
EDUCATION

- Expected 2024 **Master of Arts, Astronomy**
Wesleyan University, *Middletown, CT*
- 2021 **Associate in Science, Physics (High Honors)**
Associate in Science, Math (High Honors)
Cabrillo College, *Aptos, CA*
- 2016 **Bachelor of Arts, English**
Oberlin College, *Oberlin, OH*
Minor: Environmental Studies, Capstone: Postcolonial Anglophone Literatures

RESEARCH

- 2023-2024 **Graduate Student Researcher, Astronomy Department, Wesleyan University**
Advisor: Seth Redfield
Modeling all-sky galactic Lyman- α absorption due to 15 known local interstellar medium (LISM) clouds surrounding the solar system. We will predict what the Alice UV spectrometer aboard NASA's New Horizons spacecraft should see as it reaches the edge of the heliosphere, in preparation for New Horizon's upcoming first all-sky observations.
- 2021-Present **Undergraduate Researcher, Astronomy & Astrophysics, University of California, Santa Cruz**
Advisors: Enrico Ramirez-Ruiz, Samantha C. Wu, Ariadna Murguia-Berthier, Rosa Wallace Everson.
Investigated the characteristics of stars that have survived tidal disruption by a supermassive black hole. Simulated the long-term evolution of tidally disrupted stars using cutting-edge stellar evolution code (MESA). By comparing theoretical deviation of disrupted vs. undisturbed stars, our findings provide observational detection strategies.
- 2022 **Undergraduate Researcher, Plankton Monitoring Lab, Cabrillo College**
Advisors: Nicole Crane, Jane Silberstein.
Contributed to NOAA/NCCOS west coast plankton monitoring applied research project, increasing understanding of harmful algal blooms in Monterey Bay National Marine Sanctuary. Gained experience in plankton collection and identification, microscopes, data analysis/entry, teamwork, and scientific illustration.

AWARDS & SCHOLARSHIPS

- 2023 **Chambliss Astronomy Achievement Honorable Mention, American Astronomical Society**
Honorable Mention for poster presentation award at the 241st AAS meeting in Seattle, WA.
- 2021-2022 **Lamat Research Fellowship, University of California, Santa Cruz**
Funded research with Dr. Enrico Ramirez-Ruiz's high-energy astrophysics group.
- 2021 **Student Presentation Award, SACNAS**
Best astrophysics research poster presented at the SACNAS NDiSTEM Conference.
- 2021 **PEACE Award, Cabrillo College Office of the President**
Exceptional literary work addressing legacies of colonialism on campus.
- 2021 **Wanda Garner Non-Endowed Scholarship, Cabrillo College Mathematics Department**
Academic achievement and contributions to the STEM community.
- 2021 **Student of the Month, Cabrillo College**
Academic accomplishment and contributions to the campus and wider community.
- 2021 **Norton Writer's Prize, W. W. Norton & Company Inc.**
National competition for outstanding academic writing by undergraduates. [Essay.](#)
- 2020 **Ted Bowen Memorial Endowed Scholarship, Cabrillo College Physics Department**
Academic achievement and contributions to the STEM community.

- 2016 **Inducted Member**, *Phi Beta Kappa Honor Society*
Breadth and depth in arts and sciences, scholarly achievement, and excellence of character.
- 2015 **President's Public Service Fellowship**, *Oberlin College Office of the President*
Summer fellowship for community-engaged work in youth empowerment and leadership.
- 2012-2016 **John F. Oberlin Scholarship**, *Oberlin College*
Four-year tuition scholarship for exceptional academic achievement.
- 2012 **National Merit Scholar Finalist**, *National Merit Scholarship Corporation*
Top 3% PSAT achievement nationwide.

PRESENTATIONS

- 2023 **Talk**, *Astronomy Department Research Seminar, Wesleyan University*
Black Hole Survival Guide: Finding Stars that Endure Partial Tidal Disruption
- 2023 **Poster**, *241st Meeting of the American Astronomical Society*
Black Hole Survival Guide: Finding Stars that Endure Partial Tidal Disruption
- 2022 **Talk**, *University of California, Santa Cruz 11th Annual Lamat Astrophysics Research Symposium*
Black Hole Survival Guide: Finding Stars That Survive Partial Tidal Disruption
- 2022 **Poster**, *Conference for Undergraduate Women in Physics (CUWiP)*
Searching for Stars Disrupted by a Supermassive Black Hole
- 2021 **Invited Talk**, *Latinx United at Cabrillo for Engineering and Science (LUCES)*
Searching for Stars Disrupted by a Supermassive Black Hole
- 2021 **Award-Winning Poster**, *SACNAS National Diversity in STEM (NDiSTEM) Conference*
Searching for Stars Disrupted by a Supermassive Black Hole
- 2021 **Talk**, *University of California, Santa Cruz 10th Annual Lamat Astrophysics Research Symposium*
Star, Interrupted: Meeting a Black Hole and Living to Tell the Tale

STEM OUTREACH

- 2022-2024 **Astronomy Public Outreach Program**, *Wesleyan University*
Host weekly public observing nights, operating inflatable planetarium, historic 20" refractor telescope, and 8" and 24" reflector telescopes.
- 2023 **Science Saturday**, *Wesleyan University*
Assisted with on-campus STEM experience for elementary-age youth.
- 2019-2022 **Women in Science and Engineering Club**, *Cabrillo College*
Events Coordinator (2021-22) providing opportunities for gender minorities in STEM.
- 2021 **Picture a Scientist**, *Cabrillo College STEM Colloquium*
Organized and moderated a panel of scientists addressing harassment and equity in STEM.
- 2020 **Bulletins From the Basin**, *Big Basin Redwoods State Park*
Filmed Jr Ranger programs and educational media on natural science topics. 28,000+ views.
- 2015 **Youth Coordinator**, *Children & Teen Services, Oberlin Public Library*
Mentored and tutored low-income, at-risk youth weekly at drop-in technology center.

WORK EXPERIENCE

- 2022-2024 **Teaching Assistant**, *Astronomy Department, Wesleyan University*
Courses: ASTR 155 – Introduction to Astrophysics (majors). ASTR 105 – Exploring the Cosmos (non-majors). Duties: lead weekly labs/observing sessions, office hours, grading.
- 2021-2022 **NASA Community College Aerospace Scholars (NCAS)**, *NASA*
Excelled in 5-week course and authored 10-page report presenting in-situ resource utilization capabilities to assist long-duration space missions. Won national engineering competition, serving as Project Manager for team of 10 designing a lunar mission.

- 2019-2021 **Interpretive Senior Park Aide, California State Parks**
Engaged public regarding natural/cultural resource conservation. Designed and led NGSS-aligned fieldtrips for hundreds of students annually. Collected and interpreted data on wildlife, managed volunteers, designed wildfire communications and funding advocacy.
- 2019-2020 **Math & English Tutor, Cabrillo College Learning HUB**
Provided drop-in tutoring in mathematics from Pre-Algebra through Calculus. Assisted students with essay editing, grammar, time management, and metacognitive awareness. Fostered inclusive, welcoming learning environment. Completed tutor training course.
- 2016-2019 **Program Associate, Djerassi Resident Artists Program**
Coordinated daily program operations for artists-in-residence at remote mountain retreat. Managed volunteer docents, land art installation program, in-house photography, and archives. Led guided art hikes and assisted with public events for 1,000 visitors annually.
- 2012-2016 **Library Assistant, Oberlin College Clarence Ward Art Library**
Assisted patrons with research questions at Circulation Desk. Managed rare book purchases and maintained Special Collections, processed acquisitions, curated displays and blog.

SKILLS

- Languages **English, French**
- Technical **Python, MESA, Matplotlib, Jupyter Notebooks, Inkscape**
- Certifications **Wilderness First Responder, National Outdoor Leadership School, 2018-2023**
Ham Radio Technician License, American Radio Relay League, 2018
Social Justice Mediation & Facilitation, Yeworkwah Belachew Center for Dialogue, 2014

MEDIA & PRESS

- 2022 **Celebrating Pride in STEM – Lab 066, Dope Laps** ([Podcast](#))
- 2021 **Lamat Fellow Rewa Clark Bush Receives Presentation Award, Lamat Institute** ([Article](#))
- 2020 **Big Basin Was Home to California's First Female Park Ranger, The Lily** ([Article](#))
- 2015 **President's Public Service Fellows Present Summer Successes, Oberlin College** ([Article](#))