

TANIA KURBESSOIAN

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

EDUCATION

University of California, Riverside <i>PhD. In Microbiology</i> <ul style="list-style-type: none">GPA:3.89	Riverside 2017 – 2022
California State University <i>Master of Science in Microbiology</i> <ul style="list-style-type: none">GPA:3.77	Northridge 2014 – 2016
California State University <i>Bachelor of Science in Microbiology</i> <ul style="list-style-type: none">GPA:3.51	Northridge 2010 – 2013

PUBLICATIONS

- Stajich, Jason E., Brian Lovett, Cassandra L. Ettinger, Derreck A. Carter-House, **Tania Kurbessoian**, and Matt T. Kasson. "An Improved 1.5-Gigabase Draft Assembly of *Massospora cicadina* (Zoopagomycota), an Obligate Fungal Parasite of 13-and 17-Year Cicadas." *Microbiology Resource Announcements* (2022): e00367-22.
- Kurbessoian, Tania**; Murante, Daniel; Corcker, Alex; Hogan, Deborah A.; Stajich Jason E. "In host evolution of *Exophiala dermatitidis* in Cystic Fibrosis lung micro-environment" - Submitted to G3, Accepted with minor revisions
- Selbmann, L.; Benkő, Z.; Coleine, C.; de Hoog, S.; Donati, C.; Druzhinina, I.; Emri, T.; Ettinger, C.L.; Gladfelter, A.S.; Gorbushina, A.A.; Grigoriev, I.V.; Grube, M.; Gunde-Cimerman, N.; Karányi, Z.Á.; Kocsis, B.; **Kurbessoian, T.**; Miklós, I.; Miskei, M.; Muggia, L.; Northen, T.; Novak-Babič, M.; Pennacchio, C.; Pfliegler, W.P.; Pöcsi, I.; Prigione, V.; Riquelme, M.; Segata, N.; Schumacher, J.; Shelest, E.; Sterflinger, K.; Tesei, D.; U'Ren, J.M.; Varese, G.C.; Vázquez-Campos, X.; Vicente, V.A.; Souza, E.M.; Zalar, P.; Walker, A.K.; Stajich, J.E. Shed Light in the DaRk LineagES of the Fungal Tree of Life—STRES. *Life* 2020, 10, 362.
- Pombubpa, Nuttapon, **Kurbessoian, Tania**, Stajich E. Jason, Pietrasiak, Nicole, La Doux, Tasha. "Exploring the Microbial Diversity in Biological Soil Crusts at Joshua Tree National Park (U.S. National Park Service)." National Parks Service, U.S. Department of the Interior, 28 July 2020, www.nps.gov/articles/exploring-the-microbial-diversity-in-biological-soil-crusts-at-joshua-tree-national-park.htm.
- Warren, Steven D., Larry L. St Clair, Lloyd R. Stark, Louise A. Lewis, Nuttapon Pombubpa, **Tania Kurbessoian**, Jason E. Stajich, and Zachary T. Aanderud. "Reproduction and dispersal of biological soil crust organisms." *Frontiers In Ecology Evolution*. 7: 344. 7 (2019): 344.
- Kurbessoian, Tania**. *Comparative analysis of 16S ribosomal RNA typing and physiological traits within Sporosarcina ureae*. Diss. California State University, Northridge, 2016.

RELEVANT SKILLS

- Bioinformatics:** Genome assembly and annotation, population genomics, comparative genomics, genome browser development, metagenomics binning and annotation, R amplicon analysis, language proficiency include Python and Bash.
- Microbiology and Mycology:** Aseptic technique, fluorescent, bright field and contrast microscopy, staining bacteria, culturing bacteria and fungi from the environment, enumeration and identification, media, buffer and chemical preparation, using selective media, virus plaque assay, enzyme assay, and MALDI-TOF MS.
- Biochemistry and Cell & Molecular Biology:** DNA extraction, enzymatic assay preparation, protein extraction, plasmid DNA preparation, restriction enzyme digests, PCR, agarose gel electrophoresis, amplicon library preparation

WORK EXPERIENCE

International Congress of Armenian Mycologists (ICAM) -Nonprofit <i>Co-Founder, Vice-President</i> <ul style="list-style-type: none">After the ending of the Artsakh 2020 war, diaspora Armenian Mycologists decided to create the ICAM non-profit organization.As an organization we strive to conduct critical scientific research on the understudied fungal kingdom in the both ancient yet contemporary civilization of Armenia.We seek to build science capacity in Armenia by: collaborating with the nation's already successful scientists through shared grants, co-authorship, and resource allocation; by providing financed scientific mentorship to Armenian youth; and by gathering biological data that can be used in the protection of land and life.	USA November 2020-
University of California, Riverside <i>Graduate Researcher</i> <ul style="list-style-type: none">Working with P.I. Dr. Jason E. Stajich on observing evolutionary trends in Fungi, while also focusing on melanized fungi isolated from a variety of environments including Biological Soil Crusts, cryptoendolithic communities from Antarctica, the soil from tar pits, etc.Developed Bioinformatics skills to assemble and annotate genomes from a variety of different Phyla of Fungi.	Riverside, CA July 2017- Dec 2022

- Collaborating with multiple teams on numerous different projects involving melanized fungi, including *Friedmanniomyces endolithicus* and *Exophiala dermatitidis*.

Teaching Associate

- Winter 2019, 2021 MCBL 127 - Microbial Evolution 25% TA-ship
- Spring 2020 BIOL 119 - Introduction to Genomics and Bioinformatics 50% TA-ship
 - Facilitated teachings through preparing asynchronous lectures, graded homework, quizzes and exams and provided the final grade to the professors.

California State University, Northridge

Northridge, CA

Graduate Research Assistant

Jan 2014 – Dec 2016

- Worked with P.I. Dr. Larry Baresi to extract DNA and 16S PCR *Sporosarcina ureae*, built phylogenetic tree with 57 strains.
- Appropriated the BIOLOG and MALDI-TOF using protein profiles to observe physiological results of 57 strains.

Teaching Associate

Jan 2015 – Dec 2015

- Principles of Microbiology two semesters
 - Facilitated teachings through preparing lectures, graded exams, and provided final grades to the students.
 - Promoted a dynamic learning environment, while simultaneously enhancing communication skills through student interaction.

Graduate Teaching Assistant

Jan 2014 – Dec 2016

- 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.

California State University

Northridge, CA

Undergraduate Research Student

Jan – Dec 2013

- Isolated and transferred archaea *Methanobrevibacter smithii* strain G through anaerobic techniques while infecting with bacteriophage for virus isolation.

INTERNSHIP EXPERIENCE

Jet Propulsion Laboratory, JPL - NASA

Pasadena, CA

Summer Intern Program (SIP) Intern

July – Sept. 2016

- Collaborated with P.I. Wayne Schubert and Planetary Protection Officers to apply microbiology techniques and assessment of microbial contamination.
- Designed, initiated, and completed Embedded bio-burden experiments on extreme heat and desiccation resistant strains of *Bacillus sp.* (ATCC 29669), utilized a cryogen grinder and mastered serial dilutions and plating techniques.
- Created and maintained MALDI-TOF MS protein profiles of multiple microbial populations.
- Prepared embedded spore masses using a variety of epoxies.

PROFESSIONAL ORGANIZATIONS

International Congress of Armenian Mycologists (ICAM) Non-profit

USA

Co-Founder, Vice-President

November 2020-

Association for Women in Science- Riverside Chapter (AWIS)

Riverside, CA

President, Vice President Publicity Chair

June 2018-2022

Mycological Society of America, Student and PostDoc Section (MSA-SPS)

USA

Past-Chair, Chair, Vice-Chair, Outreach Chair

August 2019-2022

Graduate Student Association- Microbiology Chapter (Micro-GSA)

Riverside, CA

President, Vice President, Outreach

June 2017-2020

Microbiology Students Association at California State University (MSA)

Northridge, CA

Secretary, Treasurer and President

Jan 2013-Aug 2016

Women in Science at California State University (WiS)

Northridge, CA

Member

Jan 2015-Dec 2016

Graduate Leadership Association at California State University (GLA)

Northridge, CA

Social Media Coordinator

Jan 2015-Dec 2016

Los Angeles Mycological Society (LAMS)

Los Angeles, CA

Member

Nov 2014 - Present

American Society for Microbiology (ASM)

USA

Member

Aug 2013 – Present

Mycological Society of America (MSA)

USA

Student Member

Jan 2016 -- Present

AWARDS & PRESENTATIONS

- Poster Presentation at American Society of Microbiology General Meeting. May 30 - June 2, 2015, New Orleans, Louisiana “Comparative Analysis of 16s Ribosomal RNA Typing and Physiological Traits within *Sporosarcina ureae*”. ***Kurbessoian, Tania**, Baresi, Larry.
- Poster Presentation at CSUN Research Symposium at California State University, Northridge April 2014, 2015, 2016 “Comparative Analysis of 16s Ribosomal RNA Typing and Physiological Traits within *Sporosarcina ureae*” ***Kurbessoian, Tania**, Baresi, Larry.
- Oral presentation at Southern California Chapter for the American Society of Microbiology General Meeting October 28-29 2016, San Diego California “Heat Inactivation of Embedded Bacterial Spores”, ***Kurbessoian, Tania**, Alexander, Aaron, Schubert, Wayne.
- Oral Presentation at Black Yeast Workshop part of International Society for Human and Animal Mycology in Amsterdam, Netherlands 2018, ***Kurbessoian, Tania**, Pombubpa, Nuttapon, Stajich, Jason.
- Oral Presentation at 4th International Workshop on Biological Soil Crusts. 25-30 August 2019 North Stradbroke Island, Queensland, Australia. ”Exploring the Role of Melanized Fungi in Cooperative Biological Soil Crust Systems”. ***Kurbessoian, Tania**, Pombubpa, Nuttapon, Pietrasiak, Nicole, Stajich, Jason.
- Poster Presentation at Mycological Society of America Annual Meeting August 10 - 14, 2019, Minneapolis Minnesota. “Just Deserts: Exploring the Diversity of Melanized Fungi in Rocks and Biological Soil Crusts”, ***Kurbessoian, Tania**, Pombubpa, Nuttapon, Pietrasiak, Nicole, Coleine, Claudia, Selbmann, Laura, Stajich, Jason.
- CANCELLED-Oral Presentation at Cellular and Molecular Fungal Biology Gordon Research Conference, June 21 - 26, 2020, Holderness School in Holderness, NH. “Black Yeasts as Desert Sunscreen: Assessing the Genetic Composition of Black Yeasts Found within Biological Soil Crusts”, ***Kurbessoian, Tania**, Pombubpa, Nuttapon, Pietrasiak, Nicole, Coleine, Claudia, Selbmann, Laura, Stajich, Jason.
- Teaching Presentation at Mycological Society of America Annual Meeting, “Mycology in the Clouds”, July 22, 2020. “Teaching Mycology and Bioinformatics Virtually”, ***Kurbessoian, Tania**.
- Poster Presentation at 2020 Virtual Tri-Science Societies (ASA - American Society of Agronomy, CSSA - Crop Science Society of America, SSSA - Soil Science Society of America) Meeting, Virtual World, November 9 - 13, 2020, “Black Yeasts as Desert Sunscreen: Assessing the Genetic Composition of Black Yeasts Found within Biological Soil Crusts”, ***Kurbessoian, Tania**, Pombubpa, Nuttapon, Pietrasiak, Nicole, Coleine, Claudia, Selbmann, Laura, Stajich, Jason.
- Oral Presentation at 2021 MSA/Botany Virtual Meeting, July 19-23, 2021 “Black Yeast as Desert Sunscreen: Assessing the Genetic Composition of Black Yeasts found in Desert Biological Soil Crusts”, ***Kurbessoian, Tania**, Pombubpa, Nuttapon, Pietrasiak, Nicole, Coleine, Claudia, Selbmann, Laura, Stajich, Jason.
- Oral Presentation at 31st Fungal Genetics Conference in Asilomar, Pacific Grove March 14-20, 2022. “In host evolution of *Exophiala dermatitidis* in Cystic Fibrosis lung micro-environment”, ***Kurbessoian, Tania**; Murante, Daniel; Crocker, Alex; Hogan, Deborah A.; Stajich Jason E.
- Poster Presentation at 31st Fungal Genetics Conference in Asilomar, Pacific Grove March 14-20, 2022. “In host evolution of *Exophiala dermatitidis* in Cystic Fibrosis lung micro-environment”, ***Kurbessoian, Tania**; Murante, Daniel; Crocker, Alex; Hogan, Deborah A.; Stajich Jason E.
- Poster at Gordon Research Conference/Seminar at Holderness NH, June 25-July 1, 2022. “In host evolution of *Exophiala dermatitidis* in Cystic Fibrosis lung micro-environment”, ***Kurbessoian, Tania**; Murante, Daniel; Crocker, A; Hogan, Deborah A.; Stajich, Jason E.
- Oral Presentation at Mycological Society of America Annual Meeting. “Mycology in the Swamp”, July 10-14, 2022. “Breaking the mold: Documenting & identifying MCF diversity in southern California desert biological soil crusts”, ***Kurbessoian, Tania**; Ahmed Sarah A.; Hoog Sybren de; Stajich Jason E.
- Eugene Robles Fellowship for UC Riverside Ph.D. Program September 2017-March 2018 - \$24,000
- Emory Simmons Fellowship from Mycological Society of America April 2019 -\$9,000
- UCR Edge Devirian Fellowship 2019 - \$900
- UCR Graduate Student Mentorship Program (GSMP) Best Mentor Award 2019-2020
- UCR Distinguished Teaching Award 2020-2021 - \$500
- UCR DEI Scholarship 2021 - \$600
- UCR MEI Chancellor's Graduate Student Diversity Certificate Program 2022
- MSA Travel Award 2022 (\$750)