



## Vascular Physiology and Pharmacology Group

Publications: 14

Q1: 14



### RESEARCH ACTIVITY

#### ■ Doctoral theses

**González Amor M.** Interferon-stimulated gene 15 (ISG15) and myeloid G protein-coupled receptor kinase 2 (GRK2) are novel mediators of vascular dysfunction induced by hypertension and obesity[dissertation]. Madrid: UAM: 2021(09/07/2021).

**Directors:** Briones Alonso AM,  
García Redondo AB.

**International Mention**



#### ■ Master Theses

**Boukich El Jouhari N.** Effect of Resolvin D2 on the cardiovascular alterations induced by aldosterone[dissertation]. Madrid: UAM: 2021(06/09/2021).

**Directors:** Briones Alonso AM,  
Rodríguez Díez R

**Arruda Navarro Albuquerque D.** Identification of the integrin receptor involved in vascular damage induced by interferon stimulated gene 15[dissertation]. Madrid:

UAM: 2021(06/09/2021).

**Directors:** Briones Alonso AM,  
González Amor M

**Méndez Albiñana P.** Efecto de la suplementación con pectina de cítricos sobre biomarcadores del síndrome metabólico en un modelo animal inducido por una dieta rica en grasa.[dissertation]. Madrid: UAM: 2021(06/09/2021).

**Director:** Blanco Rivero J.

**Ayman M.** Supplementation with a Ca-

rob ( Ceratonia siliqua L.) Fruit Improves Endothelial Dysfunction Associated with Metabolic Syndrome in Mice: Possible Role of Hydrogen Sulphide.[dissertation]. MADRID: UAM: 2021(06/09/2021)

**Directors:** García Redondo AB,  
Blanco Rivero J.

#### ■ Final Degree Theses

**Tesoro García F.** Cuidados de enfermería al paciente con quemaduras[dissertation]. Alcorcón: URJC: 2021(16/06/2021).



**Director:** Hernanz Martín R.

**Paz Fernández A.** Trastornos del sueño tras un ictus[dissertation]. Alcorcón: URJC: 2021(16/06/2021).

**Director:** Hernanz Martín R.

**Barahona Borja M.** Apnea obstructiva del sueño en tiempos de Covid-19[dissertation]. Alcorcón: URJC: 2021(16/06/2021).

**Director:** Hernanz Martín R.

**Serrano A.** Efecto de la suplementación aguda con monohidrato de creatina para la mejora del rendimiento en el heptatlón femenino[dissertation]. Madrid: UAM: 2021(16/06/2021).

**Directors:** García Redondo AB,  
Blanco Rivero J.

**Rodrigo Huescas N.** Estrategias nutricionales para la mejora del rendimiento y recuperación en el fútbol de élite[dissertation]. Madrid: UAM: 2021(16/06/2021).

**Directors:** García Redondo AB,  
Blanco Rivero J.

## ■ Publications

- Beck L, Pinilla E, Arcanjo DDR, Hernanz R, Prat-Duran J, Petersen AG, Kohler R, Sheykhzade M, Comerma-Steffensen S, Simonsen U. Pifrenidone is a vasodilator: Involvement of K(V)7 channels in the effect on endothelium-dependent vasodilation in type-2 diabetic mice. *Front Pharmacol.* 2021, 11: 619152. Article. IF: 5.988, Q1
- Blanco-Rivero J Couto GK Paula SM Fontes MT Rossoni LV. Enhanced sympathetic neurotransduction in the superior mesenteric artery in a rat model of heart failure: role of noradrenaline and ATP. *Am J Physiol-Heart C.* 2021, 320(2): H563-74. Article. IF: 5.125, Q1
- Briones A Fernández-Alfonso M. Report on the 24th meeting of the ECCR 8th-9th October 2021. *Clin Sci (Lond).* 2021, 135(S1): 1. Article. IF: 6.876, Q1

- Canes L, Martí-Pamies I, Ballester-Servera C, Alonso J, Serrano E, Briones AM, Rodríguez C, Martínez-González J. High NOR-1 (Neuron-Derived Orphan Receptor 1) expression strengthens the vascular wall response to angiotensin II leading to aneurysm formation in mice. *Hypertension.* 2021, 77(2): 557-70. Article. IF: 9.897, Q1
- Cros-Brunso L, Camacho-Rodríguez L, Martínez-González A, Llevenes P, Salaices M, García-Redondo AB, Blanco-Rivero J. A blunted sympathetic function and an enhanced nitregeric activity contribute to reduce mesenteric resistance in hyperthyroidism. *Int J Mol Sci.* 2021, 22(2): 570. Article. IF: 6.208, Q1
- Davel AP, Blanco-Rivero J, Rossoni LV. Editorial: Vascular adjustments in cardiovascular disorders. *Front Physiol.* 2021, 12: 777488. Editorial Material. IF: 4.755, Q1
- López-Moreno M, Garcés-Rimón M, Miguel M, López MTI. Adherence to mediterranean diet alcohol consumption and emotional eating in spanish university students. *Nutrients.* 2021, 13(9): 3174. Article. IF: 6.706, Q1
- Martínez-Casales M, Hernanz R, Alonso MJ. Vascular and macrophage heme oxygenase-1 in hypertension: A mini-review. *Front Physiol.* 2021, 12: 643435. Review. IF: 4.755, Q1
- Mas-Bargues C Alique M Barrus-Ortiz MT Borrás C Rodrigues-Díez R. Exploring new kingdoms: The role of extracellular vesicles in oxi-inflammatory related to cardiorenal syndrome. *Antioxidants.* 2022, 11(1): 78. Review. IF: 7.675, D1
- Morales D, Miguel M, Garcés-Rimón M. Pseudocereals: a novel source of biologically active peptides. *Crit Rev Food Sci.* 2021, 61(9): 1537-44. Review. IF: 11.208, D1
- Naya-Catala F, Wiggers GAA, Piazzon MC, López-Martínez MI, Estensoro I, Calduch-Giner JAA, Martínez-Cuesta MC, Requena T, Sitja-Bobadilla A, Miguel M, Pérez-Sánchez J. Modulation of Gilthead sea bream gut microbiota by a bioactive egg white hydrolysate: Interactions between bacteria and host lipid metabolism. *Front Mar Sci.* 2021, 8: 698484. Article. IF: 5.247, D1
- Olivencia MA Martínez-Casales M Peraza DA García-Redondo AB Mondéjar-Parreno G Hernanz R Salaices M Cogolludo A Pennington MW Valenzuela C Briones AM. K(V)1.3 channels are novel determinants of macrophage-dependent endothelial dysfunction in a mouse model with

angiotensin II-induced hypertension. *Brit J Pharmacol.* 2021, 178(8): 1836-54. Article. IF: 9.473, D1

- Oller J, Gabande-Rodríguez E, Ruiz-Rodríguez MJ, Desdin-Mico G, Aranda JF, Rodrigues-Díez R, Ballesteros-Martínez C, Blanco EM, Roldan-Montero R, Acuna P, Gil AF, Martín-López CE, Nistal JF, Cárdenas CLL, Lindsay ME, Martín-Ventura JL, Briones AM, Redondo JM, Mittelbrunn M. Extracellular tuning of mitochondrial respiration leads to aortic aneurysms. *Circulation.* 2021, 143(21): 2091-109. Article. IF: 39.918, D1
- Simoes MR, Azevedo BF, Alonso MJ, Salaices M, Vassallo DV. Chronic low-level lead exposure increases mesenteric vascular reactivity: role of cyclooxygenase-2-derived prostanoids. *Front Physiol.* 2021, 11: 590308. Article. IF: 4.755, Q1

## ■ Research projects

**Briones Alonso AM** (UAM). General Coordinator: Thomas Unger (University of Maastricht). Mechanistic Integration of vascular and endocrine pathways for Subtyping Hypertension: an Innovative network approach for Future generation research Training-MINDSHIFT (Grant agreement 954798). Marie Skłodowska-Curie actions. Innovative Training Networks (ITN)-European Joint Doctorates. 2021-2024.

**Managment centre:** UAM

**Briones Alonso AM.** Deciphering the role of novel inflammatory mediators derived from interferon and the inefficient resolution of inflammation in the cardiovascular damage associated to hypertension (PID2020-116498RB-I00). AEI. 2021-2024.

**Managment centre:** UAM

**Briones Alonso AM.** Interferon stimulated gene 15 (ISG15) as a novel mediator of cardiovascular damage. Bayer Grants-

4Targets. 2020-2021.

**Managment centre:** UAM

**García-Redondo AB.** Interferon stimulated gene 15 (ISG15) as a new mediator of aortic aneurysms (SI1-PJI-2019-321). CAM. 2020-2022.

**Managment centre:** UAM

**Miguel Castro M.** Hidrólisis de proteínas vegetales de alto valor biológico: obtención de péptidos antioxidantes y nuevas texturas culinarias para la elaboración de productos sin gluten (AGL-2017-89213). MINECO. 2018-2021.

**Managment centre:** CSIC

**Miguel Castro M.** Hidrolizado de clara de huevo y salud cardiovascular. Estudio del efecto antihipertensivo y de los mecanismos de acción en ratas DOCA-sal. (COOPA20453). CSIC. 2021-2022.

**Managment centre:** CIAL (CSIC)

**Rodrigues Díez R.** Contrato Juan de la Cierva (IJCI-2017-31399). MINECO. 2019-2021.

**Managment centre:** UAM

**Salaices Sánchez M, Briones Alonso AM.** Novel inflammatory mechanisms of vascular damage in hypertension and obesity. Role of pro-resolving lipid mediators as possible therapeutic strategy. (SAF2016-80305-P). MINECO. 2017-2021.

**Managment centre:** UAM

**Salaices Sánchez M.** Mediadores y mecanismos moleculares de patologías aórticas y valvulares (B2017/BMD-3676). CAM. 2018-2021.

**Managment centre:** UAM.



## ■ Cibers and Retics

**Salaices Sánchez M.** Networked Biomedical Research Center for Cardiovascular Diseases. (CB16/11/00286). IISCIII. (31/12/2022).

Management centre: UAM.

## ■ Patents and trademarks

**González-Muñiz R, Pérez de Vega MJ, Miguel M, Balsera-Paredes B, Moreno S,** inventors; CSIC, assignee. Triazolyl polyphenols with antioxidant activity and uses thereof; P201531450; 2015 November 08.

**León Martínez R, Abril Comesaña S, Duarte Flórez P, Crisman Vigil E, Michalska P, Salaices Sánchez M, Menéndez Ramos JC,** inventors; Fundación para la Investigación Biomédica del Hospital Universitario de la Princesa, UAM, UCM, assignees. Compuestos agonistas nicotínicos y antioxidantes para el tratamiento de enfermedades neurodegenerativas. P201930908. 2019 October 14.

**León Martínez R, Abril Comesaña S, Michalska P, Buendía Abaitua I, Salaices Sánchez M, Menéndez Ramos JC, García López M;** inventors; Fundación para la Investigación Biomédica del Hospital Universitario de la Princesa, UAM, UCM, assignees. Compuestos derivados de 2-iodo-7-(((2-(5-metoxi-1H-indol-3-il)etil)amino)metil)-1-alkil/aryl-6,7,7a,8-tetrahidro-3H-pirrololo[2,1-j]quinolina-3,9(5H)-diona como agentes antioxidantes, inductores de NRF2 y moduladores nicotínicos para el tratamiento de enferme-

dades neurodegenerativas. P201930190. 2019 March 01.

**Miguel Castro M, Garcés Rimón M, López-Alonso Fandiño R, Sandoval Huertas M,** inventors; CSIC, Mario Sandoval Huertas, assignees. Healthy food compositions having gel or foam textures and comprising hydrolyzed egg products. P201331886, PCT/ES2014/070902, EP3106042, US9648897, AR098685, JP2015130856, MX2014015135; 2013 December 20.

**Miguel Castro M, López-Alonso Fandiño R, Ramos González MM, Alexandre de Artiñano A,** inventors; CSIC, assignee. Production of and antihypertensive properties of peptides derived from egg white proteins. P200501246 PCT/ES2006/070067; 2005 May 23.

**Miguel Castro M, López-Alonso Fandiño R, Recio Sánchez MI, Ramos González MM, Alexandre de Artiñano A,** inventors; CSIC, assignee. Bioactive peptides derived from the proteins of egg white by means of enzymatic hydrolysis. P200301829, PCT/ES2004/070059, EP1661913, US8227207, AT388166, DE602004012289, DK1661913, JP2007523045; 2003 July 31.

**Miguel Castro M, Garcés Rimón M,** authors; Miguel Castro M, Garcés Rimón M, assignee. Brand name: leggie. ESM4044711; 2019 November 22.

leggie

**Pérez Girón JV, Ruiz-Castellanos MJ, de Luis Jiménez O, Pérez Boto V, Sanz**

**González R, Hernández Vélez MC, Mas Gutiérrez JA, Alonso Gordo MJ, Salaices Sánchez M, Ros Pérez M, Coloma Jerez A, Asenjo Barahona A, Sanz Montaña JL, Puente Prieto J, Jensen J,** inventors; NANOATE, S.L., assignee. Method for producing biosensors. P201031224, PCT/ES2011/070536; 2010 August 05.

**Recio Sánchez MI; Quirós del Bosque A, Hernández Ledesma B, Gómez Ruiz JA, Miguel Castro M, Amigo Garrido L, López Expósito I, Ramos González MM, Alexandre de Artiñano A, (Contreras Gómez M),** inventors; CSIC, assignee. Bioactive peptides identified in enzymatic hydrolyzates of milk caseins and method of obtaining same. P200501373, PCT/ES2006/070079, EP1905779, EP2495250, US8354502, AU2006256720, BRPI0611729, CA2611416, CN101305017, CN103254278, JP2008545774, KR20080045108, MX2007015528, NO20080103; 2005 June 08.

**Miguel M, Bruna E, Redondo BI, Gómez J, Gómez Sánchez J.** inventors: : Cárnicas Joselito S.L: assignee. Extracto procedente de la grasa de cerdo, método de obtención, composición alimenticia que lo comprende y usos del mismo. P2021130236. 2021 March 17

**Miguel M, Bruna E, Redondo BI, Gómez J, Gómez Sánchez J, Sabater-Muñoz B.** inventors: Cárnicas Joselito S.L. assignee. Composición farmacéutica que comprende un extracto procedente de la grasa de jamón de cerdo como principio activo y su uso en medicina para la prevención cardiovascular e inflamación intestinal. P202131111. 2021 november 30

