

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Donal MacGrogan

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

POSITION TITLE: Associate Investigator

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
University of Poitiers, Poitiers (FRANCE)	PhD	02/1992	Molecular Biology
Institute of Biotechnology, San Antonio (USA)	Post-Doctoral	10/1992	Cancer Genetics
Canji, Inc. San Diego (USA)	Post-Doctoral	06/1997	Cancer Genetics
Memorial Sloan Kettering Cancer Center, New York (USA)	Research Associate	12/2005	Cancer Genetics
Mount Sinai School of Medicine	ResAss Professor	12/2006	Genetics

A. Personal Statement

I have a >30-year research experience in diverse fields of medical researchs encompassing Cancer Genetics, Hematological Cancer Diseases, Neurodegenerative Diseases and Heart Developmental Biology and Disease. As of July 2022, I have co-authored 50 publications and achieved h-index of 33 (<https://orcid.org/0000-0003-2808-8422>).

B. Positions, Scientific Appointments, and Honors: N/A**C. Contributions to Science: Publications (last 5 years):**

- Piñeiro-Sabarís R, **MacGrogan D***, de la Pompa JL*. Deficient GATA6-CXCR7 signaling leads to bicuspid aortic valve. *Dis Model Mech.* 2024 Sep 1;17(9):dmm050934.doi: 10.1242/dmm.050934. Epub 2024 Sep 10. [PMID: 39253784](#)
- Piñeiro-Sabarís R, **MacGrogan D***, de la Pompa JL*. Intricate MIB1-NOTCH-GATA6 Interactions in Cardiac Valvular and Septal Development. *J Cardiovasc Dev Dis.* 2024 Jul 15;11(7):223.doi: 10.3390/jcdd11070223. [PMID: 39057643](#)
- Grego-Bessa J, Gómez-Apiñaniz P, Prados B, Gómez MJ, **MacGrogan D***, de la Pompa JL*. Nrg1 Regulates Cardiomyocyte Migration and Cell Cycle in Ventricular Development. *Circ Res.* 2023 Nov 10;133(11):927-943. doi: 10.1161/CIRCRESAHA.123.323321. Epub 2023 Oct 17. [PMID: 37846569](#)
- Tessler I, Albuissou J, Piñeiro-Sabarís R, Verstraeten A, Kamber Kaya HE, Siguero-Álvarez M, Goudot G, **MacGrogan D**, Luyckx I, Shpitzin S, Levin G, Kelman G, Reshef N, Mananet H, Holdcraft J, Muehlschlegel JD, Peloso GM, Oppenheim O, Cheng C, Mazzella JM, Andelfinger G, Mital S, Eriksson P, Billon C, Heydarpour M, Dietz HC, Jeunemaitre X, Leitersdorf E, Sprinzak D, Blacklow SC, Body SC, Carmi S, Loeyts B, de la Pompa JL, Gilon D, Messas E, Durst R. Novel Association of the NOTCH Pathway Regulator MIB1 Gene With the Development of Bicuspid Aortic Valve. *JAMA Cardiol.* 2023 Aug 1;8(8):721-731. doi: 10.1001/jamacardio.2023.1469. [PMID: 37405741](#).
- Palmquist-Gomes P, Ruiz-Villalba A, Guadix JA, Romero JP, Bessiéres B, **MacGrogan D**, Conejo L, Ortiz A, Picazo B, Houyel L, Gómez-Cabrero D, Meilhac SM, de la Pompa JL, Pérez-Pomares JM. Origin of congenital coronary arterio-ventricular fistulae from anomalous epicardial and myocardial development. *Exp Mol Med.* 2023 Jan;55(1):228-239. doi: 10.1038/s12276-022-00913-x. Epub 2023 Jan 18. [PMID: 36653444](#).
- 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 MJ, Sabater-Molina M, Escribá R, Richaud-Patin I, Iglesias-García O, Sbroggio M, Callejas S, O'Regan DP, McGurk KA, Dopazo A, Giovinazzo G, Ibañez B, Monserrat L, Pérez-Pomares JM, Sánchez-Cabo F, Pendas AM, Raya A, Gimeno-Blanes JR, de la Pompa JL. A Human Hereditary Cardiomyopathy

Shares a Genetic Substrate With Bicuspid Aortic Valve. *Circulation*. 2023 Jan 3;147(1):47-65. doi: 10.1161/CIRCULATIONAHA.121.058767. Epub 2022 Nov 3. [PMID: 36325906](#).

7. Torregrosa-Carrión R, Piñeiro-Sabarís R, Siguero-Álvarez M, Grego-Bessa J, Luna-Zurita L, Fernandes VS, **MacGrogan D**, Stainier DYR, de la Pompa JL. Adhesion G protein-coupled receptor Gpr126/Adgrg6 is essential for placental development. *Sci Adv*. 2021 Nov 12;7(46):eabj5445. doi: 10.1126/sciadv.abj5445. Epub 2021 Nov 12. [PMID: 34767447](#).

8. **MacGrogan D**, de la Pompa JL. DACH1-Driven Arterialization: Angiogenic Therapy for Ischemic Heart Disease? *Circ Res*. 2021 Sep 17;129(7):717-719. doi: 10.1161/CIRCRESAHA.121.319982. Epub 2021 Sep 16. [PMID: 34529452](#).

9. Martos-Rodríguez CJ, Albarrán-Juárez J, Morales-Cano D, Caballero A, **MacGrogan D**, de la Pompa JL, Carramolino L, Bentzon JF. Fibrous Caps in Atherosclerosis Form by Notch-Dependent Mechanisms Common to Arterial Media Development. *Arterioscler Thromb Vasc Biol*. 2021 Sep;41(9):e427-e439. doi: 10.1161/ATVBAHA.120.315627. Epub 2021 Jul 15. [PMID: 34261328](#)

10. Prados B, Del Toro R, **MacGrogan D**, Gómez-Apiñániz P, Papoutsi T, Muñoz-Cánoves P, Méndez-Ferrer S, de la Pompa JL. Heterotopic ossification in mice overexpressing Bmp2 in Tie2+ lineages. *Cell Death Dis*. 2021 Jul 22;12(8):729. doi: 10.1038/s41419-021-04003-0. [PMID: 34294700](#)

11. **MacGrogan D***, Martínez-Poveda B, Desvignes JP, Fernandez-Friera L, Gomez MJ, Gil Vilariño E, Callejas Alejano S, García-Pavía P, Solís J, Lucena J, Salgado D, Collod-Bérout G, Faure E, Théron A, Torrents J, Avierinos JF, Montes L, Dopazo A, Fuster V, Ibáñez B, Sánchez-Cabo F, Zaffran S, de la Pompa JL*. Identification of a peripheral blood gene signature predicting aortic valve calcification. *Physiol Genomics*. 2020. Oct 12. [PMID: 33044885](#).

12. Trivisano I, Oliveira VL, Prados B, Grego-Bessa J, Piñeiro-Sabarís R, Bou V, Gómez MJ, Sánchez-Cabo F, **MacGrogan D***, de la Pompa JL*. Coronary arterial development is regulated by a Dll4-Jag1-EphrinB2 signaling cascade *eLife*. 2019; 8: e49977. [PMID: 31789590](#).