

MEGAN O'CONNELL

PhD Candidate – Integrative Biology
University of Texas at Austin

megan.oconnell@utexas.edu
(610)368-3531

[website](#)

*Botanical Research Institute of
Texas, Fort Worth, TX*

EDUCATION & RESEARCH EXPERIENCE

Conservation Botanist, Conservation Research Program 2021-present
Botanical Research Institute of Texas

DUTIES: Develop a conservation research program for rare and endangered plant species of Texas, build out a seed banking network and initiative for the state, investigate and predict the impacts of global change on critical plant communities in Texas, develop a line of questioning regarding the conservation and restoration of native habitats in changing landscapes, codify relationships with state and federal agencies, local universities, non-profits, land trusts, and land owners to conserve and protect Texas flora.

PhD, Integrative Biology with a focus in Ecology
University of Texas at Austin, The Jha Lab

Smithsonian Tropical Research Institute, Panama 2014-2021

DISSERTATION: Disentangling the impacts of density-dependence, climate & phenology on plant-pollinator interactions and pollen-mediated gene flow

DUTIES: 26 graduate coursework and 88 research credits completed, project design, management & evaluation, grant writing, directed and managed field crews and logistics in Panama for the collection of ecological data (4 field seasons), managed 6 undergraduates and 2 high school interns in lab protocols and genetic data collection (4 semesters), led statistical analyses and writing of 4 academic publications, participated in several public engagement opportunities

BS coursework, Biology 2012-2014

Oregon State University, Corvallis, OR

Smithsonian Tropical Research Institute, Panama

THESIS: Intraspecific leaf functional trait variation along the Panama Canal rainfall gradient

DUTIES: field technician in Panama, assisted with the collection of ecological data, lab technician, assisted with molecular processing of ecological samples, developed my own set of research questions to pursue in our study system and procured funding to collect field data

BA, English Literature 2007-2009

Loyola University, New Orleans, LA

Magna Cum Laude

PUBLICATIONS

Castilla, A.R., Rodriguez M.F., Santos, A., **O'Connell, M.C.**, Treviño, L., Jha, S. (2017) *Adding landscape genetics and individual traits to the ecosystem function paradigm reveals the importance of species diversity*. PNAS.

O'Connell, M.C., Castilla, A.R., Jha, S. (2018) *Pollen movement across fragmented tropical forests: paternity analyses reveal the role of landscape and pollinator body size on gene flow in multipaternal plants*. BioTropica.

O'Connell, M.C., Jordan, Z., McGilvray, E., Liere, H., Lin, B.B., Philpott S.M., Jha, S. (2020) *Local plant species composition drives pollinator foraging patterns within urban garden landscapes*. Urban Ecosystems.

O'Connell, M.C., Castilla, A.R., Espinosa, H., Kore, P., Jha, S. (in prep) *El Niño-Southern Oscillation and phenological shifts intensify effects of deforestation on plant-pollinator interactions and pollen dispersal in tropical forests*.

O'Connell, M.C., Hance, T., Florence, J. (in prep) *Just Listen: Harnessing the power of self-directed design and activation to promote community and well-being in school parks*.

SCIENCE MEDIA EXPERIENCE

<u>Biodiversity at Work: Can Bees Help Us Solve Crimes?</u> – Director/Producer	2020
<i>Produced for the Jha Lab and the Biodiversity Center at UT Austin</i>	
<u>Bayou City Short Documentary</u> – Production Assistant	2019-2020
<i>Fin & Fur Films and Texas Parks and Wildlife, Produced for Wild Texas Film Tour</i>	
<u>Moving Lines Short</u> – Co-Producer	2019
<i>International Wildlife Film Festival Filmmakers' Lab, Produced for the USDA and Defenders of Wildlife</i>	
<u>Playing with Fire Video Series</u> – Producer/Director	2018-2019
<i>UT Insect Collection, Produced for an NSF-funded outreach project</i>	
<u>Proposed Border Wall will Harm Texas Biodiversity Video</u> – Director	2018
<i>UT College of Natural Sciences, Accompanied an article in Frontier in Ecology and the Environment</i>	
<u>Scientist in Residence Video Campaign</u> – Director	2017-2018
<i>Environmental Science Institute, Produced to promote the Scientist in Residence Program at UT</i>	
<u>BioVida Panamá – La Rana Dorada</u> – Director	2016-2017
<i>Screened at 2018 SXSW Films for the Forest & 2018 Association of Tropical Biology Conference</i>	

PUBLIC ENGAGEMENT

<u>Pillow Park Project Research/Media Coordinator</u>	2020
<i>St. David's Parks with Purpose Grant, facilitated by West Cave Outdoor Discovery Center Designing and engaging community in the conversion of a neighborhood park into an ecologically-sound outdoor recreation space at Pillow Elementary</i>	
<u>The Living Coast Narrator</u>	2020
<i>2020 Texas tour with <u>Montopolis Orchestra</u> Queen Theatre, Bryan, TX Texas A&M – Corpus Christi, TX</i>	
Guest Lecture – Life without Biodiversity: Can We Survive?	2019
<i>Sustaining the Planet, Undergraduate Course, UT Austin</i>	
<u>Presentation - How to Think, Dance, and Grocery Shop Like a Bee</u>	2019
<i>Brackenridge Field Laboratory, UT Austin Austin Public Library – Howson Branch Austin Public Library – Twin Oaks Branch</i>	
E-Poster - Back to the Wild-ish: Amphibian Reintroduction in Panama	2018
<i>2nd International Wildlife Reintroduction Conference, Chicago, IL</i>	
<u>Poster – Multi-paternity and Pollen-Mediated Gene Flow</u>	2017
<i>Association of Tropical Biology and Conservation, Merida, Mexico</i>	
Presentation – Why When Matters When it Comes to Pollination	2016
<i>Native Plant Society of Texas, Austin, TX</i>	
Presentation – Reaching Out: A Discussion of Outreach as a Tropical Ecologist	2015
<i>Gamboa Lecture Series, Smithsonian Tropical Research Institute</i>	

TEACHING EXPERIENCE

Economic Botany Teaching Assistant	Fall 2017/Fall 2018
<i>Plant Biology Department, UT Austin</i>	
Scientist in Residence Teaching Fellow	2016-2017
<i>Environmental Science Institute & Laurel Mountain Elementary</i>	
Biology Supplemental Instruction Leader	2012-2013
<i>Academic Success Center, Oregon State University</i>	
AmeriCorps Middle School Assistant English Teacher	2010-2011
<i>Communities in Schools at SciTech Academy, New Orleans</i>	

MENTORSHIP

Undergraduate Thesis Students: Pragati Kore, Apoorva Magadi, Leticia Lee

Undergraduate Trainees: Jen Schlauch, Nelson Jaen, Hilario Espinosa, Katie Pennartz, Amy Wroblewski

High School Trainees: Yadira Rodriguez, DJ Ojeda

FELLOWSHIPS & GRANTS

USDA NIFA Post-Doctoral Fellowship – National Institute of Food and Agriculture	<i>declined</i>
Parks with Purpose Grant – St. David’s Foundation, Austin, TX	2020
University Graduate Continuing Fellowship – Graduate School, UT Austin	2020
IWFF Filmmaker’s Lab Fellow – International Wildlife Film Festival	2019
EcoLabs Grant Recipient – Department of Integrative Biology, UT Austin	2019
Scientist in Residence Media Fellow – Environmental Science Institute	2018
Integrative Biology Travel Award – Integrative Biology, UT Austin	2017
Jean Andrews Community Engagement Internship – UT Austin	2017
Scientist in Residence Teaching Fellowship – Environmental Science Institute	2016
STRI Research Fellowship – Smithsonian Tropical Research Institute	2016
NSF Graduate Research Fellowship – National Science Foundation	2015
Integrative Biology Recruitment Fellowship – UT Austin	2014
Undergraduate Research & Innovation Award – Oregon State University	2014
Undergraduate Research Internship – Smithsonian Tropical Research Institute	2013

LANGUAGES

English, Proficient in conversational Spanish

