

ALEJANDRO GIL GÓMEZ

(631) 542-3500

24 Acorn Ln, Stony Brook, NY 11790

alejandro.gilgomez@stonybrook.edu

EDUCATION

Stony Brook University, Stony Brook, NY

Ph.D. Student, Ecology and Evolution Department. Rest Lab

Start Date: August, 2018

Courses included:

Ecology

Evolution

Biometry

Molecular Genetics

Population Genetics

Biological Dynamics and Networks

Autonomous University of Madrid, Madrid, Spain

Bachelors of Science, Biology

May 2016

RESEARCH EXPERIENCE

Graduate Research Assistant at Rest Lab, Stony Brook University.

Summer 2018

- Evaluating the genetic variation on drug-drug interaction response by different strains of *Saccharomyces cerevisiae*
- Performing IC50 determination for different sterol biosynthesis inhibitors following the CLSI and EUCAST procedures.
- Developing an Opentron-OT2 robotic pipetting protocol for microplates.
- Determining FICI and Bliss scores for pairwise drug interaction using R and synergyfinder
- Align rDNA 18S and 16S sequences of bacteria and eukaryotes to generate phylogenetic trees using IQtree
- Train and supervise a High School Student on lab safety and microbiology techniques using *Saccharomyces cerevisiae*

Undergraduate Research Assistant at Rest Lab, Stony Brook University.

Spring 2018

- Developed lab experiments for colorimetric assays and flow cytometry to determine cell viability
- Analyze cell viability data using R and tidyverse
- Lead research group from abroad through skype meetings
- Train an undergrad student

Undergraduate Research Assistant at Reguera Lab, Autonomous University of Madrid.

2016-2018

- Assist on field experiment measurements on yield and length of quinoa in Teruel, Spain
- Measure different size parameters for quinoa seeds using the image software ImageJ
- Analyzing the data using R and SPSS
- Generating publication quality figures and participating in the edition of the manuscript during the peer review process.

Internship and Research Assistant at LAIR foundation, Madrid
2015

Summer

- Sorting chronic lymphocytic T8 cells from the blood of hospital patients and animal models using Flow Cytometry
- Generating Flow Cytometry reports using Flow Jo and Flowing Software for the diagnosis of patients with Chronic Lymphocytic Leukemia.

TEACHING EXPERIENCE

Graduate Teaching Assistant, Stony Brook University, Stony Brook, NY

- Fundamentals of Biology: Organisms to Ecosystems, Spring 2020
- Bioinformatics – Instructed lab section, Fall 2019
- Molecular Diversity – Instructed lab section, Spring 2019
- Bioinformatics – Instructed lab section, Fall 2018

RELEVANT SKILLS AND TRAINING

Computer skills

- Bash scripting, R, python3, AWS, HPCC, git, Jupyter lab.
- BWA, GATK, samtools, vcftools, IQtree, FigTree, ChimeraX, Jalview, MEGAX, FlowJo, InterproScan
- Opentrons OT2, 3D printing.
- Platforms: Windows, Linux.

Safety certifications

- EHS – Lab Safety Supervisor, 2019
- EHS – Lab Safety Formaldehyde, 2017
- EHS – Lab Safety Biological Hazards, 2017
- EHS – Lab Safety Chemical Hazards, 2017

Languages

- **Spanish** Native Language
- **English** C1, TOEFL 2017
- **German** B2

Other Skills

- Public speaking, communication, scientific writing, lab management

GRANTS AND AWARDS

- Stony Brook Ecology and Evolution Department, George Williams Award (\$900), 2019
- Ecology and Evolution Recruitment Fellowship, 2018
- International Exchange Agreement UAM-SBU, 2016-2017

PEER-REVIEWED PUBLICATIONS

- Reguera, M., Conesa, C. M., Gil-Gómez, A., Haros, C. M., Pérez-Casas, M. Á., Briones-Labarca, V. & Mujica, Á. (2018). The impact of different agroecological conditions on the nutritional composition of quinoa seeds. PeerJ, 6, e4442.

POSTERS AND PRESENTATIONS

- Gil-Gomez, A., and Rest, J. Genetic variation in drug-drug interactions in *Saccharomyces cerevisiae*. Ureca, Stony Brook, 2017.

ACTIVITIES

- E&E Representative for Darwin Day, Student Outreach on Evolution, 2020
- Student Mentor, European Night of Researchers, 2018
- Student Representative, Biology UAM, 2017
- Student at Official School of Languages, 2010-2012