XXXIII CONGRESO ANUAL SAN 2018 CORDOBA – ARGENTINA 24 AL 26 DE OCTUBRE

PRE-CONGRESS COURSE "NEUROBIOLOGY OF DRUG ADDICTION"

SAN IBRO LARC Course and ISN Small Conference (ISN-CC) Associated to the XXXIII SAN 2018 Meeting

October 22nd -23rd, 2018

Ciudad Universitaria, Córdoba, Argentina

ORGANIZER:

Dr. Liliana M. Cancela. *IFEC-CONICET, Full Professor, Department of Pharmacology, School of Chemical Sciences, Universidad Nacional de Córdoba.*

COORDINATOR:

Dr. Flavia Bollati. IFEC-CONICET, Assistant Professor, Department of Pharmacology, School of Chemical Sciences, Universidad Nacional de Córdoba.

COLABORATORS:

Dr. Verónica Álvarez (USA)
Dr. María Estela Andrés (Chile)
Dr. Bruno Averbeck (USA)
Dr. Rudy Bernabeu (Argentina)
Dr. Martine Cador (Francia)
Dr. Peter W. Kalivas (USA)
Dr. Silvia Cruz (México)
Dr. Juan Carlos Molina (Argentina)
Dr. Gabriela Paglini (Argentina)
Dr. Mariela Pérez (Argentina)
Dr. Marcelo Rubinstein (Argentina)
Dr. Mirian Virgolini (Argentina)

LOCATIONS:

-Salón Auditorio, Edificio Integrador, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba.
-Salón de Actos Pabellón Argentina, Ciudad Universitaria, Córdoba, Argentina

WORKSHOP *Homage to Ricardo Miledi*
"Workshop: Past, Present and Beyond of Synaptic Transmission"

Previous and satellite activity of the XXXIII Annual Congress of the Argentine Society of Neuroscience Research – SAN

October 22th – 23th, 2018 – Instituto Martín y Mercedes Ferreyra, Córdoba

LOCATION:
Instituto de Investigaciones Médicas
Mercedes y Martín Ferreyra (INIMEC)
Ciudad de Córdoba, República Argentina

ORGANIZING COMMITTEE:
Dr. Joaquín Piriz
Dr. Juan D. Goutman
Dr. Daniel J. Calvo
Dr. Osvaldo Uchitel

SPEAKERS:
Piotr Bregestovski (France)
Ataúlfo Martínez Torres (México)
Carlos Matute (Spain)
Ian Parker (USA)
Angela Vincent (UK)
Cecilia Bouzat (Argentina)
Daniel J. Calvo (Argentina)
Juan D. Goutman (Argentina)
Antonia Marín-Burgin (Argentina)
Osvaldo Uchitel (Argentina)

Pre-Congress Activities

Monday, October 22nd
09:00 – 18:00 PRE-CONGRESS COURSE "Neurobiology of Drug Addiction" / *Auditorio Ciencias I Facultad de Ciencias Químicas – UNC*

14:00 – 18:00 WORKSHOP Ricardo Miledi / *Instituto de Investigación Médica M y M Ferreyra (INIMEC-CONICET-UNC)*
Tuesday, October 23rd
09:00 – 18:00 PRE-CONGRESS COURSE "Neurobiology of Drug Addiction" / *Auditorio Ciencias I Facultad de Ciencias Químicas – UNC*

10:00 – 18:00 WORKSHOP Ricardo Miledi / *Instituto de Investigación Médica M y M Ferreyra (INIMEC-CONICET-UNC)*

14:00 – 18:00 REGISTRATION / *Pabellón Argentina, UNC.*
16:00 – 19:00 OPEN HOUSE: Neuroscience for Community / *Salón de Actos. Pabellón Argentina*

XXXII Congress of the Argentine Society for Research in Neuroscience

October 24th – 26th, 2018
Pabellón Argentina, Ciudad Universitaria, UNC

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Vocal

Estela Maris Muñoz, IHEM-CONICET, Universidad Nacional de Cuyo
Vocal

Javier Ramos, Instituto de Biología Celular y Neurociencia "Prof. E. De Robertis", CONICET-UBA
Vocal

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CIQUIBIC CONICET-Universidad Nacional de Córdoba

Dr. Pablo Lopez,
Instituto de Investigación Medica Mercedes y Martin Ferreyra, CONICET

PROGRAM

DAY 1 / Wednesday, October 24th

07:30 – 08:15 Registration
08:25 – 08:30 Welcome by Organizers
08:30 – 10:30 SYMPOSIUM I / *Room A*

"**Neurobiology of drug addiction**"
Chairs: *Liliana M. Cancela; Marcelo Rubinstein*

Dissecting the roles of dopamine D2 receptors in the basal ganglia and motivated behaviors
Verónica Álvarez
Laboratory on Neurobiology of Compulsive Behaviors. National Institute on Alcohol Abuse and Alcoholism, USA

Opiate withdrawal memories: Behavior and neural network
Martine Cador
Université Bordeaux, France

Neural systems underlying reinforcement learning
Bruno Averbeck
Laboratory of Neuropsychology, NIMH/NIH, USA

Using the Neurobiology of Willpower to Treat Drug Addiction
Peter W Kalivas
Medical University of South Carolina, USA.

10:30 – 11:00 Coffee Break

11:00 – 12:00 OPENING LECTURE / *Room A*
Tubulin tyrosination-detyrosination cycle : key role in neuronal functions
Annie Andrieux,
Univ. Grenoble Alpes, France

12:30 Lunch with activities:

P29.-Characterization of the antagonistic actions of histamine on homomeric GABAAρ1 receptors

Andrea N. Beltrán González, Manuel I. López Pazos, Daniel J. Calvo

Laboratorio de Neurobiología Celular y Molecular. INGEBI-CONICET

Presenting author: **Daniel Juan Calvo**, *danieljcalvo@gmail.com*

Histamine may exert its effects not only through its canonical (G-protein coupled) receptors, but also by other mechanisms which are currently being studied. It was shown that histamine can modulate the activity of different ligand-gated ion channels including several subtypes of GABAA receptors. For example, it gates homomeric GABAAβ2-3 and acts as a positive modulator on heteromeric GABAAα1-5β2γ2 receptors, but its effects on GABAAρ1 receptors had never been studied before. We previously reported that histamine inhibited GABAAρ1 receptor responses in a dose-dependent, reversible and voltage-independent manner. This was the first evidence of histamine mediating an inhibitory action on a ionotropic GABA receptor and contributed to explore the role of histamine in the retina. In the present study we analyzed the mechanism of action involved in this modulation. GABAAρ1 receptors were expressed in Xenopus laevis oocytes and GABA-evoked chloride currents recorded by two-electrode voltage-clamp. Dose-response curves for GABA performed in the presence of histamine were shifted to the right, with no changes in the slope, nHill or maximum response. No use dependent effects were observed. These results are compatible with a competitive antagonism operating on the GABAAρ1 receptors. Computational docking studies and single-oocyte binding assays with tritiated GABA are being conducted to confirm the mechanism of action proposed here.
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