Sociedad Mexicana de Bioquímica
Neurobiología

SMB

PROGRAM

II Neurobiology Meeting of the Mexican Society for Biochemistry

Pre-Meeting Course: "Trending Topics in Neuroscience"

Hotel Hacienda Jurica, Querétaro,Qro.
October 15-18, 2017

Organizing Committee:
Clorinda Arias, IIB, UNAM
Lourdes Massieu, IFC, UNAM
Milagros Méndez, INPRF
Julio Morán, IFC, UNAM
Angélica Zepeda, IIB, UNAM

SUNDAY, OCTOBER 15

Pre-Meeting Course: "Trending Topics in Neuroscience"

11:00-12:00 *Circadian rhythms: connecting metabolism to chromatin*
Lorena Aguilar. Instituto de Investigaciones Biomédicas, UNAM, México

12:00-13:00 *Methods to study circRNA regulation and function*
Pedro Miura. Department of Biology, University of Nevada, Reno, USA

13:00-14:00 *The impact of metabolic disorders on the epigenome and brain function*
Fernando Gómez Pinilla. Department of Integrative Biology and Physiology, UCLA, USA

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

15:15–16:15 *Novel tools to study adult neurogenesis*
Carmen Vivar. CINVESTAV, México

16:15- 17:15 *Two photon excitation microscopy and miniature microscopy for the study of neuronal activity in vivo*
Ana María Estrada. UCLA, USA

17:15-18:15 *Linking two-photon imaging of neuronal structure and function with behaviour*
Frank Sengpiel. Cardiff University, United Kingdom

18:30-19:00 **Welcome ceremony**

19:00–20:00 **Opening talk**

Sex differences in the effects of anxiolytic and antidepressant drugs
Alonso Fernández Guasti, *CINVESTAV, México*

MONDAY, OCTOBER 16

9:00–11:00 **Symposium I**
NEUROENDOCRINOLOGY

Chair: Ignacio Camacho
Facultad de Química, UNAM e Instituto Nacional de Perinatología, México

I.1 Neural effects of the prolactin/vasoinhibin axis
Carmen Clapp. Instituto de Neurobiología, UNAM, Qro., México

I.2 TRH neurons integrate signals of stress and energy status to modulate metabolism
Patricia Joseph. Instituto de Biotecnología, UNAM, Mor., México

I.3 Sex steroid actions in the amygdala
Alberto Rasia-Filho. Federal University of Rio Grande do Sul, Porto Alegre, Brasil

I.4 Suckling: its behavioral and neuroendocrine consequences beyond lactation
Gabriela González Mariscal. CINVESTAV, Universidad Autónoma de Tlaxcala, México

11:00–11:30 **coffee break**

11:30 – 12:30 **Plenary Lecture**

Mechanisms of plasticity in mouse visual cortex
Frank Sengpiel, School of Biosciences, Cardiff University, United Kingdom

12:30 -14:30 **Lunch**

14:30–15:30 **Oral Presentations I**

Chair: María Isabel Miranda
Instituto de Neurobiología, UNAM, México

14:30-14:42
Possible factors involved in sexual preference in rodents: Effect of multiple gestations and endocrine conditions during the prenatal period
Alejandra Hernández González, Alonso Fernández Guasti. CINVESTAV, México

14:42-14:54
Novel Roles for Krüppel-Like Factor 13 (KLF13) in Hippocampal Neurons
José Avila Mendoza, Arasakumar Subramani, Robert J Denver. University of Michigan, USA

14:54- 15:06
Bursting in the substantia nigra reticulata in the absence of dopaminergic modulation
Verónica Alejandra Cáceres Chávez, Jesús Pérez-Ortega, Ricardo Hernández-Martínez, Marco Arieli Herrera Valdez, Elvira Galarraga, José Bargas Díaz. Instituto de Fisiología Celular, Instituto de Neurobiología, Facultad de Ciencias, UNAM, México

15:06- 15:18
Thalamo-striatal contribution to the start/executions of an action sequence
Edgar A. Díaz Hernández, Josue O. Ramírez Jarquín, Fatuel Tecuapetla Aguilar. Instituto de Fisiología Celular, UNAM, México

15:18- 15:30
Valuation of the potential of combinations with memantine (M) + acetyl L-cartinine (ALCAR), M + curcumin (C) in an experimental model of cognitive deficit
Germán Velázquez García, Mireya Alcaraz Zubeldia, Jaime Chávez Alderete, Laura Yunuen Hernández Sánchez, Camilo Ríos. Instituto Nacional de Neurología, México

15:30–17:30 **Symposium II**
NEURODEVELOPMENT

Chair: Diana Escalante
Instituto de Fisiología Celular, UNAM, México

II.1 Functional determination of the neurogenic capacity of brain cells in the embryo and the adult
Luis Covarrubias. Instituto de Biotecnología, Mor., UNAM, México

II.2 Role of histamine H1 receptor on the telencephalic neurogenesis in a diabetic rat model
Anayansi Molina. Instituto Nacional de Perinatología, México

II.3 Molecular aspects of the developing hypothalamus: the role of microRNAs
Leonor Pérez. Instituto de Biotecnología, Mor., UNAM, México

II.4 From ES to neural crest: early segregation of potential
Martín García Castro. University of California, Riverside, USA

17:30 – 19:30 **Poster I (Even numbers)**

TUESDAY, OCTOBER 17

9:00 – 11:00 **Symposium III**
THE AGING BRAIN

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

III.1 Age-accumulation of circRNAs in the brain
Pedro Miura, Department of Biology, University of Nevada, Reno, USA

III.2 Physiological neuronal senescence
Susana Castro, Instituto de Fisiología Celular, UNAM, México

III.3 Inflammation and neuronal dysfunction in Alzheimer's Disease
Gustavo Pedraza, Instituto de Biotecnología, Mor., UNAM, México

III.4 Unraveling the role of post translational modifications on alpha-synuclein biology and pathobiology
Tiago Fleming Outeiro, Department of Experimental Neurodegeneration, University Medical Center Goettingen, Germany

11:00 – 11:30 **coffee break**

11.30 – 12:30 **Plenary Lecture**

A zinc-potassium continuum in neuronal cell death

Elias Aizenman. Department of Neurobiology, University of Pittsburgh, USA

12:30 - 14:30 **Lunch**

14:30 – 15:30 **Oral Presentations II**

Chair: Ataúlfo Martínez
Instituto de Neurobiología, UNAM, México

14:30-14:42 *Evolution of the Alzheimer's-associated neuroinflammatory process in Down Syndrome*
Lisi Flores Aguilar, M. Florencia Iulita, Thomas Wisniewski, Jorge Busciglio, A. Claudio Cuello. McGill University, Montreal, Canada. Université de Montréal, Montréal, Canada. New York University School of Medicine, New York. University of California, Irvine. McGill University, Montréal, Canada·

14:42-14:54 *mTOR pathway inhibition by metformin plus caloric restriction has beneficial anti-epileptic effects.*
Bryan V. Phillips Farfán, Daniela Calderón Gámez, María del Carmen Rubio Osornio, Verónica Custodio Ramírez, Carlos Paz Tres, Karla G. Carvajal Aguilera. Instituto Nacional de Pediatría, México

14:54- 15:06 *Effect of acidic pH and growth factor withdrawal on human hippocampal neural precursor cells (hHippNPCs) commitment to neuronal phenotype: implications in neurodegenerative diseases.*
María del Carmen Cárdenas Aguayo, Laura Gómez Virgilio, Gustavo López Toledo, María del Carmen Silva Lucero, Ubaldo García Hernández, David García Díaz. Facultad de Medicina, UNAM, México

15:06- 15:18 *Autophagy fails to prevent glucose deprivation/glucose reintroduction induced neuronal death due to calpain-mediated lysosomal dysfunction in cortical neurons.*
Cristian Gerónimo Olvera, Teresa Montiel, Ruth Rincón Heredia, Susana Castro Obregón, Lourdes Massieu. Instituto de Fisiología Celular, UNAM, México

15:18- 15:30 *Resveratrol reduces edema through sur1 expression regulation in cerebral ischemia*
Iván Alquisiras Burgos, Alma Ortiz Plata, Alejandro Millán Vega, Penélope Aguilera. Instituto Nacional de Neurología y Neurocirugía, México

15:30 – 17:30 **Symposium IV**

PERCEPTION AND NEURAL NETWORKS

Chair: Martha Lilia Escobar
Facultad de Psicología, UNAM, México

IV.1 Divergent cortical processing of music and speech
Luis Concha. Instituto de Neurobiología, Qro., UNAM, México

IV.2 Neurophysiology of time perception in the primate
Hugo Merchant. Instituto de Neurobiología, Qro., UNAM, México

IV.3 Somatosensory signals in the basal ganglia during the learning and execution of motor habits
Pavel Rueda. Instituto de Neurobiología, Qro., UNAM, México

IV.4 How attention affects visual perception
Marisa Carrasco. Center for Neural Science, NYU, New York, USA

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

19:30 - Business meeting

WEDNESDAY, OCTOBER 18

9:00 – 11:00 **Symposium V**
NEUROTOXICITY AND NEUROREPAIR

Chair: José Segovia
CINVESTAV, México

V.1 Role of motor cortex in the neuropathology of Huntington´s disease
Ana María Estrada. UCLA, USA

V.2 Molecular mechanisms underlying Familial Alzheimer's Disease
Lucía Chávez. VIB-KU Leuven Center for Brain & Disease Research, Leuven, Belgium

V.3 Copper binding to the prion protein and the beta amyloid peptide: A wrestling match at the synapse?
Liliana Quintanar. Departamento de Química, CINVESTAV, México.

V.4 The Epidemics of Junk Food and Implications for Brain Repair
Fernando Gómez Pinilla. Integrative Biology and Physiology. UCLA, USA

11:00 – 11:30 **coffee break**

11:30 – 12:30 **Closing Lecture**

Gas6 Signaling as a Requirement for TAMing Inflammation and Enhancing Myelination
Bridget Shafit-Zagardo, Albert Einstein College of Medicine, NY, USA

12:30 - 14:30 **Closing Ceremony**

Posters Session I. Even numbers

2	**Assessment of manganese chloride doses in behavioral and MRI experiments.** Aguilar Moreno J. Alejandro, Gasca Deysi, Ortíz Juan, Alcauter Solórzano Sarael, Paredes G. Raúl G. Instituto de Neurobiología, UNAM
4	**Striatal Circuits on Behavioral Flexibility.** Alatriste León Héctor, Linares García Iván, Ramírez Jarquín Josué Orlando, Tecuapetla Aguilar Fatuel. Instituto de Fisiología Celular, UNAM.
6	**D-serine administration restores age-related effects on cognitive flexibility and attention in rats**. Calero Vargas Isnarhazni Alejandra, Ramírez-Hernández Noemí, López-Hidalgo Mónica. Facultad de Medicina. Universidad Autónoma de Querétaro
8	**Expression of synaptophysin in monoparental/biparental prairie voles after pair-bonding formation**. Rebeca A. Cortés Sánchez, Francisco Camacho, Néstor Díaz, Larry J Young, Raúl Paredes, Wendy Portillo. Instituto de Neurobiología, UNAM
10	**Development of a home-made system to quantify physical activity in an experimental rodent model.** Roberto Cuevas Olguín, Teresa Mares Barbosa, Marcela Miranda Morales, Griselda García, Eric Esquivel Rendón, Jorge Vargas Mireles, Gabriela, González, Marco Atzori. Facultad de Ciencias, Universidad Autónoma de San Luis Potosí
12	**Evaluation of the risk behavior and its relation with the academic yield in students of Faculty of Chemical Sciences BUAP.** Fortis Valera Monserrat, Alatriste Bueno Victorino, Facultad de Ciencias Químicas BUAP
14	**Optogenetic manipulation of the direct and indirect pathways of the basal ganglia: dorsomedial striatum *versus* dorsolateral striatum.** Llanos Moreno Argelia, Cuevas Vicente Nisa, Ramírez Jarquín Josué, Tecuapetla Fatuel. Instituto de Fisiología Celular, UNAM
16	**Sexual hormones are not sufficient to achieve high sexual receptivity in female mice, sexual experience is required.** P. Marco Manclús, R. G. Paredes, W. Portillo. Laboratorio de Plasticidad y conducta sexual, INB UNAM
18	**Deficits in cognitive performance are associated with a reduction in serum levels of transaminases in humans.** Ramírez Hernández Noemi, Calero Vargas Isnarhazni, Reyes López Julián, Arias García Nallely Amaranta, Riveroll Romero Roberto, López Hidalgo Mónica. Universidad Facultad de Medicina**.** Autónoma de Querétaro.
20	**Operant conditioning paradigm in head-fixed rats for yuxtasomal recordings in the cerebral cortex.** Santana Chávez Gabriela, López Hidalgo Mónica, Olivares Moreno Rafael, Rojas Piloni Gerardo. Departamento de Neurobiología del desarrollo y Neurofisiología, INB UNAM
22	**Can Autophagy Contribute to the Mouse Neural Tube Closure?** Pilar Sarah Acevo Rodríguez, Diana Escalante Alcalde and Susana Castro Obregón. Departamento de Neurodesarrollo y Fisiología, División de Neurociencias, Instituto de Fisiología Celular, UNAM
24	**Characterization of the promoter of the *Klf10* gene in the developing hypothalamus.** Garduño Tamayo Norma Angélica, Pedraza Alva Gustavo, Pérez Martínez Leonor**.** Laboratorio de Neuroinmunobiología, Departamento de Medicina Molecular y Bioprocesos, Instituto de Biotecnología, UNAM
26	**Impact of senescent astroglial cells upon neuronal functionality**. Morales Rosales Sandra Lizbeth, González Puertos Viridiana Yazmín, Massieu Trigo María de

	Lourdes, Moreno Blas Daniel, Gerónimo Olvera Cristian, Konigsberg Fainstein Mina. Posgrado en Biología Experimental. Universidad Autónoma Metropolitana, Iztapalapa
28	**ß-amyloid 1-42 production in vision related structures on aging and Alzheimer's disease; Could the eye be useful for early detection of Alzheimer's disease?** Montserrat Pérez Hernández, Abigail Torres Romero, Uriel Martínez Hernández, Roberto González Salinas, Rosario Gulias Cañizo, Rubén Zamora Alvarado, Lenin Ochoa de la Paz, Luis F. Hernández Zimbrón. Research Department, Asociación Para Evitar la Ceguera en México, I.A.P.
30	**Aging-associated changes in synaptic vesicle recycling.** Nelly Rodríguez Corona and Clorinda Arias. Instituto de Investigaciones Biomédicas, Departamento de Medicina Genómica y Toxicología Ambiental. UNAM
32	**Prenatal ethanol exposure alters locomotor activity and selectively promotes changes in Met-enk expression in adolescent rats.** Hernández Fonseca Karla, Reyes Guzmán Aurora Cosette, Abate Paula and Méndez Milagros. Departamento de Neuroquímica, Subdirección de Investigaciones Clínicas, Instituto Nacional de Psiquiatría Ramón de la Fuente
34	**Behavioral effects of sucrose in Wistar rats: Dose-response studies.** Milagros Méndez Ubach and Karina Santiago González. Departamento de Neuroquímica, Subdirección de Investigaciones Clínicas, Instituto Nacional de Psiquiatría Ramón de la Fuente
36	**White Matter Alterations in Heavy Cannabis Users.** Gina Patricia Monteverde Muir, Arafat Angulo Perkins, Laura Nava Gómez, Sarael Alcauter. Instituto de Neurobiología, UNAM.
38	**Sympathetic regulation of visceral adiposity and metabolism in a rat model of stress induced by sleep restriction.** Lucia Engracia Azuara Alvarez, Adrián Ruiz Báez, Ma. Isabel Casillas Santana, Nadia Saderi, Roberto Carlos Salgado Delgado. Facultad de Ciencias. Universidad Autónoma de San Luis Potosí.
40	**Progressive changes in the expression of 5-HT$_7$ serotonin receptor in Paraventricular nucleus of hypothalamus are related to differences in spontaneous motor behavior in a rodent model of chronic stress.** Burgos Santillán MI, Rodríguez Córdova VM, Hernández Montiel HL, Mendoza Trejo MS, Hernández Chan NG. Facultad de Medicina, Universidad Autónoma de Querétaro
42	**Different sources of stress: sex and model type differences.** Torres Carrillo Paulina, Vargas Gómez Mariana, Miranda Guzmán Jennyfer Teresa, Vergel Munguía Mariana Denisse, Gómez Avalos Hatzumy, Verdin Ruvalcaba Luis, Paz Trejo Diana Berenice, Ochoa de la Paz Lenin & Sánchez Castillo Hugo. Laboratorio de Neuropsicofarmacología y Estimación Temporal. Facultad de Psicología, UNAM
44	**Exposure to continuous light elicits depression through an Interleukin-6 transsignaling dependent mechanism in a murine model**. Ricardo Velázquez Contreras, Francisco Vega, Jorge Vargas, Gabriela González, Roberto Cuevas Olguín, Eric Esquivel Rendón, Teresa Mares Barbosa, Marcela Miranda Morales, Griselda García, Catalina Arenas Huertero, Nadia Saderi, Roberto Salgado Delgado, Stefan Rose John, Marco Atzori, Facultad de Ciencias, Universidad Autónoma de San Luis Potosí
46	**Temporal profile in the expression of genes induced by the forced swimming test: Implications of GR, BDNF and NURR1.** Valery Vilchis Moreno, Elizabeth Ruíz Sánchez, Pedro Montes del Carmen, Rafael Campos Rodríguez y Patricia Rojas Castañeda. Laboratorio de Neurotoxicología. Instituto Nacional de Neurología y

	Neurocirugía, Manuel Velasco Suárez.
48	**Role of silver nanoparticles (AgNPs) and zinc chloride (ZnCl2) on the survival of Glioma C6.** José Fernando García Rodrigo, Samuel Salazar García, Gabriel Alejandro Martínez Castañón, Carmen González. Facultad de Ciencias Químicas, UASLP
50	**Mitochondrial Membrane Potential (mΔψ) Response to NMDA and MK-801 in rat cultured cortical astrocytes.** González Hernández José Roberto and Montes de Oca Balderas Pavel. Unidad de Neurobiología Dinámica.
52	**Developmental regulation of the prolactin/vasoinhibin axis in hippocampal astrocytes.** Fernando Macías, Miriam Ulloa, Rodrigo Manuel Aroña, Carmen Clapp, Gonzalo Martínez de la Escalera, Edith Arnold. Department of Cellular and Molecular Neurobiology. CONACYT-Neurobiology Institute, UNAM
54	**Glutamate-dependent translational control of glutamine synthetase in Bergmann glia cells.** Arturo Ortega, Reynaldo Tiburcio Félix, Miguel Escalante López, Bruno López Bayghen, Samule Zinker, Dinorah Hernández Melchor, Esther López Bayghen, Luisa C Hernández Kelly. Departamento de Toxicología, CINVESTAV IPN
56	**Titanium dioxide nanoparticles are internalized and induced autophagy and nuclear factor kappa B translocation in astrocytes.** José Antonio Pérez Arizti, Rebeca López Marure. Instituto Nacional de Cardiología "Ignacio Chávez"
58	**Comparative effects on rat primary astrocytes and C6 rat glioma cells cultures after 24 hours exposure to silver nanoparticles (AgNPs).** Samuel Salazar García, Manuel A. Ramírez Lee, Héctor Rosas Hernández, Edgar Rangel López, Claudia G. Castillo, Abel Santamaría, Gabriel A. Martínez Castañón, Carmen González. Facultad de Ciencias Químicas, UASLP
60	**Simultaneous detection of Bielschowsky silver-staining technique and fluorescent immunohistochemistry in the rat sciatic nerve.** E. Segura Anaya, R. Flores Miranda, A. Martínez Gómez A, M.A.R. Dent. Laboratorio de Neurociencias. Facultad de Medicina. UAEM
62	**Astrocytes activation induced by morin improves memory in healthy mouse.** Mónica Adriana Torres Ramos, Hilda Martínez Coria, Norma Serrano García, Gabriela Sinaí López Chávez, Marisol Orozco Ibarra, Alejandra Y. González Muñiz, Héctor López Valdés. Unidad Periférica de Neurociencias, INNN Facultad de Medicina, UNAM
64	**Prolactin protects rat cortical astrocytes against oxidative stress.** Miriam Ulloa, Fernando Macías, Rodrigo Manuel Aroña, Carmen Clapp, Gonzalo Martínez de la Escalera, Edith Arnold. Department of Celular and Molecular Neurobiology. Neurobiology Institute, UNAM
66	**Neurodegeneration and metabolic syndrome: role of oxidative stress, insulin resistance and AMP-dependent protein kinase (AMPK).** Karla Carvajal, Luz del Carmen Camacho Castillo, Bryan Phillips Farfán, Aidee Baires López, Gabriela Rosas Mendoza, Victoria Campos Peña. Laboratorio de Nutrición Experimental, Instituto Nacional de Pediatría
68	**Involvement of energy metabolism and Sirtuin 1 inhibition in the expression of Alzheimer's disease markers.** Manuel Flores León, Martha Pérez Domínguez, Rodrigo González Barrios and Clorinda Arias. Instituto de Investigaciones Biomédicas, UNAM
70	**Connexin 30.2 is expressed in exocrine vascular cells throughout pancreatic postnatal development**. Elia Martha Pérez Armendáriz, Cristina Coronel Cruz,

	Beatriz Hernández Téllez, Ivonne Grisel, Verónica Rodríguez Mata, E. Andrés Castell Rodríguez, Departamento de Biología Celular y Tisular, Facultad de Medicina, UNAM
72	**Membrane levels of SNAT2 mediated by PKA phosphorylation.** Tayde Gabriela Serrano Cano, Adrián Chávez Cano, Arturo Ortega, Cecilio Giménez, Francisco Zafra, Angelina Rodríguez. Facultad de Química. Universidad Autónoma de Querétaro
74	**Palmitic acid produces differential changes in the content of H3K9ac in human neuroblastoma cells.** Iker Francisco Soto Santarriaga, Manuel Flores León, Rodrigo González Barrios and Clorinda Arias. Instituto de Investigaciones Biomédicas, UNAM
76	**A dorsomedial thyrotropin-releasing hormone neuronal population senses energy balance alterations: Identifying new TRHergic hypothalamic connections activated by fasting and refeeding.** Karla Yamili Vargas Orihuela, Lorraine Jaimes Hoy, Fidelia Romero Arteaga, Edith Sánchez Jaramillo, Patricia Joseph Bravo, Jean Louis Charli. Instituto de Biotecnología, UNAM
78	**Sulpiride protects against diabetic retinopathy in rats by increasing systemic prolactin and the accumulation of ocular vasoinhibins.** Adán Castro Elva, Ramírez Hernández Gabriela, Díaz Lezama Nundehui, Ruíz Herrera Xarubet, Arnold Edith, Martínez de la Escalera Gonzalo and Clapp Carmen. Instituto de Neurobiología, UNAM
80	**Vasoinhibins promote apoptotic cell death in hippocampal neuronal primary cultures.** Rodrigo Manuel Aroña, Edith Arnold, Fernando Macías, Miriam Ulloa, Josué Rivera, Carmen Clapp, Gonzalo Martínez de la Escalera. Department of Celular and Molecular Neurobiology. Neurobiology Institute, UNAM
82	**Effect of GH and IGF-1 treatments after hypoxic-ischemic injury in chicken cerebellar cell cultures.** Baltazar Lara María del Rosario, Ávila-Mendoza José, Martínez Moreno Carlos Guillermo, Carranza Salas Martha, Arámburo Carlos, Luna Muñoz Maricela. Department of Cellular and Molecular Biology, Institute of Neurobiology, UNAM
84	**Expression and regulation of membrane progesterone receptors delta and epsilon in cells derived from human glioblastomas.** José Moisés Capetillo Velázquez, Aylin Del Moral Morales, Valeria Hansberg Pastor, Ignacio Camacho Arroyo. Unidad de Investigación en Reproducción Humana, Instituto Nacional de Perinatología-Facultad de Química, UNAM
86	**Prolactin neuroprotection against glutamate excitotoxicity is mediated in part via NF-kB activation and reducing the $[Ca^{2+}]I$ overload in hippocampal neuronal primary cell cultures.** Cerbón, M, Vázquez Martínez ER, Rivero Segura NA, Flores E, García de la Cadena S, Cabrera Reyes EA, Rincón Heredia R, Martínez-Pacheco H, Ferreira DG, Lopes L, Massieu L. Unidad de Investigación en Biología de la Reproducción. Instituto Nacional de Perinatología-Facultad de Química, UNAM
88	**Sex hormone effects on EZH2 expression in human glioblastoma cells.** Aylin Del Moral-Morales, Valeria Hansberg Pastor, Ignacio Camacho Arroyo. Unidad de investigación en Reproducción Humana, Instituto Nacional de Perinatología-Facultad de Química, UNAM
90	**Chronic stress inhibits the response of the thyroid axis to cold exposure.** Angélica Gutiérrez Mata, Mariana Gutiérrez-Mariscal, Miguel Cisneros, Jean Louis Charli, Patricia Joseph Bravo. Departamento de Genética del Desarrollo y Fisiología Molecular, Instituto de Biotecnología, UNAM
92	**The effects of Progesterone-Induced Blocking Factor (PIBF) in human glioblastoma cell proliferation, migration and invasion.** Valeria Hansberg

	Pastor, Araceli Gutiérrez Rodríguez, and Ignacio Camacho Arroyo. Facultad de Química. UNAM
94	**The Renin-Angiotensin system is up-regulated in the Arcuate nucleus of rats exposed to a high-fat diet.** Luis Daniel Hernández Torres, Guadalupe Elena Donjuán, Carolina Escobar, Roberto Salgado Delgado, Nadia Saderi. Laboratorio de Neuroanatomía Funcional y Ritmos Biológicos, Facultad de Ciencias, Universidad Autónoma de San Luis Potosí
96	**Optimization of tanycyte cultures for expression of the thyrotropin-releasing hormone-degrading ectoenzyme.** Abraham López Barajas, Adair Rodríguez-Rodríguez, Beetsi Urrieta-Chávez, Antonieta Cote-Vélez, Patricia Joseph-Bravo, Jean-Louis Charli. Instituto de Biotecnología, UNAM
98	**Hyperprolactinemia leads to elevated levels of prolactin in the vitreous of patients with diabetic retinopathy.** Núñez-Amaro Daniel, Ramírez Neria Paulina, Mira-Lorenzo Ximena, García Franco Renata, Robles-Osorio Ludivina, Clapp Carmen. Facultad de Ciencias Naturales, Universidad Autónoma de Querétaro
100	**Sex differences in daily hypothalamic leptin signaling between lean and obese mice *Neotomodon alstoni*.** Moisés Pérez-Mendoza, Manuel Miranda-Anaya. Unidad Multidisciplinaria de Docencia e Investigación, Facultad de Ciencias, UNAM-Juriquilla
102	**Rapid induction of thyrotropin releasing hormone biosynthesis in the paraventricular nucleus of the hypothalamus during obesity development in male rats; role of leptin signaling.** Marlen Asucena Ramírez Bustos, María del Pilar Torres Reyes, Miguel Cisneros Ramírez, David Antonio Villaseñor Peña, Patricia Joseph-Bravo, Jean-Louis Charli and Rosa María Uribe Villegas. Instituto de Biotecnología-UNAM
104	**Prolactin protects neuroretinal function and vascular stability in diabetic mice.** Ramírez-Hernández Gabriela, Díaz-Lezama Nundehui, Adán-Castro Elva, Ruiz-Herrera Xarubet, Macotela Yazmín, Arnold Edith, Martínez de la Escalera Gonzalo Clapp Carmen. Instituto de Neurobiología, UNAM
106	**Testosterone promotes glioblastoma cell proliferation through androgen receptor activation.** Dulce Carolina Rodríguez-Lozano, Alejandro Cerón Villalva, Valeria Hansberg-Pastor, Ignacio Camacho-Arroyo. Unidad de Investigación en Reproducción Humana, Instituto Nacional de Perinatología-Facultad de Química, UNAM
108	**Adeno-associated virus as transgenic tools for manipulation of tanycytes and hypophysiotrophic cells.** Adair Jonathan Rodríguez Rodríguez, Rosa María Uribe, Fidelia Romero, Patricia Joseph-Bravo and Jean Louis Charli. Instituto de Biotecnología, UNAM
110	**Social isolation during adolescence induces sex-dependent differences on the activity of hypothalamic-pituitary-thyroid axis, and its response to cold exposure.** Diego Rodríguez-Sarmiento, Patricia Joseph-Bravo, Lorraine Jaimes-Hoy Departamento de Genética del Desarrollo y Genética Molecular, Instituto de Biotecnología, UNAM.
112	**Voluntary exercise-induced activation of the thyroid axis is attenuated by chronic stress.** Ma. Felix Salmerón Jiménez, Mariana Gutiérrez-Mariscal, Fidelia Romero, Jean-Louis Charli, Patricia Joseph-Bravo. Departamento de Genética del Desarrollo y Fisiología Molecular, Instituto de Biotecnología, UNAM.
114	**Comparison between the neuroendocrine mechanisms regulating the synthesis and release of reptilian, avian and mammalian pituitary Growth**

	Hormone (GH). Urban Sosa Valeria Alejandra, Ávila Mendoza José, Carranza Salas Martha Elizabeth, Luna Muñoz Maricela, Martínez-Moreno Carlos Guillermo y Arámburo de la Hoz Carlos. Departamento de Neurobiología Celular y Molecular, Instituto de Neurobiología, UNAM
116	**Characterization of energy balance in mice KO for the thyrotropin releasing hormone degrading enzyme; effect of 5 back-crossings with the C57BL/6NJ background.** Laura Urzúa-Contla, Miguel Cisneros, Patricia Joseph-Bravo, Jean-Louis Charli and Antonieta Cote-Vélez. Escuela de Biología, Facultad de Ciencias Biológicas BUAP.
118	**Prolactin promotes the hyperoxia-induced inhibition of retinal neovascularization in newborn mice.** Vázquez-Membrillo Miguel, Díaz-Lezama Nundehui, Adán-Castro Elva, Ramírez-Hernández Gabriela, Ledezma-Colunga Guadalupe, Ruíz-Herrera Xarubet, Martínez de la Escalera Gonzalo, Clapp Carmen. Instituto de Neurobiología, UNAM
120	**Assessment of fecal lactoferrin in BALB/c mice under immobilization stress.** Vega-Bautista Edward Alan, Rodríguez-Paz José Antonio, Rojas Osornio Sandra Angélica, Cruz Hernández Teresita Rocío, Campos Rodríguez Rafael, Drago-Serrano Maria Elisa. Departamento de Sistemas Biológicos, Universidad Autónoma Metropolitana Unidad Xochimilco
122	**Role of Wnt signaling pathway on hippocampal reorganization after entorhinal cortex lesion.** Lizbeth García Velázquez, Clorinda Arias Álvarez. Department of Genomic Medicine and Environmental Toxicology, IIB, UNAM
124	**The link between PKCα and ERβ activity in a medulloblastoma cell line** Jiménez-Arellano Carolina & González-Arenas Aliesha. Departamento de Medicina Genómica y Toxicología Ambiental, Instituto de Investigaciones Biomédicas, UNAM
126	**Palmitic acid-induced neuronal insulin resistance: role of PKCs activation, reactive oxygen species and ceramides production.** Karina Sánchez-Alegría, Patricia Ferrera and Clorinda Arias. Depto. Medicina Genómica y Toxicología Ambiental. Instituto de Investigaciones Biomédicas, UNAM
128	**Lysophosphatidic acid signaling induces Protein Kinase C nuclear translocation in glioblastoma cell lines.** Silvia Anahi Valdés-Rives, Aliesha González-Arenas. Departamento de Medicina Genómica y Toxicología Ambiental, Instituto de Investigaciones Biomédicas, UNAM

Posters Session II. Odd numbers

1	**Hypothalamic lipotoxicity leads to neuroinflammation and increases ghrelin sensitivity in rat.** Alberto Camacho, Roger Maldonado-Ruiz Cristina Rodriguez-Padilla. Unidad de Neurometabolismo. Centro de Investigación y Desarrollo en Ciencias de la Salud. UANL
3	**Role of reactive oxygen species in the regulation of neuroinflammation induced by excitotoxic damage in cerebellar granular neurons.** Gutiérrez-Chávez LG; Hernández-Espinosa DR; Morán Andrade J. División de Neurociencias, Instituto de Fisiología Celular, UNAM
5	**Obesity induced neuroinflammation and its impact in adipose tissue morphology.** Guzmán Ruiz Mara Alaide, Torres Castro Paola Ximena, Ofelia Pérez Olvera, León Avecilla Erik Alejando, García García Arturo Ivan y Chavarría Krauser

	Anahí. Unidad de Investigación en Medicina Experimental, Facultad de Medicina, UNAM
7	**Role of NOX-2 in the inflammatory response to excitotoxic damage.** Hernández-Espinosa DR, Massieu Trigo L, Zenteno Galindo E, Morán Andrade J. Departamento de Neurodesarrollo y Fisiología, Instituto de Fisiología Celular, UNAM
9	***Malvaparviflora*** **extract regulates the phagocytic capacity of microglial cells via a PPARγ-mediated mechanism in an Alzheimer´s disease model.** Elisa Medrano-Jiménez, Martha Pedraza-Escalona, Lourdes Álvarez-Arellano, Alejandro Zamilpa Alvarez, Maribel Herrera-Ruíz, Enrique Jiménez-Ferrer, Jaime Totoriello-García, Gustavo Pedraza-Alva and Leonor Pérez-Martínez. Laboratorio de Neuroinmunobiología, Departamento de Medicina Molecular y Bioprocesos, Instituto de Biotecnología, UNAM
11	**Biochemical parameters and cognitive impairment in multiple sclerosis.** Jocelyn Moreno-Camacho, Ana Laura Hernández Ledesma, Adriana Jheny Rodríguez Méndez, Susana Gallardo Vidal, Pablo García-Solís, Julián Reyes-López, Aracely Anaya-Loyola. Maestría en Ciencias en Neurometabolismo. Facultad de Medicina, UAQ
13	**LPS-induced neuroinflammation decreases DCX+ cells proliferation in adult hippocampus.** Martha Pérez, Angélica Zepeda. Instituto de Investigaciones Biomédicas, UNAM
15	**A *Malvaparviflora´*s fraction prevents the deleterious effects resulting from neuroinflammation in a murine model.** Cristina Ramírez Serrano, Maribel Herrera-Ruíz, Enrique Jiménez Ferrer, Alejandro Zamilpa Alvarez, Jaime Totoriello García, Gustavo Pedraza-Alva and Leonor Pérez-Martínez. Laboratorio de Neuroinmunobiología, Departamento de Medicina Molecular y Bioprocesos, Instituto de Biotecnología, UNAM
17	**Effect of valerenic acid on inflammatory mechanism in mice model of Parkinson's Disease.** Alfredo Rodríguez Cruz, Elizabeth Martínez-Rojo, Jesus Mendiola-Precoma, Jesica E. Escobar-Cabrera, Guadalupe García-Alcocer, Laura C. Berumen . Unidad de Investigación Genética, Facultad de Química, Universidad Autónoma de Querétaro.
19	**Immunologic characterization of pediatric medulloblastomas.** Zavaleta-Bahena A, Piña-Sánchez P, Eguía-Aguilar P, Perezpeña-Diazconti M, González-García N, Corona JC, Maldonado-Bernal C, Álvarez-Arellano L. Lab. de Neurociencias, Hospital Infantil de México Federico Gómez
21	**Analgesic Effect of Repetitive Transcranial Magnetic Stimulation (rTMS) in Patients With Chronic Low Back Pain.** Monica Ambriz-Tututi, Beatriz Alvarado-Reynoso, René Drucker-Colín. Hospital General Ajusco Medio ‘‘Dra. Obdulia Rodríguez Rodríguez’’, Unidad de Trastornos de Movimiento y Sueño
23	**Pathological role of a polyglutamine expansion in human TATA-binding protein inSCA17modeled in *Drosophila melanogaster.*** Cárdenas-Tueme, Marcela; Gonzalez-Villasana, Vianey; Altamirano-Torres, Claudia and Reséndez-Pérez, Diana. Facultad de Ciencias Biológicas. Universidad Autónoma de Nuevo León
25	**Comparing the possible neuroprotective properties of sugarcane juice and ferulic acid in *C. elegans* and rat cortical slices.** Aline Colonnello Montero, Ilan Kotlar Goldaper, Abel Santamaría del Ángel. Laboratorio de Aminoácidos Excitadores, Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez
27	**Effect Of Electrical Stimulation At The St36 Acupoin In A Model Of TraumaticSpinalCordInjury in rat.** Angélica Coyoy Salgado, Priscila Madrid

	Hernández, Wendy Gutiérrez Villegas, Carlos Orozco Barrios, StephanieSánchez Torres, Rodrigo Mondragón Lozano, Omar Fabela Sánchez, Hermelinda Salgado Ceballos. Proyecto Camina A.C., Mexico and Med. Res. Unit in Neurolog. Dis., Ctr. Médico Nacional Siglo XXI, México
29	**Neuroanatomic alterations and stereotyped behaviors in the mouse C58/J. Implications for the study of autism.** Sofía Cruz Guzmán, Aliesha González Arenas, Octavio García. Laboratorio de Neurobiología del síndrome de Down. Facultad de Psicología, UNAM
31	**Autophagy decreases oxidative stress and apoptosis in a cellular model of Parkinson's disease.** Ana Patricia Duarte Jurado**,** María de Jesús Loera Arias, Odila Saucedo-Cárdenas, Roberto Montes de Oca Luna, Humberto Rodríguez Rocha, Aracely García-García. Departamento de Histología, Facultad de Medicina, Universidad Autónoma de Nuevo León
33	**Evaluation of fusion/fission proteins and mitochondrial deficit in synaptosomes in Triple transgenic mouse model of Alzheimer's Disease.** César Espino De la Fuente, Mónica Rosas-Lemus, Perla Moreno-Castilla, Federico Bermúdez Rattoni, Salvador Uribe-Carvajal y Clorinda Arias. Departamento de Medicina Genómica y Toxicología Ambiental, Instituto de Investigaciones Biomédicas. UNAM
35	**Changes in circadian rhythm by arsenic accelerate amyloid pathology in the 3XTG-AD model.** Niño, SA, Ledesma-Mendoza B, Sánchez-Romero ML, Jiménez-Capdeville ME, Zarazúa S, Díaz-Cintra S, Saderi Nadia Salgado Delgado R. Facultad de Ciencias Químicas, Universidad Autónoma de San Luis Potosí
37	**Profile of the release of amino acid neurotransmitters in rodent is depending of diurnal variation: Microdialysis study.** Francisco Estrada-Rojo, Liliana Carmona-Aparicio, Elvia Coballase-Urrutia, Virginia Arriaga, Rosalinda Guevara-Guzman and Luz Navarro. Laboratory of Neuroendocrinology, Department of Physiology Faculty of Medicine
39	**Atomoxetine (ATX) in differentiated SH-SY5Y cells alters mitochondrial function.** Denise Gómez Bautista, Sonia Carreón Trujillo, Raquel González Pérez and Juan Carlos Corona. Laboratory of Neurosciences, Hospital Infantil de México Federico Gómez
41	**Characterization of the circadian system in a Triple Transgenic model for Alzheimer's disease (3xTg-AD).** Irma A. González Luna, Manuel Miranda Anaya, Mauricio Díaz Muñoz. Instituto de Neurobiología, UNAM
43	**Effect of Resveratrol on glucose transporter 3 expression in ischemia**. Gutiérrez Aguilar G. Fernando, Alquisiras Burgos Iván, Ortiz-Plata Alma, Pedraza Chaverri José, Aguilera Penélope. Laboratorio de Patología Vascular Cerebral. Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez
45	**ERβ-PKCα interaction plays an important role in medulloblastoma development.** Hernández-Rojas Rubí, González-Arenas Aliesha. Departamento de Medicina Genómica y Toxicología Ambiental. Instituto de Investigaciones Biomédicas, UNAM
47	**Dihydroprogesterone promotes the growth of human glioblastoma cells.** Ana María Hernández Vega, Carmen Janín Zamora-Sánchez, Valeria Hansberg-Pastor, Ignacio Camacho-Arroyo. Unidad de investigación en Reproducción Humana, Instituto Nacional de Perinatología-Facultad de Química, UNAM
49	**Alterations of striatal cholinergic system in autism model in the rat.** Ibáñez Sandoval Dayna Nallely, Jessica A. Hernández-Maldonado, Saderi Nadia and Ibáñez

	Sandoval Osvaldo. Facultad de Medicina, UNAM
51	**Diurnal variation of minocycline administration effect on behavioral recovery after a Traumatic Brain Injury in rats.** Islas Escoto Santiago, Martínez-Tapia Ricardo Jesús, Barajas-Martínez Antonio, Martínez-Vargas Marina, Estrada-Rojo Francisco y Navarro Luz. Lab. de Neuroendocrinología, Depto de Fisiología, Facultad de Medicina UNAM
53	**Protective effects of cannabinoid-profile agents against the synergistic toxicity of glutaric acid and quinolinic acid on in vitro models.** Ilan Kotlar Goldaper, Aline Colonnello Montero, Edgar Rangel López, Abel Santamaría del Ángel Laboratorio de Aminoácidos Excitadores, Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez
55	**Mifepristone improve the efficacy of temozolamide in glioblastoma associated with DNA damage repair and Apoptosis.** Monserrat Llaguno-Munive, Mario Romero-Piña, Janeth Serrano-Bello, Luis A.Medina, Norma Uribe-Uribe, Mauricio Rodríguez-Dorantes, Ana Maria Salazar, Patricia Garcia-Lopez. Laboratorio de Farmacología, Subdirección de Investigación Básica, Instituto Nacional de Cancerología
57	**Characterization of chemical biomarkers in a novel *in vivo* model of ictogenesis.** Hiram Luna-Munguia, Alexander G. Zestos, Stephen V. Gliske, Robert T. Kennedy, William C. Stacey. Department of Neurology, University of Michigan, USA
59	**Synthesis and characterization of the SiO_2/DA microimplant for evaluation in a hemiparkinsonism rat model.** Verónica Guadalupe Maqueda González, Mónica Rosalía Jaime Fonseca, María Guadalupe Valverde Aguilar, Patricia Vergara Aragón y Patricia Santiago Jacinto. CICATA-Legaria, Instituto Politécnico Nacional
61	**Retinal and visual cortex identification of $A\beta_{pE3\text{-}42}$ and $A\beta pE_{11\text{-}42}$ peptides in Alzheimer disease and normal aging.** Uriel Martínez Hernández, Abigail Torres Romero, Montserrat Pérez Hernández, Roberto González Salinas, Rosario Gulias Cañizo, Ruben Zamora Alvarado, Lenin Ochoa de la Paz, Luis F. Hernández-Zimbrón Universidad Autónoma Metropolitana, Unidad Iztapalapa
63	**Role of autophagy in the protective effect of the ketone body Beta-hydroxybutyrate against ischemic injury induced by the occlusion of the medial cerebral artery.** Lourdes Massieu, Teresa Montiel, Susana Flores, Berenice Bernal, Yessica Heras y Luis Tovar y Romo. División de Neurociencias. Instituto de Fisiología Celular. UNAM
65	**Effect of Transcranial Magnetic Stimulation in a model of rat´s Hemiparkinson** Medina-Salazar Idalia, Elías-Viñas, David, Verdugo-Díaz Leticia. Laboratorio de Bioelectromagnetismo, Departamento de Fisiología, Facultad de Medicina, UNAM
67	**Feeding restriction confers an anti-oxidative effect in rat hippocampus after seizure induction.** Mercado-Gómez Octavio, Arriaga Ávila Virginia, Álvarez-Herrera Marcelino and Guevara-Guzmán Rosalinda. Departamento de Fisiología, Facultad de Medicina, UNAM
69	**Recurrent moderate hypoglycemia enhances brain injury induced by the hypoglycemic coma and leads to memory decline.** Teresa Montiel, Gabriela Languren, Leticia Ramírez-Lugo, Israela Balderas, Gustavo Sánchez-Chávez, Francisco Sotres-Bayón, Federico Bermúdez-Rattoni, and Lourdes Massieu. División de Neurociencias. Instituto de Fisiología Celular. UNAM
71	**Alpha-mangostin attenuates inflammation induced by systemic LPS administration in C57BL/6J mice and ameliorates memory deficits in a transgenic mouse model of Alzheimer´s disease".** Nava Catorce Miryam, Acero

	Galindo Gonzalo, Gevorkian Goar. Instituto de Investigaciones Biomédicas, UNAM
73	**The activation of membrane progesterone receptors promotes the migration and invasion of human glioblastoma cells.** Walter Nicolás Ortega, B. Yenifer Bastida Beristain, Valeria Hansberg-Pastor, Ignacio Camacho-Arroyo. Unidad de investigación en Reproducción Humana, Instituto Nacional de Perinatología-Facultad de Química, UNAM.
75	**Focal Cerebral Ischemia Induces Early Protein and Genetic Expression Changes. Cytoplasmic and Mitochondrial Proteomic Study.** Ortiz-Plata Alma, Villafuerte-Morquecho Luis Enrique, Orozco-Ibarra Marisol, Chánez-Cárdenas María Elena, Muñoz-Sánchez Jorge, Sánchez-Hernández Hugo, Corzo-Toledo Jorge Daniel, Cázares-Raga Febe Elena, Hernández-Hernández Fidel de la Cruz. Laboratorio de Neuropatología Experimental. Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez
77	**Activation of AMPK by resveratrol has a neuroprotective effect.** Pineda-Ramírez Narayana, Pedraza-Chaverri José and Aguilera Penélope. Laboratorio de Patología Vascular Cerebral. Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez
79	**DNA methylation and gene expression of astroglia before, during and after oxygen and glucose deprivation.** Isaac Ponce Arias, Luis B. Tovar-y-Romo. Instituto de Fisiología Celular, UNAM
81	**Studying Cu(II) interactions with amyloid-β peptide and Prion Protein: Insights into the molecular battle for Cu(II) in Alzheimer Disease.** Posadas Yanahi, Parra-Ojeda Lili, Pérez-Cruz Claudia and Quintanar Liliana. Departamento de Química. CINVESTAV, México
83	**Antinociceptive effect of ferulic acid in painful diabetic neuropathy rats** Geovanna Nallely Quiñonez-Bastidas, Francisco Javier Flores-Murrieta, Vinicio Granados-Soto, Héctor Isaac Rocha-González. Sección de Estudios de Posgrado e Investigación, Escuela Superior de Medicina, Instituto Politécnico Nacional
85	**The Indirect Pathway of the Basal Ganglia Contributes to the Switch Between Action Sequences.** Ramírez-Armenta Kathia Itzel, Sánchez-Fuentes Asai, Ramírez-Jarquín Josué Orlando & Tecuapetla Fatuel. Instituto de Fisiología Celular, UNAM
87	**Human Neural Stem Cells Culture in Poly-D-lactic- Acid (PDLA) 3d Printed Scaffolds for Spinal Cord Injury.** Edson I. Rubio-Hernández, Alvar Paredes-Puerto, Claudia G. Castillo. Laboratorio de células troncales humanas, CIACYT-Facultad de Medicina, Facultad de Medicina, Universidad Autónoma de San Luis Potosí
89	**Green fluorescent protein expression in mouse brain structures delivered with an intranasally administered non-viral vector.** Emiliano Tesoro-Cruz, Norma Oviedo, Leticia Manuel-Apolinar, Sandra Orozco-Suárez, Vilma Carolina Bekker-Mendez. Unidad de Investigación Biomédica en Infectología e Inmunología, Hospital de Infectología, Centro Médico Nacional "La Raza", IMSS
91	**GABAR-Taurine interaction in the process of proliferation of neural progenitor cells from the sub-ventricular zone of the mouse brain.** Carlos de J. Torres-Rosas**,** Lenin D. Ochoa-de la Paz, Rubén Zamora-Alvarado, Hugo Quiroz-Mercado, Roberto Gonzales-Salinas, Luis Hernández-Zimbrón, Rosario Gulia. Departamento de Bioquímica, Facultad de Medicina, UNAM
93	**The mRVG29 complex has the ability to deliver DNA molecules to murine brain.** Villa-Cedillo Sheila Adela, Garza Morales Rodolfo, Zavala-Flores Laura Mireya, García-García Aracely, Rodríguez-Rocha Humberto, Loera-Arias María de Jesús, Acosta-Espinoza Esrom Jared, Soto-Domínguez Adolfo, Montes de Oca-Luna

	Roberto, Saucedo-Cárdenas Odila. Instituto Mexicano del Seguro Social, Centro de Investigación Biomédica del Noreste.
95	**Injectable Nano-Network for Curcumin/Dopamine release in treating hemiparkinsonism induced in the rat.** Carmen Goretti del Rosario Villavicencio Carvajal, Guadalupe Valverde Aguilar, Patricia Vergara Aragón. CICATA-Legaria, Instituto Politécnico Nacional
97	**Allopregnanolone promotes changes in the gene expression profile of human glioblastoma cells.** Carmen J Zamora-Sánchez, Aylin del Moral-Morales, Ana Hernández-Vega, Valeria Hansberg-Pastor, and Ignacio Camacho-Arroyo. Unidad de Investigación en Reproducción Humana, Instituto Nacional de Perinatología-Facultad de Química, UNAM
99	**Maturation, survival and activation of adult hippocampal neurons born after a focal excitotoxic damage in dentate gyrus: evaluating the anatomo-functional recovery.** Aguilar-Arredondo Andrea, Zepeda Rivera Angélica. Instituto de Investigaciones Biomédicas. UNAM
101	**Modifications in cytoskeletal and astrocyte proteins content in prefrontal cortex in a murine model of autism (C58/J strain).** Barón-Mendoza Isabel, García-Rebollar Jorge O., Díaz Georgina, Martínez-Marcial Mónica, González-Arenas Aliesha. Departamento de Medicina Genómica y Toxicología Ambiental Instituto de Investigaciones Biomédicas, UNAM
103	**Paced mating increases the expression of μ opioid receptors in the ventromedial hypothalamus.** Bedos Marie, Antaramian Anaid, Gonzalez-Gallardo Adriana, Paredes Raúl Gerardo, Departamento de Neurobiología Conductual y Cognitiva, Instituto de Neurobiología, UNAM
105	**Effects of pair bonding on cell proliferation in *Microtus ochrogaster.*** Analía Castro, Nestor Diaz, Larry J Young, Raúl G Paredes and Wendy Portillo. Laboratory of Sexual Behavior and Plasticity. Institute of Neurobiology, UNAM
107	**Dentate gyrus neurogenesis induced by pair bonding in prairie voles.** Raymundo Domínguez Ordóñez, Tania Aguilar García, Néstor Fabián Díaz, Francisco Javier Camacho Barrios, Larry J Young, Raúl Paredes Guerrero, Wendy Portillo Martínez. Instituto de Neurobiología, UNAM
109	**Effect of the decrease of prefrontal serotonin on the theta activity of the prelimbic-amygdala circuit, expressed during spatial reversal learning, in rats.** Yoana Estrada Reyes, María Esther Olvera Cortés, José Miguel Cervantes Alfaro, Miguel Ángel López Vázquez. Laboratorio de Neuroplasticidad, Universidad Michoacana de San Nicolás de Hidalgo
111	**Identification in male rats, by manganese enhanced magnetic resonance, of the neural circuits controlling sexually motivated behaviors.** Gaytán Tocavén Lorena, Ortiz Retana Juan, Martínez Gasca Deisy, Alcauter Solorzano Sarael, Paredes Raúl. Instituto de Neurobiología, UNAM
113	**Neural Correlates of Value-Based Decision-Making During Spatial Navigation in the Rat.** Andrew Gregory Howe, Kate M. Wassum, Hugh Tad Blair. Neuroscience Interdisciplinary Program (NSIDP), University of California, USA
115	**Functional and anatomical segregation of sensorimotor cortex layer 5 neurons projecting subcortically.** Olivares Moreno Rafael, Altamirano Espinoza Alain, López Hidalgo Mónica y Rojas Piloni Gerardo. Departamento de Neurobiología del Desarrollo y Neurofisiología, INB, UNAM
117	***In vivo* two-photon calcium imaging of primary visual cortex in a genetic mouse model of autism.** Ortiz Cruz Carlos Alberto, Jiménez Márquez Emiliano, and

	Ramiro Cortés Yazmín. Instituto de Fisiología Celular, UNAM
119	**Neurochemical, structural and behavioral modifications after chronic modulation of Wnt signaling in the adult hippocampus.** Abril Ortiz-Matamoros and Clorinda Arias. Departamento de Medicina Genómica y Toxicología Ambiental, Instituto de Investigaciones Biomédicas, UNAM
121	**Neural basis of bimanual coordination.** Pimentel Farfán Ana Karen, Soria Ávila, Bárbara Monserra, Hidalgo Balbuena Ana Elizabeth, Luma Annie Yolene, Peña Rangel María Teresa, Rueda Orozco Pavel Ernesto. Departamento de Neurobiología del Desarrollo y Neurofisiología, UNAM
123	**Phosphorylation of tau protein modulates hippocampal theta activity and prevents epileptiform activity.** Salas Gallardo Anahí, González Pereyra Perla, Macías Martin, Ordaz Sánchez Benito, Peña Ortega Fernando, Aguilar Vázquez Azucena, Orta Salazar Erika, Díaz Cintra Sofía and Mondragón Rodríguez Siddhartha. CONACYT National Council for Science and Technology
125	**The cortico-striatal contribution to a chain of action sequences.** Sánchez Fuentes Asai, Ramírez Armenta Kathia Itzel, Ramirez Jarquín Josué Orlando, Tecuapetla Fatuel. Instituto de Fisiología Celular, UNAM
127	**Pallidal Gaba B receptors activation: effects on the firing pattern of thalamic reticular nucleus.** Villalobos Vásquez N, Acosta Mejía M T, Villalobos Vásquez J. Academia de Fisiología, Departamento de Fisiología y Farmacología, Escuela Superior de Medicina, Instituto Politécnico Nacional
129	**Molecular characterization of the mutant *buc-1* in the nematode *Caenorhabditis elegans*.** Alvarado Serrano M, Guerrero-Sánchez MJ, Arellano-Carbajal F. Universidad Autónoma de Querétaro
131	**Effect of treatment with levetiracetam on neurotransmission dentate gyrus of rats with Temporal Lobe Epilepsy.** Julieta G. Mendoza Torreblanca, M. Sara Navarrete Hernández, M. Edna García Cruz, I. Jatziri Contreras García, Rogelio Ramírez Hernández, L. Adriana Pichardo Macías. Instituto Nacional de Pediatría
133	**An Order of Magnitude Analysis of Inositol tris-phosphate Diffusion at the Nanoscale in a Model of Peri-synaptic Astrocyte Projection.** Pavel Montes de Oca Balderas and Horacio Montes de Oca Balderas. Unidad de Neurobiología Dinámica. Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez
135	**Localization of the MCTP protein heterologously expressed in HEK-293 cells.** Eduardo Olivares Hernández. Instituto de Neurobiología, UNAM
137	**Effect of silver nanoparticles on the permeability of the brain blood barrier. Role of metallothioneins.** Guillermo Dávalos Rivas, Samuel Salazar Garcia, Gabriel Alejandro Martinez Castañón, Carmen Gonzalez. Facultad de Ciencias Químicas, UASLP