

Francisco José (Paco) Guerra-García

Predoctoral researcher

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Stowers Institute for Medical Research, Kansas City, Missouri, United States

EDUCATIONAL BACKGROUND

Universidad Pablo de Olavide
BSc, Biotechnology. GPA: 9.78 out of 10

Seville, Spain
September 2018 – June 2022

RESEARCH EXPERIENCE

Stowers Institute for Medical Research
Predoctoral researcher, Sankari lab

Kansas City, MO, US
August 2023 – Present

- Uncovering NCR peptides function in the symbiotic relationship between *M. truncatula* and *S. melliloti*.

Stowers Institute for Medical Research
Graduate researcher, Bazzini lab

Kansas City, MO, US
July 2022 – July 2023

- Dissecting the mechanisms of translation of downstream open reading frames in human cells.

Centro Andaluz de Biología y Desarrollo (CABD-CSIC)
Undergraduate thesis student, Moreno-Mateos lab

Seville, Spain
September 2021 – June 2022

- Optimizing CRISPR-Cas7-11 system *in vivo* for RNA targeting in zebrafish embryos.
- Awarded with the highest qualification (10 out of 10).

Centro Andaluz de Biología y Desarrollo (CABD-CSIC)
Collaborator student, Moreno-Mateos lab

Seville, Spain
October 2020 – September 2021

- Using CRISPR-Cas13d to understand early development in zebrafish.
- Studying non-coding RNAs in vertebrates using zebrafish.

Centro Andaluz de Biología y Desarrollo (CABD-CSIC)
Collaborator student, Santos-Ocaña lab

Seville, Spain
October 2019 – March 2020

- Studying human COQ2 gene deficiency and rare mitochondrial diseases using *Saccharomyces cerevisiae*.

POSTER PRESENTATIONS

Rocky Mountain RNA Symposium
Dissecting the mechanism of dORF translation activation in human cells

Aurora, CO, US
April 2023

Stowers Institute Crossroads Research Conference
Dissecting the mechanism of dORF translation activation in human cells

Kansas City, MO, US
September 2022

Stowers Summer Scholars Program
Dissecting the mechanism of dORF translation activation in human cells

Kansas City, MO, US
July 2022

RNA Ribored Conference
In vivo optimization of CRISPR-Cas7-11 system for RNA targeting

Madrid, Spain
May 2022

AWARDS AND FELLOWSHIPS

Stowers Institute for Medical Research

Kansas City, MO, US

Stowers Summer Scholars Program internship	June – July 2022
Universidad Pablo de Olavide Best university transcript	Seville, Spain September 2022
Ministerio de Educación y Formación Profesional Research collaboration fellowship	Seville, Spain September 2021 – June 2022
Universidad Pablo de Olavide Highest university entrance exam score	Seville, Spain September 2018
IES La Bahía Honors in health sciences high school	San Fernando, Cádiz, Spain June 2018

SKILLS

Computational: proficient programming in R (RNA-seq datasets analysis, statistical analysis, creation of graphs, use of databases).

Molecular biology: DNA cloning, construction and analysis of fluorescent reporters, RT-qPCR, western blot, RNA targeting (Cas13d, Cas7-11, shRNA), proteomics (CD, BLI, HPLC).

Model organisms: human cell culture (transfection, lentivirus production and transduction, flow cytometry), zebrafish (breeding, embryo manipulation and microinjection), yeast (*S. cerevisiae* culture, mitochondrial respiration assays), bacteria (*S. meliloti*, *E. coli*).

Language: Spanish (native), English (advanced).

REFERENCES

Miguel A. Moreno-Mateos, PhD mamormat@upo.es	Ramon y Cajal Researcher-Junior PI at CABD-CSIC +34 666 32 67 75
Ariel A. Bazzini, PhD arb@stowers.org	Associate Investigator at Stowers Institute 816-337-9251
Siva Sankari, PhD ssankari@stowers.org	Assistant Investigator at Stowers Institute 816-787-4860