

María José Durán González

BIOTECHNOLOGY ENGINEERING

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Summary

I'm currently doing an internship in San Francisco, CA. Also, I'm a research student at the Biotechnology Research Center of ITCR. I've been working in this research center since my first year of university. I've always been interested in areas related with human diseases, space biology and synbio. I describe myself as a curious, friendly and hard worker person.

Education

Costa Rica Institute of Technology (ITCR)

2016-Present

B.S. IN BIOTECHNOLOGY ENGINEERING

Work Experience

Molecular Food Startup - Intern

April 2020 - Present

COMPOUND FOODS, INC.

San Francisco, CA

- Working directly on the development of a food product that merged synthetic biology, microbiology and chemical analysis to recreate a product that has a high impact in climate change. As well as working on the brand/marketing strategy of the company.

Structural Biology Laboratory - Research Student

Dec 2017 - Present

BIOTECHNOLOGY RESEARCH CENTER, ITCR

Costa Rica

- Leader of the project "Structural studies by X-ray diffraction of proteins from venom of snakes with biomedical importance for possible inhibitory therapeutic molecules".
- Currently working in the project "Heterologous production and biochemical characterization of the human procoagulant Factor VIII for crystallization tests of protein interactions".

iGEM 2019 Competition

Oct 2018 - Nov 2019

COSTA RICA'S TEAM

Boston, USA

- Silver medal winner with a project that aimed the generation of a new treatment against *C. difficile*. It involved the engineering of *L. casei* in order to sense the presence of the pathogen by Quorum Sensing and release a bacteriocin.
- Worked in the wet-lab, dry-lab, human practices and social media.

Biotechnology Institute - Intern

Nov 2018 - Jan 2019

NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO (UNAM)

Mexico

- Worked at the Department of Molecular Medicine, in the analysis and characterization of disulfide bridges enriched proteins (neurotoxins and disintegrants) and the enzymatic characterization of scorpion toxins.
- Performed heterologous expression and purification of snake venom antibodies.

National Policy and Regulation on Synthetic Biology

2019

MINISTRY OF HEALTH AND ALL POLITICAL PARTIES

Costa Rica

- Worked with the Congress-legislators, the Health Minister and national media to discuss the policy related to Synthetic Biology in Costa Rica, in collaboration with M. S. Carolina Peláez.

Bioprocess Laboratory - Research Student

Jun 2016 - Dec 2018

BIOTECHNOLOGY RESEARCH CENTER, ITCR

Costa Rica

- Leader of a student research project related with the erythropoietin expression, purification, bioactivity studies and scaling in *E. coli* and later *Pichia pastoris*.
- Assistant researcher to Ph.D. candidate project of Alexander Schmidt., involved in the cellular dedifferentiation of mulberry leaf, the antioxidant production optimization and its scale.

Other Experiences

ACADEMIC RELATED

- Selected as part of the ALLBIOTECH 3rd generation leaders of Biotechnology in Latin America
- Singularity University Costa Rica Summit 2020
- OpenLab IUCr-UNESCO. Crystallography International Workshop held in Costa Rica, 2017.

PERSONAL RELATED

- Tap teacher since 2016. Currently working with 7 dance academies of the country.