

Edgardo López De Jesús

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EDUCATION

University of Puerto Rico-Rio Piedras, PR
Graduate Studies in Biology
Concentration in Bioinformatics

July/2014-Present
GPA: 3.88

University of Puerto Rico-Humacao, PR
Bachelor of Science in Biology
Concentration in Microbiology

Aug/2009-May/2013
GPA: 3.40

Science Graduate courses: Molecular Biology(BIOL6501), Bioinformatics(BIOL6360), Experimental Design and Advanced Analysis(MATE6686), Topics in Genetics and Genomics(BIOL-6326), Systematic Phylogenetics(BIOL-6120), Evolution(BIOL-6802), Quantitative Biology 1(BIOL-6996), ConGen 2015 Recent Advances in Conservation Genetics.

Science Undergraduate courses: General Biology 1 and Lab. (BIOL 3001), Calculus 1 (MATE 3061), Genetic and Lab (BIOL 3305), Zoology and Lab. (BIOL 3420), General Biology 2(BIOL3003), General Chemistry 1 and Lab (QUIM 3001), General Ecology (BIOL 3115), Philosophy of Science(FILO4471), General Chemistry 2 and lab(QUIM 3003), Botany and Lab(BIOL4425), Investigation: Especial Problems on Biology 1(BIOL4907), Organic Chemistry 1 and Lab(QUIM3031-QUIM3033), Developmental Biology and Lab(Biol3019), Physics and Lab 1-2(FISI3011-12-13-14), Intro. to Biochemistry(BIOL3024), Investigation: Especial Problems on Biology 2(BIOL4908), Immunology(BIOL-3569), Cellular and Molecular Biology(BIOL3010), Responsible Behavior in Biomedical Research(INTD-4026), Microbial Ecology(BIOL-4028), Applied Microbiology(BIOL-4315), Industrial Microbiology(BIOL-4367), Biochemistry(QUIM-4055).

Awards:□

- 2014-2016: AMP Bridge to the Doctorate, UPR-Rio Piedras.
- 2011-2013: McNair fellowship, UPR-Humacao.
- 2011-2013: MARC fellowship, UPR-Humacao□.
- 2009: Scholarship for excellence by the Government of Puerto Rico.
- 2009: CEA participate on Pre-Calculus, UPR-Humacao□.
- 2009: Academic Excellence, Florencia Garcia Peña School.□
- 2007-2008: Geo-explorers, Turabo University□.

Research Experience:

University of Puerto Rico -Rio Piedras

July 2014-present

Title: "Relationship between body size, effective population size and DNA repair capacity"

PI: Steven E. Massey, PhD

- Conducting research in the area of Molecular Evolution and Bioinformatics.
- Quality Control of Whole Genome sequence of mammals.
- Single nucleotide polymorphism analysis(SNP).
- Factors of Study: Body size, Proteome size, Genome size, Longevity, Tumor suppressor genes, DNA repair genes, Cancer Evolution.
- Recombination rate, Population size, heterozygosity, Mutation load.

University of Puerto Rico -Humacao/Rio Piedras

Jan 2011/May2013

Title: "Proteomic of Tumor-head by mass spectrometry on *Xenopus laevis*"

PI: Edwin Traverso, PhD

- Conducted research in the area of Developmental Biology.
- Identification of binding proteins that interact with a novel protein called Tumorhead.
- Tumorhead is related to cell proliferation in the early stage of development of *Xenopus laevis*.
- Techniques: Protein purification, mRNA development, Mass spectrometry, Silver Staining, Western Blot, animal surgery, bacterial transformation, mMessage mMachine, Electrophoresis.

Boston University, Massachusetts

Jun 2012/May 2013

Title: "Folate Metabolism comparison between Human and Gut Microbiota"

PI: Cassandra Smith, PhD

- Conducted research in the area of Microbial Ecology and Bioinformatics.
- Evolutionary comparison of folate metabolism between human and gut Microbiota and possible symbiotic relationship.

JOB EXPERIENCE □

OfficeMax 1510

Oct/2013-Aug/2014□

Sales Associate

- Responsible for positively contributing to the customer shopping experience by providing friendly, knowledgeable and professional service as well as assisting customers with a total solutions purchase.

Dr. Roque Diaz Tizol Private School

Oct/2013-May 2014

Science Teacher

- Work as a science teacher for high school students.
- Also teach elective class like mandarin and technology.

SKILLS

- Science: Microbiology, biochemistry and bioinformatic techniques. Multiple industrial applications in biotechnology and aseptic techniques.
- Computer: Knowledge in Windows, Macintosh and Linux. Computer expert, technician and programmer. Always up to date with the technology.

Language: Fluent in Spanish and English.

Conferences/Workshops Attended:□

- ABRCMS 2011 St. Louis, Missouri

- ABRCMS 2012 San Jose, California
- McNair Annual Symposium 2012- San Juan Puerto Rico
- Stem cell conference 2011/2012 UPR-Humacao- Humacao, Puerto Rico
- Bioinformatic and System Biology Workshop- Boston University Boston,Massachusetts •UPRRP Biology Department Colloquium 2014-2015.
- Workshop: Use of the NGS MiSeq System for microbiome data generation and advanced data analyses.
- Workshop: Microscopy & Imaging by Mark Clymer(Datacolor Inc.)
- Workshop: Bioinformatics by Dr. Michael Guarnieri National Bioenergy Center.
- SMBE(Society for Molecular Biology and Evolution) Annual meeting 2015 Vienna, Austria.

Extracurricular Activities:□

- Nu Sigma Beta Fraternity(community work, charities, social activities)
- ASM(American Society for Microbiology)
- Graduate Student Representative on the Graduate Committee.
- Orientations to University Students About technology applied to college.
- Serve as a mentor to college students in the Bioinformatics Laboratory at the University of Puerto Rico Rio Piedras□.
- Math Tutor for college students.