
BIOGRAPHICAL SKETCH

Provide the following information for the proposed network coordinators and members
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NAME DE LA POMPA, José Luis jlpompa@cnic.es	POSITION TITLE Full Professor, Centro Nacional de Investigaciones Cardiovasculares (CNIC) Madrid, SPAIN https://www.cnic.es/en/investigacion/intercellular-signaling-cardiovascular-development-and-disease		
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, and include postdoctoral</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Complutense University, Madrid, SPAIN	B.S.	1980-1985	Biology, Genetics
Centro de Biología Molecular and Instituto Cajal, CSIC, Madrid. PhD thesis: Autónoma University of Madrid (UAM), Madrid, SPAIN	PhD, summa cum laude	1986-1990	Genetics and developmental biology

A. PERSONAL STATEMENT: We study the role of intercellular communication in cardiovascular development, and its connection to human disease, particularly congenital heart defects (CHD). In the last several years our group has been studying the role of intercellular signals (ie: NOTCH, BMP2, EPHRINB2, GPR126 and NRG1) in mediating the communication between endocardium-myocardium in cardiovascular development (valves, ventricles and coronaries) or between the heart and placenta, and their implication in congenital heart defects and cardiomyopathy.

B. POSITIONS AND AWARDS:

Positions

1990-02/94. Postdoctoral fellow Dr. Rolf Zeller, European Molecular Biology Laboratory (EMBL), Heidelberg, GERMANY.
06/1994-04/1997. Postdoctoral fellow Dr. Tak W. Mak, Ontario Cancer Institute and Amgen Institute, Toronto, CANADA.
05/1997-02/1999. Staff Scientist. Amgen Institute, Toronto, Ontario (CANADA).
05/1997-02/1999. Staff Scientist. Amgen Institute, Toronto, Ontario (CANADA).
03-12/1999. Group Leader. EMBL Mouse Biology Programme. Monterotondo, Rome (ITALY).
01-12/2000. Associate Professor. Center for Aging and Developmental Biology. University of Rochester School of Medicine. Rochester, NY. (USA).
01/ 2001-08/2003. Full Professor, Head of the Molecular Oncology Department, Institute for Oncologic Research. Barcelona (SPAIN).
09/2003-12/2009. Assistant, Associate Professor. Department of Immunology and Oncology, Centro Nacional de Biotecnología-CSIC. Madrid (SPAIN).
Jan. 2010-Dec 2014. Full Professor. Cardiovascular Developmental Biology Department. CNIC, Madrid (SPAIN).
Jan. 2011-Dec 2014. Full Professor and Program Coordinator. Cardiovascular Developmental Biology. CNIC.
Jan 2015-present. Full Professor. Head of the laboratory: Intercellular Signaling in Cardiovascular Development and Disease CNIC.

Honors

1986. Predoctoral Fellowship, Spanish Ministry of Education and Science (MEC).
1990. Best PhD Thesis Award, Caja de Ahorros y Monte de Piedad de Madrid, and Postdoctoral Fellowship, MEC.
1992. EMBO Postdoctoral Fellowship.
1999. Member of the Governing Board of the EMBL, Mouse Biology Program, Monterotondo, IT.
2001. Head of the Molecular Oncology Department, Institut Recerca Oncológica (IRO).
2007. Member of the International Society for Heart Research (ISHR).
2007-present. *Ad hoc* reviewer for Cell, Dev Cell, Nature, Nat Cell Biol, Nat Med, Circ Res, Circ, Eur H J, ATVB.

2014. Chair, Organizing Committee of the International Weinstein Conference on cardiovascular development held in Madrid (Spain).

2010-2014; 2018-2022. Nucleus Member of the ESC Working Group on Developmental Anatomy and Pathology.

2019-present. Member of the evaluation panel of the Marseille Institute of Rare Diseases (MarMaRa), Aix-Marseille University, Marseille, France.

C. PUBLICATIONS

Scopus H-index: 62 ([Google scholar](#)), 54 ([Web of Science](#)). 116 papers published. Total cites: 23,400 (Scopus).
[ResearcherID: F-9719-2014](#), [ORCID 0000-0001-6761-7265](#)

a. 5 more important publications. Please insert hyperlink to the online publication

1. Siguero-Alvarez M, ... **de la Pompa JL**. (2023). [A Human Hereditary Cardiomyopathy Shares a Genetic Substrate With Bicuspid Aortic Valve](#). *Circulation* 147, 47-65. PMID: 36325906

2. Torregrosa-Carrión R, ... **de la Pompa JL**. (2021). [Adhesion G protein-coupled receptor Gpr126/Adgrg6 is essential for placental development](#). *Sci Adv* 7(46):eabj5445. PMID: 34767447

3. Travisano SI, ... **de la Pompa JL**. (2019). [Coronary arterial development is regulated by a Dll4-Jag1-EphrinB2 signaling cascade](#). *Elife*. 8:e49977. PMID: 31789590

4. D'Amato G, ... **de la Pompa JL**. (2016). [Sequential Notch activation regulates ventricular chamber development](#). *Nat Cell Biol*. 18(1):7-20. PMID: 26641715.

5. Luxán G, ... **de la Pompa JL**. (2013). [Mutations in the NOTCH pathway regulator MIB1 cause left ventricular noncompaction cardiomyopathy](#). *Nat Med*. 19(2):193-201. PMID: 23314057

b. 10 additional publications.

1. Tessler I*, ... **de la Pompa JL***, Gilon D, Messas E, and Durst R. [Novel Association of the NOTCH Pathway Regulator MIB1 Gene With the Development of Bicuspid Aortic Valve](#). *Corresponding authors. *JAMA Cardiol*. 2023 Jul 5;e231469.

2. **de la Pompa JL**. [Don't Break the Axis: Placental Inflammation Leads to Congenital Heart Disease](#). *Circulation*. 2023 147(12):973-976. doi: 10.1161/CIRCULATIONAHA.123.063657.

3. Luna-Zurita, L. ,... **de la Pompa JL (2023)** [Cooperative Response to Endocardial Notch Reveals Interaction With Hippo Pathway](#). *Circ Res*. 133(11):1022-1039.

4. Grego-Bessa J, ... **de la Pompa JL** (2023). [Nrg1 Regulates Cardiomyocyte Migration and Cell Cycle in Ventricular Development](#). *Circ Res*. 133(11):927-943.

5. Prados B, ... **de la Pompa JL** (2021). [Heterotopic ossification in mice overexpressing Bmp2 in Tie2+ lineages](#). *Cell Death Dis*. 12(8):729. doi: 10.1038/s41419-021-04003-0.

6. MacGrogan D, ... **de la Pompa JL**. (2020). [Identification of a peripheral blood gene signature predicting aortic valve calcification](#). *Physiol Genomics*. 52(12):563-574.

7. Torregrosa-Carrión R, ... **de la Pompa JL**. (2019) [NOTCH Activation Promotes Valve Formation by Regulating the Endocardial Secretome](#). *Mol Cell Proteomics*. (9):1782-1795.

8. Del Monte-Nieto G, ... **de la Pompa JL**, Shou W, Adams RH, Harten SK, Tzahor E, Zhou B, Harvey RP (2018). [Control of cardiac jelly dynamics by NOTCH1 and NRG1 defines the building plan for trabeculation](#). *Nature* 557(7705):439-445. doi: 10.1038/s41586-018-0110-6. PMID: 29743679

9. Papoutsis T... **de la Pompa JL**. (2018). [Bmp2 and Notch cooperate to pattern the embryonic endocardium](#). *Development* 145(13):dev163378.

10. MacGrogan D, ... **de la Pompa JL**. (2016). [Sequential Ligand-Dependent Notch Signaling Activation Regulates Valve Primordium Formation and Morphogenesis](#). *Circ Res* 118(10):1480-97.

D. CURRENT AND ANTICIPATED GRANT SUPPORT

-Molecular basis of cardiomyocyte maturation: Implications for congenital heart disease and cardiomyopathy. Spanish Ministry of Science, Innovation and Universities (MCIU). Ref.: PID2022-104776RB-100. 2023-2026. 560,000€.

-CIBER Cardiovascular. Spanish Ministry of Science, Innovation and Universities (MCIU). Carlos III Health Institute. Ref.: CB16/11/00399. 2017-open end. Network project. 55,000€/year, yearly evaluation.

- Novel genetic and mechanistic studies of hypertrophic cardiomyopathy. La Caixa Research Health Foundation. Ref. HR23-00084. 1,000,000€ consortium. 09/2023-09/26.

-Leducq Trans-atlantic Network: The placenta in maternal and fetal cardiovascular health and disease (PlacHear Network). 8,000,000\$ consortium. 1,050,000\$ per group. 01/01/2025-12/31/2030.