



SENC

Sociedad Española de NeuroCiencia

**Third
Cajal Winter Conference**

**Mental Illness:
From Genes to Treatment**

March 19-23, 2007
Benasque, Huesca (Spain)

Final Programme

The Sociedad Española de NeuroCiencia (SENC) announces the celebration of the Third **Cajal Winter Conference**. The aim of this series of Conferences is to bring together specialists in a given area of Neuroscience to present their recent data and discuss with world leaders in the field on common interests in an open, informal atmosphere.

Committees

SENC

José María Delgado García, *President*
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Cajal Winter Conferences

Francesc Artigas, *chair*
Roberto Gallego
Salvador Martínez
Alberto Ferrús
Javier Cudeiro
Jesús García-Sevilla



Venue and accommodation

Benasque is a nice mountain village near the highest peak in Pyrenees, Monte Aneto (3404 m) with the ski resort of Cerler at 6 km. The Benasque valley offers unique mountain landscapes and the opportunity for strolling and hiking along many trails as well as visiting interesting ancient houses and churches .

The Conference will take place in the Casa de Cultura of the Benasque City Hall, in the center of the village, very close to the hotels. The conference room is equipped with standard projection. The main hotel will be Hotel Ciria (Ave. los Tilos s/n, phone +34 974 551612, fax +34 974 55 10 80; e-mail: hotelciria@hotelciria.com), Dinners for all participants will take place at the Hotel Ciria.



Registration

Registration costs include the conference fee for participants (170 €) plus accommodation expenses (check-in March 19, check-out March 23). These are as follows (for participants and accompanying persons)

- **Double room, single occupancy: 340 €**
- **Double room: 200 €/person**
- **Triple room: 190 €/person**
- **Quad room (penthouses): 180 €/person**

Thus, the total cost of a participant wishing to stay in a double room with single occupancy is 510 €. Separate receipts can be made on request for the conference and accommodation expenses. The SENC will take care of accommodations only during the conference days. Those participants or accompanying persons who wish to stay in the same hotel before or after the Conference must contact Hotel Ciria directly for these extra days (phone 974 551612, fax 974 55 10 80; e-mail: hotelciria@hotelciria.com).

Cancellation

Cancellations made before March 1 will be fully refunded. Those after that date will be refunded by 80%. Cancellation notice should be sent to the secretary of SENC at senc@uam.es.



Conference Programme

Monday March 19

16:00-20:30 **Registration**

21:00 **Dinner**

Tuesday March 20

15:15 F Artigas. *Welcome address*

15:30 **Oral communications.** *Chair: J Cudeiro*

15:30 R Benavides-Piccione, I Ballesteros-Yáñez, S Knafo, M Dierssen, J de Felipe. *Pathology and plasticity of dendritic spines*

16:00 J Orejarena, JM Trigo, P Robledo, R Maldonado. *Neurobiological mechanisms involved in the addictive properties of MDMA*

16:30 X Gallego, P Murtra, T Zamalloa, J Pineda, R Maldonado, M Dierssen. *Increased activity of the locus coeruleus is not necessary to produce behavioural withdrawal signs in a mouse model overexpressing TrkC receptor*

17:00 **Plenary lecture**

George F Koob. Neurobiology of addiction

18:00 **Coffe break**

18:30 **Oral communications.** *Chair: R Moratalla*

18:30 A Verdejo-García. *Profile of executive deficits in cocaine and heroin polysubstance users: Common and differential effects on separate executive components and brain function*

19:00 J Riba, MJ Barbanoj. *Studies on the biological correlates of hallucinogen-induced effects in humans*

19:30 **Poster session**

21:00 **Dinner**

Wednesday March 21

15:30 **Oral communications.** *Chair: F Viana*

15:30 J Cudeiro, C Rivadulla, X Mariño, C de Labra, N Espinosa. *Neuromodulatory mechanisms operating in the corticothalamic feedback*

16:00 R Moratalla, N Pavón, S Darmopil, V C Muñetón. *Molecular correlates of L-DOPA-induced dyskinesia: Role of dopamine receptors*

16:30 L Kargieman, N Santana, G Mengod, P Celada, F Artigas. *Antipsychotic drugs reverse the disruption in prefrontal cortex function produced by the NMDA receptor antagonist phencyclidine*

17:00 **Plenary lecture**

Anthony A. Grace. Neurobiology of schizophrenia

18:00 **Coffe break**

18:30 **Oral communications.** *Chair: R Benavides-Piccione*

18:30 X López-Gil, Z Babot, C Suñol, F Artigas, A Adell. *Clozapine blocks the increases in 5-HT and glutamate induced by systemic MK-801. Comparison with haloperidol*

19:00 A Bortolozzi, L Díaz-Mataix, C Scorza, J Gringich, F Artigas. *Clozapine modulates DA release in medial prefrontal cortex by a 5-HT_{2A} receptor-independent mechanism*

19:30 **Poster session**

21:00 **Dinner**



Thursday March 22

15:30 **Oral communications.** *Chair: F Artigas*

15:30 R Vidal, E Castro, R Mostany, A Martín, A Pazos. *Chronic fluoxetine induces down-regulation of 5-HT₄ receptors in rat hippocampus*

16:00 E Castillo-Gómez, M A Gómez-Climent, R Guirado, E Varea, J M Blasco-Ibáñez, C Crespo, F J Martínez-Guijarro, J Nàcher. *Dopamine modulates the expression of neuronal structural plasticity-related molecules in the medial prefrontal cortex of adult rats*

16:30 J Nàcher, E Varea, E Castillo-Gómez, M A Gómez-Climent, R Guirado, J M Blasco-Ibáñez, C Crespo, F J Martínez-Guijarro. *NMDA receptors and neuronal structural plasticity in the adult CNS. Putative implication in mood disorders*

17:00 **Plenary lecture**

Trevor W Robbins. Models of cognitive dysfunction in neuropsychiatric disorders; the neuromodulation of fronto-striatal systems

18:00 **Coffee break**

18:30 **Oral communications.** *Chair: R Gallego*

18:30 A Guadaño-Ferraz, A Montero-Pedrazuela, I Fernández-Lamo. *Thyroid hormone action in adult brain*

19:00 J Serrano, A Martínez. *Expression of microRNAs in cerebrovascular diseases*

19:30 **Poster session**

21:00 **Dinner**



Poster presentations

Posters must be mounted on the boards on Monday 19 or Tuesday 20 and will remain on display during the whole conference. Authors should be at their posters at the end of oral sessions.

Poster size is **90 cm x 140 cm (portrait)**

P1. L Galeote, R Maldonado, F Berrendero. *Kappa-opioid receptors, but not dynorphin, participate in the development of tolerance to nicotine-induced antinociception*

P2. A Ortega-Alvaro, O Ortiz, N Granado, J M Solis, D Grandy, J Mico, R Moratalla. *Dopamine D₄ receptors impair spatial learning and memory in aged mice, as suggested by their performance in the Morris water maze and radial arm maze*

P3. P Vázquez-Borsetti, P Celada, R Cortés, F Artigas. *Simultaneous projections from prefrontal cortex neurons to the midbrain serotonergic and dopaminergic nuclei*

P4. A Castañé, A Bortolozzi, F Artigas. *Cortical dopamine and serotonin release in a pharmacological model of schizophrenia. Involvement of 5-HT_{1A} receptors*

P5. L Lladó, F Artigas, P Celada. *The 5-HT_{1A} paradox: why 5-HT inhibits and 8-OH-DPAT activates pyramidal neurons in prefrontal cortex through 5-HT_{1A} receptors?*

P6. M Masana, F Artigas, A Bortolozzi. *Differential regulation of extracellular dopamine levels in the mesocortical and mesolimbic pathways*

P7. S Gascón, M Sobrado, J M Roda, A Rodríguez-Peña, M Díaz-Guerra. *Excitotoxicity and focal cerebral ischemia induce truncation of the NR2A and NR2B subunits of the NMDA receptor and cleavage of the scaffolding protein PSD-95*

P8. N Granado, O Ortiz, L M Suárez , E D Martín, V Ceña, J M Solís, R Moratalla. *D₁ but not D₅ dopamine receptors are critical for LTP, spatial learning*

P9. A Rodríguez-Gaztelumendi, M L Rojo, A Pazos, A Díaz *Autoradiographic study of the density and functionality of 5-HT_{1A} receptors in the brain of the olfactory bulbectomized rat and the modulation by chronic fluoxetine*

P10. A Rodríguez-Gaztelumendi, E Marrón, M L Rojo, J M Castillo, E M Valdizán, A Pazos, A Díaz. *Altered endocannabinoid-dependent signalling in the prefrontal cortex of an animal model of depression: reversion by chronic fluoxetine*

P11. C Obradors, M Martínez de Lagrán, M Dierssen. *Study of the impact of TrkC overexpression in neuritogenesis: a neuromorphometrical approach in cortical primary cell cultures*

P12. G Azkona, M Martínez de Lagrán, D Toiber, H Soreq, M Dierssen *Neurodegenerative pattern in the cholinergic system of TgDyrk1A mice*

P13. R Martínez-Murillo, A Martínez *Standardization of an orthotopic mouse brain tumor model following transplantation of CT-2A astrocytoma cells*

P14. M A Gómez-Climent, E Castillo-Gómez, R Guirado, E Varea, J M Blasco-Ibáñez, C Crespo, F J Martínez-Guijarro, J Nàcher. *Phenotype of PSA-NCAM expressing cells in the temporal lobe*

P15. R Madrid, A Mälkiä, T Donovan-Rodriguez, V Meseguer, M Valero, M C Acosta, C Luna, C Belmonte, F Viana . *Pharmacological dissection of TRPM8 contribution to thermal responses in mammalian peripheral cold thermoreceptors*

P16. I Fernández-Lamo, A Montero-Pedrazuela, A Gruart, C Venero, J M Delgado-García, A Guadaño-Ferraz. *Thyroid hormone deficiency in the adult brain: implications in learning and memory*

P17. A Palomino, A González-Pinto, O Oyanguren, A Aldama, C González-Gómez, F Mosquera, C Matute. *Glutamate plasma levels and polymorphisms in glutamate -related genes in schizophrenia and bipolar disorder patients*

P18. A Gutiérrez-Fernández, A González-Pinto, O Oyanguren, A Aldama, C González-Gómez, F Mosquera, C Matute. *Expression of myelin basic protein and the oligodendrocyte gene CNPase in peripheral blood lymphocytes and SNPs in the neuregulin-1 gene in patients with first-psychotic episode*



A group of participants at the
Second Cajal Winter Conference (March 2006)