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PROGRAM

	OCT 18	OCT 19	OCT 20	OCT 21	OCT 22
09:00 11:00		SYMPOSIA Tue-S1 to Tue-S3: Alba, Bisig, Biurrun&Coronel	OC SESSIONS (OC1- OC4)	SYMPOSIA Thu-S7 to Thu-S9: Kaczer, Pallares, Setton	YOUNG INVESTIGATORS TALKS Fri-YIT4 to Fri-YIT5
11:00 11:30	Opening Words (Cancela) "EDUARDO DE ROBERTIS"		☕ Biobreak		
11:30 12:30	LECTURE Rita Raisman-Vozari (Chairs: Ferrario, Antonelli, Stahl)	PLENARY LECTURE Peter Kalivas (Chairs: Cancela, Pacchioni, Pautassi, Coll)	PLENARY LECTURE Andrea Nistri (Mazzone, Unsain)	PLENARY LECTURE Maria Dolores Ledesma (Sodero, Adamo)	E-SOCIAL Scientific publications: Journals and editorial policies (Rayes, Zorrilla, Ceriani) Gender inequities and inequalities around the world (Antonelli, Murta)
12:30 13:00	☕ Biobreak				
13:00 14:00	E-SOCIAL Co-authorship network structure and gender inequalities of the Argentine neuroscientific community (Bekinstein, Fernandez)				
14:00 16:00	E-POSTER SESSIONS (PS1 - PS3)	E-POSTER SESSIONS (PS4 - PS7)	SYMPOSIA Wed-S4 to Wed-S6: Rela, Echeveste&Samengo, Wilson&Moyano	E-POSTER SESSIONS (PS8 - PS10)	SYMPOSIA Fri-S10 to Fri-S11: Durand, Monteleone&Brocco
16:00 16:30	☕ Biobreak				
16:30 17:30	YOUNG INVESTIGATORS TALKS Mon-YIT1 to Mon-YIT3	PLENARY LECTURE Silvia Bunge (Andreau, Brocco)	PLENARY LECTURE Vivian Budnik (Rayes, Contin)	PLENARY LECTURE M. Laura Feltri (Setton, López)	"RANWELL CAPUTTO" LECTURE Carlos Dotti (Chairs: Cancela, Guido, Sodero, Fernández)
17:30 18:00	☕ Biobreak				
18:00 19:30	E-SOCIAL Navigating the gray areas to do Neuroscience (Mazzone, Rayes)	E-SOCIAL Socio-environmental modulation of cognitive processes (Fernandez Larrosa, Andreau)	E-SOCIAL Looking for training abroad? Tips for international interviews (Zorrilla, Beckwith, Fernandez)	ASAMBLEA SAN Elecciones	E-SOCIAL Neuro-cine (Ferrario, Avale)

The ketone body β -hydroxybutyrate (β HB) rescues behavioral defects in DAF-18/PTEN mutants of *C. elegans*

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Mutations in the phosphatase and tensin homolog (PTEN) gene, a negative regulator of the Akt/PKB pathway, are associated with neurodevelopmental disorders (NDDs). In recent years, ketogenic diets (KGDs) have been shown to have beneficial behavioral effects in animal models of NDDs. Ketogenic diets trigger a metabolic shift by forcing the production of ketone bodies (KBs) to generate ATP. The mechanisms underlying the beneficial effects of KGDs on NDDs are unknown. Here we used *daf-18/PTEN* mutants of *C. elegans* to gain molecular and cellular insights into the effects of KGDs on neurodevelopment. We find that these mutants are defective in exerting a complex behavior such as the escape response. These behavioral defects improve in animals cultured in the presence of KB β -hydroxybutyrate (β HB). Surprisingly, exposure to β HB at early stages is sufficient to achieve this improvement throughout adulthood, suggesting that β HB is necessary at a critical stage of development. We have also found that the effect of β HB is abolished in *daf-16/FOXO* mutants, revealing a key role for this transcription factor. Finally, we observed morphological defects in GABAergic motor neurons in *daf-18* mutants. We are exploring whether exposure to β HB can amend these abnormalities. Given the high level of conservation of the pathways involved (PTEN/AKT/FOXO) across the animal kingdom, this work could contribute to better understand NDDs and establishing potential therapeutic options in mammals.