
EDUCATION

- Expected 2030 **PhD, Astronomy**
Yale University, New Haven, CT
- 2024 **Master of Arts, Astronomy**
Wesleyan University, Middletown, CT
Planetary Science concentration.
- 2022 **Associate in Science, Math**
Associate in Science, Physics
Associate in Science, Astronomy
Associate in Science, Liberal Arts-Interdisciplinary Studies
Cabrillo College, Aptos, CA
High Honors.
- 2016 **Bachelor of Arts, English**
Oberlin College, Oberlin, OH
Phi Beta Kappa Honors. Environmental Studies minor. Postcolonial Anglophone Literatures capstone.

RESEARCH

- 2025 **OSTEM Intern, Planetary Science Division, NASA Ames Research Center**
Advisor: Natasha Batalha
Ran cloud-free atmospheric models of exoplanet WASP-17b, a retrograde hot Jupiter observed with the *James Webb Space Telescope*. Found best fit parameters and analyzed residuals, with goal of identifying systematic shortcomings and improving PICASO modeling methods.
- 2023-2024 **Graduate Student Researcher, Astronomy Department, Wesleyan University**
Advisor: Seth Redfield
Modeling Lyman- α absorption due to 15 known local interstellar clouds that surround the Solar System. Our models predict what the Alice UV spectrograph aboard NASA's *New Horizons* spacecraft should see as it reaches the edge of the heliosphere, which we compare with *New Horizons*' first all-sky observations.
- 2021-2022 **Post-bacc Researcher, Lamat Institute for Computational Astrophysics, University of California, Santa Cruz**
Advisor: Enrico Ramirez-Ruiz
Investigating the characteristics of stars that have survived an encounter with a supermassive black hole. Simulating the long-term evolution of tidally disrupted stars using MESA code. 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

- 2024 **Challenge Coin, Office of the Superintendent, Joshua Tree National Park**
Awarded for special achievement, dedication, and service promoting night sky education and stewardship.
- 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 SACNAS National Diversity in STEM Conference.

- 2021 **PEACE Award**, *Office of the President, Cabrillo College*
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.
- 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

- 2025-2030 **Teaching/Research Fellowship**, *Astronomy Department, Yale University*
5-year fully-funded stipend with tuition remission for astronomy PhD program.
- 2025-2028 **Dean's Emerging Scholar Fellowship**, *Graduate School of Arts and Sciences, Yale University*
3-year monetary award in recognition of outstanding academic record and exceptional promise.
- 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**, *NASA Connecticut Space Grant Consortium*
Funded travel to 243rd AAS conference in New Orleans, LA.
- 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**, *Lamat Institute for Computational Astrophysics, 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

- 2025 **Talk**, *246th Meeting of the American Astronomical Society*
Imposters in the Galactic Center: The Unusual Early-Time Appearance of Tidal Disruption Remnants
- 2024 **Talk (Invited)**, *45th Scientific Assembly of the Committee on Space Research (COSPAR)*
Modeling Lyman-Alpha Emission in the Local Interstellar Medium as Observed by *New Horizons*
- 2024 **Talk**, *Astronomy Department Research Seminar, Wesleyan University*
Shadows on the Sky: Mapping *New Horizons*' Vision of the Local Interstellar Cloudscape
- 2024 **Talk**, *New Horizons Science Team Meeting #55*
Modeling the Impact of LISM Clouds on *New Horizons*' Lyman-Alpha Observations
- 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**, *11th Annual Lamat Astrophysics Research Symposium, University of California, Santa Cruz*
Black Hole Survival Guide: Finding Stars that Endure Partial Tidal Disruption
- 2022 **Poster**, *Conference for Undergraduate Women in Physics (CUWiP)*
Searching for Stars Disrupted by a Supermassive Black Hole
- 2021 **Talk (Invited)**, *Latinx United at Cabrillo for Engineering and Science (LUCES), Cabrillo College*
Star, Interrupted: Meeting a Black Hole and Living to Tell the Tale
- 2021 **Poster**, *National Diversity in STEM (NDiSTEM) Conference, SACNAS*
Searching for Stars Disrupted by a Supermassive Black Hole
- 2021 **Talk**, *10th Annual Lamat Astrophysics Research Symposium, University of California, Santa Cruz*
Star, Interrupted: Meeting a Black Hole and Living to Tell the Tale

STEM OUTREACH

- 2025 **Preparing Your Research Talk**, *University of California, Santa Cruz*
Led 2-week workshop on science communication for Lamat Institute summer astrophysics students.
- 2024 **Slugs & Steins Lecture**, *University of California, Santa Cruz*
Public lecture entitled “The Lamat Institute: Re-Imagining Leadership and Mentorship in Astronomy.”
- 2023 **Community Engagement Volunteer**, *Comm. for the Protection of Astronomy and the Space Environment, AAS*
Assisted with outreach regarding issues of satellite constellations, light pollution, and space debris.
- 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

- 2024 **Astronomy Intern**, *Scientists-in-Parks, National Park Service*
Led telescope programs and gave public astronomy / light pollution talks at Joshua Tree National Park, reaching hundreds of visitors each week. Assisted with endangered species monitoring and data collection.
- 2022-2024 **Astronomy Public Outreach**, *Van Vleck Observatory, Wesleyan University*
Hosted weekly public observing nights: giving science talks, operating Digitalis planetarium, historic 20” refractor telescope, and 8” and 24” reflector telescopes. Trained new workers on telescope operations.
- 2022-2024 **Teaching Assistant**, *Astronomy Department, Wesleyan University*
Courses: ASTR 211 – Observational Astronomy (majors). ASTR 155 – Introduction to Astrophysics (majors). ASTR 105 – Exploring the Cosmos (non-majors) x2. Duties: lead weekly labs, observing sessions, office hours, grading, guest lecture.

- 2019-2021 **Interpretive Senior Park Aide**, *California State Parks*
Designed and led public programs and NGSS-aligned fieldtrips for 100s of students annually. Filmed original educational media on historical and natural science topics (28,000+ views), collected wildlife data, habitat restoration, managed volunteers, graphic design, opened/closed visitor centers, staffed giftshops.
- 2019-2020 **Math & English Tutor**, *Learning HUB, Cabrillo College*
Provided tutoring in mathematics from Pre-Algebra through Calculus for first-generation college students. 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 (e.g., open house, art auction, workshops) 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** (native), **French** (advanced)
- Technical **Python for scientific computing, MESA, Inkscape, telescope/astrograph operation**
- Certifications **Wilderness First Responder**, *National Outdoor Leadership School, 2018-2026*
Ham Radio Technician License, *American Radio Relay League, 2018*
Social Justice Mediation & Facilitation, *Yeworkwah Belachew Center for Dialogue, 2014*

MEDIA & PRESS

- 2024 **Lamat Institute: Re-Imagining Leadership and Mentorship in Astronomy**, *UC Santa Cruz* ([Lecture](#))
- 2023 **Van Vleck Observatory Opens its Doors for Community Outreach**, *Wesleyan University* ([Article](#))
- 2021 **Lamat Fellow Rewa Clark Bush Receives Presentation Award**, *Lamat Institute* ([Article](#))
- 2020 **Norton Writer's Prize: A Loss Beyond Words**, *W. W. Norton & Company Inc.* ([Essay](#))
- 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](#))
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