
EDUCATION

- Expected 2024 **Master of Arts, Astronomy**
Wesleyan University, Middletown, CT
Concentration: Planetary Science
- 2022 **Associate in Science, Physics | High Honors**
Associate in Science, Math | High Honors
Cabrillo College, Aptos, CA
- 2016 **Bachelor of Arts, English | Phi Beta Kappa Honors**
Oberlin College, Oberlin, OH
Minor: Environmental Studies, Capstone: Postcolonial Anglophone Literatures

RESEARCH

- 2023-Present **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 spectrograph 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 **Post-bacc Researcher**, *Astronomy & Astrophysics, University of California, Santa Cruz*
Advisor: Enrico Ramirez-Ruiz
Investigating the characteristics of stars that have survived tidal disruption by a supermassive black hole. Simulating 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 **Post-bacc 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, and scientific illustration.

AWARDS & HONORS

- 2023 **Chambliss Astronomy Achievement Honorable Mention**, *American Astronomical Society*
Honorable Mention for poster presentation award at the 241st AAS meeting in Seattle, WA.
- 2022 **First Place**, *NASA Community College Aerospace Scholars*
Led team to victory in national engineering competition as lunar mission Project Manager.
- 2021 **Student Presentation Award**, *Society for the Advancement of Chicanos/Hispanics and Native Americans in Science*
Best astrophysics research poster presented at the National Diversity in STEM Conference.
- 2021 **PEACE Award**, *Cabrillo College Office of the President*
Exceptional literary work addressing legacies of colonialism on campus.
- 2021 **Student of the Month**, *Cabrillo College*
Academic accomplishment and contributions to the campus and wider community.
- 2020 **Norton Writer's Prize**, *W. W. Norton & Company Inc.*
National competition for outstanding academic writing by undergraduates. [Essay](#).
- 2016 **Inducted Member**, *Phi Beta Kappa Honor Society*
Breadth and depth in arts and sciences, scholarly achievement, and excellence of character.
- 2012 **National Merit Scholar Finalist**, *National Merit Scholarship Corporation*
Top 3% PSAT achievement nationwide.

GRANTS & SCHOLARSHIPS

- 2022-2024 **Teaching Assistantship**, *Astronomy Department, Wesleyan University*
2-year fully-funded TA stipend with tuition remission for astronomy master's program.
- 2023 **Travel Grant**, *Graduate Student Association, Wesleyan University*
Funded travel to New Horizons Science Team Meeting in Boston, MA.
- 2023 **FAMOUS Travel Grant**, *American Astronomical Society*
Funded travel to 241st AAS conference in Seattle, WA.
- 2021-2022 **Lamat Research Fellowship**, *University of California, Santa Cruz*
1.5-year fully-funded research stipend with Prof. Enrico Ramirez-Ruiz's high-energy astrophysics group.
- 2021 **Wanda Garner Non-Endowed Scholarship**, *Mathematics Department, Cabrillo College*
Academic achievement and contributions to the STEM community.
- 2020 **Ted Bowen Memorial Endowed Scholarship**, *Physics Department, Cabrillo College*
Academic achievement and contributions to the STEM community.
- 2012-2016 **John F. Oberlin Scholarship**, *Oberlin College*
Four-year tuition scholarship for exceptional academic achievement.
- 2015 **President's Public Service Fellowship**, *Office of the President, Oberlin College*
Summer fellowship for community-engaged work in youth empowerment and leadership.

RESEARCH PRESENTATIONS

- 2024 **Poster**, *243rd Meeting of the American Astronomical Society*
Evaluating New Horizons Lyman-Alpha Observations From the Edge of the Solar System for Evidence of a Local ISM Cloudscape
- 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*
Searching for Stars Disrupted by a Supermassive Black Hole
- 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 **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

- 2023-present **Community Engagement Volunteer**, *Comm. for the Protection of Astronomy and the Space Environment, AAS*
Assist with outreach regarding issues of satellite constellations, light pollution, and space debris.
- 2022-2024 **Astronomy Public Outreach Program**, *Van Vleck Observatory, Wesleyan University*
Host weekly public observing nights: giving science talks, operating Digitalis planetarium, historic 20" refractor telescope, and 8" and 24" reflector telescopes. Train new students on telescope operations.
- 2023 **Star-gay-zing**, *Astronomy Department, Wesleyan University*
Spearheaded first annual Pride month event, including lectures, planetarium, telescope observing, and discussions to promote LGBTQ+ belonging in astronomy. Procured funding from city Pride Commission.

- 2023 **Science Saturdays**, *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. Collaborated with Indigenous Students Club to engage hundreds of students/faculty across campus re: decolonizing science.
- 2021 **Picture a Scientist**, *STEM Colloquium, Cabrillo College*
Organized and moderated a panel of scientists addressing harassment in STEM with Title IX Office.
- 2020 **Bulletins From the Basin**, *Big Basin Redwoods State Park*
Filmed Junior 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.
- 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**, *Learning HUB, Cabrillo College*
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**, *Clarence Ward Art Library, Oberlin College*
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 for scientific computing, MESA, 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

- 2023 **Van Vleck Observatory Opens its Doors for Community Outreach**, *Wesleyan University* ([Article](#))
- 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](#))