

Africa Galvez-Flores
ESR9 Fellow

Institution: Biogelx Limited
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Meeting 1
Eindhoven, 26th March 2019

Education

Sep 26th, 2016 – Sep 7th 2017

University College London, Division of Biosciences, UK
Master of Science (MSc) – Neuroscience.

2011 – 2015

University of Navarra, School of Sciences, Pamplona, Spain
Bachelor of Science (BSc) – Biochemistry.



Biomedical research experience

2016 – 2017

UCL Institute of Neurology, *Department of Molecular Neuroscience*, London, UK
Master's research project – Investigation into the involvement of a neuronal-death modulator in cellular models of Parkinson's.

2015 – 2016

Columbia University Medical Center, *Department of Pathology and Cell Biology*, New York, USA
Internship – Investigation into molecular approaches to disruption of memory formation in cellular models of Alzheimer's disease.

2014 – 2015

Centre for Applied Medical Research (CIMA), *Department of Gene Therapy*, Pamplona, Spain.
Undergraduate research project – Investigation into quality control mechanisms ensuring cellular health.

Future career objectives

(Present –)

Development of a **further career in biomedical industry to find new therapeutic approaches against human disease.**

Main expertise in **Cellular and Molecular Pathology**.

- Culture and manipulation of different cell lines, quantitative and semi-quantitative assays for cell/molecular biology (e.g. qPCR), cell imaging techniques...

My work within the THERACAT consortium focuses on **designing and optimising Biogelx peptide-based hydrogel technology to aid in the development of the proposed bio-orthogonal catalysis approach to cancer treatment:**

- Designing and synthesising **hydrogels capable of mimicking both healthy and cancerous tissue.**
- Development of **realistic *in vitro* 3D cancer models using peptide hydrogels.**
- Generation of insight into the ability of peptide hydrogels to act as **nanoparticle carriers** themselves.

Scientific

Currently learning about **biomaterials** and working on the **creation** of preliminary **3D models of breast cancer** with **Biogelx** peptide-based **hydrogels** and the **MCF-7** cell line (Centre for Cellular Microenvironment, **University of Glasgow**).

Transversal

Gaining experience of the **biomedical industry across a broad spectrum** (from academia to SME), while working within an **interdisciplinary** team.

- E.g. communication of science to a general audience - content marketing.

Others

Involved in the internationalization of talented Spanish students – leading the International Mentoring Programme Alumni Community at IMFAHE foundation.