring from mothers with maternal immune infection acts as a risk factor for the development of depressive-like behaviors in adulthood* **Valle-Castillo Gabriela Abigail.** Instituto Nacional de Psiquiatría "Ramón de la Fuente Muñiz"

GENE EXPRESSION

52	*Gene data mining and Protein-Protein interaction analysis for Alzheimer's Disease and Diabetes Mellitus and identifies their potential molecular links* **Ricardo Castillo Velázquez.** Universidad Autónoma de San Luis Potosí
54	*Identification of transcripts, proteins and microRNAs that are differentially expressed at early phases of brain regeneration in the Mexican axolotl* **Arturo Emiliano Martínez-Hernández.** Instituto de Fisiología Celular. UNAM
56	*Transcriptional adaptation to ischemia in the brain endothelium mediated by the Early B-cell factor* **Jaime Emiliano Rogerio-Ríos.** Instituto de Fisiología Celular, UNAM
58	*Transcriptional effect of enriched environment exposure in a murine colitis model* **David Valle García.** Instituto de Biotecnología. UNAM

GLIA

60	*In Vitro and Computational Studies of Perezone and Perezone Angelate as Potential Anti-Glioblastoma Multiforme Agents* **Maricarmen Hernández Rodríguez.** Escuela Superior de Medicina. IPN
62	*Alterations in the physiology of Müller glial cells under diabetic retinopathy conditions in vitro* **Alan Emmanuel Medina Arellano.** Facultad de Medicina, UNAM
64	*Differential expression of astrocytic fibrillary glial acidic protein during brain aging in rats* **Brian Iván Morales-López.** Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suarez
66	*Flouride exposure modulates SLC7A11 (xCT) in radial glial cells* **Andrea Ocharán.** Departamento de Toxicología. Cinvestav. IPN
68	*Thrombospondin-1 (TSP-1) expression in brain mouse during postnatal development.* **Arturo Esteban Pérez Miguel.** Facultad de Psicología. UNAM,
70	*Effect of 5 Hz transcranial magnetic stimulation on hippocampal oligodendrocytes in chronically stressed female Swiss-Webster mice* **Allan Rico Becerra.** Instituto Nacional de Psiquiatría "Ramón de la Fuente Muñiz"

72	*Differences in the localization of AQP1 and expression patterns of AQP isoforms in rat and mouse sciatic nerve and changes in rat AQPs expression after nerve crush injury* **Edith Segura-Anaya**. Laboratorio de Neurociencias. Facultad de Medicina. UAEMEx
74	*Analysis of density and distribution of astrocytes and microglial cells at the hippocampal formation of autistic-like C58/J mice.* **Carlos Noé Vázquez-Moreno.** Instituto de Investigaciones Biomédicas. UNAM

METABOLISM

76	*Obesity and its relationship with the appearance of peripheral insulin resistance and brain insulin resistance in C57BL/6 mice.* **Oscar Ezequiel Bahena-Cuevas**. FCQB. Universidad Autónoma de Guerrero
78	*Aerobic training decreases peripheral sensitivity and inflammation in T2D mice.* **Saúl Ernesto Cifuentes Mendiola**. FES Iztacala. UNAM
80	*Metabolomic profile of dopaminergic neurons derived from induced pluripotent stem cells of Parkinson's disease patients.* **Xóchitl Flores-Ponce**. Instituto de Fisiología Celular. UNAM
82	*Effect of cysthationine-gamma-lyase/hydrogen sulfide system modulation on vascular dysfunction induced by insulin resistance in male Wistar rat thoracic aorta* **Araceli Sánchez-López**. Departamento de Farmacobiología, Cinvestav – Coapa
84	*Sulpiride, a D2 dopamine receptor antagonist improves glucose tolerance, insulin sensitivity and reduces visceral adipocyte hypertrophy in obese mice* **Dina Iathzil Vázquez-Carrillo**. Instituto de Neurobiología. UNAM

NEUROENDOCRINOLOGY

86	*Short-term administration of tibolone reduces inflammation and oxidative stress in the hippocampus of ovariectomized rats fed high-fat and high-fructose* **Christian Guerra-Araiza**. Centro Médico Nacional Siglo XXI, Instituto Mexicano del Seguro Social
88	*Oxytocin/vasopressin-related neuropeptide distribution in ovaries of Pogonomyrmex barbatus ant* **María Fernanda Vergara Martínez**. Instituto de Investigaciones Biomédicas, UNAM

NEUROPHARMACOLOGY

90	*Effect of probiotics on fluoxetine and sertraline antidepressant activity in learned helplessness models in mice.* **Patricia Aguirre-Bañuelos.** Universidad Autónoma de San Luis Potosí

92	*Analysis of the effect of two hypoglycemic agents on long-term memory in diabetic BALB/c mice* **Carolina Carrillo-Calderón**. Autonomous University of Coahuila
94	*Bunodeopsis globulifera toxins induce [3H]-glutamate release in rat cortex and decrease viability of human neuroblastoma cell line SH-SY5Y* **Aleida Jeannette Flores Pérez.** Posgrado en Ciencias del Mar y Limnología. UNAM
96	*Exogenous hydrogen sulfide improves hypertension induced by traumatic brain injury in rats through vasopressor sympathetic outflow inhibition and H_2S-synthesizing enzymes restoration* **Saúl Huerta de la Cruz**. Departamento de Farmacobiología, Cinvestav Coapa
98	*Identification of the locus underlying synaptic potentiation mediated by TrkB receptor activation in CA3 pyramidal cells of the hippocampus* **Roberto Olvera-Guillen**. Departament of Pharmacobiology, CINVESTAV
100	*Orally administered silybin improves most of the biochemical and behavioral outcomes in the MPTP-induced parkinsonism murine model* **Ricardo Jair Ramírez-Carreto.** Unidad de Investigación en Medicina Experimental, UNAM
102	*Anticonvulsant and nervous system stimulant effect of Ehretia tinifolia extracts* **David Osvaldo Salinas-Sánchez**. Universidad Autónoma del Estado de Morelos
104	*NPY-Y1 receptors in dorsal periaqueductal gray modulate food, sucrose and alcohol consumption in pre-exposed and free food and water access rats* **Priscila Vázquez-León**. Facultad de Psicología. UNAM

INTEGRATIVE NEUROPHYSIOLOGY

106	*Enrichment environment improves memory and synaptic plasticity in cognitively impaired animals due to chronic exposure to a high-fructose and high-fat diet.* **Ernesto Saúl Gutiérrez López.** Instituto de Fisiología Celular. UNAM
108	*Cortical effects of facial palsy in motor planning of facial expressions in a murine model* **Elías Perrusquia Hernández.** Faculty of Higher Studies Iztacala. UNAM
110	*Dietary restriction blocks epileptogenesis by preventing the increase in low-frequency bands and IL-1β expression by hippocampal kindling* **Josué Denichi Sánchez Hernández.** National Institute of Neurology and Neurosurgery M.V.S.

NEUROIMMUNOLOGY

112	*Influence of maternal immune activation on synaptic transmission mediated by metabotropic glutamate receptors at the mossy fiber-CA3 synapse.* **Johaly del Carmen Anguiano Buenfil**. Departament of Pharmacobiology. Cinvestav

114	*Effect of thermal stimulation on macrophage subpopulations in a murine sepsis model* **Mario Alberto Bautista-Hernández**. Centro Médico Nacional Siglo XXI, IMSS
116	*Catecholaminergic neuroimmunological system in the dental pulp* **María Eugenia Marcela Castro-Gutiérrez**. Centro Médico Nacional Siglo XXI, IMSS
118	*Effect of dopamine type 2 receptor activation on neuroinflammation in a mouse model of sleep deprivation* **María Guadalupe Hernández Luna.** Faculty of Medicine. UNAM
120	*Activation of Toll-like receptors in combination with vincristine in glioblastoma cells* **Orlando Daniel Moedano-Hernández**. Hospital Infantil de México Federico Gómez.
122	*The p38 MAP kinase mediates BDNF neuroprotective functions against β–Amyloid peptides and inflammatory cytokines* **Alejandro Ramírez Olvera**. Instituto de Biotecnología, UNAM
124	*Differential expression of BDNF, RANTES and EOTAXIN-1 in serum-derived exosomes and in serum and from major depressive diagnosed patients* **Jorge Manuel Vásquez-Pérez.** Instituto Nacional De Psiquiatría Ramón De La Fuente Muñiz

NEUROPATHOLOGY

126	*Encoding signs of orofacial neuropathic pain from facial expressions in mice* **Rey David Andrade González.** Facultad de Estudios Superiores Iztacala. UNAM
128	*Establishment of a CRISPR based-system for ataxin-7 transcript interactome characterization* **Rodolfo Daniel Ávila-Avilés.** Department of Genetics and Molecular Biology. Cinvestav IPN
130	*Tibolone administration decreases oxidative stress in plasma and spinal cord in a traumatic spinal cord injury animal model* **Guadalupe Bautista Poblet**. Hospital de Especialidades. Centro Médico Nacional SXXI. IMSS
132	*Early dysregulation of Wnt signaling in the hippocampus of 3xTg-AD model* **Diana Elizabeth Colín Martínez.** Instituto de Investigaciones Biomédicas. UNAM
134	*Role of NOX in NLRP3 inflammasome regulation during cerebellar granule neuron death.* **Karen S. Cruz-Hernández.** Instituto de Fisiología Celular. UNAM
136	*Inhalation of vanadium pentoxide (V2O5) induces memory and cytoskeleton alterations in brain structures related to Alzheimer disease.* **Claudia Dorado-Martínez**. Facultad de Estudios Superiores Iztacala, UNAM
138	*Hyperphosphorylated Tau relates to reduced hippocampal excitability in the young rTg4510 mouse model of tauopathy* **Carlos Antonio García-Carlos.** Instituto de Neurobiología. UNAM

140	*Autophagy Inducers Trehalose and Metformin Prevent Congnitive and Motor Dysfunction by Protecting Dopaminergic Neurons from Paraquat Toxicity* **Yareth Gopar-Cuevas.** Universidad Autónoma de Nuevo León, Facultad de Medicina
142	*Temporality in the expression of alpha-synuclein and dopaminergic neuronal death after intracerebral lipopolysaccharide injection* **Alma Karen Lomeli-Lepe**. (CUCBA), Universidad de Guadalajara
144	*Differential expression of synaptic plasticity of the medial and lateral perforant path to the dentate gyrus in a neurodevelopment model of schizophrenia: effects on spatial memory* **Luis A. Márquez.** Departament of Pharmacobiology, Cinvestav-Sede Sur

CELLULAR PLASTICITY & NEURAL CIRCUITS

146	*Neuronal differentiation of the N1E-115 cell line promoted by aminated biomaterial coatings synthesized by plasma polymerization*. **Estephanny Jocelyn Alvarado Muñoz.** Universidad Autónoma Metropolitana Plantel Xochimilco
148	*Environmental enrichment influences social interaction and agonistic behavior in the offspring of pregnant dams exposed to immune activation with the viral mimetic Poly I:C implication of neurogenesis and sex.* **Valeria Flores-Torres.** 1Instituto Nacional de Psiquiatría "Ramón de la Fuente Muñiz
150	*Short time of social instability stress does not induce depressive-like behavior but evidences low social interaction with increased negative social behavior and dendritic remodeling in the dentate gyrus of female C57Bl6 in environmental enrichment* **Ana Cecilia Luis-Castañeda.** Instituto Nacional de Psiquiatría "Ramón de la Fuente Muñiz
152	*Plastic changes in the sexual reward circuit induced by motivated behaviors in male rats* **Zacnité Mier-Quesada**. Instituto de Neurobiología. UNAM
154	*Muscarinic modulation of firing pattern in two types of parafascicular thalamic nucleus neurons.* **Héctor Aarón Vázquez Vázquez.** Instituto de Fisiología Celular. UNAM

SIGNAL TRANSDUCTION

156	*The role of miRNAs in the signaling pathway activated by Zika virus leading to microcephaly* **Nohemi Adriana Camacho Concha.** Instituto de Biotecnología. UNAM
158	*Alterations in signaling by DHA and its association with dendritic complexity in hippocampal neurons of an autistic-like mouse* **Sandra Guzmán-Vázquez.** Instituto de Investigaciones Biomédicas. UNAM

SYNAPTIC TRANSMISSION

160 *Artificial early and late memory signals induce taste avoidance memory, plastic and neurochemical changes*
Arturo Hernández-Matias. Instituto de Fisiología Celular. UNAM

INNOVATION & TECHNOLOGY

162 *Cerebral biomarkers measurement in serum from Parkinson's disease patients with a high output technique (nano not blot) and its further analysis using artificial intelligence tool*
Alberto Morales-Villagrán. Mexbio Research Innovations S. A. de C.V.

Posters Session II Odd numbers

Tuesday April 5. 17:35 – 19:30

COGNITION & BEHAVIOR

1	*Analysis of Neuronal Activity in Prefrontal Cortex and Modeling with Recurrent Neural Networks during Bimodal Detection Task* **Bernardo Andrade Ortega.** Cellular Physiology Institute. UNAM
3	*Natural sweeteners decrease short-term memory capacity in male and female C57BL6 mice* **Cristina Balcón Pacheco**. Univ. of Guanajuato Campus Irapuato Salamanca
5	*Bimodal Encoding in a Neuronal Population of the Dorsal Premotor Cortex during Working Memory* **Andrea Fernanda Campos Pérez.** Instituto de Fisiología Celular, UNAM
7	*Environmental Enrichment and a Cooperative Social Behavior Task* **Gabriela Lizbeth Franco Olivares.** Facultad de Psicología. UNAM
9	*Effect of dopamine type 2 receptor activation in long-term memory in a murine REM sleep deprivation model.* **Stephany García Velasco**. Facultad de Medicina UNAM
11	*Maternal enrichment increases infantile spatial amnesia mediated by postnatal neurogenesis modulation.* **Grecia López-Oropeza.** Department of Cell Biology, Faculty of Sciences, UNAM
13	*The role of 5-HTRs of the Nucleus Accumbens in Sociability* **Magda Karina Martínez Mata.** Instituto de Fisiología Celular, UNAM
15	*Effects of Disruptors on a Retrospective Temporal Discrimination Task: An Approach through Signal Detection Theory* **Mario Pérez Calzada.** Facultad de Psicología. UNAM
17	*Emotional dysregulation in women with endometriosis presenting cyclical and non-cyclical chronic pelvic pain* **Dulce Carolina Rodríguez-Lozano**. INPER-Facultad de Química. UNAM
19	*Striatal circuitries for motor control and action selection* **Daniela Trejo-Saavedra**. Instituto de Neurobiología, UNAM
21	*The effect of optogenetic-induced synaptic plasticity in LC-CA1 pathway on memory* **Arenski Vázquez-Lechuga**. Instituto de Fisiología Celular. UNAM

DEVELOPMENT & AGING

23	*Evaluation of ketogenic diet as a non-invasive strategy to improve autophagy and memory function in aged 3xTg-AD and WT mice* **Lorelei Ayala-Guerrero**. Instituto de Fisiología Celular. UNAM

25	*Sucrose Consumption During Late Adolescence alters Dendritic Orientation of Doublecortin Positive Neurons of The Ventral Dentate Gyrus in Adulthood* **Pablo Edson Bustamante Nieves.** Instituto Nacional de Pediatría
27	*Generation of knock-down and knock-out hESC lines for SCL to study GABAergic differentiation* **Jorge Luis Díaz-Ruiz.** Instituto de Fisiología Celular, UNAM
29	*Effect of sonic hedgehog on the axonal growth of human dopaminergic neurons* **García-Gutiérrez Paola.** Instituto Nacional de Neurología y Neurocirugía
31	*Prolactin receptor deficiency promotes a hypomyelinating phenotype in the corpus callosum of suckling and prepubertal mice* **Ana Luisa Ocampo-Ruiz**. Instituto de Neurobiología, UNAM
33	*The chronoarchitecture of the cerebral cortex could be linked to the emergence of the senescent phenotype* **Ana Karen Ramírez Reyes**. Instituto de Investigaciones Biomédicas, UNAM
35	*Effect of D-serine on cognitive reserve in aged rats* **Bárbara Vázquez-Prieto.** ENES - Unidad Juriquilla. UNAM

TEACHING & SCIENTIFIC KNOWLEDGE DISSEMINATION

37	*Malnutrition and the serotoninergic System: the consequences of a poor nutrition during pregnancy in the development of the Brain.* **Ángela Renata Jiménez-Pérez.** Facultad de Ciencias, UNAM

EPIGENETICS

39	*Tn5 enzyme production and characterization for CUT&Tag profiling of epigenetic modifications in human embryonic stem cells* **César Daniel Meléndez-Ramírez**. Instituto de Fisiología Celular. UNAM

STRESS

41	*Neuronal death induce by potassium deprivation (K5) and ST has differential effects in Drp1 phosphorylation* **Carolina Cid Castro**. Instituto de Fisiología Celular. UNAM
43	*Participation of the Sympathetic Nervous System in the Modulation of Components of Intestinal Homeostasis in Mice Underwent Stress* **Fabiola Guzmán-Mejia.** Universidad Autónoma Metropolitana Xochimilco
45	*Mechanisms of Neurotoxicity Induced by Exposure to Low Doses of Permethrin* **Sonia Nava-Salazar.** Instituto Nacional de Perinatología
47	*Development of binge eating behavior in Female Wistar Kyoto rats: a better model with construct and appearance validity* **Daniela Sarai Rodriguez-Rangel.** Cinvestav-Sede Sur

49	*Mitochondrial dynamics under glucose deprivation and glucose reintroduction in cortical neurons and its possible regulation by the ketone body βhydroxybutyrate* **Ashley Salcido-Gómez.** Instituto de Fisiología Celular. UNAM

GENE EXPRESSION

51	*Identification of the exons retained in the mRNA of the Sulfonylurea receptor 1 in the brain and other rat tissues* **Penélope Aguilera.** Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez
53	*DISC1 interactome genes are associated with psychosis in patients with schizophrenia and bipolar disorder in the Mexican population* **Araceli Gutiérrez-Rodríguez.** Instituto Nacional de Medicina Genómica
55	*Potential role of lncRNAs as modulators of pluripotency and dopaminergic neuronal differentiation* **Ismael Portillo Pantoja.** Instituto de Fisiología Celular, UNAM
57	*An enriched environment prevents the cognitive decline in the Alzheimer´s disease mouse model 5XFAD by modulating the microglia neuroprotective phenotype* **Kenya Paola Romero Burgos.** Instituto de Biotecnología. UNAM

GLIA

59	*Evidence for a neuroinflammatory process in the hippocampus of the autistic-like mouse strain C58/J throughout development* **Juan Francisco Duarte-Campos.** Instituto de Investigaciones Biomédicas. UNAM
61	*Characterization of Mice Cerebellar Microglia Primary Cultures* **María Isabel Martínez Hernández.** Departamento de Toxicología. Cinvestav IPN
63	*Glutamine transport systems expressed in the U373MG glioblastoma cell line* **Laura Isabel Méndez-Aldana.** Departamento de Toxicología. Cinvestav. IPN
65	*Protective and antioxidant effects in glial cells of phenolic compounds* **José Manuel Nájera-Maldonado.** FCQB. Universidad Autónoma de Guerrero
67	*Expression of exosomal miR-29a in astrocytes exposed to high glucose* **Claudia Paola Pérez-Macedonio.** FCQB. Universidad Autónoma de Guerrero
69	*Stimulation with TNF-α and glutamate induces the release of Wnt5a and Wnt7a in Astrocyte-derived exosomes* **Rosa Isela Rendón-Meza.** Instituto de Investigaciones Biomédicas. UNAM
71	*Characterization of EAATs in human endothelial cells and astrocytes: contribution of the BBB to glutamate efflux* **Fredy Sánchez Cano.** Neurotoxicology Lab. Dep. of Toxicology. Cinvestav-IPN
73	*Aryl hydrocarbon receptor as a new EAAT1/GLAST regulator* **Janisse Silva-Parra**. Departamento de Toxicología. Cinvestav. IPN

75	*Human olfactory epithelium-derived astrocytes transplantation into the striatum of neonatal mice* **Denisse Vega Mackeprang.** Instituto de Neurobiología. UNAM

METABOLISM

77	*Coconut and Sucrose Diets Alter GABA in Overweight rat brain* **David Calderón Guzmán**. Instituto Nacional de Pediatría
79	*Prolactin modulates enterocyte intestinal maturation in lactating mice* **José Luis Dena-Beltrán**. Instituto de Neurobiología. UNAM
81	*Regulation of the transcription factor TFEB by the ketone body β-hydroxybutyrate in neurons and its impact on mitophagy* **Juan Carlos Gómora-García**. Instituto de Fisiología Celular, UNAM
83	*Metabolic profile of CPA: Implications for Glioma's Treatment* **America Vanoye Carlo**. Laboratorio de Neurociencias, Instituto Nacional de Pediatría

NEUROENDOCRINOLOGY

85	*Prolactin Modulates Sexual Pheromone Perception and Accessory Olfactory Bulb Cell Activation In Female Mice* **Viridiana Cerbantez Bueno**. Instituto de Neurobiología. UNAM
87	*Differential regulation of pituitary growth hormone expression and release by several neuropeptides among vertebrates* **Valeria Alejandra Urban Sosa**. Instituto de Neurobiología. UNAM
89	*Oxytocin/vasopressin-related neuropeptide distribution in developmental stages and castes in the ant Pogonomyrmex barbatus brain* **Carlos Zavaleta Zamora**. Instituto de Investigaciones Biomédicas, UNAM

NEUROPHARMACOLOGY

91	*Anxiolytic and hypnotic effect of methanolic extract of Malphigia mexicana* **Dante Avilés-Montes.** Universidad Autónoma del Estado de Morelos
93	*Sea anemone Bartholomea annulata venom actives $GABA_A$ CHANNEL-receptors* **Antonia Colom-Casasnovas.** Instituto de Ciencias del Mar y Limnología. UNAM
95	*Effect of hydrogen sulfide on the vascular dysfunction induced by severe traumatic brain injury in rats* **Félix Iván López-Preza**. Center for Research and Advanced Studies. Cinvestav
97	*Pharmacological evidence of the mechanisms involved in the hydrogen sulfide-induced peripheral neuronal modulation of the vascular tone* **Grecia Josefa Medina-Terol.** Departamento de Farmacobiología. Cinvestav Coapa

99	*Characterization of hollow titanium dioxide nanospheres as a release device of biomolecules with the potential to induce axonal growth of human dopaminergic neurons* **Emma Ortiz-Islas**. Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez
101	*Silica nanoparticles functionalized with folic acid and loaded with antineoplastic drugs for glioblastoma multiforme* **Citlali Ekaterina Rodríguez-Pérez**. Molecular Neuropharmacology and Nanotechnology lab National Institute of Neurology and Neurosurgery
103	*Functional expression of the oligodendroglial α3β2γ1 GABAA receptor in HEK293 cells* **María Berenice Varela Correa**. Instituto de Neurobiología, UNAM
105	*Effects of pioglitazone in an experimental animal model of Attention-Deficit/Hyperactivity Disorder* **Daniela Vázquez-González**. Hospital Infantil de México Federico Gómez

INTEGRATIVE NEUROPHYSIOLOGY

107	*The Suprachiasmatic nucleus controls sleep delay-induced hyperglycemia.* **Gabriela Hurtado-Alvarado.** 1Instituto de Investigaciones Biomédicas, UNAM
109	*In Vivo Wireless Optogenetic Control of Skilled Motor Behavior* **Diana L. Rodríguez-Muñoz**. Instituto de Fisiología Celular. UNAM
111	*Neuronal representation of oral ethanol administration in orbitofrontal cortex of sedated naïve mice* **Karla Ivonne Zepeda-Reyes.** Faculty of Higher Studies Iztacala. UNAM

NEUROIMMUNOLOGY

113	*KChIP3 impairs memory in the Alzheimer's disease mouse model 5XFAD* **Bolivar Jesús Arcos-Encarnación**. Instituto de Biotecnología UNAM
115	*Analysis and comparison of protein content of serum derived exosomes obtained from patients with Major Depressive Disorder (MDD): responders versus non-responders to pharmacological treatment* **Diana Gutierrez-Buenabad.** Facultad de Psicología. UNAM
117	*Maternal immune activation impairs morphophysiological properties of CA1 pyramidal neurons from dorsal hippocampus of the offspring* **Ernesto Griego Melo.** Departament of Pharmacobiology, Cinvestav
119	*Effect of maternal immune activation on central nervous system and function* **Karla F Meza-Sosa.** Instituto de Biotecnología, UNAM
121	*TNFR2 inhibit Long-term potentiation in single-synapses and promote memory loss in a familial Alzheimer´s disease mouse model* **Jorge Luis Ochoa-Almazán**. Instituto de Biotecnología. UNAM

123	*Sympathoadrenomedular system mediates anti-inflammatory and glycemic reflex to endotoxin* **Esteban Santacruz-Martínez**. Instituto de Investigaciones Biomédicas. UNAM
125	*Exposure to an Enriched Environment Attenuates Mouse Experimental Colitis* **Tomás Villaseñor Toledo**. Instituto de Biotecnología, UNAM

NEUROPATHOLOGY

127	*Structural and dynamics analysis of the polyQ tract in the Ataxin-7 protein* **Rodolfo Daniel Ávila-Avilés.** Cinvestav IPN
129	*Effect of the ketone body β-hydroxybutyrate on autophagy activation induced by glucose deprivation in cultured cortical neurons* **Karla Gabriela Avilez Poblador**. Instituto de Fisiología Celular. UNAM
131	*In Vivo Transfection in a Murine Model of Tubulinopathy* **Diego Carmona Montiel**. Neuroscience Laboratory, DCI, University of Guanajuato
133	*Effect of tibolone on inflammation and motor recovery in a model of traumatic spinal cord injury* **Angélica B. Coyoy Salgado**. Hospital de Especialidades. Centro Médico Nacional SXXI. IMSS - CONACyT
135	*Characterization of cellular markers of senescence during the progression of Alzheimer's disease pathology in the brain of 3xTg-AD mice* **José Eduardo Domínguez Rivas.** Instituto de Investigaciones Biomédicas, UNAM
137	*Dopamine concentration and mitochondrial function modifications in a Parkinson's disease model by manganese inhalation* **Cesar Alfonso Garcia-Caballero**. Facultad de Estudios Superiores Iztacala, UNAM
139	*Post-translational modifications on tau protein after neuronal exposure to palmitic acid* **Valeria Melissa García-Cruz**. Instituto de Investigaciones Biomédicas. UNAM
141	*Contribution of brain microvasculature to remyelination after an ischemic injury via extracellular vesicles* **Fernando Hernández-Real**. Instituto de Fisiología Celular. UNAM
143	*Temporal expression of circadian clock proteins in glioma C6* **Emely Maqueda-Martínez.** Instituto de Investigaciones Biomédicas. UNAM
145	Protective effect of the ketone body, β-hydroxybutyrate on ischemic brain injury. Role of reticular stress and autophagy **Teresa Montiel**. Instituto de Fisiología Celular. UNAM

CELLULAR PLASTICITY & NEURAL CIRCUITS

147	*The persistence of antidepressant-like effects of rTMS at 5Hz is associated with microglial modifications in the hippocampal neurogenic niche in rodents exposed to unpredictable chronic mild stress.* **Dana Vianey Castro-de Aquino.** Instituto Nacional de Psiquiatría

149	*Neurogenesis-dependent and/or independent mechanisms underlying the antidepressant-like effect of 5Hz repetitive transcranial magnetic stimulation (rTMS) in mice exposed to chronic mild stress* **Andrea Granados-Juárez.** Instituto Nacional de Psiquiatría "Ramón de la Fuente Muñiz
151	*Repetitive transcranial magnetic stimulation (5 Hz) decreases the depressive-like behavior, modifies the structural dendritic plasticity, and induces global epigenetic changes in the frontal cortex and hippocampus in a model mouse of chronic stress.* **Juan David Meneses-San**. National Institute of Psychiatry "Ramón de la Fuente Muñiz"
153	*Memory impairment in adulthood after neonatal excitotoxicity is related to changes in NMDA receptor NR2 subunit protein expression* **Mónica E. Ureña-Guerrero.** (CUCBA), Universidad de Guadalajara

SIGNAL TRANSDUCTION

155	*The Krüppel-like factor 13 (KLF13) is a New Regulator of the JAK/STAT Signaling Pathway in Hippocampal Neurons* **José Ávila-Mendoza.** Instituto de Neurobiología. UNAM
157	*Analysis of phosphatidylethanolamine binding protein 1 (PEBP1) interactions with other proteins during brain cerebral focal ischemia in rat hippocampus* **Jorge Daniel Corzo-Toledo.** Cinvestav – IPN
159	*PTP1B regulates cell cycle progression through a Cdk3/Rb dependent manner in human glioblastoma cells* **Olga Villamar-Cruz.** Facultad de Estudios Superiores-Iztacala. UNAM

SYNAPTIC TRANSMISSION

161	*Functional role of cortical glutamatergic neurotransmission in conditioned taste preference* **Karla Gabriela Medina-Medina.** Instituto de Fisiología Celular. UNAM

INNOVATION & TECHNOLOGY

163	*Increase of 5-HT levels is induced both in mouse brain and HEK-293 cells following their exposure to a non-viral tryptophan hydroxylase construct.* **Emiliano Tesoro-Cruz.** Hospital de Infectología, Centro Médico Nacional "La Raza", IMSS / IFC UNAM

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