

Natalie M. Batalha

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Current position:

2018- Professor of Astronomy & Director of Astrobiology, University of California, Santa Cruz

Previous positions:

2012-2018 Research Astrophysicist, NASA Ames Research Center, Moffett Field, California
2008-2012 Associate Professor of Physics and Astronomy, San Jose State University, California
2002-2008 Assistant Professor of Physics and Astronomy, San Jose State University, California
2000-2002 National Research Council Post-doctoral Fellow, NASA Ames Research Center
1998-2000 Postdoctoral Fellow, Observatório Nacional, Rio de Janeiro, Brazil

Education and degrees:

1997 PhD, Astrophysics, University of California, Santa Cruz, CA
1992 MSc, Astrophysics, Observatório Nacional, Rio de Janeiro, Brazil
1989 B.S., Physics and Astronomy, University of California, Berkeley, CA

Synergistic Activities:

NASA's Kepler Mission

2016-2017: Kepler Project Scientist, Mission Closeout Phase, NASA Ames Research Center
Duties include advocating for decisions that ensure the mission meets its science goals, advising the project manager on science matters, participating in scientific analyses, reviewing technical documents, interfacing with NASA headquarters and the Exoplanet Program Office, communicating science results to the public and the scientific community.

2012- 2016: Kepler Mission Scientist, Extended Mission Phase, NASA Ames Research Center
Lead scientist for exoplanet occurrence rates; responsible for ensuring that the Kepler mission meets its science goals; interface between external science community and Kepler project office; member of Kepler's Science Leadership team; science liaison to Kepler Public Affairs;.

2010-2012: Kepler Science Team Lead, Prime Mission Phase, NASA Ames Research Center
Responsible for coordinating a 50+ member science team, devising strategies to achieve the science goals of the mission, organizing working groups to accomplish scientific goals. allocating resources, constructing budgets, interfacing with Kepler Education and Public Outreach team, working closely with NASA Public Affairs, and serving as chairperson of the Science Council.

NASA's Nexus for Exoplanet System Science

2014-2018: co-Lead for NASA's Nexus for Exoplanet Systems Science (NExSS)
NExSS is a cross divisional (Astrophysics, Planetary Sciences & Astrobiology, Earth Sciences, Heliophysics) research coordination network (17 teams, ~250 scientists) working to advance the field of planetary habitability and the search for life on exoplanets.

James Webb Space Telescope

2017 - 2021: James Webb Space Telescope Users Committee (JSTUC)
Committee serves as a conduit of information between STScI and the science community

2015-2017: James Webb Space Telescope Advisory Committee (JSTAC)
Advises the STScI on the Institute's readiness to support science operations with JWST, the implementation of NASA's science policies, and matters related to the general observer program.

Selected Recent Grants & Contracts:

NASA Interdisciplinary Consortia for Astrobiology Research (ICAR), PI
Follow the Volatiles, 2021 - 2026
Multi-Institutional, UCSC lead, \$5M

NASA Keck Key Strategic Mission Support FY20 - FY22, co-PI
The TESS-Keck Survey, FY20 - FY22
Space Telescope Science Institute, Early Release Science Program for JWST, PI
78.1 hours awarded, ~\$400k (FY21-22) + ~\$500k (FY22-23)
NASA Keck Key Strategic Mission Support 2018 A&B, co-I
A Spectroscopic Catalog of Kepler Planets Orbiting Cool Stars: Probing the Physics of
Photo-Evaporation, 10 nights awarded
NASA's Nexus for Exoplanet System Science, PI, 2015-2020
Management contract, NASA Astrobiology, ~\$100k per year

Individual Awards & Honors:

2020 Legacy Fellow of the American Astronomical Society
2019 Elected to American Academy of Arts & Sciences
2018 Honorary Doctorate, University of Uppsala, Sweden
2018 Alumni Achievement Award, UCSC
2017 Smithsonian Ingenuity Award in Physical Sciences
For scientific leadership of NASA's Kepler Mission.
2017 Time Magazine's List of the 100 Most Influential People of the World for 2017
2017 Lecar Prize, Harvard-Smithsonian Center for Astrophysics
For exceptional contributions to the study of extrasolar planets
2011 NASA Exceptional Public Service Medal
For outstanding leadership of the Kepler Science Team

Selected Recent Publications:

TESS-Keck Survey. V. Twin Sub-Neptunes Transiting the Nearby G Star HD 63935
Scarsdale, N, Murphy, J., Batalha, N. and 55 co-authors, 2022, AJ 162 215

The Occurrence of Rocky Habitable-zone Planets around Solar-Like Stars from Kepler Data
Bryson, S., Kunimoto, M., Kopparapu, R., Coughlin, J., Borucki, W., Koch, D., Aguirre, V., Allen, C.,
Barentsen, G., **Batalha, N.**, Berger, T., Boss, A., and 70 co-authors, 2021 AJ 161 36

Sensitivity Analyses of Exoplanet Occurrence Rates from Kepler and Gaia
Shabram, M, **Batalha, N.**, Thompson S., Hsu, D., Ford, E., Christiansen, J., Huber, D., Berger, T.,
Catanzarite, J., Nelson, B., Bryson, S., Belikov, R., Burke, C., Caldwell, D., 2020, AJ 160 16

The Transiting Exoplanet Community Early Release Science Program for JWST
Bean, Jacob L.; Stevenson, Kevin B.; **Batalha, Natalie M.**; Berta-Thompson, Zachory; Kreidberg, Laura;
Crouzet, Nicolas; Benneke, Björn; Line, Michael R.; Sing, David K.; Wakeford, Hannah R.; and 88
coauthors, 2018, arXiv:1803.04985, accepted for publication in PASP

*Planetary Candidates Observed by Kepler. VII. The First Fully Uniform Catalog Based on the Entire 48
Month Dataset (Q1-Q17 DR24)*, Coughlin, J.L., Mullally, F., Thompson, S.E., Rowe, J.F., Burke, C.J.,
Latham, D.W., **Batalha, N.M.**, and 28 co-authors, 2016, ApJ, 224, 12

Exploring exoplanet populations with NASA's Kepler Mission
Batalha, N.M. 2014, Proceedings of the National Academy of Sciences, 111, 12647

Planetary Candidates Observed by Kepler: III. Analysis of the First 16 Months of Data,
Batalha, N., Rowe, J., Bryson, S., Barclay, T., and 25 co-authors, 2013, ApJS, 204, 24

*Characteristics of Planetary Candidates Observed by Kepler. II. Analysis of the First Four Months of
Data*, Borucki, W., Koch, D., Basri, G., **Batalha, N.**, and 66 co-authors, 2011, ApJ 736 19

Kepler's First Rocky Planet: Kepler-10b,
Batalha, Natalie M.; Borucki, William J.; Bryson, Stephen T.; and 49 coauthors, 2011, ApJ, 729, 27