

CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Juan		
Family name	Martínez-Pinna		
Gender (*)	Male	Birth date	
ID number			
e-mail		https://isletcellsignal.umh.es/es/	
Open Researcher and Contributor ID (ORCID) (*)		0000-0003-0777-2049	

(*) *Mandatory*

A.1. Current position

Position	University Lecturer (TU)		
Initial date	30/03/2010		
Institution	Universidad de Alicante (UA)		
Department/Center	Fisiología, Genética y Microbiología	Facultad de Ciencias	
Country	Spain	Teleph. number	636229731
Key words	Excitable cells, ion channels, endocrine disruptors, diabetes		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
01/06/2002 - 31/12/2003	Postdoctoral fellow. University of Cambridge (UK)
01/01/2001-30-03-2010	Ayudante Universidad and Profesor Contratado Doctor. UA.
01-01-1997-31/12/2000	PhD student. Scholarship from the Spanish Ministry of Education and Sciences, Institute of Neuroscience and Department of Physiology, UMH, Spain.

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Biology degree	Universidad de Alicante	1993
PhD Neuroscience	Universidad Miguel Hernández de Elche	2000

(Include all the necessary rows)

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Juan Martínez-Pinna is Lecturer of Physiology at UA, Spain. He is the head of the “*Fisiología Neuroendocrina*” group at UA and associated researcher in Instituto de Investigación Desarrollo e Innovación en Biotecnología Sanitaria de Elche (IDiBE) at UMH. His scientific interest is focused on studying the effect of endocrine disruptors with estrogenic activity on the physiology of excitable cells. The findings of his research line have been important to understand low dose effects triggered by Endocrine Disruptors with estrogenic activities, mainly bisphenol-A in the electrical activity of pancreatic β -cells and neurons. During the last eight years, in the group of Angel Nadal with which he is co-IP of a project of the Ministry, they probed that bisphenol-A exposure alters ion channels activity through estrogen receptors modulation in excitable cells and that this predisposes to diabetes and to increased pain sensitivity. He has published scientific articles (27 in Pubmed) and I have made more than 50 communications to national and international congresses. He is reviewer of scientific articles in international journals, Brain Research, Journal of Experimental Pharmacology, PlosOne and Membrane Physiology and Biophysics, being a member of the editorial board of the latter. Some general indicators of the quality of scientific production are: 4 research periods (sexenios; the last one granted on 01/01/2025). Total citations: 922. H-index: 19.

Throughout his career he has contributed to the training of young researchers through the direction of numerous TFGs and TFMs, as well as the direction of two doctoral theses (one of them in its last year). In addition, he has contributed to transfer these discoveries to society through informative talks (Pint of Science, Night of Research at UA, talks in high schools, classes for the elderly, etc). I have made short stays at the Universities of Leicester (UK), Skovde (Sweden) and Federal de Santa Catarina (Brazil). Finally, he has been Principal Investigator of three competitive projects (national and autonomic) and has participated as a collaborating researcher in other R&D projects funded in public calls (including the Consolider project: The Spanish Ion Channel Initiative).

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions)

- **Martinez-Pinna, J.**, McLachlan, E. & Gallego, R. Distinct mechanisms for activation of Cl⁻ and K⁺ currents by Ca²⁺ from different sources in mouse sympathetic neurones. **J. Physiol.** 2000. 527.2: 249-264.
- **Martinez-Pinna, J.**, Gurung, I., Vial, C., Leon, C., Gachet, C. Evans, R. & Mahaut-Smith, M.P. Direct voltage control of P2Y₁ and other G_q-coupled receptors. **J. Biol. Chem.** 2005. 280 (2): 1490-1498.
- Mahaut-Smith MP, **Martinez-Pinna J**, Gurung IS. A role for membrane potential in regulating GPCRs? **Trends Pharmacol Sci.** 2008; 29(8):421-9.
- **Martinez-Pinna J**, Gurung IS, Mahaut-Smith MP, Morales A. Direct voltage control of endogenous lysophosphatidic acid G-protein-coupled receptors in Xenopus oocytes. **J Physiol.** 2010 15; 588:1683-93.
- **Martinez-Pinna J**, Marroqui L, Hmadcha A, Lopez-Beas J, Soriano S, Villar-Pazos S, Alonso-Magdalena P, Sousa Dos Santos R, Quesada I, Martin F, Soria B, Gustafsson JA and Nadal A. Oestrogen receptor β mediates bisphenol-A actions on ion channel expression in mouse pancreatic beta cells. **Diabetologia.** 2019; 62(9):1667-1680.
- Soriano S, Gil-Rivera M, Marroquí L, Alonso-Magdalena P, Fuentes E, Gustafsson JA, Nadal A, **Martinez-Pinna J**. Bisphenol A regulates Nav1.7 ramp currents in mouse dorsal root ganglion neurons and increases nociception. **Sci Rep** 2019; 9 (1):10306.
- Marroqui, L; **Martinez-Pinna, J**; Castellano-Muñoz, M; dos Santos, R; Medina-Gali, R; Soriano, S; Quesada, I; Gustafsson, JA; Encinar, JA; Nadal, A. Bisphenol-S and Bisphenol-F alter mouse pancreatic β -cell ion channel expression and activity and insulin release through an estrogen receptor ER β mediated pathway. **Chemosphere** 2020:129051.
- Capera J, Pérez-Verdaguer M, Peruzzo R, Navarro-Pérez M, **Martínez-Pinna J**, Alberola-Die A, Morales A, Leanza L, Szabó I, Felipe A. A novel mitochondrial Kv1.3-caveolin axis controls cell survival and apoptosis. **Elife.** 2021;10:e69099.
- Babiloni-Chust I, Dos Santos RS, Medina-Gali RM, Perez-Serna AA, Encinar JA, **Martinez-Pinna J**, Gustafsson JA, Marroqui L, Nadal A. G protein-coupled estrogen receptor activation by bisphenol-A disrupts the protection from apoptosis conferred by the estrogen receptors ER α and ER β in pancreatic beta cells. **Environ Int.** 2022; 164:107250.
- **Martínez-Pinna J**, Sempere-Navarro R, Medina-Gali RM, Fuentes E, Quesada I, Sargis RM, Trasande L, Nadal A. Endocrine disruptors in plastics alter β -cell physiology and increase the risk of diabetes mellitus. **Am J Physiol Endocrinol Metab.** 2023; 324(6).

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

Juan Martinez-Pinna has attended to more than 50 congress and has been an invited speaker at congresses and academic seminars.

1. Señalización intracelular sensible al potencial de membrana en células no excitables. Instituto de Neurociencias, Universidad Miguel Hernández de Elche -CSIC. 16/01/2004

2. Señalización intracelular sensible al potencial de membrana en células no excitables. Departamento de Fisiología Genética y Microbiología, Universidad de Alicante. 20/02/2004
3. Vías de señalización intracelular sensibles al potencial de membrana. Hospital Ramón y Cajal (Madrid). 17/10/2005
4. Voltage control of G-protein-coupled receptor-mediated calcium signaling. The Systems Biology Research Centre, University of Skövde. 05/05/2014
5. Diversidad de canales iónicos de potasio. Societat Catalana de Biologia. 03/12/2016
6. Ion channel physiology. IDiBE (UMH). 05/11/2021
7. The endocrine disruptor bisphenol A regulates sodium Nav1.7 ramp currents in mouse dorsal root ganglion neurons and increases nociception. VIII congress RECI. San Juan de Alicante.

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

COMO INVESTIGADOR PRINCIPAL:

Estudio del papel del potencial de membrana en la modulación de los receptores acoplados a proteínas-G en ovocitos de *Xenopus*. Generalitat Valenciana, GV04A/573 (16.500,00 €). 2004-2005.

Estudio del mecanismo de modulación por el voltaje de los receptores acoplados a proteínas-G. Generalitat Valenciana GV06A/323 (18.500,00 €). 2006-2007

Relación entre ERalfa, ERbeta y GPER en las células beta del páncreas y su papel en la regulación de los canales de potasio y la apoptosis inducida por estrógenos ambientales. AEI, PID2020-117294RB-I00 (338.800 €). 2021-2024. Co-Investigador Principal with Angel Nadal (UMH).

Efectos fisiológicos de la señalización extranuclear selectiva del receptor de estrógenos en células- β pancreáticas y neuronas hipotalámicas. AEI, PID2023-150256NB-I00 (373.800 €). 2025-2028. Co-Investigador Principal with Angel Nadal (UMH).

COMO INVESTIGADOR:

Mecanismos de supresión, potenciación y modulación sináptica el sistema nervioso central de mamíferos. DGICYT, PM95-0107 (11.700.000 pts). 1995-1998. IP: Roberto Gallego (UA). Becario.

Papel de la hiperpolarización de la membrana neuronal en la generación de la actividad eléctrica de la corteza visual primaria. DGESEIC, PM98-0102-C02-01 (18.877.000 pts). 1999-2000. IP: Roberto Gallego (UMH). Becario.

Papel de los ICI(Ca) en la maduración, fertilización y primeros estadios del desarrollo de ovocitos de *Xenopus*. Generalitat Valenciana, CTIDIA/2002/185 (22.807,50 €). 2002-2003. IP: Pedro Lax (UA). Investigador.

Estudio electrofisiológico de las propiedades de la membrana de ovocitos de *Xenopus laevis* durante la ovogénesis, la maduración y tras la fecundación. Ministerio de Ciencia y Tecnología, BFI2001-0756 (42.161,00 €). 2002-2005. IP: Andrés Morales (UA). Investigador.

The spanish ion channel initiative. Ministerio de ciencia e innovación consolider-ingenio 2010 csd2008_00005 (166.000 €). 2008-2013. IP: Antonio Ferrer-Montiel. Investigador colaborador.

Modulación de neuroreceptores ionotrópicos por anestésicos locales y anticolinesterásicos por grupos amino o amonio. Ministerio de Economía y Competitividad BFU2012-31359. 2013-2016. IP: Andrés Morales (UA). Investigador.

Efectos de la exposición simultánea a disruptores endocrinos y dieta rica en grasa sobre la célula beta pancreática e implicaciones en la diabetes mellitus de tipo 2. Ministerio de Economía, Industria y Competitividad. AEI. BFU2017-86579-R. 2017-2020. IP: Ángel Nadal (UMH). Investigador

Abordando el papel del páncreas endocrino en el envejecimiento. Nuevas estrategias y perspectivas. ICAR. International Center for Aging Research. 2024. IP: Sergi Soriano (UA). Universidad de Alicante. Investigador.

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any