

Simara Laboy López, PhD

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Education

University of Puerto Rico, Rio Piedras Campus <i>Doctor of Philosophy in Chemistry</i>	<i>Dec 2021</i>
Inter American University of Puerto Rico Metropolitan Campus <i>Bachelor's in science in Chemistry</i>	<i>May 2014</i>

Honors, Awards and Certifications

• PR Department of State Certified Licensed Chemist	<i>2023</i>
• Proteomics and Biotech Certification from Omni Scientia Corp.	<i>2019</i>
• Center for Innovation, Research, and Education in Environmental Nanotechnology (CIRE ² N) Fellow	<i>2017</i>
• CienciaPR's Yale Ciencia Academy Fellow	<i>2017</i>
• Singularity University's Global Impact Competition Puerto Rico Winner	<i>2016</i>
• PR-LSAMP Bridge to Doctorate Cohort X Fellow	<i>2014</i>
• Undergraduate Honors Program Award	<i>2014</i>
• Xerox Technical Minority Scholarship	<i>2012</i>

Technical Skills

Professional Skills:

- Project Management Professional (42-hr course certification) and strong communication skills
- Experience working with LIMS, Trackwise, Minitab
- Technical writing and computer literacy in Microsoft (Word, Excel, PowerPoint and Teams)
- Fully Bilingual (English/Spanish), Quick Learner and Critical Thinker

Analytical Techniques:

- Microscopy techniques (SEM, AFM, Optical, and Refractometry)
- Zeta Potential and Dynamic Light Scattering (DLS)
- Fourier Transform Infrared Spectroscopy (FTIR)
- Spectrophotometric Techniques (XPS and UV-Vis)
- Thermogravimetric Analysis (TGA)
- High Performance Liquid Chromatography (HPLC)

Biochemical Techniques:

- Immunocytochemistry
- Cytotoxicity and Viability Assays

Professional Experience

AMGEN Manufacturing, Process Development Scientist, New Product Introduction (External Worker) *July 2023 – June 2024*

- Supported the introduction of new products to manufacturing commercial activities that include Clinical, Characterization, Engineering and Validation Runs in the form of floor support, technical support and data analysis.
- Performed GMP duties such as Authoring, Editing, Data Gathering, Data Verifying and Reviewing documentation including protocols, executed attachments, SOPs and Reports.
- Led laboratory study to characterize surfactant concentration by refractometry method.

AMGEN Manufacturing, Process Development Scientist, Commercial Support (External Worker) *December 2022 – June 2023*

- Performed statistical data analysis, and data verification for commercial support documents in the form of Process Monitoring Assessment Forms (PMAF) documents.
- Presented Nelson Rule violations and gathered historical data to evaluate validity of the signals to discuss during triage weekly meetings and authored the resulting PMAFs documentation in Trackwise system.

AbbVie Biotechnology Limited, Small Volume Parenterals (SVP) Scientist I (*Temporary*) *January 2022 – August 2022*

- Performed a Root Cause investigation using the 6M method.
- Authored Characterization, Registration Summary and Comprehensive Performance Validation Reports
- Led technical study to implement new method for In Process Checks during parenteral product filling operations.
- Developed technical memorandums on material equivalency and tracking and trending.
- Assisted manufacturing activities during special runs (Clinical and PPQs) or special projects.
- Presented product performance and in process control updates at weekly technical meetings.

Puerto Rico Science Policy Action Network (PR-SPAN), Member

February 2019 – May 2021

- Published blogs on CienciaPR network.
- Arranged and hosted a webinar involving Science Community and Policy Making
- Developed promotions and video content for social media.
- Assisted meetings with several representatives from congress of Puerto Rico
- Represented the network in the Annual National Science Policy Symposium in New York

Center for Innovation, Research and Education in Environmental Nanotechnology (CIRE²N), Fellow

August 2017 – May 2021

- Published a Magazine called NanoCiencia in collaboration with other fellows.
- Developed a Problem Based Learning (PBL) approach in water remediation for school students.
- Created and edited several educational videos involving Environmental Policy and Water Polarity
- Engaged in numerous outreach activities as well as many workshops including video creations, education techniques and approaches, among others.

PRatian LLC, Member

September 2016 – May 2017

- Pitched Agrobreads to Kinesis organization.
- Worked in the Product Development of Agrobreads and Served as a Chemical consultant for a grant proposal.
- Conducted a spectroscopy workshop at Luis Llorens Torres School in Juana Diaz

University of Puerto Rico, Research Assistant

January 2016 – August 2017

- Maintained Cell Cultures for lab research
- Trained incoming undergraduate students in cell culture techniques.
- Zetasizer NS Instrument Manager

University of Puerto Rico, Teacher's Assistant

August 2014 – December 2015

- Developed lectures and graded evaluations.
- Imparted chemistry lessons and laboratory practices involving instrumentations, and techniques.
- Engaged in weekly coordination meetings with fellow faculty peers.

Inter American University of Puerto Rico, PARES Student Mentor

November 2013 – May 2014

- Helped students in anything academic related and served as a guide in their development.
- Designed and organized the first Math Olympics in the University for the basic Math courses with the purpose of engaging with freshmen and sophomores to promote perseverance with them.

Brain IQ Rx, Brain Trainer

September 2013 – January 2014

- Exposed the student to a series of problems. Taught them the correct way to solve each and then increased the problems' difficulty without changing the skill necessary to solve them.

Inter American University of Puerto Rico, Linus MSP Assistant

October 2011 – May 2013

- Managed and distributed the documents that were supposed to be either turned in or collected, took attendance, distributed workshop materials.
- Wrote reports on the engagement and participation from the teachers.

Inter American University of Puerto Rico, Math Tutor

September 2011 – November 2012

- Assisted in teaching how to navigate the Educosoft class software.
- Imparted mathematics tutoring sessions skills from Pre-Algebra up to Calculus I

Publications

- Bioactive Cellulose Acetate Electrospun Mats as Scaffolds for Bone Tissue Regeneration at the International Journal of Biomaterials. <https://doi.org/10.1155/2022/3255039>
- Porous Cellulose Acetate/Block Copolymer Membranes for the Recovery of Polyphenolic Compounds from Aquatic Environments at ACS Omega. <https://doi.org/10.1021/acsomega.1c04327>
- Evaluation of Synthesized Nanohydroxyapatite-Nanocellulose Composites as Biocompatible Scaffolds for Applications in Bone Tissue Engineering at the Journal of Nanomaterials. <https://doi.org/10.1155/2015/310935>

References

Dr. Eduardo Nicolau, Thesis Advisor
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Dr. Liz Diaz, Academic Advisor
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