619-768-3493

shammas.tara@gmail.com

Education

Master of Science- Earned 2025

- o University of California, San Diego
- o Department of Chemistry & Biochemistry-Chemistry
- o Daniel Donoghue, Committee Chair
 - ♦ Distinguished Professor of Chemistry and Biochemistry
 - ♦ Co-Director, NIH Training Grant

Bachelor of Science-Earned 2021

- o University of California, San Diego
- Department of Chemistry & Biochemistry-Biochemistry-Chemistry
- o Psychology Minor

Associate of Science & Mathematics- Earned 2019

- Cuyamaca Community College
- o IGETC for Transfer to UC

Research Experience

Donoghue Lab

- o University of California, San Diego
- Graduate Researcher
 - Studying BCR-ABL for a potentially new drug therapy target.

Godula Lab

- o University of California, San Diego
- o Undergraduate Researcher
 - Studied glycosaminoglycan microarray under the supervision of a graduate student mentor.

Teaching Experience

Teaching Assistant

- o University of California, San Diego
- Department of Chemistry & Biochemistry
 - Organic Chemistry Laboratories, Organic Chemistry Lectures, and Pharmacology and Toxicology.

Skills

Interdisciplinary skills within the fields of chemistry, biochemistry, and biology:

- DNA Cloning via mini-preps and plasmid preps, PCR, E. Coli transformation, HEK293T transfection, electroporation of 32D, SDS-PAGE gel, agarose gel, western blotting, immunoprecipitation, cell culture, maintenance of cell culture, designing of primers (sequencing and mutagenesis), mRNA extraction, reverse transcription, qPCR.
- Schlenk line, rotary evaporator, solvent stills, biotage system for column chromatography, IR spectroscopy and mass spectrometry,
- Thermocycler, quantitative and conventional PCR, agarose and polyacrylamide gel analysis, flow cytometry, DNA sequencing and sample preparation.

Awards & Scholarships

2020 Undergraduate Summer Research Award

- o University of California, San Diego
- Under the Supervision of Kamil Godula
 - ♦ Associate Professor of Chemistry and Biochemistry

Cuyamaca-UC Internship

2017 Sharp Grossmont Hospital Volunteer Auxiliary 2017 Scholarship

- SHARP Grossmont Hospital
 - Junior Volunteer

Industry Experience

Calbiotech INC.

- Production Scientist for ELISA Kits
 - Oversee the production and testing process of direct ELISA kits. Inspect the material being used for the preparation of the kits to ensure the quality of what is being produced. Manage data collections and analyzation of prepared kits to release.

Publications

BCR-ABL: The molecular mastermind behind chronic myeloid leukemia

- Cytokine & Growth Factor Reviews, June 2025
- o PMID: 40360311, https://doi.org/10.1016/j.cytogfr.2025.05.001