

BIOGRAPHICAL SKETCH

NAME JOSÉ LUIS DE LA POMPA, PhD	Present Position Senior Investigator http://www.cnice.es/es/desarrollo/desarrollo/
ID No: 50302612W. Nationality: Spanish Date of birth: 04/21/1963. Gender: M E-mail: jlpompa@cnice.es Telephone: +34-620-936633	Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC) Melchor Fernández Almagro 3, 28029 Madrid, Spain

Education/Training

<i>INSTITUTION AND LOCATION</i>	<i>DEGREE</i>	<i>Date</i>	<i>FIELD OF STUDY</i>
University Complutense, Madrid Autónoma University, Madrid	Bachelor Ph.D.	June 1985 Jan 1990	Biology Genetics

Previous Positions

<i>Position</i>	<i>Institution</i>	<i>Start date</i>	<i>End date</i>
Program Coordinator	Cardiovascular Development and Repair Department, CNIC	01/01/2011	31/01/2015
Associate Professor	Centro Nacional de Biotecnología (CNB-CSIC), Madrid, Spain	01/08/2003	31/12/2008
Investigator and Department Head	Instituto de Recerca Oncologica (IRO), Barcelona, Spain	01/01/2001	31/07/2003
Associate Professor	Center for Aging and Developmental Biology, University of Rochester Medical Center, NY, USA	01/01/2000	31/12/2000
Group Leader	European Molecular Biology Laboratory (EMBL) Mouse Biology Programme, Rome, Italy	01/03/1999	31/12/1999
Staff Scientist	Amgen Institute, Toronto, Canada	01/05/1997	28/02/1999
Postdoctoral Associate	Amgen Institute, Toronto, Canada	01/04/1994	30/04/1997
Postdoctoral Associate	EMBL Heidelberg, Germany	01/02/1990	31/03/1994
Postdoctoral Associate	Centro de Biología Molecular, CSIC; Madrid, Spain	01/01/1990	28/02/1990
PhD student	Centro de Biología Molecular e Instituto Cajal, CSIC, Madrid, Spain	01/01/1986	31/12/1989

Selected Honors (last 5 years)

2011 Award from Fundación Mutua Madrileña for the best research article: Luna-Zurita et al. (2010) J Clin. Invest

2010 Member of the ESC Working Group on Developmental Anatomy and Pathology

Revision of articles in the following scientific journals: Development; Developmental Biology, Molecular and Cellular Biology, Proc.Natl. Acad. Sci. USA, Mechanisms of Development, Developmental Cell, Circulation, Circulation Research

Organization of Scientific Meetings and Symposia (last 5 years)

2015 CNIC Conference on Frontiers in Cardiovascular Bioengineering

2014 Chair of the 2014 Weinstein Conference, Madrid, Spain

2010 New Insights into cell & tissue interactions in cardiovascular development and disease. Madrid, Spain

2010 NotchIT Theoretical and Practical Courses: Overview of model systems in developmental biology & Developmental analysis of heart development: from theory to practice. Madrid, Spain

Selected peer-reviewed publications (last 5 years)

<http://www.researcherid.com/rid/F-9719-2014>

h index: 32 (Thompson & Reuters).

Number of citations in the last 5 years: 2500

- Hand2 Is an Essential Regulator for Two Notch-Dependent Functions within the Embryonic Endocardium. VanDusen NJ, Casanovas J, Vincentz JW, Firulli BA, Osterwalder M, Lopez-Rios J, Zeller R, Zhou B, Grego-Bessa J, DE LA POMPA JL, Shou W, Firulli AB. **Cell Rep.** (2014) 1247:00987-5
IF (2013): 7.207

- Left ventricular noncompaction: a genetic cardiomyopathy looking for diagnostic criteria. Garcia-Pavia P, DE LA POMPA JL. **J Am Coll Cardiol.** (2014) 64:1981-3
IF (2013): 15.343

-How to Make a Heart Valve: From Embryonic Development to Bioengineering of Living Valve Substitutes. MacGrogan D, Luxán G, Driessen-Mol A, Bouten C, Baaijens F, DE LA POMPA JL. Cold Spring Harb Perspect Med. (2014) 4(11). pii: a013912. doi: 10.1101/cshperspect.a013912. Review.
IF (2013): 7.559

- Arid3b is essential for second heart field cell deployment and heart patterning. Uribe V, Badía-Careaga C, Casanova JC, Domínguez JN, DE LA POMPA JL, Sanz-Ezquerro JJ. **Development.** (2014) 141:4168-81.
IF (2013): 6.273

- Notch and hippo converge on Cdx2 to specify the trophoblast lineage in the mouse blastocyst. Rayon T, Menchero S, Nieto A, Xenopoulos P, Crespo M, Cockburn K, Cañon S, Sasaki H, Hadjantonakis AK, DE LA POMPA JL, Rossant J, Manzanares M. **Dev Cell.** (2014) 30:410-22.
IF (2013): 10.366
Citas: 3

- Notch1 regulates progenitor cell proliferation and differentiation during mouse yolk sac hematopoiesis. Cortegano I, Melgar-Rojas P, Luna-Zurita L, Siguero-Álvarez M, Marcos MA, Gaspar ML, & JL DE LA POMPA. **Cell Death Differ.** (2014) 21:1081-94.
IF (2013): 8.385
- Genetic and functional genomics approaches targeting the Notch pathway in cardiac development and congenital heart disease. MacGrogan D, Luxán G, & JL DE LA POMPA. **Brief Funct Genomics.** (2014) 13:15-27.
IF (2013): 3.427
- Notch activation stimulates migration of breast cancer cells and promotes tumor growth. Bolós V, Mira E, Martínez-Poveda B, Luxán G, Cañamero M, Martínez-A C, Mañes S, & JL DE LA POMPA. **Breast Cancer Res.** (2013);15(4):R54.
IF (2013): 5.881
Citas: 6
- Epithelial to mesenchymal transition-the roles of cell morphology, labile adhesion and junctional coupling. Abdulla T, Luna-Zurita L, DE LA POMPA JL, Schleich JM, Summers R. **Comput Methods Programs Biomed.** (2013) 111(2):435-46.
IF (2013): 1.093
- Notch regulates blastema proliferation and prevents differentiation during adult zebrafish fin regeneration. J Münch, A González-Rajal & JL DE LA POMPA.. **Development** (2013). 140:1402-11.
IF (2013): 6.273
Citas: 8
- Mutations in the NOTCH pathway regulator MIB1 cause left ventricular non-compaction cardiomyopathy. Luxán G, Casanova, J.C., Martínez-Poveda, B., Prados, B., D'Amato, G., MacGrogan, D., Gonzalez-Rajal, A., Dobarro, D., Torroja, C., Martinez, F., Izquierdo-García, J. L., Fernández-Friera, L., Sabater-Molina, M., Kong, Y.Y., Pizarro, G., Ibañez, B., Medrano, C., García-Pavía, P., Gimeno, J. R., Monserrat, L., Jiménez-Borreguero, L. J., DE LA POMPA, JL **Nat Med** (2013) 19:193-201
IF (2013): 28.054
Citas: 27
- Epithelial-to-mesenchymal transition in epicardium is independent of snail1. Casanova JC, Travisano S, DE LA POMPA JL. **Genesis.** (2013) 51:32-40
IF (2013): 2.042
Citas: 2
- Coordinating tissue interactions: Notch signaling in cardiac development and disease. DE LA POMPA JL., Epstein JA. **Dev Cell.** (2012) Feb 14;22(2):244-54. doi: 10.1016/j.devcel.2012.01.014. REVIEW. PMID: 2340493
IF (2012): 12.861
Citas: 45
- The non-canonical NOTCH ligand DLK1 exhibits a novel vascular role as a strong inhibitor of angiogenesis. Rodríguez P, Higuera MA, González-Rajal A, Alfranca A, Fierro-Fernández M, García-Fernández RA, Ruiz-

Hidalgo MJ, Monsalve M, Rodríguez-Pascual F, Redondo JM, DE LA POMPA JL, Laborda J, Lamas S. **Cardiovasc Res.** (2012) Feb 1;93(2):232-41. PMID: 22068159.
IF (2012): 5.940
Citas: 4

-Ablation of Dido3 compromises lineage commitment of stem cells in vitro and during early embryonic development. Fütterer A, Raya A, Llorente M, Izpisua-Belmonte JC, DE LA POMPA JL, Klatt P, Martínez-A C. **Cell Death Differ.** (2012) Jan;19(1):132-43. PMID: 21660050
IF (2012): 8.371

-Signaling during epicardium and coronary vessel development. Pérez-Pomares JM, DE LA POMPA JL. **Circ Res.** (2011) Dec 9;109(12):1429-42. REVIEW. PMID:22158650
IF (2011): 9.489

-Notch signaling in cardiac valve development and disease. MacGrogan D, Luna-Zurita L, DE LA POMPA JL. **Birth Defects Res A Clin Mol Teratol.** (2011) Jun;91(6):449-59. REVIEW. PMID: 21563298
IF (2011): 2.742
Citas 16

-Diet-induced aortic valve disease in mice haploinsufficient for the Notch pathway effector RBPJK/CSL. Nus M, MacGrogan D, Martínez-Poveda B, Benito Y, Casanova JC, Fernández-Avilés F, Bermejo J, DE LA POMPA JL. **Arterioscler Thromb Vasc Biol.** (2011) Jul;31(7):1580-8. PMID: 21493891
IF (2011): 6.368
Citas: 25

-Differential Notch signaling in the epicardium is required for cardiac inflow development and coronary vessel morphogenesis. del Monte G, Casanova JC, Guadix JA, MacGrogan D, Burch JB, Pérez-Pomares JM, DE LA POMPA JL. **Circ Res.** (2011) Apr 1;108(7):824-36. PMID: 21311046
IF (2011): 9.489
Citas: 34

-Integration of a Notch-dependent mesenchymal gene program and Bmp2-driven cell invasiveness regulates murine cardiac valve formation. Luna-Zurita L, Prados B, Grego-Bessa J, Luxán G, del Monte G, Benguría A, Adams RH, Pérez-Pomares JM, DE LA POMPA JL. **J Clin Invest.** (2010) Oct;120(10):3493-507. PMID: 20890042
IF (2010): 14.152
Citas: 67

-Notch signaling in cardiac development and disease. MacGrogan D, Nus M, DE LA POMPA JL. **Curr Top Dev Biol.** (2010);92:333-65. REVIEW. PMID: 20816401
IF (2010): 5.892

BOOK CHAPTERS:

-Grego-Bessa, J. M. Pérez-Pomares and J. L. DE LA POMPA (2010). "Signalling pathways in valve formation - origins of congenital defects", in: "Heart Development and Regeneration", Volume 1, pages 389-413. ISBN 978-0-12-372490-8. N Rosenthal and RP Harvey, Eds. Elsevier.

Competitive funding (last 5 years)

-The NOTCH signaling pathway in Left Ventricular Non-Compaction (LVNC) cardiomyopathy: genetic studies and in vivo and in vitro modeling. Agency: **Fundación BBVA**. 2015-2017. **PI: J.L. de la Pompa**. 150.000 €

-Señalización intercelular en el desarrollo, la homeostasis y la enfermedad cardiovascular. Agency: **MINECO**, ref: SAF2013-45543-R. 2014-2016. **PI: J.L. de la Pompa**. 480.000 €

-Investigación, desarrollo, producción y aplicación de medicamentos de terapia celular en enfermedades cardiovasculares. Red Terapia Celular. Agency: **Instituto de Salud Carlos III**, ref.RD12/0019/0003, 2013-2016, **PI: JL. Del a Pompa**, Coordinator: J.M. Moraleda Jiménez. 39.000 €/year

-Red de Enfermedades Cardiovasculares. Agency: **Instituto de Salud Carlos III**, ref. RD12/0042/0005, 2013-2016, **PI: JL. De la Pompa**, Coordinator: F. Fernández Avilés. 60.000 €/year

-CardioNeT- International Training Network on the Cellular and Molecular Bases of Heart Homeostasis and Repair. Agency: **European Union**, ref. 28600, 2012-2015. **PI: JL de la Pompa**. Coordinator: E. Lara. 366.00 €

-Integración de señales durante el desarrollo y la homeostasis cardiovascular. Agency: **MICINN**, ref. SAF2010-17555, 2011-2013. **PI: JL de la Pompa**, 471.900 €

-Intracellular in cardiac valve development and homeostasis. Agency: **Fundació La Marató de TV3**, ref. 081731, 2009-2011. **PI: JL de la Pompa**, Coordinator: A. García de Herreros. 200.000 €

-Notch signaling in development and pathology. Agency: **EU FP7, Initial Training Network**, ref. 215761, 2009-2012. **PI: JL de la Pompa**, Coordinator: Isabella Screpanti. 419.000 €

-Degenerative-calcific aortic disease: From pathological to epidemiological characterization. Agency: **CNIC**, ref.CNIC-09, 2008-2011. **PI: JL de la Pompa**, Coordinator: Pilar Tornos. 105.000 €

-Red Temática de Terapia Celular. Agency: **Instituto de Salud Carlos III**, ref.RD06/0010/1013, 2008-2013. **PI: JL de la Pompa**, Coordinator: Javier García Sancho. 195.000 €

-Obtención de una población estromal medular para tratamiento de enfermedad isquémica crónica y sordera e hipoacusia. Agency: **Junta de Castilla y León**, ref. GR-176 (Grupos de Excelencia), 2008-2010
PI: J.L. de la Pompa, Coordinator: Ana Sánchez García. 75.000 €

-Organizing Workshop: New Molecular targets in Cardiovascular Disease. Agency: **MEC**, ref. SAF2007-29444E, 2008. **PI: J. L. de la Pompa**. 9.000 €

-Señalización intercelular en el desarrollo y homeostasis cardiovascular. Agency: **MEC**, ref. SAF 2007-62445, 2008-2011. **PI: J.L. de la Pompa** 519.000 €

-Nuevas dianas terapéuticas en la enfermedad cardiovascular (CARDIOVREP-CM). Agency: **Gobierno Regional de Madrid**, ref.P-2006/ BIO-194, 2007-2010. **PI and Coordinator: J.L. de la Pompa** 247.000 €

-Prevención y tratamiento del daño miocardio asociado a la enfermedad cardiovascular (RECAVA II)
Agency: **Instituto de Salud Carlos III**, ref. RD06/0014/0038, 2007-2013. **PI: J.L. de la Pompa**, Coordinator:
Francisco Fernández Avilés. 330.00 €

-Valor diagnóstico de Notch en cardiopatías humanas: Estudio y validación de un modelo experimental.
Agency: **Fundación de Investigación Mutua Madrileña Automovilista**, ref.20060824, 2006-2009. **PI: J.L. de la Pompa** 62.000 €

PhD Theses Supervised

Paula Gómez Apiñániz. Title: TBC. Universidad Autónoma de Madrid. FPI Fellow.
In Progress. Starting Date: 2014

Marcos Sigüero.. Title: TBC. Universidad Autónoma de Madrid. FPI-SO Fellow.
In Progress. Starting Date: 2014

Dimitris Grivas. Title: TBC. Universidad Autónoma de Madrid. ITN FP7 Fellow
In Progress. Starting Date: 2012

Stanislao Trapisano Title: Role of Notch in cardiomyocyte proliferation and differentiation during chamber development. Universidad Autónoma de Madrid. FPI Fellow
In Progress. Starting Date: 2011

Gaetano D'Amato Title: Role of Notch in cardiomyocyte proliferation and differentiation during chamber development. Universidad Autónoma de Madrid. ITN FP7 and SO Fellow
In Progress. Starting Date: 2010

Julianne Münch Title: Mecanismos moleculares de la regeneración cardíaca en el pez cebra. Universidad Autónoma de Madrid. ITN FP7 and SO Fellow
In Progress. Starting Date: 2009

2013 Guillermo Luxán Title: Regulating NOTCH ligands. The role of Mind bomb1 during cardiac development and disease. Universidad Autónoma de Madrid. FPI Fellow
First Class "Cum Laude"

2012 Álvaro González Rajal, Title: Identificación y validación funcional de nuevos genes implicados en la regeneración del corazón y de la aleta en el pez cebra, Autonomous University of Madrid, Faculty: Biology, First Class "Cum Laude"

2011 Gonzalo del Monte, Title: Expression and functional analysis of Notch signaling during cardiac development with special focus on the epicardium and coronary vasculature, Autonomous University of Madrid, Faculty: Biology, First Class "Cum Laude"

2010 Luis Luna, Title: Integración de señales durante el desarrollo de las válvulas cardíacas: Papel de la vía de Notch, Autonomous University of Madrid, Faculty: Biology, First Class "Cum Laude" and the Annual Award for his thesis from the Department of Molecular Biology, Autonomous University of Madrid

2009 Pedro Melgar Rojas, Title: Función de la vía de señalización Notch en el desarrollo hematopoyético, Autonomous University of Madrid, Faculty: Biology, First Class “Cum Laude”

2007 Joaquín Grego-Bessa, Title: La vía de señalización Notch en el desarrollo cardíaco, Central University of Barcelona, Faculty: Biology, First Class “Cum Laude”

Selected invited lectures, 2013 and 2014

GRC on Notch Signaling in Development, Regeneration & Disease, Maine, US, July 20-25, 2014

Leduq Meeting, London, December 7-9, 2013

Berlin Cardiovascular Development Meeting, Berlin, September 29-26 2013

TAKAO Symposium, Tokyo, July 13-16, 2013

Annual Meeting Of The Spanish Working Group On Familial Cardiac Diseases, March 22-23, Murcia, 2013