Carolyn Brinkworth

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I have served as NCAR's Director for Diversity, Education & Outreach (DEO) since September 2014, where I am responsible for coordination of all DEO activities across the institution. I moved to NCAR from the Infrared Processing and Analysis Center (IPAC), based at Caltech, where I began as a visiting graduate student in 2003, worked as a postdoc and staff scientist, and ended as the Deputy Lead for Public Affairs. I did this while maintaining a robust research program into dust disks around white dwarfs. I am currently completing my Master's degree in Education through Claremont Graduate University, with a focus on the experiences of minority students in higher education. I plan to submit my thesis in mid-March, entitled "The experiences of LGBTQ students in STEM higher education: recommendations for departments and institutions."

Employment

2014 – Present	Director for Diversity, Education & Outreach, NCAR
2013 – 2014	Deputy Lead for Public Affairs, IPAC
2010 - 2014	Associate Staff Scientist, Science Affairs, NASA Exoplanet Science Institute, IPAC
2009 - 2013	Education and Outreach Scientist, IPAC
2007 - 2010	Assistant Staff Scientist, Science User Support, Spitzer Science Center, IPAC
2005 - 2007	Postdoctoral Researcher, Spitzer Science Center / Jet Propulsion Laboratory

Education

Oct 2011 - Present	M. A. in Education, Claremont Graduate University (currently completing thesis)
Oct 2001 - Apr 2005	Ph.D. in Astrophysics, University of Southampton, U.K.
Oct 1997 - Jul 2001	M.Phys in Physics with Astrophysics (2:1), University of Leicester, U.K.

Awards

2013	NASA Equal Employment Opportunity Medal: "*For outstanding leadership, dedication and commitment, volunteerism, mentoring and coaching of under-represented student groups through science education workshops and programs*"

Relevant Experience

- At NCAR, I am responsible for all diversity programs within the organization. Since arriving in Fall 2014, I have worked with my staff to create a 4-part Equity and Inclusion training series (UNEION) for NCAR staff, teaching about privilege, gender, race, and bystander intervention through readings, interactive exercises, and group discussions. We have also started a Diversity Brown Bag lunch talk series that covers a variety of topics, from unconscious bias, to intercultural communication, and transgender 101 training.

- I have strongly advocated for policy changes at NCAR, working with HR and Facilities to bring in all-gender restrooms, update the lactation rooms, and investigate the extension of health care benefits for non-married couples.

- I am responsible for the strategic coordination of NCAR's education & outreach portfolio, including our student internship programs, professional development workshops, visitor programs, undergraduate and graduate educational resources, postdoc professional mentoring, K-12 teacher professional development, and public engagement.

- I serve as an informal consultant to a number of diversity, equity and inclusion groups based at science organizations across the country.

- I have recently been selected as one of 30 individuals to take part in the NSF's Geoscience Opportunities for Leadership in Diversity Ideas Lab, due to take place in March. The GOLD Lab will bring together geoscientists, social scientists and psychologists to facilitate the design, pilot implementation of innovative professional development curricula for scientists to increase diversity in the field.

- I was a co-organizer of the Inclusive Astronomy 2015 conference, which took place in Nashville in Summer 2015. The conference brought together astronomers and social sciences, and was designed to address diversity, equity and inclusion in astronomy in an intersectional way – i.e. not focusing on any single aspect of people's identity, but recognizing that they are all intertwined and reinforcing. Recommendations from that conference are due to be released by this Summer.

- At IPAC, I worked for Spitzer Science User Support, working with astronomers to process their Spitzer data. I was also responsible for many of the education & outreach activities in the group, including coordinating Spitzer and Herschel's press release process, writing educational content for websites and scripts for podcasts, leading public events, and K-12 educational activities.

- As part of my duties at NExScI, I coordinated the science agenda for the Sagan Summer Workshop and I facilitated the Management Operations Working Group meetings for Keck and IRTF

- In 2011, I founded a partnership with Learning Works Charter School, a local school for in-crisis students in Pasadena. I managed a 9-strong volunteer team that developed and still teaches an ongoing Grade-9 astronomy class at the school.

Research

M.A. IN EDUCATION
I am currently finishing my thesis for my M.A. in Education from Claremont Graduate University's School of Educational Studies. My focus throughout the course has been on access to STEM education and the experiences of under-represented groups, including racial and ethnic minorities, women, and the LGBT community.

RESEARCH
Until recently, I had an active astronomy research program, studying the remains of ancient planetary systems around white dwarfs. I studied the stars themselves, their dust disks, and the evolution of binary stars. I also studied the spin periods of magnetic white dwarfs, to determine the post-main-sequence behavior of different populations of stars. I have published 24 papers in peer-reviewed journals (7 as first-author), with two more recently submitted, and I have extensive observing experience at numerous professional observatories, including Spitzer, Hubble, Kitt Peak, CTIO, Palomar, and the Isaac Newton Group on La Palma.

My research interests now focus on the experiences of LGBTQ students in higher education. I am just starting a new research project to investigate the mental health outcomes of LGBTQ students on college campuses. I also have an active research project investigating the demographic and social factors that contribute to the general public's likelihood of supporting government funding for basic and applied science research.