

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

18-21 June 2017, Barcelona



**Programme**

# Sunday, June 18<sup>th</sup>

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 19<sup>th</sup>

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)*

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

18:00	<b>01. Neuropharmacology I</b>	<b>02. Cardiovascular &amp; Smooth Muscle</b>	<b>03. Receptors &amp; Ion Channels</b>	<b>04. Cancer, Pharmacogenomics &amp; Toxicology</b>
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 $\beta/\delta$ 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 $\Delta^9$ -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	$\alpha$ 2A- and $\alpha$ 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	<b>Plenary Lecture-</b> Cancer epigenetics- Genes & drugs. <i>Manel Esteller (Spain)</i>			
20:00	<b>Social Activity</b>			

08:30	Plenary Lecture- A novel pharmacological paradigm for chronic pain. <i>Antonio Ferrer- Montiel (Spain)</i>
09:30	Coffee Break <b>Posters Session</b> (P-89 to P-169)
11:00 - 13:00	Symposia
Room: Gran Salon Mediterranea	<p><b>S7. Being in the right place in the right time: Targeting oxidate stress</b>  <b>Chair: Martina Schmidt, University of Groningen (The Netherlands)</b>          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><b>S8. Inflammation</b>  <b>Chair: M<sup>a</sup> Jesús Sanz, University of Valencia (Spain)</b>          L-selectin shedding is the <math>\beta</math>go<sup>2</sup> 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<sup>a</sup> 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><b>S9. Psychopharmacology</b>  <b>Chairs: Javier J. Meana, Pais Vasco University (Spain) &amp; Juan Carlos Leza, University Complutense of Madrid (Spain)</b>          The prolyl oligopeptidase inhibitor IPR-19 ameliorates cognitive deficits in mouse models of schizophrenia. <i>Roger Prades (Spain)</i>          Role of serotonin 5-HT<sub>3</sub> 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><b>S10. Therapeutic Innovation</b>  <b>Chair: Eva Martínez - Moragon, Hospital Universitario Dr. Peset, Valencia (Spain)</b>          P2Y<sub>12</sub> 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><b>S11. Gastrointestinal and Hepatic Pharmacology</b>  <b>Chair: Jordi Bruix, CIBEREHD, (Spain) &amp; Marcel Jiménez, Autonomous University of Barcelona (Spain)</b>          The importance of the transportome in hepatic and gastrointestinal diseases. <i>Marçal Pastor- Anglada (Spain)</i></p>

	Pharmacological targets for NASH. <i>M<sup>a</sup> 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	<b>S12. Teaching Pharmacology</b>			
	<b>Chairs: Silvia Sánchez, University of Barcelona (Spain) &amp; Josep-Eladi Baños, Pompeu Fabra University (Spain)</b>			
	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	<b>Coffee Break</b>			
17:00	Selected Posters for oral presentation			
18:00	<b>05. Neuropharmacology II</b>	<b>06. Inflammation</b>	<b>07. Natural Products &amp; Teaching Pharmacology</b>	<b>08. Pain &amp; Ischemia</b>
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>Rodriguez-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 $\beta$ -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 <sub>2</sub> 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	<b>Plenary Lecture-</b> Pharmacology leaping over the gap: bringing transformational mechanisms to drug discovery. <i>M<sup>a</sup> Isabel Loza (Spain)</i>			
19:00	<b>SEF Assembly</b>			
21:00	<b>Gala Dinner</b>			

09:00		
11:00	Symposia	
Room: Gran Salon Mediterranea	<b>S13. Neuropharmacology</b>	
	<b>Chairs: Olga Valverde, Pompeu Fabra University (Spain) &amp; Maruja Hurlé, Cantabria University (Spain)</b>	
	Vulnerability factors that predispose to cocaine addiction. <i>Julia García-Fuster (Spain)</i>	
	Potential clinical value of microRNA-30c as biomarker and therapeutic target for neuropathic pain. <i>Monica Tramullas (Spain)</i>	
	Behavioral and molecular alterations induced by maternal alcohol binge consumption in offspring mice. <i>Olga Valverde (Spain)</i>	
	Therapeutic potential of conjugated siRNAs for the treatment of major depressive disorder. <i>Francisco Artigas (Spain)</i>	
Room: Sitges	<b>S14. Pharmacology of Anti- Cancer Drugs</b>	
	<b>Chair: Ramón Salazar, IDIBELL, ICO, University of Barcelona (Spain)</b>	
	ABTL0812 an autophagy-anticancer drug in Phase II clinical trials that inhibits PI3K/Akt/mTOR pathway by inducing TRIB3 expression. <i>José Alfón (Spain)</i>	
	Improving immunotherapy strategies in advanced endometrial carcinoma. <i>Josep Maria Piulats (Spain)</i>	
	New therapeutic proposals emerging from patient-derived preclinical platforms of pediatric solid tumors. <i>Angel Montero (Spain)</i>	
	The Cancer Genome Interpreter: a tool to annotate the biological and clinical relevance of tumor alterations. <i>David Tamborero (Spain)</i>	
Room: Favencia	<b>S15. JAK.STAT signalling: new targets and therapeutics for multiple diseases</b>	
	<b>Chairs: Tim Palmer, Bradford (UK) &amp; Ana P. Costa-Pereira, Imperial College (UK)</b>	
	Inflammatory re-tuning of IL-6 mediated Jak-STAT signaling. <i>Simon Jones (UK)</i>	
	The STAT3 paradox in breast cancer: an inducer of cell death and an oncogene. <i>Cristine Watson (UK)</i>	
	JAK-STAT Pathway in myeloproliferative neoplasms: from JAK2 V617F to calreticulin mutants. <i>Stefan Constantinescu (Belgium)</i>	
	Targeting STAT5 in leukemogenesis – what's new? <i>Veronica Sexl (Austria)</i>	
11:00	Coffee Break	
11:30	<b>Plenary Lecture-</b> Present and future pharmacological treatment of Alzheimer's disease. <i>Agneta Nordberg, Karolinska Institutet, Stockholm, Sweden</i>	
12:30	<b>Closing Ceremony</b>	
13:30	Lunch & Departure	

## Posters Presentations

### 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  $\Delta^9$ -THC administration leads to functional 5HT<sub>2A</sub> receptors supersensitivity mediated by inhibitory Gi/o proteins in mouse brain cortex. *Ibarra, I. (Spain)*

(P-6)  $\alpha$ 2A- and  $\alpha$ 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-HT<sub>3</sub> 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 CO<sub>2</sub> 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. *Ramírez, M.J. (Spain)*

(P-20)  $\alpha$ 2A- and  $\alpha$ 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 mGlu<sub>5</sub> 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 H<sub>2</sub>O<sub>2</sub>. *Rivera de los Arcos, L. (Spain)*
- (P-34) Role of mitogen-activated protein kinase (mapk) in the regulation of I-type channel calcium entry in resistance arteries. *Gutierrez Cruz, A. (Spain)*
- (P-35) NADPH oxidase-derived H<sub>2</sub>O<sub>2</sub> 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- $\beta$ /Caveolin –dependent secretion of Pigmented Epithelium Derived Factor: TGF- $\beta$  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) PGE<sub>2</sub> 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 $\beta$ / $\delta$  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)*
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