

Sociedad Mexicana  
de Bioquímica  
Neurobiología



## ***PROGRAM***

### **III Neurobiology Meeting of the Mexican Society for Biochemistry**



#### **Pre-Meeting Workshop on Computational Neuroscience**

Open House for the public / Día de Puertas Abiertas

***Gran Plaza Hotel & Convention Center, Guanajuato, México  
September 22-26, 2019***

#### **Organizing Committee:**

Ignacio Camacho Arroyo, INPer-Facultad de Química, UNAM  
Susana Castro Obregón, Instituto de Fisiología Celular, UNAM  
Octavio García, Facultad de Psicología, UNAM  
Aliesha González Arenas, Instituto de Investigaciones Biomédicas, UNAM  
Hugo Merchant, Instituto de Neurobiología, UNAM  
Silvia Solís Ortiz, Departamento de Ciencias Médicas, Universidad de Guanajuato

SUNDAY, SEPTEMBER 22

## **Pre-Meeting Workshop on Computational Neuroscience**



**Organizer:** Dr. Victor de Lafuente  
Instituto de Neurobiología, UNAM campus Juriquilla

**9:00-11:00** *Introduction to Computational Neuroscience: Matlab tools to study neurophysiological signals*

Dr. Victor de Lafuente

Instituto de Neurobiología, UNAM campus Juriquilla, México

**11:00-11:30** Coffee Break

**11:30-13:30** *Neural encoding and decoding for neuroprosthetics*

Dr. Mark Churchland

Columbia University Medical Center, USA

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**13:30-14:30**

**Lunch**

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**14:30-15:30** *Machine Learning: theoretical and practical aspects*

Dr. Mario Treviño

Instituto de Neurociencias, Universidad de Guadalajara, Jalisco, México

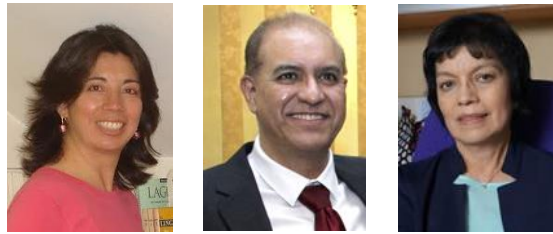
**15:30- 16:30** *Analytical tools for Magnetic Resonance Imaging*

Dr. Alonso Ramirez

Centro de Investigación en Matemáticas, CONACYT, Guanajuato, México

SUNDAY, SEPTEMBER 22

## Open House for the public / Día de Puertas Abiertas



- 10:00-14:00** *Neuronas en acción.*  
*Actividades y demostraciones dirigidas a público menor de 12 años.*  
Dra. Luz Lazos Ramírez  
Coordinadora de Divulgación y Promoción Científica del Instituto de Fisiología Celular, UNAM.
- 11:00-12:00** *¿Qué hacen las hormonas sexuales en nuestro cerebro?*  
Dr. Ignacio Camacho Arroyo  
INPer-Facultad de Química, U.N.A.M.
- 12:00-13:00** *Te enamoras con el cerebro y no con el corazón*  
Dra. Martha Silvia Solís Ortiz  
Departamento de Ciencias Médicas, Universidad de Guanajuato
- 13:00-14:00** *Demostraciones de la música en el cerebro*  
Dra. Martha Silvia Solís Ortiz  
Departamento de Ciencias Médicas, Universidad de Guanajuato
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### **General Interest**

- 16:40 – 17:00** *Research opportunities in Germany*  
Dra. Susana Castro Obregón  
Ambassador Scientist, Alexander von Humboldt-Stiftung/Foundation  
Instituto de Fisiología Celular, UNAM
- 17:00 – 17:20** *Mexican Sincrotron in Hidalgo. Research opportunities for research on neurobiology.*  
Dra. Brenda Valderrama  
Coordinator, National Scientific Committee for the Mexican Sincrotron  
Instituto de Biotecnología, UNAM

**SUNDAY, SEPTEMBER 22**

### **III Neurobiology Meeting**

**17:45-18:00**

**Welcome ceremony**

**18:00-19:00**

#### **Opening Talk**



*Movement dynamics in the motor cortex*  
Dr. Mark Churchland  
Columbia University Medical Center, USA

**19:00**

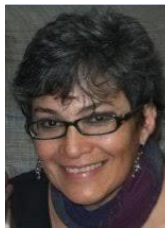
**Social hour with lite bites**

**MONDAY, SEPTEMBER 23**

**9:00-11:00**

#### **Symposium I**

##### **NEURODEVELOPMENT**



**Coordinator and chair:** Dr. Luis Covarrubias  
Instituto de Biotecnología, UNAM

*I.1 Epigenetic instructions for building the cerebral cortex*

Dr. Manuel Baizabal

Department of Neurobiology, Harvard Medical School, USA

*I.2 Phospholipid phosphatase-3, a novel marker of neural stem cells, participates in the ventricular system remodeling and adult neurogenesis in mice*

Dr. Diana Escalante

Instituto de Fisiología Celular, UNAM, México

*I.3 Development of large-scale brain networks from infancy to adulthood*

Dr. Sarael Alcauter

Instituto de Neurobiología, UNAM, campus Juriquilla, México

*I.4 Transcriptional regulation of adult hippocampal neurogenesis*

Dr. Benedikt Berninger

Center for Developmental Neurobiology, King's College, UK

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**11:00–11:30**

**Coffee Break**

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**11:30 – 12:30**

**Plenary Lecture I**



*From hidden to overt: uncovering the roles of glia in hearing and hearing loss*

Prof. Dr. Gabriel Corfas

Director Kresge Hearing Research Institute, University of Michigan, USA

**12:30–13:30**

**Oral Presentations I**

**Chair:** (Pending)

12:30 – 12:45 Speaker 1

12:45 – 13:00 Speaker 2

13:00 – 13:15 Speaker 3

13:15 – 13:30 Speaker 4

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**13:30 -15:00**

**Lunch**

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**15:00–17:00**

**Symposium II**

**NEUROBIOLOGY OF FEEDING IN HEALTH AND DISEASE**



**Chair:** Dr. Yazmin Macotela

Instituto de Neurobiología, UNAM, campus Juriquilla, México

**Coordinator:** Dr. Ranier Gutiérrez

Laboratorio de Neurobiología del Apetito, Departamento de Farmacología, CINVESTAV, México

*II.1 Striatal integration of food reward and satiety*

Dr. Luis Tellez

Instituto de Neurobiología, UNAM campus Juriquilla, México

*II.2 A neural circuit for gut-induced reward*

Dr. Ivan de Araujo

Icahn School of Medicine at Mount Sinai, New York City, USA

*II.3 A hypothalamic-BNST circuit regulates delay discounting in decision making*

Dr. Henry H. Yin

Duke University, USA

*II.4 Lateral hypothalamus GABAergic neurons encode sucrose's palatability*

Dr. Ranier Gutiérrez

Laboratorio de Neurobiología del Apetito, Departamento de Farmacología, CINVESTAV, México

**17:00 – 17:05**

**1 min talks for poster advertisings**

**17:05 – 19:00**

**Poster Session I (Even numbers)**

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**20:00 -**

**“Callejoneada”, Guanajuato sightseeing**

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## **TUESDAY, SEPTEMBER 24**

**9:00 – 11:00**

### **Symposium III**

#### **CEREBRAL TUMORS**



**Chair:** Dr. Liliana Quintanar

Departamento de Química, CINVESTAV, México

**Coordinator:** Dra. Aliesha González Arenas

Instituto de Investigaciones Biomédicas, UNAM, México

*III.1 The role of renin-angiotensin in gliomas*

Dr. Talia Wegman

Instituto Nacional de Cancerología, México

*III.2 Supportive role of microenvironment in brain tumor initiation and progression*

Dr. Zeng-jie Yang

Philadelphia Fox Chase Cancer Center, USA

*III.3 Gas1 as a tool for experimental glioma therapy*

Dr. José Segovia

CINVESTAV, México

*III.4 Topoisomerase II and gliomas: Regulation of transcription and personalized application of chemotherapy*

Dr. Adam Sonabend

Northwestern Chicago, Illinois, USA

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**11:00 – 11:30**

**coffee break**

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**11.30 – 12:30**

**Plenary Lecture II**



*Dissociable dopamine dynamics for learning and motivation*  
Dr. Joshua Berke  
UCSF Center for Integrative Neuroscience, USA

**12:30 – 13:30**

**Oral Presentations II**

**Chair:** (Pending)

12:30 – 12:45 Speaker 1  
12:45 – 13:00 Speaker 2  
13:00 – 13:15 Speaker 3  
13:15 – 13:30 Speaker 4

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**13:30 – 15:00**

**Lunch**

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**15:00 – 17:00**

**Symposium IV**

**NEURAL NETWORKS**



**Chair:** Dr. Silvia Solís Ortíz  
Universidad de Guanajuato, México  
**Coordinator:** Dr. Angélica Zepeda  
Instituto de Investigaciones Biomédicas, UNAM, México

*IV.1 Imprinting and recalling cortical ensembles*

Dr. Luis Carrillo Reid  
Instituto de Neurobiología, UNAM, campus Juriquilla, México

*IV.2 Heterosynaptic structural plasticity of adult born granule cells*

Dr. Stephan Schwarzscher  
Goethe-Universität, Frankfurt am Main, Germany



*IV.3 The influence of spatial learning on adult hippocampal neurogenesis*

Dr. Nora Abrous

Neurocentre Magendie, Bordeaux, France

*IV.4 Intracortical and corticostriatal circuits for sensory processing and behavior*

Dr. David Margolis

Department of Cell Biology and Neuroscience, Rutgers University, USA

**17:00 – 17:05**

**1 min talks for poster advertisings**

**17:05 – 19:00**

**Poster Session II (Odd numbers)**

WEDNESDAY, SEPTEMBER 25

**9:00 – 11:00**

**Symposium V**

**COGNITIVE NEUROBIOLOGY**



**Chair:** Dr. Adán Domínguez Vargas

Escuela Nacional de Estudios Superiores Unidad León, UNAM, México

**Coordinador:** Dr. Francisco Sotres Bayón

Instituto de Fisiología Celular, UNAM, México

*V.1 Brainstem-to-amygdala control of emotional associative learning*

Dr. Joshua Johansen

RIKEN Center for Brain Science, Japan

*V.2 Cortico-striatal contribution to the execution of a chain of sequences*

Dr. Fatuel Tecuapetla

Instituto de Fisiología Celular, UNAM, México

*V.3 Neural basis of bilaterally coordinated actions*

Dr. Pavel Rueda-Orozco

Instituto de Neurobiología, UNAM, campus Juriquilla, México

*V.4 Prefrontal control of conflict choice behavior*

Dr. Francisco Sotres Bayón

Instituto de Fisiología Celular, UNAM, México

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**11:00 – 11:30**

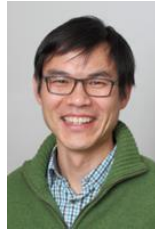
**coffee break**

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**11:30 – 12:30**

**Plenary Lecture III**



*Transcriptional regulation of adult hippocampal neurogenesis*

Dr. Chichung Lie

Institut für Biochemie, Friedrich-Alexander Universität Erlangen-Nürnberg, Germany

**12:30 – 13:30**

**Oral Presentations III**

**Chair:** (Pending)

12:30 – 12:45 Speaker 1

12:45 – 13:00 Speaker 2

13:00 – 13:15 Speaker 3

13:15 – 13:30 Speaker 4

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**13:30 – 15:00**

**Lunch**

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**15:00 – 16:00**

**Closure Lecture**



*The neural code*

Dr. Ranulfo Romo

Instituto de Fisiología Celular, UNAM

El Colegio Nacional de México

USA National Academy of Sciences

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**16:00 – 16:30**

**Closing Ceremony**

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**17:00 – 18:00**

**Having a beer with...**

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**18:00 – 18:30**

Business meeting

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**20:00 -**

**Farewell Dinner**

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THURSDAY, SEPTEMBER 26

**9:00 - 11:00**      **Breakfast**  
Talks with Speakers

**12:00**              **Departure**