

**37TH SEF NATIONAL MEETING
WITH GUEST SOCIETY
THE BRITISH PHARMACOLOGICAL SOCIETY**

18-21 June 2017, Barcelona



Programme

Sunday, June 18th

15:00 Registration

Plenary Room

Session I: **The Young Pharmacologists Committees: Voice of the Future**

Chairs: *Dr. Miguel Romero (Spain) & Dña. Mariella Ramos (Spain)*

15:30

Young Pharmacologists Committee of the Spanish Society of Pharmacology (SEF). *Patrice Gomes (Spain)*

What do you want Young Pharmacologists Committee to do for you? *Aida Collado (Spain)*

Session II: **Orientation Seminar on Academic Career for Young Doctors**

Chairs: *Dr. Miguel Romero (Spain) & Dr. Concha Peiró (Spain)*

16:30

The pre-doctoral stage: how to prepare a good CV from the start. *Sergio Montserrat-de la Paz (Spain)*

How to be a post-doc and not die trying. *Tania Romacho (Spain)*

Climbing the ladder: career expectations versus academic reality. *Eduardo Oliver (Spain)*

17.30

Opening Ceremony

18.00

Plenary Lecture- Role of the endocannabinoid system in food-induced addictive-like behavior, *Rafael Maldonado (Spain)*

19.00

Music and Reception

Monday, June 19th

08:30

Plenary Lecture- GPCR expression in health and disease identifies new therapeutic targets, *Paul Insel (USA)*

09:30

Coffee Break

Posters Session

(P-1 to P-88)

11:00

Symposia

13:00

S1. Pharmacology and toxicology of drug transporters: recent advances.

Chairs: *Ann Daly, Newcastle University (UK) & Dan Antoine, University of Liverpool (UK)*

Room:
Gran Salon
Mediterranea

Pharmacogenomics and epigenetic alteration of membrane transporters. *Matthias Schwab (Germany)*

PBPK modelling of drug transporters to facilitate individualized dose prediction. *Aleksandra Galetin (UK)*

ABC transporters in drug-induced liver injury. *Jose Manautou (USA)*

Scientific Perspective on the Evaluation of Transporter-based Drug-drug Interactions, *Shiew-Mei Huang (USA)*

Room: Sitges	<p>S2. Pain</p> <p>Chairs: Jose Manuel Baeyens, <i>University of Granada (Spain)</i> & Esther Berrocoso, <i>University of Cadiz (Spain)</i> </p> <p>Pharmacological associations in pain. A real life scenario. <i>Victor Mayoral (Spain)</i></p> <p>Implication of noradrenaline in pain and its emotional consequences. <i>Esther Berrocoso (Spain)</i></p> <p>Sigma-1 receptor blockade unmask peripheral opioid analgesia. <i>Jose Manuel Baeyens (Spain)</i></p> <p>Animal Models of Pain: Beyond the Evaluation of Reflexes. <i>Enrique Portillo-Salido (Spain)</i></p>
Room: Favencia	<p>S3. Ischaemia & Reperfusion</p> <p>Chairs: Anna Planas, <i>IDIBAPS/CSIC (Spain)</i> & I. Mhairi Macrae, <i>University of Glasgow (UK)</i></p> <p>Cerebrovascular pathology: novel pharmacological strategies. <i>M^a Ángeles Moro (Spain)</i></p> <p>Novel therapies for acute ischemic stroke: from pharmacological neuroprotection to vasculoprotection. <i>Sergio Amaro (Spain)</i></p> <p>Oxycyte: an intravenous oxygen carrier capable of diagnosing and treating acute ischaemic stroke. <i>I. Mhairi Macrae (UK)</i></p> <p>Protection against myocardial reperfusion injury by targeting mitochondrial succinate dehydrogenase. <i>Antonio Rodríguez (Spain)</i></p>
<p>13:00 Lunch</p>	
<p>14:30 - 16:30 Symposia</p>	
Room: Gran Salon Mediterranea	<p>S4. G Protein- Coupled Receptors Pharmacology</p> <p>Chairs: Ian McGrath, <i>University of Glasgow (UK)</i> & Leonardo Pardo, <i>Autonomous University of Barcelona (Spain)</i> </p> <p>The drug invention template: from "crafted round the natural hormone" to sculpted to fit the receptor. <i>Ian McGrath, (UK)</i></p> <p>New approaches to modulate GPCRs. <i>Leonardo Pardo (Spain)</i></p> <p>Optopharmacology: lighting up G protein-coupled receptors. <i>Victor Fernández-Dueñas (Spain)</i></p> <p>GPCR Heterodimers: What are they good for and how do they work? <i>Peter McCormick (UK)</i></p>
Room: Sitges	<p>S5. Cardiovascular and smooth muscle pharmacology</p> <p>Chairs: Juan Tamargo, <i>University Complutense of Madrid (Spain)</i> & M^a Pilar D'Ocon, <i>Valencia University (Spain)</i></p> <p>New drugs in the treatment of heart failure: hope or hype? <i>Juan Tamargo (Spain)</i></p> <p>Novel mediators of inflammation in vascular damage in hypertension. <i>Ana M^a Briones (Spain)</i></p> <p>Drugs for pulmonary hypertension: old stories of partial success, partial failure and new perspectives. <i>Francisco Pérez (Spain)</i></p> <p>Pleiotropic actions of Losartan metabolites in hypertension. <i>Guillermo Zalba (Spain)</i></p>
Room: Favencia	<p>S6. Natural Products in Pharmacology</p> <p>Chairs: Salvador Fudio, <i>Pharmamar (Spain)</i> & Rafael de la Torre, <i>IMIM (Spain)</i></p> <p>Quality of Herbal Medicinal Products: contribution of the European Pharmacopoeia. <i>Salvador Cañigüeral (Spain)</i></p> <p>Flavonoids in the treatment of mental disorders. <i>Rafael de la Torre (Spain)</i></p> <p>Marine derived medicines for the treatment of cancer: the experience of PharmaMar. <i>Salvador Fudio (Spain)</i></p> <p>Development of neuroprotective therapies with phytocannabinoids for neurodegenerative disorders. <i>Javier Fernández (Spain)</i></p>
<p>16:30 Coffee Break</p>	
<p>17:00 Selected Posters for oral presentation</p>	

18:00	01. Neuropharmacology I Chair: Julia García, <i>University of Illes Balears</i>	02. Cardiovascular & Smooth Muscle Chair: María Jesús Alonso, <i>University Rey Juan Carlos</i>	03. Receptors & Ion Channels Chair: Jesús Giraldo, <i>Autonomous University of Barcelona</i>	04. Cancer, Pharmacogenomics & Toxicology Chair: Sergi Mas, <i>University of Barcelona</i>
17:00	Dual-specificity phosphatase Dusp6 Regulates Long-Term Memory and Erk/MAP-Kinase signaling in Hippocampus. <i>Sindreu, C. (Spain)</i>	Protective effects of PPAR β/δ activation on endothelial dysfunction induced by plasma from lupus patients: Role of endoplasmic reticulum stress. <i>Sánchez, M. (Spain)</i>	Histochemical and functional evidence of metabotropic glutamate 5 receptor existence in brain dopaminergic neurons, with modeling of receptor interactions. <i>Ortiz, J. (Spain)</i>	Identification of differential kinase off-targets among clinical PARP inhibitors: new opportunities for precision oncology? <i>Antolin, A. (UK)</i>
17:15	Black Swiss Mice: molecular alterations related to mania-like behavior <i>Cortés, E. (Spain)</i>	HIV transgene expression induces endothelial dysfunction and Kv7 channel impairment in the pulmonary vasculature. <i>Cogolludo, A. (Spain)</i>	The p.P888L SAP97 polymorphism shortens the cardiac action potential duration and the QT interval. <i>Delpón, E. (Spain)</i>	Actinic keratosis: standard compounds validation in both in vitro and in vivo models. <i>Armengol, C. (Spain)</i>
17:30	Chronic Δ^9 -THC administration leads to functional 5HT2A receptors supersensitivity mediated by inhibitory Gi/o proteins in mouse brain cortex <i>Ibarra-Lecue, I. (Spain)</i>	Senescence and late-onset estrogen therapy promote deleterious effects in common carotid artery of female mice: influence of epigenetic regulation. <i>Costa, T. (Brazil)</i>	Signaling of the fractalkine receptor CX3CR1 and its natural genetic variants: impact of receptor non-synonymous single nucleotide polymorphisms. <i>García-Silva, A. (Spain)</i>	Pharmacogenomic Alerts in an Electronic Medical History. <i>Simonovich, V. (Argentina)</i>
17:45	α 2A- and α 2C-Adrenoceptors as Significant Targets for Dopamine and Dopamine Receptor Ligands. <i>Casadó-Anguera, V. (Spain)</i>	Influence of lycopene on metabolic syndrome induced by fructosa in wistar rats" <i>Aparicio, R. (Spain)</i>	Rett-like severe encephalopathy caused by a de novo GRIN2B mutation is attenuated by D-serine dietary supplement. <i>Altafaj, X. (Spain)</i>	Drug induced liver injury assessment: acute hepatitis due to hepatitis e virus, a diagnosis to consider <i>Sanabria, J. (Spain)</i>
18:00	Plenary Lecture- Cancer epigenetics- Genes & drugs. <i>Manel Esteller (Spain)</i>			
20:00	Social Activity			

08:30	Plenary Lecture- A novel pharmacological paradigm for chronic pain. <i>Antonio Ferrer- Montiel (Spain)</i>
09:30	Coffee Break Posters Session (P-89 to P-169)
11:00 - 13:00	Symposia
Room: Gran Salon Mediterranea	<p>S7. Being in the right place in the right time: Targeting oxidate stress Chair: Martina Schmidt, University of Groningen (The Netherlands) Measuring ligand concentration where it matters: Assessing the "Micro PK/PD" of adenosine A2a receptor ligands. <i>Steven Charlton (UK)</i> Molecular and function impact of oxidative stress in COPD. <i>Paul A. Kirkham (UK)</i> Targeting mitochondria in oxidative stress via modulation of potassium channels. <i>Amalia Dolga (Netherlands)</i> Mitochondrial dysfunction is a key driver of fibroblast senescence. So what do we target? <i>Darryl Knight (Australia)</i></p>
Room: Sitges	<p>S8. Inflammation Chair: M^a Jesús Sanz, University of Valencia (Spain) L-selectin shedding is the βgo² signal for neutrophil effector function: a potential therapeutic target in sterile injury. <i>Aleksandar Ivetic (UK)</i> Adipocytokines: novel therapeutic targets in endothelial dysfunction and vascular inflammation? <i>Concha Peiró (Spain)</i> CXCL16/CXCR6 axis blockade impairs metabolic syndrome-associated endothelial dysfunction and abdominal aortic aneurysm (AAA) development. <i>M^a Jesús Sanz (Spain)</i> Increased platelet and T cell activation in patients with primary hypercholesterolemia is associated to enhanced leukocyte-arterial adhesion. <i>Aida Collado (Spain)</i> DPP4 deletion in adipose tissue promotes hepatic insulin sensitivity via IGF1. <i>Tania Romacho (Spain)</i></p>
Room: Favencia	<p>S9. Psychopharmacology Chairs: Javier J. Meana, Pais Vasco University (Spain) & Juan Carlos Leza, University Complutense of Madrid (Spain) The prolyl oligopeptidase inhibitor IPR-19 ameliorates cognitive deficits in mouse models of schizophrenia. <i>Roger Prades (Spain)</i> Role of serotonin 5-HT₃ receptors in the treatment of depressive disorders. <i>Luis F. Callado (Spain)</i> Pharmacology of new psychoactive substances. <i>Magi Farré (Spain)</i> Role of inflammatory processes in depression. <i>Lucile Capurón (France)</i></p>
13:00	Lunch
14:30 - 16:30	Symposia
Room: Gran Salon Mediterranea	<p>S10. Therapeutic Innovation Chair: Eva Martínez - Moragon, Hospital Universitario Dr. Peset, Valencia (Spain) P2Y₁₂ inhibition in ACS: Platelet and beyond platelet effects. <i>Lina Badimon (Spain)</i> Pharmacoeconomics applied to biological drugs in the management of severe asthma. <i>Eva Martinez-Moragon (Spain)</i> Targeted immunotherapy for cancer treatment, discovering a new era in Oncology. <i>Luis De la Cruz-Merino (Spain)</i></p>
Room: Sitges	<p>S11. Gastrointestinal and Hepatic Pharmacology Chair: Jordi Bruix, CIBEREHD, (Spain) & Marcel Jiménez, Autonomous University of Barcelona (Spain) The importance of the transportome in hepatic and gastrointestinal diseases. <i>Marçal Pastor- Anglada (Spain)</i></p>

	Pharmacological targets for NASH. <i>M^a Luz Martínez (Spain)</i>			
	Immune therapy of liver cancer. <i>Bruno Sangro (Spain)</i>			
	Purine receptors and smooth muscle function in the gastrointestinal tract. <i>Marcel Jiménez (Spain)</i>			
Room: Favencia	S12. Teaching Pharmacology			
	Chairs: Silvia Sánchez, University of Barcelona (Spain) & Josep-Eladi Baños, Pompeu Fabra University (Spain)			
	Are TV medical dramas useful to teach clinical pharmacology? An empirical study using House M.D. <i>Josep Eladi Baños (Spain)</i>			
	Inter-university network for innovative education in Pharmacology: a common space to improve learning? <i>Marisa Ferrándiz (Spain)</i>			
	An experience of using E-learning in the teaching of pharmacology. <i>Silvia Sánchez (Spain)</i>			
	An academic service-learning activity in higher education to promote responsible use of antibiotics. <i>A. Fernández, T. Ignatova, O. Yashchenko (Spain)</i>			
16:30	Coffee Break			
	Selected Posters for oral presentation			
17:00 - 18:00	05. Neuropharmacology II Chair: María Laura Cuffí, University of Barcelona	06. Inflammation Chair: Francesc Jimenez, Autonomous university of Barcelona	07. Natural Products & Teaching Pharmacology Chair: Josep Eladi Baños, Pompeu Fabra University	08. Pain & Ischemia Chair: Manel Merlos, Esteve
17:00	"Interleukin-1 receptor antagonist (il-1ra) and brain endocannabinoids crosstalk to control neurogenesis" <i>Molina-Holgado, F. (UK)</i>	"Suppressor of cytokine signalling 3 (SOCS3) interaction with cavin-1 links SOCS3 function and cavin-1 stability" <i>Lewis, J.J. (UK)</i>	Topical pre-treatment with a carotenoid from microalgae reduces cutaneous UVB-induced inflammation in hairless mice" <i>Rodrigues-Luna, A. (Spain)</i>	"Simvastatin blocks soluble SSAO/VAP-1 release in experimental models of cerebral ischemia: possible benefits for stroke-induced inflammation control" <i>Unzeta, M. (Spain)</i>
17:15	The mitochondrial angiotensin II subtype-2 receptor expression declines with ageing, and modulates the catecholamine secretion in chromaffin cells" <i>Padín-Nogueira, J.F. (Spain)</i>	EVOO phenols, Hydroxytyrosol and hydroxytyrosol acetate, suppressed IL-1 β -induced proinflammatory mediators production in human synovial fibroblasts" <i>Rosillo, M.A. (Spain)</i>	"Attractive key historical facts as a tool to teach pharmacology" <i>Serés, E. (Spain)</i>	"Activation of extracellular signal-regulated kinases (ERK 1/2) in the locus coeruleus contributes to pain-related anxiety in arthritic rats" <i>Da Silva, G. (Spain)</i>
17:30	"The effect of buspirone on the basal ganglia output nuclei is related to the dopaminergic system integrity in rats" <i>Vegas, S. (Spain)</i>	"Evaluation of the anti-inflammatory activity of LXR agonists in in vitro and in vivo models" <i>López, R. (Spain)</i>	"Using cinema films as an innovative educational strategy to create meaningful learning in pharmacology teaching" <i>Cabanillas, A. (Chile)</i>	"Treatment of neuropathic pain associated to the spared nerve injury model in mice: role of sigma-1 receptors" <i>Bravo-Caparrós, I. (Spain)</i>
17:45	"Neuroprotective effect of novel imidazoline I ₂ receptor ligands in the senescence accelerated mouse prone 8 (SAMP8)" <i>Griñan, C. (Spain)</i>	"Psoriatic fibroblasts polarize macrophages to a pro-inflammatory phenotype" <i>Montesinos, M.C. (Spain)</i>	"The last frontier: Inter professional learning events between dentistry and pharmacy" <i>Durham, L. (UK)</i>	"Epigenetic mechanisms underlying neuropathic pain in rats" <i>Francés, R. (Spain)</i>
18:00	Plenary Lecture- Pharmacology leaping over the gap: bringing transformational mechanisms to drug discovery. <i>M^a Isabel Loza (Spain)</i>			

19:00 SEF Assembly

21:00 Gala Dinner

Wednesday, June 21st

09:00

11:00

Symposia

S13. Neuropharmacology

Chairs: **Olga Valverde**, *Pompeu Fabra University (Spain)* & **Maruja Hurlé**, *Cantabria University (Spain)*

Vulnerability factors that predispose to cocaine addiction. *Julia García-Fuster (Spain)*

Room:
Gran Salon
Mediterranea

Potential clinical value of microRNA-30c as biomarker and therapeutic target for neuropathic pain. *Monica Tramullas (Spain)*

Behavioral and molecular alterations induced by maternal alcohol binge consumption in offspring mice. *Olga Valverde (Spain)*

Therapeutic potential of conjugated siRNAs for the treatment of major depressive disorder. *Francisco Artigas (Spain)*

S14. Pharmacology of Anti- Cancer Drugs

Chair: **Ramón Salazar**, *IDIBELL, ICO, University of Barcelona (Spain)*

ABTL0812 an autophagy-anticancer drug in Phase II clinical trials that inhibits PI3K/Akt/mTOR pathway by inducing TRIB3 expression. *José Alfón (Spain)*

Room:
Sitges

Improving immunotherapy strategies in advanced endometrial carcinoma. *Josep Maria Piulats (Spain)*

New therapeutic proposals emerging from patient-derived preclinical platforms of pediatric solid tumors. *Angel Montero (Spain)*

The Cancer Genome Interpreter: a tool to annotate the biological and clinical relevance of tumor alterations. *David Tamborero (Spain)*

S15. JAK.STAT signalling: new targets and therapeutics for multiple diseases

Chairs: **Tim Palmer**, *Bradford (UK)* & **Ana P. Costa-Pereira**, *Imperial College (UK)*

Inflammatory re-tuning of IL-6 mediated Jak-STAT signaling. *Simon Jones (UK)*

Room:
Favencia

The STAT3 paradox in breast cancer: an inducer of cell death and an oncogene. *Cristine Watson (UK)*

JAK-STAT Pathway in myeloproliferative neoplasms: from JAK2 V617F to calreticulin mutants. *Stefan Constantinescu (Belgium)*

Targeting STAT5 in leukemogenesis – what's new? *Veronica Sexl (Austria)*

11:00

Coffee Break

11:30

Plenary Lecture- Present and future pharmacological treatment of Alzheimer's disease.

Agneta Nordberg, Karolinska Institutet, Stockholm, Sweden



12:30

Closing Ceremony

13:30

Lunch & Departure

Posters Presentations

Moderators:

1. Amadeu Gavalda
2. Javier Meana
3. Mayte Tejerina
4. Dolores Ivorra

Neuropharmacology I

(P-1) Long-term consequences of treating rats with cocaine at a window of adolescent vulnerability on negative affect in adulthood.

García-Fuster, M.J. (Spain)

(P-2) Dopaminergic degeneration partially modifies the response of the locus coeruleus to noxious stimulus. *Paredes, E. (Spain)*

(P-3) Brain specific carnitine palmitoyltransferase 1C (CPT1C) is involved in the hypothalamic regulation of thermogenesis by endocannabinoids-dependent mechanisms. *Rodríguez-Rodríguez, R. (Spain)*

(P-4) Association of regulatory TPH2 polymorphisms with higher reduction in depressive symptoms in children and adolescents treated with fluoxetine. *Torres, T. (Spain)*

(P-5) Chronic Δ^9 -THC administration leads to functional 5HT_{2A} receptors supersensitivity mediated by inhibitory G_{i/o} proteins in mouse brain cortex. *Ibarra, I. (Spain)*

(P-6) α 2A- and α 2C-adrenoceptor subtypes expression in postmortem prefrontal cortex of subjects with schizophrenia. *Brocos, I. (Spain)*

(P-7) Ketamine-induced hypnosis in mice regulates FADD and MEK-ERK signaling in brain cortex. *Salort, G. (Spain)*

(P-8) Serotonin 5-HT₃ receptor antagonism potentiates the antidepressant activity of citalopram. *Perez del Palomar, B. (Spain)*

(P-9) The use of Licochalcone A as pre-emptive pharmacological inhibition of JNK1, leads to neuronal protection against excitotoxic insults derived of kainic acid. *Buquets, O. (Spain)*

(P-10) Early exposure of mice to MDPV increases the vulnerability to cocaine in the adulthood. *Lopez- Arnau, R. (Spain)*

(P-11) Long-term consequences of treating rats with methamphetamine at a window of vulnerability during young adulthood on hippocampal cell damage. *Bis- Humbert, C. (Spain)*

(P-12) Repeated electroconvulsive shock increased newly born generated cells and neuroplasticity markers in the rat hippocampus. *García- Cabrerizo, R. (Spain)*

(P-13) Acute treatment with 8-OH-DPAT improves cognition in rats by changing the strategy used to resolve a maze at different ages. *Hernández-Hernández, E. (Spain)*

(P-14) Black Swiss Mice: molecular alterations related to mania-like behavior. *Cortes, E. (Spain)*

(P-15) Actions of lithium treatment on oxidative stress markers in mitochondrial complex I and complex III inhibition and after CO₂ exposure in SH-SY5Y cells. *Martínez, A. (Spain)*

(P-16) Resveratrol protects C57BL/6J aged mice in front of LPS acute inflammatory insult. *Canudas, A.M. (Spain)*

(P-17) Dual-specificity Phosphatase Dusp6 Regulates Long-Term Memory and Erk/MAP-Kinase Signaling in Hippocampus. *Sindreu, C. (Spain)*

(P-18) Environmental enrichment in the absence of physical exercise produces beneficial behavioural effects and anti-oxidative effects in rats. *Mármol, F. (Spain)*

(P-19) Gender differences on the effects of prenatal stress and perinatal diet on the behavioral profile of aged rats. *Ramirez, M.J. (Spain)*

(P-20) α 2A- and α 2C adrenoceptors as significant targets for dopamine and dopamine receptor ligands. *Casadó, V. (Spain)*

(P-21) Optical control of pain in vivo with a photoactive mGlu5 receptor negative allosteric modulator. *López Cano, M. (Spain)*

Cardiovascular & Smooth Muscle

(P-22) MARCKS regulates vascular contractility. *Jahan, K.S. (UK)*

(P-23) Involvement of endoplasmic reticulum stress and mitochondrial dysfunction in abdominal aortic aneurysm disease. *Galán, M. (Spain)*

(P-24) High-fat feeding promotes dysfunction of perivascular adipose tissue. *Kennedy, S. (UK)*

(P-25) Senescence and late-onset estrogen therapy promote deleterious effects in common carotid artery of female mice: influence of epigenetic regulation. *Costa, T. (Brazil)*

(P-26) Electrophysiological characterization of two novel KCNK3 (TASK-1) mutations indicated in Pulmonary Arterial Hypertension. *Cunningham, K. (UK)*

(P-27) Chondroitin sulfate and glucosamine combination treatment for musculoskeletal diseases and osteoarthritis: a chance to kill two birds with one stone? Results in a rat-injury model. *Montell, L. (Spain)*

(P-28) HIV transgene expression induces endothelial dysfunction and Kv7 channel impairment in the pulmonary vasculature. *Cogolludo, A. (Spain)*

(P-29) MiR-1 impairs endothelial and Kv channel function in pulmonary arteries. *Cogolludo, A. (Spain)*

(P-30) Selenosugars are a promising class of selenium derivatives with vasculo-protective effects. *Onetti, Y. (Spain)*

(P-31) Increased contractile responses to phenylephrine in the ascending aorta of a murine model of Marfan syndrome reveal regional and sex differences. *Jiménez-Altayó, F. (Spain)*

(P-32) Lupalbigenin, a prenylated isoflavone in *Derris scanden* extracts, lacks vasodilator activity in the porcine isolated splenic artery. *Watanapokasin, R. (Thailand)*

(P-33) Endothelium-derived hyperpolarization (edh)-induced relaxation of renal arteries: role of H₂O₂. *Rivera de los Arcos, L. (Spain)*

(P-34) Role of mitogen-activated protein kinase (mapk) in the regulation of l-type channel calcium entry in resistance arteries. *Gutierrez Cruz, A. (Spain)*

(P-35) NADPH oxidase-derived H₂O₂ is involved in the endothelium-dependent relaxations of intrarenal arteries. *Prieto, D. (Spain)*

(P-36) Optical control of muscarinic acetylcholine receptors using photoswitchable bitopic ligands. *Riefolo, F. (Spain)*

(P-37) *Lactobacillus fermentum* CECT5716 consumption protects kidney and improves endothelial dysfunction in murine lupus. *Duarte, J.M. (Spain)*

(P-38) Scleroderma fibroblasts suppress angiogenesis via TGF- β /Caveolin –dependent secretion of Pigmented Epithelium Derived Factor: TGF- β receptor inhibitors as a novel therapeutic target for the treatment of Scleroderma. *Elies, J. (UK)*

(P-39) Pomace olive oil enriched in oleanolic acid restores vascular dysfunction and metabolic parameters in mice fed a high fat diet. *Claro, C. (Spain)*

(P-40) Decreased Expression of ETS-2 in EPCs as an Early Marker of Cardiovascular Instability in CABG Patients, Beneficial Effects of Sitagliptin. *Tejerina, T. (Spain)*

(P-41) Effect of the probiotic *Lactobacillus fermentum* CECT5716 in hypertensive rat induced by chronic nitric oxide blockade. *Romero, M. (Spain)*

(P-42) Hypoxic preconditioning increases the potential of exosomes derived from mesenchymal stem cells to limit pulmonary vascular dysfunction induced by lipopolysaccharide. *Moreno, L. (Spain)*

(P-43) PGE₂ derived from MPGES-1 facilitates excessive aldosterone production from adipose tissue in obesity. Role in vascular function. *Briones, A.M. (Spain)*

(P-44) Gut microbiota controls arterial blood pressure in rats by altering gut-brain-bone marrow interaction. *Toral, M. (Spain)*

(P-45) Protective effects of PPAR β / δ activation on endothelial dysfunction induced by plasma from lupus patients: Role of endoplasmic reticulum stress. *Sánchez, M. (Spain)*

(P-46) Changes in the expression of the NT-3/TrkC pathway in vessels and left ventricle during culture. *D'Ocon, P. (Spain)*

(P-47) Neurotrophin-3 and TrkC expression in blood vessels and left ventricle of adult rodents. *Ivorra, M.D. (Spain)*

(P-48) Pharmacological and genetic dissection of the role of TRPA1 and TRPM8 channels in intrinsic vascular responses to cold. *Alonso, L. (Belgium)*

- (P-49) Pioglitazone alters the vascular contractility in hypertension by interference with ET-1 system. *Alonso, M.J. (Spain)*
- (P-50) Influence of lycopene on metabolic syndrome induced by fructosa in wistar rats. *Aparicio, R. (Spain)*
- (P-51) Effect of swimming training on neurogenic contraction and stock of intracellular calcium concentration in spontaneously hypertensive rats. *Peña, M. G. (Brazil)*
- (P-52) Patagonia Calafate (*Berberis microphylla*) berry extracts has a potent cellular antioxidant profile and elicits endothelium-dependent vascular relaxation. *Calfío, C. (Chile)*

Receptors & Ion Channels

- (P-53) CaV2.2 (N-type) voltage-gated calcium channels are activated by SUMO-1 protein. *Stephens, G. (UK)*
- (P-54) Modeling human bipolar disorder: The HINT1-deficient mice. *Rodríguez, M. (Spain)*
- (P-55) The Parkinson's disease-associated GPR37 receptor is an adenosine A2A receptor repressor in mice. *Morató, X. (Spain)*
- (P-56) Characterisation of the actions of the novel P2Y2 receptor antagonist, AR-C118925XX. *Muoboghare, M. (UK)*
- (P-57) Optical control of locomotor activity in a mouse model of parkinsonism using a photoactive adenosine A2A receptor antagonist. *Taura, J. (Spain)*
- (P-58) Dynamic Mass Redistribution phenotypic assay for identifying ligands active at GPR35 receptors. *González, A. (Spain)*
- (P-59) Optical control of endogenous receptors and cellular excitability using targeted covalent photoswitches. *Garrido, A. (Spain)*
- (P-60) Rett-like severe encephalopathy caused by a de novo GRIN2B mutation is attenuated by D-serine dietary supplement. *Altafaj, X. (Spain)*
- (P-61) Signaling of the fractalkine receptor CX3CR1 and its natural genetic variants: impact of receptor non-synonymous single nucleotide polymorphisms. *García Silva, A. (Spain)*
- (P-62) Glibenclamide inhibits ATP-sensitive K currents in the Cantú Syndrome. *Caballero, R. (Spain)*
- (P-63) Cellular biology of human cardiac Nav1.5-Kir2.1 channel complexes. *Caballero, R. (Spain)*
- (P-64) The p.P888L SAP97 polymorphism shortens the cardiac action potential duration and the QT interval. *Delpón, E.*
- (P-65) A mutation in the Tbx5 transcription factor decreases the human cardiac sodium current and is associated with the Brugada Syndrome. *Delpón, E. (Spain)*
- (P-66) Histochemical and functional evidence of metabotropic glutamate 5 receptor existence in brain dopaminergic neurons, with modeling of receptor interactions. *Ortíz, J. (Spain)*
- (P-67) A method for quantifying biased signalling of inverse agonists. *Hall, D. (UK)*
- (P-68) Pharmacological and biophysical properties of plasma membrane pores induced by silica nanoparticles. *Sanchez, A. (Belgium)*
- (P-69) Functional μ -Opioid-galanin receptor heteromers in the ventral tegmental area. *Moreno, E. (Spain)*
- (P-70) Specific chemical sensitivities of *Drosophila melanogaster* TRPA1 isoforms. *Brett, B. (Belgium)*
- (P-71) Contactin-associated protein 1 interacts with metabotropic glutamate receptor type 5 and modulates its function in the hippocampus. *Ciruela, F. (Spain)*
- (P-72) The large conductance, Ca²⁺-activated K⁺ channel opener VSN16R modulates hippocampal CA1 pyramidal neuron firing. *Stephens, G. (UK)*

Cancer

- (P-73) Effect of *Sideritis hyssopifolia* on apoptosis in human prostate cancer LNCaP cells. *García, J.J. (Spain)*
- (P-74) Effect of *Sideritis hyssopifolia* on cell cycle distribution in human prostate cancer LNCaP cells. *Huerga, V. (Spain)*
- (P-75) Actinic keratosis: standard compounds validation in both in vitro and in vivo models. *Armengol, C. (Spain)*
- (P-76) Synthesis and Biological evaluation of novel inhibitors of Signal Transducer and Activator of Transcription (STAT) proteins in hematological malignances. *Guerra, B. (Spain)*
- (P-77) Identification of differential kinase off-targets among clinical PARP inhibitors: new opportunities for precision oncology? *Antolín, A. (UK)*
- (P-78) The role of receptor protein tyrosine phosphatase beta/zeta in cell migration. *Papadimitriou, E. (Greece)*
- (P-79) The prognostic value of the melatonergic system-based ASMT: CYP1B1 index in solid tumors. *Kinker, G. (Brazil)*
- (P-80) Nimotuzumab and radiotherapy in the treatment of pediatric patients with diffuse intrinsic brain astrocytomas. *Marrero, M.A. (Cuba)*

Pharmacogenomics & Toxicology

(P-81) Host characteristics, pharmacological properties and their interactions influence type of liver injury in hepatotoxicity. *Sanabria, J. (Spain)*

(P-82) Drug induced liver injury assessment: acute hepatitis due to hepatitis e virus, a diagnosis to consider. *Sanabria, J. (Spain)*

(P-83) Prospective drug-induced liver injury registry: clinical characteristics and outcomes of 915 cases. *Sanabria, J. (Spain)*

(P-84) Epigenetic and genetic variants in the HTR1B gene and clinical improvement in children and adolescents treated with fluoxetine. *Gassó, P. (Spain)*

(P-85) Prevalence of ugt1a1 genetic variants in Argentinean population, potential implications for pharmacogenomic testing. *Scibona, P. (Argentina)*

(P-86) Pharmacogenomic alerts in an Electronic Medical History. *Simonovich, V. (Argentina)*

(P-87) Pharmacogenetic study focused on fluoxetine pharmacodynamics in children and adolescent patients: Impact of the serotonin pathway. *Rodríguez, N. (Spain)*

(P-88) Prevalence and Pattern of Potentially Inappropriate Medication in Older Primary Care Patients. Prominent role of benzodiazepines. *Blanco, E. (Spain)*

TUESDAY, JUNE 20TH

Moderators:

1. Juan Carlos Leza
2. Carmen Terencio
3. Silvia Sanchez
3. Lidia Giménez

Neuropharmacology II

(P-89) The fifth subunit modulates the function of canonical agonist sites in $\alpha 4\beta 2$ nicotinic receptors. *García del Villar, S. (UK)*

(P-90) Synthesis of new 1-substituted isoquinolines with potential anti-Parkinson activity. *Cabedo, N. (Spain)*

(P-91) Computational approaches for the understanding of agonist efficacy in structurally and functionally complex GPCRs. *Giraldo, J. (Spain)*

(P-92) Neuroprotective effect of novel imidazoline I2 receptor ligands in the senescence accelerated mouse prone 8 (SAMP8). *Griñan, C. (Spain)*

(P-93) Unravelling the contribution of adenosine A2A receptor to the neurobiology of schizophrenia. *Valle, M. (Spain)*

(P-94) Interleukin-1 receptor antagonist (il-1ra) and brain endocannabinoids crosstalk to control neurogenesis. *Molina- Holgado, F. (UK)*

(P-95) In vivo photomodulation of GABA and glycine receptor channels. *Gomila, A. (Spain)*

(P-96) Study of the effect of early postnatal administration of a NMDA receptor antagonist in mouse on different functional and neuromorphological schizophrenic phenotypes. *García, S. (Spain)*

(P-97) Gene-based association analysis of gene networks for the study of extrapyramidal symptoms induced by antipsychotics. *Boloc, D. (Spain)*

(P-98) Identification of pharmacological chaperones for the cellular prion protein by dynamic mass redistribution screening. *Iglesias, A. (Spain)*

(P-99) Phosphorylation of ionotropic glutamate receptors is altered in synaptopathy conditions. *Gomez de Salazar, M. (Spain)*

(P-100) Effect of fingolimod phosphate on neuronal oxidative stress produced by menadione. *Pavía, J. (Spain)*

(P-101) HDAC5 and SIRT2: epigenetic targets for antidepressant therapy *Tordera, R. (Spain)*

(P-102) Novel coumarins derivatives as selective MAO-B inhibitors: in vitro, in vivo and ex vivo assays. *Rodríguez, F. (Spain)*

(P-103) Behavioural effects of novel multitarget anticholinesterasic derivatives in aging and Alzheimer's disease: Studies in 3xTg-AD mice. *Giménez, L. (Spain)*

- (P-104) The effect of buspirone on the basal ganglia output nuclei is related to the dopaminergic system integrity in rats. *Vegas, S. (Spain)*
- (P-105) Pharmacological modulation of calcium signalling and exocytosis in chromaffin cells from C57BL6/J mice. *Martínez Ramirez, C. (Spain)*
- (P-106) Synthetic sulfatide-like sulfoglycolipids as potential neuroprotectors in brain damage. *García Alvarado, F. (Spain)*
- (P-107) Exocytosis and mitochondrial ultrastructure and function in chromaffin cells of the SOD1G93A mouse model of ALS at a pre-disease stage. *Mendez, I. (Spain)*
- (P-108) The mitochondrial angiotensin II subtype-2 receptor expression declines with ageing, and modulates the catecholamine secretion in chromaffin cells. *Padín-Nogueira, J.F. (Spain)*
- (P-109) Effect of abcb1 C3435T polymorphism on pharmacokinetics of antipsychotics and antidepressants. *Saiz, M. (Spain)*

Inflammation

- (P-110) Suppressor of cytokine signalling 3 (SOCS3) interactions with cavin-1 links SOCS3 function and cavin-1 stability. *Lewis, J.J. (UK)*
- (P-111) Prostanoid-mediated inhibition of IL-6 trans-signalling in pulmonary arterial hypertension: A role for EPAC-1 mediated induction of "suppressor of cytokine signalling 3" (SOCS3). *Durham, G. (UK)*
- (P-112) Oleuropein exhibited anti-inflammatory and anti-oxidant activities in IL-1 β -stimulated human synovial fibroblasts. *Castejón, M.L. (Spain)*
- (P-113) Hydroxytyrosol derivative modulates inflammatory response in LPS-induced murine peritoneal macrophages. *Montoya, T. (Spain)*
- (P-114) VLDL and apolipoprotein ciii induce stress and inflammation and attenuate insulin signaling via toll-like receptor 2 and erk1/2 in skeletal muscle cells. *Vazquez-Carrera, M. (Spain)*
- (P-115) Characterization of the in vitro and in vivo profile of Epigallocatechin-3-gallate. *Carreño, C. (Spain)*
- (P-116) Evaluation of the anti-inflammatory activity of LXR agonists in in vitro and in vivo models. *López, R. (Spain)*
- (P-117) EVOO phenols, hydroxytyrosol and hydroxytyrosol acetate, suppressed IL-1 β -induced proinflammatory mediators production in human synovial fibroblasts. *Rosillo, M.A. (Spain)*
- (P-118) Chondroitin sulfate inhibits monocyte chemoattractant protein-1 release from 3T3-L1 adipocytes: a new treatment opportunity for obesity-related metabolic syndromes? *Montell, L. (Spain)*
- (P-119) CX3CL1/CX3CR1 and CCL2/CCR2 axes are potential therapeutic targets to prevent arterial leukocyte adhesion in metabolic syndrome. *Gomes, P. (Spain)*
- (P-120) A Fluoromethylchalcone derivative as inhibitor of caspase-1 activation in CPPD-induced Mouse Air Pouch model. *Catalán, L. (Spain)*
- (P-121) Anti-inflammatory and immunomodulatory effects of osteostatin in the CIA model. *Nacher, J. (Spain)*
- (P-122) ORM2 and APOA2 serum levels can predict the patient response to chondroitin sulfate/glucosamine hydrochloride: results from the moves study. *Martínez, H. (Spain)*
- (P-123) The Angiotensin-(1-7)/ Mas Receptor Axis Counteract Pro-Inflammatory Signaling in Human Vascular Smooth Muscle Cells. *Romero, A. (Spain)*
- (P-124) Beneficial effect of adenosine A2B receptor activation in a murine model of skin hyperplasia. *Terencio, M.C. (Spain)*
- (P-125) IKK α is involved in pro-inflammatory activity of extracellular nicotinamide phosphoribosyltransferase (eNAMPT) in bone marrow-derived macrophages. *Bermúdez, B. (Spain)*
- (P-126) Discovery of Small Molecules for IL-17 Mediated Inflammatory Diseases. *Álvarez, E. (Spain)*
- (P-127) Vascular damage induced by visfatin in mice involves NADPH oxidase activation and prostanoid release. *Ramos, M. (Spain)*
- (P-128) Psoriatic fibroblasts polarize macrophages to a pro-inflammatory phenotype. *Montesinos, M.C. (Spain)*

Natural Products

- (P-129) Effect of the intake of the strain Bifidobacterium animalism subsp. lactis CECT 8145 in Zucker fatty rats. *Alexandre, M.A. (Spain)*
- (P-130) Effects of pepsin egg white hydrolysate on metabolic syndrome. *Miguel, M. (Spain)*
- (P-131) Topical pre-treatment with a carotenoid from microalgae reduces cutaneous UVB-induced inflammation in hairless mice.

Rodríguez, A. (Spain)

(P-132) Diosmetine and diosmine inhibit the pro-inflammatory cytokines release. *Zaragozá, C. (Spain)*

(P-133) Anti-inflammatory and sedative activities of peperomia galioides: in vivo studies in mice. *Vila, E. (Spain)*

(P-134) Hepatoprotective effect of croton hypoleucus following thioacetamide-induced necrosis in rats. *Urrutia, T. A. (Mexico)*

(P-135) The reduction in adrenergic and inflammatory serum markers in osteoarthritis patients after treatment with chondroitin sulfate/glucosamine hydrochloride and celecoxib is different according to the presence of bacterial DNA in blood. *Martínez, H. (Spain)*

(P-136) Safety study on the use of medicinal plants. *Gruszycki, M. (Argentina)*

(P-137) Hemp (cannabis sativa L.) seed oil as a source of bioactive compounds for the treatment of fibromyalgia-related symptoms. *Montserrat-de la Paz, S. (Spain)*

(P-138) Dual effects of resveratrol on cell death and proliferation of colon cancer cells. *San Hipólito, A. (Spain)*

(P-139) Effects of olive leaf extract in high-fat diet-fed mice: impact on vascular dysfunction. *Díez, P. (Spain)*

(P-140) Anthelmintic activity of essential oils against Anisakis simplex L3 larvae. *López, V. (Spain)*

(P-141) Antioxidant and bioactive properties of Jasonia glutinosa (Compositae) in caenorhabditis elegans. *López, V. (Spain)*

Teaching Pharmacology

(P-142) Active Learning: Alignment of Assessment and Objectives. *Patangi, R. (Canada)*

(P-143) Motivational tools to encourage students to become engaged in a pharmacology subject. *García, J.J. (Spain)*

(P-144) Rubric-based scoring in a hands-on session of Veterinary Pharmacology. *Huerga, V. (Spain)*

(P-145) Does the design and development of objective structured clinical examinations by undergraduate students of Podiatry degree improve their learning and assessment skills about medicines? *Bellido, I. (Spain)*

(P-146) The last frontier: Inter professional learning events between dentistry and pharmacy. *Durham, L. (UK)*

(P-147) Using cinema films as an innovative educational strategy to create meaningful learning in pharmacology teaching. *Cabanillas, A. (Chile)*

(P-148) Implementation and evaluation of an online self-assessment system to improve student performance in Pharmacology. *Moreno, L. (Spain)*

(P-149) Students of the Primary Education Degree, as the new player in health and nutrition promotion. *Bermudez, B. (Spain)*

(P-150) New academic perspectives in teaching pharmacology and clinical therapeutics: an international service learning experience. *Lucena, M. (Spain)*

(P-151) Attractive key historical facts as a tool to teach pharmacology. *Serés, E. (Spain)*

(P-152) How did the press approach the discovery and use of sulphonamides during the 20th century? *Serés, E. (Spain)*

(P-153) Rational Pharmacotherapy in the assessment of clinical competence using an Objective Structured Clinical Examination "OSCE". *Blanco, E. (Spain)*

(P-154) Preparing pharmacy students to practice: specialized reports and oral communication activities. *Recio, M.C. (Spain)*

(P-155) Peer instruction in veterinary pharmacology: a preliminary experience. *Clos, V. (Spain)*

Pain

(P-156) Postoperative pain and morphine consumption after ultrasound-guided femoral and sciatic combined nerve block versus neurostimulation for femoral and sciatic combined nerve block or neurostimulation for femoral nerve block in primary elective total KN. *Bellido, I. (Spain)*

(P-157) sensitization of trpv1 neurons by pge2: Lost of sensory selectivity for noxious heat and participation on mechanical hyperalgesia. *Ruiz, M.C. (Spain)*

(P-158) Activation of extracellular signal-regulated kinases (ERK 1/2) in the Locus Coeruleus contributes to pain-related anxiety in arthritic rats. *Da Silva, G. (Spain)*

(P-159) Treatment with sulforaphane enhances the antinociceptive effects of delta opioid receptors in diabetic mice: mechanisms implicated. *Pol, O. (Spain)*

(P-160) Epigenetic mechanisms underlying neuropathic pain in rats. *Francés, R. (Spain)*

(P-161) The chemokine CCL4 induces opioid analgesia through lymphocyte stimulation and inhibits inflammatory hyperalgesia in mice. *García, M. (Spain)*

(P-162) Effects of vascular endothelial growth factor-A165b and SRPK1 inhibition in the monosodium iodoacetate model of osteoarthritis in rat. *Almahasneh, F. (UK)*

(P-163) Treatment of neuropathic pain associated to the spared nerve injury model in mice: role of sigma-1 receptors. *Bravo, I. (Spain)*

(P-164) Development of phenotypic in vitro models of pain in early drug discovery. *Martínez, A.L. (Spain)*

Ischemia & Reperfusion

(P-165) Simvastatin blocks soluble SSAO/VAP-1 release in experimental models of cerebral ischemia: possible benefits for stroke-induced inflammation control. *Unzeta, M. (Spain)*

(P-166) Plasma levels of therapeutic drugs significantly inhibit blood-brain barrier endothelial cell ABC transporters. *Shubbar, M. (UK)*

(P-167) Impact of cerebral ischemia/reperfusion and uric acid treatment on middle cerebral artery angiogenesis in normotensive and spontaneously hypertensive rats. *Masip, M. (Spain)*

Gastrointestinal

(P-168) New curcumin-coumarin derivatives and resveratrol reduce patophysiological processes associated with pancreatitis and pancreatic cancer. *Bugallo, A.I. (Spain)*

(P-169) Olive Leaf extract exhibits immunomodulatory activity in human PBMCs and Anti- Inflammatory effect in the DSS model of mouse colitis. *Veza, T. (Spain)*

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