

TANIA KURBESSOIAN

Taniakurbessoian@gmail.com | 818.497.1580 | <https://www.linkedin.com/pub/Tania-kurbessoian/71/648/87a/>

A motivated Ph.D. student in Microbiology, seeking for a career in Microbiology, Mycology and Genetics

EDUCATION

University of California, Riverside

PhD. In Microbiology

- GPA:3.89

California State University

Master of Science in Microbiology

- GPA:3.77

California State University

Bachelor of Science in Microbiology

- GPA:3.51

Riverside

2017-

Northridge

2014 – 2016

Northridge

2010 – 2013

RELEVANT SKILLS

- **Microbiology:** Aseptic technique, Bright field and contrast microscopy, Staining bacteria, Enumeration and identification, Media, buffer and chemical preparation, Utilizing food microbiology, Using selective media, Plaque assay, Enzyme assay, MALDI-TOF MS as an identification tool down to the strain level
- **Mycology:** Aseptic technique, Bright field and contrast microscopy, staining fungi, media preparation, culturing
- **Biochemistry and Cell & Molecular Biology:** DNA extraction, Assay Preparation, Protein Extraction, Plasmid DNA preparation, Restriction enzyme digests, PCR, Agarose gel electrophoresis, using centrifugation.
- **Chemistry:** Preparing solutions, Titrations, Extractions, Filtration, Solubility tests

INTERNSHIP EXPERIENCE

Jet Propulsion Laboratory, JPL - NASA

Summer Intern Program (SIP) Intern

Pasadena, CA

July – Sept. 2016

- Collaborated with P.I. Wayne Schubert and Planetary Protection Officers to apply biological aspects to astrobiological situations.
- Created, followed up and finished Embedded Bioburden experiments on extreme heat and desiccation resistant strains of *Bacillus* sp. (ATCC 29669), utilized a cryogen grinder and mastered serial dilutions and plating techniques.
- Calculated varying D-values for ATCC 29669 in varying temperature and time lengths.
- Created and maintained MALDI-TOF MS protein profiles of the *Bacillus* sp. (ATCC 29669).
- Prepared embedded spore masses using a variety of epoxies.

WORK EXPERIENCE

University of California, Riverside

Graduate Researcher

Riverside, CA

July 2017-

- Working under P.I. Dr. Jason E. Stajich on observing evolutionary trends in Fungi, while also focusing on melanized yeast fungi *Hortaea werneckii*, *Knufia petricola* and others.
- Applied learned microbiology techniques to successfully isolate mycological organisms from arid regions and biological crusts.

California State University

Graduate Research Assistant

Northridge, CA

Jan. 2014 – Dec.2016

- Employed under P.I. Larry Baresi using numerous molecular biology techniques such as electrophoresis, plasmid preparation, and restriction enzyme digests to extract, isolate and digest DNA from and PCR techniques to extract 16S sequences from 57 strains of *Sporosarcina ureae*.
- Process alignments utilizing Bioinformatics tools and create trees which accurately depict the non-clonal relationship between 57 strains.
- Observed and gained extensive knowledge on varying types of spores generated from the *Sporosarcina* strains.
- Attempted different techniques to isolate spores, found it to be most successful through sonication methods.
- Appropriated the BIOLOG tool in order to observe physiologies which then were used to create another dendrogram expressing the non-clonal relationship between the 57 strains.
- Efficiently utilized MALDI-TOF MS to create protein profiles for all 57 strains of *Sporosarcina* and created dendograms based on MSP's and 97% similarities of protein profiles to group them into OTUs, comparing OTU's with each other.

California State University

Teaching Associate

- Offered constructive feedback based on student performance on laboratory classes such as: Principles of Microbiology.
- Facilitated teachings through preparing lectures, graded exams, and provided final grades to the students.
- Improved aseptic techniques for students by demonstrating how to accomplish proper aseptic technique, as well as a variety of microbial testing maneuvers.
- Promoted a dynamic learning environment, while simultaneously enhancing communication skills through student interaction.

California State University

Graduate Assistant

- Assisted undergraduate students in laboratory classes including Principles of Microbiology, Medical Microbiology, Microbial Physiology, Biology of the Fungi and Food Microbiology.
- Fostered CSU's success through preparing media and cultures that were utilized in the microbiology teaching classrooms.
- Taught students how to maneuver and accomplish proper aseptic technique.

California State University

Undergraduate Research Student

- Prepared different types of media specific to certain types of *Escherichia coli* as well as to an archaea *Methanobrevibacter smithii* strain G.
- Isolated and transferred *Methanobrevibacter smithii* strain G through anaerobic techniques.
- Worked within an anaerobic hood infecting *Methanobrevibacter smithii* strain G with Phage G.
- Employed numerous molecular biology techniques such as electrophoresis, plasmid preparation, and restriction enzyme digests to extract, isolate and digest DNA from *Escherichia coli*, *Methanobrevibacter* strain G as well as its isolated phage, *Phage G*.

Northridge, CA

Jan 2015 – Dec 2015

Northridge, CA

Jan 2014 – Dec 2016

Northridge, CA

Jan – Dec 2013

PROFESSIONAL ORGANIZATIONS

Graduate Student Association- Microbiology Chapter (Micro-GSA)

President, Vice President, Outreach

Riverside, CA

June 2017-

Association for Women in Science- Riverside Chapter(AWIS)

President, Publicity Chair

Riverside, CA

June 2018-

Microbiology Students Association at California State University (MSA)

Secretary, Treasurer and President

Northridge, CA

Jan 2013-Aug 2016

Women in Science at California State University (WiS)

Member

Northridge, CA

Jan 2015-Dec 2016

Graduate Leadership Association at California State University (GLA)

Social Media Coordinator

Northridge, CA

Jan 2015-Dec 2016

Los Angeles Mycological Society (LAMS)

Member

Nov 2014 - Present

American Society for Microbiology (ASM)

Member

Aug 2013 – Present

Southern California Chapter of the American Society for Microbiology (SCASM)

Member

Dec 2014 – Present

Mycological Society of America (MSA)

Student Member

Jan 2016 -- Present

AWARDS & ADDITIONAL INFORMATION

- Research and Graduate Department- Research Scholarship 2014
- Presented Research at American Society of Microbiology General Meeting 2015
- Presented Research at Research Symposium at California State University, Northridge 2014, 2015, 2016
- Presented Research at Southern California American Society of Microbiology General Meeting 2016
- Presented Research at JPL-NASA September 2016
- Eugene Robles Fellowship winner September 2017
- Oral Presentation at Black Yeast Workshop part of ISHAM in Amsterdam, Netherlands 2018
- Emory Simmons Fellowship winner April 2019
- Presented Research at MSA- Mycological Society of America

❖ **Language skills:** Proficient in reading, writing and communicating in English, Armenian, Russian

❖ **Computer skills:** Programming: Bash, Python