

# **USC**Dornsife

### Marine and Environmental Biology

Fall 2017 USC Dornsife Employees Faculty Tenured & Tenured Track

USC Dornsife		Humanities	Other	Natural Sciences	Social Sciences
PACIFIC					
ISLANDER	0.0%	0.0%	0.0%	0.0%	0.0%
HISPANIC	1.1%	3.2%	0.0%	0.0%	0.0%
AMERICAN INDIAN	2.8%	4.5%	0.0%	1.0%	4.1%
BLACK	3.0%	5.1%	0.0%	1.5%	3.1%
UNKNOWN	10.4%	10.2%	0.0%	7.3%	17.3%
ASIAN	10.8%	10.2%	0.0%	9.7%	14.3%
WHITE	71.9%	66.9%	100.0%	80.6%	61.2%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%
Female	31.6%	47%	0.0%	18%	35.7%
Male	66.7%	52%	100.0%	80%	62.2%
Unknown	1.7%	1.0%	0.0%	2.0%	2.0%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%

USC Dornsife 2018-22 Diversity, Equity and Inclusion Strategic Plan

# National Hispanic Heritage Month Week 2 Mentorship

This week we examine the critical role that mentorship plays in the recruitment and retention of Latina/o/x students in STEM. Mentoring has the potential to enhance social capital, making it an important intervention for Latina/o/x students interested in STEM fields. Bridging social capital, consisting of support and guidance from institutional agents such as faculty mentors, can expand networks and provide information that can assist in learning about fields of interest (Albright et al. 2017). However, research has shown that bonding social capital, or getting to know students and their social context and developing a close relationship is likely equally important for promoting positive outcomes (Sanchez et al. 2021). The lack of representation of Latina/o/x scholars in senior positions limits the number of available role models and places undue burden on those who can provide effective mentorship.

## The Role of Institutional Agents in Providing Institutional Support to Latinx Students in STEM

Case study results featuring four Latinx STEM faculty members illustrate the forms of institutional support professors can provide to increase the number of Latinx students in science, technology, engineering, and mathematics (STEM) fields.



### Latino STEM Teachers, DACA, and the Future of Teaching

Dr. Adriana Briscoe, Professor of Ecology & Evolutionary Biology at UC Irvine, reflects on the critical importance of role models for increasing recruitment and



## Collectors, Nightlights, and Allies, Oh My! White Mentors in the Academy

This article by Dr. Marisela Martinez-Cola identifies, defines, and discusses three roles White mentors play for students of Color.





MORE: Preparing Cal State LA Minority Students for Success in Top PhD Programs

National Hispanic Heritage Month Seminar

Dr. Carlos Gutierrez, CSU Los Angeles Thursday, Sept 30, 11a TWR

To learn more about the MORE programs visit https://www.calstatela.edu/

centers/moreprograms

### Cuentos/Contos

#### Kiersten Formoso

Ph.D. Student, University of Southern California

Kiersten, a New York born but Jersey-raised evolutionary scientist passionately describes her research exploring land to sea (not sea to land!) evolutionary transformations. She tells us how she shakes off heightened self-awareness (as one of the few Latinx in academic spaces) and addresses barriers that keep Latinx from pursuing science careers. Despite these setbacks, Kiersten has also had many positive experiences and remains inspired to pursue a career as a tenure-track professor. Read more.



#### Ph.D. Student, The Ohio State University

Alonso (originally hailing from the San Fernando Valley), shares his academic evolution: from pursuing an aviation administration degree in community college to obtaining a BSc. to currently researching venom changes in off-sea anemones! He also discusses the hidden curriculum, mentorship in academia and why he started the organization, "Latinx in the Marine Sciences". Read more.



### Dr. Bryan H. Juarez

NSF Postdoctoral Fellow, Stanford University

South/East Los Angeles native, Bryan, describes how his low-income background drove him to design novel mathematical approximations to tackle complex science problems (jumping in frogs), as an alternative to using expensive equipment that may have been financially inaccessible. He also explains



how his Latinx background prepared him to spot genuine mentors and allies, which have now blossomed into solid friendships. Finally, Bryan touches on experiencing culture shock as a Latino in academia and how EEB departments can support their fellow Latinx academics. Read more.



Image credit: NASA/Getty images

### Latinx Scientist Profile

Dr. Ellen Ochoa became the first Hispanic woman to go to space in 1993. An electrical engineer and astronaut, she was also the first Hispanic and second woman to direct NASA's Johnson Space Center. Her paternal grandparents originally immigrated to Arizona from Sonora, Mexico to Arizona and later to California. She was born in Los

Angeles and earned her BSc in physics from San Diego State University and MS and PhD degrees from Stanford's Department of Electrical Engineering. Prior to her career as an astronaut, she researched optical systems for automated space exploration at Sandia National Laboratories and the NASA Ames Research Center, where she was a group director. She holds several patents in the field of optical systems and has received a number of awards and accolades for her work, including NASA's Distinguished Service Medal. She is a Fellow of AAAS, the American Institute of Aeronautics and Astronautics, and the National Academy of Inventors.

#### Dr. Ochoa on the importance of positive mentorship for her career:

When I was going through school, it was pretty unusual for a woman to be in STEM fields. Certainly, any woman of color. In some [classes], I was the only woman. In others, maybe one of two or four. I can only remember one class with more than that. I did get some discouragement. I can't say whether it was because of my Hispanic background or because I was a woman, because people don't actually tell you. When I was at San Diego State University as an undergraduate, I started to explore STEM fields. I went to talk to a professor in the electrical engineering department. He made it very clear: He was not interested in having me in his department. He said, "Well, we did have a woman come through here once, but it's a really difficult course of study and I just don't know that you'd be interested." Fortunately, I also talked to a professor in the physics department who was much more

encouraging. That's a pattern I saw throughout graduate school and early my career: I would run into people who didn't think I should be there, but also other people who were really supportive.

 $\label{eq:mapping} \textit{My Ph.D. advisors at Stanford, for example, were very supportive-- and that certainly made a huge difference in my career.}$ 

Read more of the interview transcript  ${\color{blue}\text{here}}$ 

