

COMMITTEE ON FACULTY RESEARCH LECTURE
Annual Report 2023-24

To: Academic Senate, Santa Cruz Division

The Committee on the Faculty Research Lecture (CFRL) enthusiastically nominates Professor Natalie Batalha, Astronomy & Astrophysics, as the 2024-25 Faculty Research Lecturer.

Professor Batalha's research reveals the Universe to us, helping us better understand Earth's origins and the possible future. Her research includes the detection and characterization of exoplanets and the study of exoplanet demographics. With the launch of the James Webb Space Telescope, Professor Batalha has been leading international collaborations of hundreds of scientists to investigate what these exoplanets are composed of and how they formed. These are simply groundbreaking observations, and it is unlikely there will be another moment in the field like this for decades.

In November 2022, Professor Batalha testified to Congress on the success of the JWST mission, updating the lawmakers on some of the results. The hearing was titled "[Unfolding the Universe: Initial science results from the James Webb Space Telescope.](#)"

Professor Batalha has also received numerous awards, which include:

- Elected to the American Academy of Arts and Sciences
- Awarded the University of California Presidential Chair
- Elected as a Legacy Fellow of the American Astronomical Society
- Gave the John N. Bahcall Distinguished Lecture, at the Space Telescope Science Institute, in Baltimore, MD
- Gave the Carl Sagan Distinguished Lecture at Cornell

A true Banana Slug, Professor Batalha was selected as the recipient of the 2018 UC Santa Cruz Alumni Achievement Award.

Professor Batalha earned her Ph.D. in astrophysics at UC Santa Cruz in 1997, with an A.B. from Berkeley and an M.Sc. from Observatório Nacional, Rio de Janeiro, Brazil. After a post-doctoral fellowship in Brazil, she returned to California, taking a position at San José State University as a Professor of Astronomy and Astrophysics and joining the exoplanet discovery team at NASA Ames Research Center. She then joined the astronomy faculty at UC Santa Cruz in fall 2018.

She currently serves as the Director of the UCSC Astrobiology Initiative, with the goal of understanding the development of life through the intersecting areas of astronomy, chemistry, biology, and beyond. In recognition of these efforts, Professor Batalha was awarded as PI a \$5M NASA Interdisciplinary Consortia for Astrobiology Research program in 2021.

A dedicated campus community member, she has participated in many campus events, including hosting the wonderful April 2022 interdisciplinary event: *The Universe in Verse*, which brought together scientists, poets, and artists for a celebration of cosmos.

Professor Batalha continues to be a campus leader in mentoring graduate students and postdoctoral scholars in cutting-edge research on exoplanets as well as professional life and well-being. Over the last two years, her six graduate mentees and three postdocs have led as first author on papers including measuring the prevalence of Earth-like planets, Keck Observatory spectroscopic surveys of transiting exoplanets, and James Webb Space Telescope spectroscopy of exoplanet atmospheres.

In honor of her significant research contributions, resulting in many publications, media appearances, grants, and awards; we are proud to nominate our esteemed colleague to present her research to the University and to the larger community as faculty research lecturer. We look forward to her lecture bringing the scope of her research to our campus and local community.

Respectfully submitted,

COMMITTEE ON FACULTY RESEARCH LECTURE

James Clifford
Regina Langhout
Brant Robertson
Marianne Weems
Barbara Rogoff, *Chair*