

**10ª Reunión Anual**  
**Sociedad Española de Investigación sobre**  
**Cannabinoides**  
**Santander, 26 a 28 de noviembre de 2009**

**Programa científico de la Reunión**

**Jueves, 26 de noviembre**

- 11:00-12:30**      **Entrega de documentación**
- 12:30**              **Inauguración**
- Luís María Truán Silva, Consejero de Sanidad del Gobierno de Cantabria
  - José Carlos Gómez Sal, Vicerrector de Investigación y Tránsito del Conocimiento, Universidad de Cantabria
  - Ángel Pazos, Presidente del Comité organizador local
  - Javier Fernández-Ruiz, Presidente de la SEIC
- 13:00-14:00**      **Conferencia Inaugural** (presentada por Ángel Pazos)  
Dra. Cecilia Hillard, Medical College of Wisconsin, Milwaukee, USA:  
"Endocannabinoids and allostasis"
- 14:00**              **Comida**
- 16:00**              **Presentación del libro** "Actualización sobre el potencial terapéutico de los cannabinoides" (José Antonio Ramos)
- 16:30-18:00**      **Mesa Redonda:** "Cannabis y trastornos psiquiátricos: del laboratorio a la clínica" (moderadores: Koldo Callado y Rafael Franco)
- Benedicto Crespo-Facorro, Universidad de Cantabria y Hospital Universitario Marqués de Valdecilla
  - Ismael Galve-Roperh, Universidad Complutense
  - Ángel Pazos, Universidad de Cantabria
- 18:00-18:30**      **Café**

- 18:30**                    **Comunicaciones orales**
- 18:30                    O-0.1  
CANNABIS CONSUMPTION IS RELATED TO BETTER PREMORBID ADJUSTMENT AND COGNITIVE PERFORMANCE ON FIRST EPISODE SCHIZOPHRENIA PATIENTS. J.M. Rodríguez-Sánchez; I. Mata; R. Ayesa-Arriola; A. Pazos; E. Valdizán; J.L. Vázquez-Barquero; C. González Blanch-Bosch; B. Crespo-Facorro.
- 18:45                    O-0.2  
EFFECTS OF CANNABIS CONSUMPTION IN SUBCLINICAL POSITIVE PSYCHOTIC EXPERIENCES. L. Hernández; J.L. Rubio; M. Ruiz-Veguilla.
- 19:00-19:30**           **Discusión general**
- 21:00**                    **Recepción ofrecida por el Excmo. Ayuntamiento de Santander en el Palacio de Exposiciones y Congresos**

**Viernes, 27 de noviembre**

- 09:00**                    **Presentación 1ª Sesión de comunicaciones orales**  
(moderadores: Rafael Rodríguez Puertas, Elena Castro)
- 09:15-10:30**           **1ª Sesión de comunicaciones orales: "Señalización cannabinoide en el sistema nervioso"**
- 09:15                    O-1.1  
THE INVERSE AGONIST EFFECT OF RIMONABANT ON G-PROTEIN ACTIVATION IS NOT MEDIATED BY THE CB1 RECEPTOR: EVIDENCE FROM HUMAN POSTMORTEM BRAIN. A.M. Erdozain; R. Diez-Alarcia; J.J. Meana; L.F. Callado.
- 09:30                    O-1.2  
DENDRITIC TERRITORIES DIVERSIFY ENDOCANNABINOID PLASTICITY. N. Puente; I. Elezgarai; L. Reguero; P. Grandes; O.J. Manzoni.
- 09:45                    O-1.3  
SYNAPTIC DOMAINS OF THE CB1 CANNABINOID RECEPTORS IN THE VENTROMEDIAL HYPOTHALAMIC NUCLEUS OF CONDITIONAL MUTANT MICE. L. Reguero; I. Elezgarai; N. Puente; G. Marsicano; P. Grandes.
- 10:00                    O-1.4

- CB1 CANNABINOID RECEPTOR REGULATION OF PYRAMIDAL NEURONAL SPECIFICATION IN THE DEVELOPING CEREBRAL CORTEX. J. Díaz; T. Aguado; J. Palazuelos; C. Rosado-Ballester; K. Monory; G. Marsicanno; B. Lutz; H.C. Lu; M. Guzmán; I. Galve-Roperh.
- 10:15 O-1.5  
ENDOCANNABINOIDS MEDIATE NEURON-ASTROCYTE COMMUNICATION. A. Araque; L. Maglio.
- 10:30-12:00** **Café y sesión de pósters**
- 12:00** **Presentación 2ª Sesión de comunicaciones orales**  
(moderadores: Ángel Arévalo, Alfonso Araque)
- 12:15-13:30** **2ª Sesión de comunicaciones orales: "Cannabinoides y neuroprotección: hipoxia-isquemia"**
- 12:15 O-2.1  
STUDY OF CELL DEATH IN PERINATAL RATS WITH HYPOXIC-ISCHEMIC INJURY THROUGHOUT SEVERAL REOXYGENATION TIMES AND WITH ENDOCANNABINOIDS TREATMENT. I. Lara-Celador; L. Castro-Ortega; E. Hilario; J. Lacalle; D. Alonso; A. Caballero; F.J. Álvarez; A.A. Álvarez.
- 12:30 O-2.2  
MONITORING OF BRAIN CELLULAR DAMAGE AFTER A HYPOXIC-ISCHEMIC INJURY IN PERINATAL RATS. POSSIBLE THERAPEUTIC ROLE OF ENDOCANNABINOIDS 2-ARACHIDONOYLGLYCEROL AND ANANDAMIDE. L. Castro-Ortega; I. Lara-Celador; A.A. Álvarez; D. Alonso; F.J. Álvarez; J. Lacalle; A. Caballero; E. Hilario.
- 12:45 O-2.3  
CHRONIC AND ACUTE TREATMENT WITH THE CANNABINOID TYPE 2 RECEPTOR (CB2) AGONIST (JWH133) IS NEUROPROTECTIVE IN ISCHEMIC STROKE BY DECREASING PROINFLAMMATORY CYTOKINES. J.G. Zarruk; D. Fernández-López; M. Sobrado; I. Ballesteros; V.G. Romera; J.M. Pradillo; A. Moraga; T. Atanes; I. Lizasoain; M.A. Moro.
- 13:00 O-2.4  
WIN 55212-2 ENHANCES OLIGODENDROGENESIS, REMYELINATION AND NEUROGENESIS AFTER NEWBORN RAT BRAIN HYPOXIA-ISCHEMIA. D. Fernández-López, J.A. Martínez-Orgado; I. García-Yébenes; R. Cañadas; O. Hurtado; M.A. Moro; I. Lizasoain.
- 13:15 O-2.5

CB<sub>2</sub> AND ADENOSINE RECEPTOR ACTIVATION IS INVOLVED IN THE NEUROPROTECTIVE EFFECT OF CANNABIDIOL IN AN *IN VITRO* MODEL OF NEWBORN HYPOXIC-ISCHEMIC BRAIN DAMAGE IN MICE. A.I. Castillo; M. Moreno-Clara; L. Ruiz-Valdepeñas; A. López-García; C. Ojalora; J. Fernández Ruiz; R.M. Tolón; J. Romero; J. Martínez-Orgado.

**13:30**

**Comida**

**15:30**

**Presentación 3ª Sesión de comunicaciones orales**  
(moderadores: Leyre Mestre, Paz Viveros)

**15:45-18:15**

**3ª Sesión de comunicaciones orales: "Cannabinoides y neuroprotección: enfermedades neurodegenerativas"**

15:45

O-3.1  
PROTECTIVE EFFECTS OF DELTA-9-TETRAHYDROCANNABINOL AND OLEOYLETHANOLAMIDE ON DOPAMINERGIC SUBSTANTIA NIGRA NEURONS SUBJECTED TO OXIDATIVE STRESS. R. Moreno-Paublete; R. González-Aparicio; E. Fernández-Espejo.

16:00

O-3.2  
OLEOYLETHANOLAMIDE, A DOSE-DEPENDENT NEUROPROTECTANT IN BOTH 6-OHDA AND MPTP IN VIVO MODELS OF PARKINSONISM. R. González-Aparicio; B. Galán-Rodríguez; F. Rodríguez de Fonseca; E. Fernández-Espejo.

16:15

O-3.3  
 $\Delta^9$ -THCV, A PHYTOCANNABINOID ABLE TO REDUCE MOTOR INHIBITION BUT ALSO TO DELAY DISEASE PROGRESSION IN PARKINSON'S DISEASE. C. García; C. Palomo; M. García-Arencibia; J.A. Ramos; R.G. Pertwee; J. Fernández-Ruiz.

16:30

O-3.4  
EARLY LOSS OF STRIATAL CB<sub>1</sub> CANNABINOID RECEPTORS IS CRITICALLY INVOLVED IN THE PATHOGENESIS OF HUNTINGTON'S DISEASE. C. Blázquez; A. Chiarlone; O. Sagredo; T. Aguado; R. Pazos; E. Resel; J. Palazuelos; B. Julien; M. Salazar; C. Börner; C. Benito; C. Carrasco; M. Diez-Zaera; P. Paoletti; M. Díaz-Hernández; J.J. Lucas; J.G. de Yébenes; G. Marsicano; K. Monory; B. Lutz; J. Romero; J. Alberch; E. Pérez-Navarro; S. Ginés; J. Kraus; J. Fernández-Ruiz; I. Galve-Roperh; M. Guzmán.

16:45

O-3.5  
POTENTIAL OXIDATION OF 2-AG BY COX-2 ENHANCES MALONATE TOXICITY IN THE STRIATUM: RELEVANCE

FOR CANNABINOID TREATMENTS IN HUNTINGTON'S DISEASE. M.R. Pazos; O. Sagredo; T. Bisogno; F. Piscitelli; S. Petrosino; M.L. Hernández; V. Di Marzo; J. Fernández-Ruiz.

- 17:00 O-3.6  
CHRONIC TREATMENT WITH THE CB<sub>1</sub> RECEPTOR AGONIST ACEA REDUCES COGNITIVE IMPAIRMENT IN A TRANSGENIC MODEL OF ALZHEIMER'S DISEASE. E. Aso; S. Juvés; R. Maldonado; I. Ferrer.
- 17:15 O-3.7  
ROLE OF CANNABINOIDS IN CHEMOKINE EXPRESSION IN A VIRAL MODEL OF MULTIPLE SCLEROSIS. P.M. Íñigo; F. Loría; M. Hernangómez; M. Mecha; K.H. Goble; L. Mestre; C. Guaza.
- 17:30 O-3.8  
CANNABIDIOL PROTECTS OLIGODENDROCYTE PROGENITOR CELLS FROM INFLAMMATORY DAMAGE: IMPLICATIONS FOR MULTIPLE SCLEROSIS. M. Mecha; P. Íñigo; M. Hernangómez; F. Loría; L. Mestre; R. Mechoulam; C. Guaza.
- 17:45 O-3.9  
THE ENDOCANNABINOID 2-ARACHIDONOYLGLYCEROL REDUCES LESION EXPANSION AND WHITE MATTER DAMAGE AFTER SPINAL CORD INJURY. A. Arévalo-Martin; D. García-Ovejero; E. Molina-Holgado.
- 18:00 O-3.10  
CHRONIC DELTA9-TETRAHYDROCANNABINOL ADMINISTRATION MODULATES MICROGLIAL ACTIVATION. L. Cutando; E. Puighermanal; A. Busquets-García; R. Maldonado; A. Ozaita.
- 18:15-19:30** **Café y sesión de pósters**
- 19:30-21:00** **Asamblea de la SEIC**
- Cena (libre)

### Sábado, 28 de noviembre

- 09:00-09:30** Presentación del **Premio a la Mejor Publicación 2009**
- 9:30** **Presentación 4ª Sesión de comunicaciones orales**  
(moderadores: Cristina Sánchez, Eduardo Muñoz)

**9:45-10:30**      **4ª Sesión de comunicaciones orales: "Cannabinoides y cáncer"**

09:45      O-4.1  
TEMOZOLOMIDE ENHANCES THE ANTITUMORAL ACTION OF CANNABINOIDS. S. Torres; M. Lorente; F. Rodríguez; M. Guzmán; G. Velasco.

10:00      O-4.2  
POTENCIAL ROLE OF SPHINGOLIPIDS TRAFFICKING IN THC-INDUCED TUMOR CELL DEATH. S. Hernández-Tiedra; I.J. Salanueva; M. Salazar; M. Guzmán; G. Velasco.

10:15      O-4.3  
THE ROLE OF TRPV-1 IN DISTAL COLON CARCINOGENESIS. A. García de Vinuesa; R. Sancho; M.A. Calzado; E. Muñoz.

10:30      O-4.4  
GPR55 RECEPTOR PARTICIPATES IN THE CONTROL OF CANCER CELL PROLIFERATION EXERTED BY CANNABINOIDS. C. Andradas; M. Muñoz-Caffarel; M. Salazar; M. Lorente; G. Velasco; M. Guzmán; C. Sánchez.

**10:45**      **Presentación 5ª Sesión de comunicaciones orales (moderadores: Miquel Martín, Elsa Valdizán)**

**11:00-12:15**      **5ª Sesión de comunicaciones orales: "Cannabinoides y trastornos comportamentales"**

11:00      O-5.1  
EFFECT OF CHRONIC  $\Delta^9$ -THC ALONE AND IN COMBINATION WITH FLUOXETINE ON THE REGULATION OF CB<sub>1</sub> SIGNALLING PATHWAYS IN BULBECTOMIZED RATS. R. Vidal; B. Romero; A. Martín; B. Treceño; E.M. Valdizán; A. Díaz; A. Pazos; E. Castro.

11:15      O-5.2  
NEUROPLASTICITY PATHWAYS — $\beta$ -CATENIN, AKT/PKB, BDNF— IN AN ANIMAL MODEL OF DEPRESSION: INFLUENCE OF CHRONIC  $\Delta^9$ -TETRAHYDROCANNABINOL ADMINISTRATION. F. Pilar-Cuéllar; R. Madureira; A. Díaz; A. Pazos; E.M. Valdizán.

11:30      O-5.3  
DIFFERENTIAL EFFECT OF URB597 AND JZL184 IN RECOGNITION MEMORY MODULATION. A. Busquets-García; E. Puighermanal; R. Maldonado; A. Ozaita.

11:45      O-5.4

ADOLESCENCE EXPOSURE TO THE CANNABINOID AGONIST CP 55,940 AND/OR NICOTINE INDUCES LONG LASTING IMPAIRS IN COGNITIVE FUNCTION AND CHANGES IN CB1 RECEPTOR FUNCTIONALITY AND NICOTINIC RECEPTORS IN SELECTED BRAIN REGIONS. EFFECTS OF GENDER. E. Borzel; B. Mateos; R. Loriga; W. Luesu; V. Bini; M.P. Castelli; M.P. Viveros.

12:00

O-5.5

DIFFERENT GENETIC AND PROTEIN EXPRESSION OF THE ENDOCANNABINOID SYSTEM IS RELATED TO SPECIFIC ALCOHOL-RELATED BEHAVIORS. A. López-Jiménez; V. Echeverry-Alzate; N. Walter; K.J. Buck; K. Mackie; A. Santos; E. Giné; R. Moratalla; J.A. López-Moreno.

**12:15-13:30**

**Aperitivo, Entrega de Premios a las Mejores Comunicaciones y Clausura**

## SESIÓN DE PÓSTERS

### P.1

MOLECULAR MECHANISMS INVOLVED IN THE PROINFLAMMATORY EFFECTS DERIVED OF FAAH DELETION IN ASTROCYTES EXPOSED TO THE BETA AMYLOID PEPTIDE. C. Benito; A. I. Castillo; L. Ruiz-Valdepeñas; C. Otalora; A. López; J.A. Martínez Orgado; R.M. Tolón; J. Romero.

### P.2

REPEATED ADMINISTRATION OF WIN 55,212-2 PREVENTS SPINAL GLIAL ACTIVATION AND THE (EARLY) PRODUCTION OF PROINFLAMMATORY CYTOKINES IN PACLITAXEL-INDUCED NEUROPATHY. E. Burgos; D. Gómez-Nicola; D. Pascual; M.I. Martín; C. Goicoechea.

### P.3

EFFECTS OF THC ON ACQUISITION OF AN OPERANT RESPONDING MAINTAINED BY FOOD IN OBESE AND LEAN MICE. A. Burokas; E. Martín-García; R. Maldonado.

### P.4

OPPOSITE CHANGES IN CANNABINOID CB<sub>1</sub> AND CB<sub>2</sub> RECEPTOR EXPRESSION IN HUMAN GLIOMAS. L.F. Callado; M. López De Jesús; C. Hostalot; J.M. Garibi; J. Sallés; J.J. Meana.

### P.5

GYRIFICATION BRAIN ABNORMALITIES ASSOCIATED WITH ADOLESCENCE AND EARLY-ADULTHOOD CANNABIS USE. I. Mata; R. Pérez-Iglesias; R. Roiz-Santianez; D. Tordesillas-Gutiérrez; A. Pazos; J. Pascual-Brazo; A. Gutiérrez; J.L. Vázquez-Barquero; B. Crespo-Facorro.

### P.6

INCREASED CB<sub>1</sub>-RECEPTOR SIGNALLING IN AN ANIMAL MODEL OF CHRONIC DEPRESSION: EFFECT OF CHRONIC ANTIDEPRESSANT TREATMENT WITH FLUOXETINE. A. Díaz; A. Rodríguez-Gaztelumendi; M.L. Rojo; A. Pazos.

### P.7

LACK OF ALPHA-SYNUCLEIN ALTERS THE SENSITIVITY OF CANNABINOID TREATMENTS IN ALCOHOL DRINKING AND PREFERENCE. V. Echeverry-Alzate; A. López-Jiménez; A. Santos; E. Giné; J.A. López-Moreno.

### P.8

A NEW FAMILY OF 3-INDAZOLYL ETHER DERIVATIVES. IN VITRO PHARMACOLOGICAL CHARACTERIZATION OF THEIR CANNABINOID ACTIVITY. R. Girón; E. Sánchez; M.I. Martín; P. González; N. Campillo; J.A. Páez.

### P.9

LACK OF REINFORCING PROPERTIES OF SELF-ADMINISTERED WIN 55,212-2 IN LEWIS AND FISCHER 344 RATS. A. Higuera-Matas; S.M. Coria; A. Assís; M. Miguéns; G.L. Montoya; C. García-Lecumberri; E. Ambrosio.



**P.10**

POST-INSULT ADMINISTRATION OF CANNABIDIOL LEADS TO BRAIN ACTIVITY AND METABOLISM AS WELL AS TO NEUROBEHAVIORAL RECOVERY IN A PIGLET MODEL OF NEWBORN HYPOXIC-ISCHEMIC ENCEPHALOPATHY. J. Martínez-Orgado; F.J. Álvarez; H. Lafuente; M.C. Rey-Santano; V.E. Mielgo; E. Gastiasoro; M. Rueda; A. Castillo; E. Hilario; J. Romero.

**P.11**

CANNABIDIOL-INDUCED CYTOTOXICITY IN OLIGODENDROCYTES: A ROLE FOR ROS AND INTRACELLULAR CALCIUM. S. Mato; M.V. Sánchez-Gómez; C. Matute.

**P.12**

CANNABIS USE AND CLINICAL PRESENTATION AMONG A SAMPLE OF FIRST EPISODE OF SCHIZOPHRENIA PATIENTS. T. Moreno-Calle; R. Pérez-Iglesias; I. Mata; J.M. Pelayo-Teran; O. Martinez-Garcia; G. Pardo; J.L. Vázquez-Barquero; B. Crespo-Facorro.

**P.13**

IDENTIFICATION OF DIFFERENT ELEMENTS OF THE CANNABINOID SIGNALING SYSTEM IN AN *IN VITRO* MODEL OF SPINAL MOTOR NEURONS: INTEREST FOR AMYOTROPHIC LATERAL SCLEROSIS. M. Moreno-Martet; C. Rodríguez-Cueto; F. Loría; J.A. Ramos; C. Guaza; J. Fernández-Ruiz; E. de Lago.

**P.14**

ENDOCANNABINOIDS POTENTIATE SYNAPTIC TRANSMISSION THROUGH ASTROCYTE STIMULATION. M. Navarrete; A. Araque.

**P.15**

AGE OF ONSET AND DURATION OF UNTREATED PSYCHOSIS IN FIRST EPISODE PSYCHOSIS: INTERACTION EFFECTS BETWEEN CANNABIS AND COMT. J.M. Pelayo-Terán; R. Pérez-Iglesias; I. Mata; A. Pazos; E. Valdizán; E. Carrasco-Marín; F. Leyva-Cobián; J.L. Vázquez-Barquero; B. Crespo-Facorro<sup>1</sup>.

**P.16**

CANNABIDIOL DECREASES NEUROINFLAMMATION AND MEMORY DEFICITS IN AN ANIMAL MODEL OF ALZHEIMER'S DISEASE. L. Ruiz-Valdepeñas; C. Benito; A. López; J.A. Martínez Orgado; R.M. Tolón; Julián Romero.

**P.17**

ASSOCIATION OF GENE-ENVIRONMENT AND AGE OF PRE-ONSET CANNABIS USE WITH AGE AT ONSET OF PSYCHOSIS IN FIRST-EPISODE PATIENTS. E.M. Valdizán; R. Pérez-Iglesias; I. Mata; T. Moreno; J.M. Pelayo Terán; V. Vargas; M.B. Sánchez; A. Pazos; B. Crespo-Facorro.