

**BIOGRAPHICAL SKETCH**

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NAME: Marcos Siguero Álvarez

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Postdoctoral Researcher

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Universidad Autónoma de Madrid	BSc	06/2013	Biochemistry
Universidad Autónoma de Madrid	MSc	07/2014	Cell and Molecular Biology
Universidad Autónoma de Madrid	PhD	01/2020	Molecular Biosciences
Centro Nacional de Investigaciones Cardiovasculares (CNIC)		Present	Heart development

**A. Personal Statement**

I have worked in research related to heart development and congenital heart diseases for ten years, focusing mainly in signaling pathways and genetics. I aim to improve the knowledge of the mechanisms involved in the pathogenesis of cardiac defects in order to better diagnose or alleviate them, by using murine models based on human genetics evidence such as GWAS, RVAS and WGS data. My publication record includes 6 research papers, with 5 collaborations and one of them as first author, and a h-index of 5 in Scopus. I am involved in the supervision of two PhD candidates and I have supervised three MSc students. I also take part in science dissemination programs such as *Noche de los Investigadores* and *Semana de la Ciencia*.

**B. Positions, Scientific Appointments, and Honors**

Postdoctoral fellow. 2020-Present at Intercellular Signaling in Cardiovascular Development and Disease lab at CNIC.

**C. Contributions to Science**

1. Luna-Zurita, L., Flores-Garza, B.G., Grivas, D., Siguero-Álvarez, M., De La Pompa, J.L.

[Cooperative Response to Endocardial Notch Reveals Interaction with Hippo Pathway](#)

(2023) *Circulation Research*, 133 (12), pp. 1022-1039.

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2. Tessler, I., Albuissou, J., Piñeiro-Sabarís, R., Verstraeten, A., Kamber Kaya, H.E., Siguero-Álvarez, M., Goudot, G., Macgrogan, D., Luyckx, I., Shpitzen, S., Levin, G., Kelman, G., Reshef, N., Mananet, H., Holdcraft, J., Muehlschlegel, J.D., Peloso, G.M., Oppenheim, O., Cheng, C., Mazzella, J.-M., Andelfinger, G., Mital, S., Eriksson, P., Billon, C., Heydarpour, M., Dietz, H.C., Jeunemaitre, X., Leitersdorf, E., Sprinzak, D., Blacklow, S.C., Body, S.C., Carmi, S., Loeys, B., De La Pompa, J.L., Gilon, D., Messas, E., Durst, R.

[Novel Association of the NOTCH Pathway Regulator MIB1 Gene with the Development of Bicuspid Aortic Valve](#) (2023) *JAMA Cardiology*, 8 (8), pp. 721-731. Cited 2 times.

3. Siguero-Álvarez, M., Salguero-Jiménez, A., Grego-Bessa, J., De La Barrera, J., MacGrogan, D., Prados, B., Sánchez-Sáez, F., Piñeiro-Sabarís, R., Felipe-Medina, N., Torroja, C., Gómez, M.J., Sabater-Molina, M., Escribá, R., Richaud-Patin, I., Iglesias-García, O., Sbroggio, M., Callejas, S., O'Regan, D.P., McGurk, K.A., Dopazo, A., Giovinozzo, G., Ibañez, B., Monserrat, L., Pérez-Pomares, J.M., Sánchez-Cabo, F., Pendas, A.M., Raya, A., Gimeno-Blanes, J.R., De La Pompa, J.L.

[\*A Human Hereditary Cardiomyopathy Shares a Genetic Substrate with Bicuspid Aortic Valve\*](#)

(2023) ***Circulation*** 147 (1), pp. 47-65. Cited 5 times.

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4. Torregrosa-Carrión, R., Piñeiro-Sabarís, R., Siguero-Álvarez, M., Grego-Bessa, J., Luna-Zurita, L., Fernandes, V.S., MacGrogan, D., Stainier, D.Y.R., De La Pompa, J.L.

[\*Adhesion G protein-coupled receptor Gpr126/Adgrg6 is essential for placental development\*](#)

(2021) ***Science Advances***, 7 (46), art. no. eabj5445, . Cited 12 times.

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5. Cortegano, I., Melgar-Rojas, P., Luna-Zurita, L., Siguero-Álvarez, M., Marcos, M.A., Gaspar, M.L., De La Pompa, J.L.

[\*Notch1 regulates progenitor cell proliferation and differentiation during mouse yolk sac hematopoiesis\*](#)

(2014) ***Cell Death and Differentiation***, 21 (7), pp. 1081-1094. Cited 10 times.

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DOCTORAL THESIS: Siguero Álvarez, M.

[\*Modelling the heterogeneity and complex inheritance of Left Ventricular Non-Compaction.\*](#)

(2020) Repositorio UAM (<http://hdl.handle.net/10486/691932>). Grade: Excellent *cum laude*.