

Biographical sketch

Name		Position title	
Flores-Garza, Brenda Giselle bgfloresg@cnic.es		Predoctoral researcher, Centro Nacional de Investigaciones Cardiovasculares (CNIC) Madrid, Spain	
Education/Training			
Institution and Location	Degree	Year(s)	Field of study
Universidad Autónoma de Nuevo León (UANL), Monterrey, México	B.S.	2011-2016	Genomic Biotechnology
Universidad Complutense de Madrid (UCM), Madrid, Spain	M.Sc.	2019-2020	Molecular Biology, Biotechnology & Biomedicine
Universidad Autónoma de Madrid (UAM), Madrid, Spain	PhD	2021- <i>current</i>	Heart development, biology & genetics

A. Personal Statement: I enrolled in 2021 to the Molecular Science PhD program offered by the Universidad Autónoma de Madrid, doing my research in José Luis de la Pompa's Lab. I study the role of *Nherf2*, a Notch signaling responsive gene and its putative role during heart valve development. The main techniques I use are basic molecular biology techniques (cloning & extraction), analysis of gene expression by RNA-Sequencing, gene ontology analysis, RNA probe synthesis, PCR, *in situ* hybridization of RNA, immunohistochemistry, mouse genotyping, mouse embryo sectioning, cell culture and co-culture, and FACS.

B. Positions & Awards

Positions

2017-2019. Research assistant in the Biomedical Engineering Lab at the Tec de Monterrey (México).

Awards & honors

2014. UANL Invention Award. Patent by the Mexican Institute of Industrial Property (IMPI) and de Universidad Autónoma de Nuevo León. Patent name: "*Tricistronic vector for protein-protein interaction assays by the technique bimolecular fluorescence complementation in mammal cells culture*". Patent No. 367622, file No. MX/a/2014/06131

2015. 1st place at the 3rd Meeting of Young Researchers of Nuevo León, National Council of Science and Technology (CONACYT).
2017. Biotechnology Award, Biotechnology Institute of the UANL.
2016. Summa cum laude B.S., Universidad Autónoma de Nuevo León (UANL), México.
2019. Fundación Carolina Fellowship for a M.Sc. at the Universidad Complutense de Madrid (UAM).

C. Publications

- Luna-Zurita, L., **Flores-Garza, BG.**, Grivas, D., Sigüero-Álvarez, M., de la Pompa, JL. (2023). Cooperative Response to Endocardial Notch Reveals Interaction With Hippo Pathway. *Circulation Research*. 133:1022-1039.
- Gallegos-Martínez, S., Lara-Mayorga, IM., Samandari, M., Mendoza-Buenrostro, C., **Flores-Garza, BG.**, Reyes-Cortés, LM., Segoviano-Ramírez, JC., Zhang, YS., Trujillo de Santiago, G., Alvarez, MM. (2022). Culture of cancer spheroids and evaluation of anti-cancer drugs in 3D-printed miniaturized continuous stirred tank reactors (mCSTRs). *Biofabrication*. 14(3).
- Trujillo-de Santiago, G., **Flores-Garza, BG.**, Tavares-Negrete, JA., Lara-Mayorga, IM., González-Gamboa, I., Shrike Y., Rojas-Martínez, A., Ortiz-López, R., Álvarez, MM. (2019). The Tumor-on-Chip: Recent Advances in the Development of Microfluidic Systems to Recapitulate the Physiology of Solid Tumors. *Materials*. 12(18):2945.