

Contact

Vancouver, BC

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(LinkedIn)

Top Skills

Risk Management

Workflow Management

Biophysical Characterization

Languages

English (Native or Bilingual)

Spanish (Native or Bilingual)

Certifications

Mx Data Collection School

Project Management Professional
(PMP)

Project Management Professional
(PMP)

Publications

Dolichol phosphate mannose synthase: a glycosyltransferase with unity in molecular diversities

Dynamic function of DPMS is essential for angiogenesis and cancer progression

Precision mapping of O-linked N-acetylglucosamine sites in proteins using ultraviolet photodissociation mass spectrometry

Chemoproteomic identification of CO₂-dependent lysine carboxylation in proteins

Thermal proteome profiling reveals the O-GlcNAc-dependent meltome

Jesus E. SERRANO-NEGRÓN

Biochemist

Greater Vancouver Metropolitan Area

Summary

Puerto Rican protein biochemist who builds end-to-end workflows, from construct design and recombinant expression to purification and biophysical/analytical characterization, to generate decision-grade data; brings research ethics (REB) experience, is a queer scientist who values inclusive lab culture, and is an amateur birdwatcher with a gift for careful observation and pattern-spotting.

Experience

Lite-1

Research Associate

June 2025 - January 2026 (8 months)

Vancouver, BC

1/ Spearheaded R&D execution by scoping projects, scheduling timelines, defining deliverables, and setting milestones for scientific teams, driving on-time completion of critical technical objectives.

2/ Developed and managed project plans, maintained risk logs, and delivered status updates to highlight dependencies and efficiently resolve technical challenges, reducing project delays.

3/ Oversaw laboratory operations, enforced safety protocols, managed supplies, onboarded equipment, and standardized SOPs.

4/ Directed molecular biology workflows for microbial pigment R&D by executing cloning, expression, mutagenesis, strain screening, and assays, optimizing yield and accelerating innovation cycles.

5/ Facilitated cross-team communication, led meetings, and tracked action items to synchronize research, operations, and leadership, directly accelerating data-driven decision making.

6/ Drove scientific hiring, onboarding, and knowledge transfer to ensure lab continuity and accelerate scalability, reducing downtime and maintaining critical technical expertise.

Simon Fraser University

Research Assistant

January 2018 - January 2025 (7 years 1 month)

Vancouver, British Columbia, Canada

1/ Led biologics development from construct design to purified structural-grade protein, enabling both internal research progress and advancement of new therapeutic candidates.

2/ Engineered and improved bacterial and mammalian protein production; purified over 20 proteins using various chromatography techniques (ÄKTA, HPLC).

3/ Assessed protein quality and binding, enabling accurate downstream analyses, using CD, CETSA, BLI, ITC, mass spectrometry, and kinetic assays.

4/ Produced post-translationally modified proteins and crystallography samples; aided structural studies and data collection.

5/ Supported collaborations through SOPs, documentation, mentorship, and EDI leadership, fostering an inclusive environment that enhanced team productivity and scientific exchange.

University of Puerto Rico Medical Sciences Campus

5 years 10 months

Research Ethics Board (REB) Officer

August 2016 - May 2019 (2 years 10 months)

San Juan

1/ Reviewed research protocols for scientific, ethical, and regulatory compliance. Identified gaps. Recommended corrective actions. Assessed risk–benefit ratios. Revised informed consent materials to improve clarity and participant protection.

2/ Collaborated with multidisciplinary committees to accelerate compliant study approvals.

Research Assistant

August 2013 - November 2017 (4 years 4 months)

San Juan

- 1/ Directed mammalian cell culture and performed functional assays, including analyzing cell-cycle and apoptosis by PI staining and flow cytometry, and conducting immunocytochemistry and fluorescence imaging.
- 2/ Characterized proteins and enzymes through radioisotope-based enzyme kinetics, SDS-PAGE, and Western blotting, providing critical insights that advanced project progress.
- 3/ Implemented molecular biology workflows to increase genotyping throughput and generate actionable data for project decisions. Extracted DNA from clinical samples to enhance data reproducibility.
- 4/ Maintained bacterial cultures and performed antimicrobial and growth assays.
- 5/ Supported daily laboratory operations by preparing reagents, tracking inventory, adhering to standard operating procedures, and managing safety documentation.
- 6/ Completed formal training in radioactive materials handling and rodent procedures, contributing to safe and ethical research practices in the laboratory.
- 7/ Presented research findings at laboratory meetings, in written reports, and during formal research presentations, facilitating team decision-making and knowledge transfer.

Education

Simon Fraser University

Doctor of Philosophy - PhD, Molecular Biology and Biochemistry · (January 2018 - January 2025)

Universidad de Puerto Rico

Master of Science - MS, Molecular Biology · (August 2015 - September 2018)

University of Puerto Rico

Bachelor's Degree, Molecular Biology · (August 2009 - May 2015)

Antonio Luchetti High School

Licentiate degree, Practical Nursing, Vocational Nursing and Nursing
Assistants · (August 2006 - May 2009)