

SAN2020 E-BOOK

Welcome

*In the context of the COVID19 pandemic, the XXXV Annual Meeting of the Argentinian Society for Neuroscience Research took place under a **virtual** format, opening an opportunity to widely reach the neuroscience community in Argentina and abroad.*

*Conserving the classical structure the meeting included **plenary lectures, symposia, young investigator talks** and **poster presentations**, as well as **round tables** discussing career advancement, work environment topics and a special event dedicated to LATBrain (Latin American Brain Initiative).*

*The meeting was supported, as every year, on the principles of **scientific excellence** and **nationwide representation**, with a special emphasis in gender equality.*

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Code of conduct

All attendees are required to agree with the following code of conduct. Organizers will enforce this code throughout the event. We expect cooperation from everyone to help ensure a safe environment for everybody.

No unauthorized Recording:

*While some presentations may be recorded by the organizers for on demand broadcast with permission from presenters, **it is not allowed for attendees to record sessions**. This restriction applies to all the scheduled events in the conference including chat interactions.*

If you become aware of someone making unauthorized recordings, please contact to congresosan2020@gmail.com immediately.

Any person or organization recording without authorization may be subject to legal actions by the affected presenter, the organizations they are affiliated with, or by SAN.

SAN Congress material, including videos, will be available only for those registered to the congress and will not be archived, uploaded to the networks or broadcasted via streaming unless explicitly allowed by the speakers in writing. Videos whose presenters did not consent to be uploaded to the congress website will be deleted immediately once the activity is over.

SAN adheres to the copyright laws guiding the appropriate sharing of scientific research material, including data.

Do not share links, slides, poster material or audio/video with unregistered attendees.

Individuals should register for the event individually. Sharing access links makes the conference more prone to unwanted disruptions. Sharing login credentials or access links will result in an automatic ban from the conference.

Conference Best Practices:

All communication must be carried out in a professional and respectful manner. Live sessions will be moderated and disrespectful messages will not be tolerated.

SAN encourages open intellectual discussion in a welcoming and inclusive environment. Inappropriate behavior, harassment or offensive acts towards any member of the community is strictly prohibited and will result in removal from the conference and a report to the host institution of the removed attendee will be issued. Be friendly, welcoming and respectful. When discussing with colleagues, disagreement is an unavoidable occurrence and it is important that all discussions are carried out in good faith and seen as an opportunity to improve others and our own work. Be mindful of the tone and words you choose to communicate with others. Inappropriate behavior can be reported to congresosan2020@gmail.com.

Program

	Oct 7	Oct 8	Oct 9
9:00 - 11:00	Symposia Wed-S1 to Wed-S4: Beckwith & de la Fuente, Falzone & Jerusalinsky, Kochen, Rayes.	Symposia Thu-S5 to Thu-S9: Amador, Bellini, Bianchi & Kamienkowski, Locatelli & Sumbre, Rossetti.	Symposia Fri-S10 to Fri-S14: Espósito & Morgenstern, Goldin, Pigino, Berardino & Sonzogni, Tagliazucchi
11:30 - 12:30	"Eduardo De Robertis" Plenary Lecture Gustavo Murer: What mechanisms underlie Parkinson's disease symptoms?	Plenary Lecture: Zhigang He: From axon regeneration to function recovery after CNS injury	Plenary Lecture: Tracy Bale: 50 years since Leloir's Nobel: Maternal stress and energy signals critical to neurodevelopment.
12:30 - 13:30			
13:30 - 14:30	Políticas de Ciencia y Técnica en Argentina	Latbrain Initiative	IBRO LARC CEPAL: Gender Survey Results
14:30 - 15:30	Young Investigator Talks: Wed-YIT-1 to Wed-YIT-4	Young Investigator Talks: Thu-YIT-5 to Thu-YIT-8	Oral Communications
16:00 - 17:00	Plenary Lecture: Kay Tye: Neural Representations of Social Homeostasis	"Hector Maldonado" Plenary Lecture: Sheena Josselyn: Making memories in mice.	"Ranwell Caputto" Plenary Lecture: Juana Pasquini: Cinco décadas de Neurociencias en América Latina: Siguiendo los pasos de Ranwel Caputto
17:00 - 19:30	E-Poster Session 1	E-Poster Session 2	E-Poster Session 3
19:30 - 21:00	Looking for a postdoc abroad? Tips for international postdoc interviews.	Asamblea SAN	

E-Posters

NEURAL CIRCUITS AND SYSTEMS NEUROSCIENCE

KCNQ4 in the reticular activating system (RAS): contribution to the circadian rhythm modulation.

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The M-current is a voltage-gated potassium current generated by channels composed by KCNQ2-5 subunits. The pedunculo pontine nucleus (PPN) is part of the Reticular Activating System (RAS), associated with sleep regulation. As little is known about the composition, subcellular location and physiological implication of the M-current in PPN, our aim was to demonstrate the presence of KCNQ4 in the PPN, and its contribution to the neuronal function of this nucleus. We used a transgenic mouse lacking KCNQ4 expression (KO) and one with fluorescent-labeled cholinergic neurons (tdTomatoStop+ChAT::Cre). Using qPCR, immunofluorescence and electrophysiology on brain slices, we demonstrated that only a subpopulation of cholinergic neurons (around 27%), located on the external limits of the PPN has KCNQ4-mediated M-current. We also found that KCNQ4 regulates the expression of other KCNQ subunits. In KO mice, the expression profile changed drastically respect with the WT: Kcnq2 expression decreased, Kcnq3 increase and Kcnq5 disappeared. To study the influence of KCNQ4 on circadian rhythm we used behavioral testing. KO mice exhibited alterations in the activity cycles showing a higher sensitivity to changes in the light-darkness cycles. In summary, we found that some PPN cholinergic neurons have KCNQ4-dependent M-current and this subunit contributes to modulate the circadian rhythm. Since the PPN is affected in certain neurological diseases, KCNQ4 might be a potential pharmacological target.