

Dr. Aomawa Shields Formal Biography

Dr. Aomawa Shields is an astronomer, an astrobiologist, the Clare Boothe Luce Associate Professor in the [Department of Physics and Astronomy](#) at the [University of California, Irvine](#), and a classically-trained actor. At UC Irvine Dr. Shields leads a team of researchers and educators at the [Shields Center for Exoplanet Climate and Interdisciplinary Education \(SCECIE\)](#). Her research focuses on exploring the possible climates and potential habitability of planets orbiting stars other than the Sun, called “extrasolar planets.” She employs a hierarchy of computer models to carry out her research, including those traditionally used to predict climate and weather patterns on the Earth. Her papers have been published in a range of peer-reviewed journals, including *The Astrophysical Journal*, *Astrobiology*, and *Astrophysical Journal Letters*.

Dr. Shields received her Ph.D. in Astronomy and Astrobiology from the University of Washington in 2014, an MFA in Acting from UCLA in 2001, and an Sc.B. in Earth, Atmospheric, and Planetary Sciences from MIT in 1997. She held an NSF Astronomy and Astrophysics Postdoctoral Fellowship and a UC President’s Postdoctoral Fellowship at UCLA and at the Harvard-Smithsonian Center for Astrophysics prior to joining the UCI faculty in 2017. She was awarded the prestigious NSF CAREER award, and her research is also supported by the NASA Habitable Worlds and Exoplanets Research Program.

As a 2015 TED Fellow, Dr. Shields uses her theater background to communicate science to the public in engaging, innovative ways. Her TED Talk “[How We’ll Find Life on Other Planets](#)” has garnered over 1.8 million views. Shields also wrote and narrated the popular TED-Ed talk, “[Should we be Looking for Life Elsewhere in the Universe?](#)” for young audiences. Dr. Shields is the Founder and Director of the educational program [Rising Stargirls](#), which encourages middle-school girls of all colors and backgrounds to explore and discover the universe using theater, writing, and visual art, and trains educators around the world to conduct creative-arts based astronomy workshops in their communities. Dr. Shields’ unconventional career path has been featured in the books [Changing the Equation: 50+ US Black Women in STEM](#) by Tonya Bolden and [The Portfolio Life](#) by Christina Wallace. She has appeared in numerous media outlets, including PBS’ Nova, Glamour Magazine, Teen Vogue, The Discovery Channel, and The History Channel.

Dr. Shields’ forthcoming memoir, [Life on Other Planets: A Memoir of Finding My Place in the Universe](#), will be published by Viking at Penguin Random House on July 11, 2023. In it Shields shares her personal and professional path as an astronomer, classically trained actor, mother, and Black woman in STEM, searching for life in the universe while building a meaningful life here on Earth. Dr. Shields is the proud mother of 5 ½ year old rising stargirl Garland-Rose, who she and husband Steven have deemed the most extraordinary lifeform in their universe.