

# Jenna T. B. Ekwealor

## CURRICULUM VITAE

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### EDUCATION

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| 2015-Present | <b>Ph.D. Candidate</b><br>Department of Integrative Biology<br>University of California, Berkeley (UCB)<br>Laboratory of Dr. Brent Mishler                     |
| 2015         | <b>M.S. in Environmental Science, Biology Option</b><br>California State University, Los Angeles (CSULA)<br>Laboratory of Dr. Kirsten Fisher                   |
| 2012         | <b>B.S. in Biology, Minor in Chemistry</b><br>Purdue University, Indiana University—Purdue University—Indianapolis (IUPUI)<br>Laboratory of Dr. Melissa Kacena |
| 2012         | <b>B.A. in Religious Studies</b><br>Indiana University, IUPUI  |
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### PUBLICATIONS

4. **Ekwealor, Jenna T. B.**; Fisher, Kirsten M. A distinct bryophyte microhabitat: Hypolithic mosses in the Mojave Desert. (In prep).
  3. **Baughman, Jenna T.**; Payton, Adam C.; Paasch, Amber E.; Fisher, Kirsten M.; McDaniel, Stuart F. Multiple factors influence population sex ratios in the Mojave Desert moss *Syntrichia caninervis*. *American Journal of Botany* 104(5):1-10 (2017), DOI: 10.3732/ajb.1700045
  2. Meijome, Tomás E.\*; **Baughman, Jenna T.\***; Hooker, R. Adam; Cheng, Ying-Hua; Ciovacco, Wendy A.; Balamohan, Sanjeev A.; Srinivasan, Trishya L.; Chitteti, Brahmananda R.; Eleniste, Pierre P.; Horowitz, Mark C.; Srouf, Edward F.; Bruzzaniti, Angela; Fuchs, Robyn K.; Kacena, Melissa A. C-Mpl is expressed on osteoblasts and osteoclasts and is important in regulating skeletal homeostasis. *Journal of Cellular Biochemistry* 117:959-969 (2016), DOI: 10.1002/jcb.25380 \*Contributed equally
  1. Eleniste, Pierre P.; Patel, Vruti; Posritong, Sumana; Zero, Odette; Largura, Heather; Cheng, Ying-Hua; Himes, Evan R.; Hamilton, Matthew; **Baughman, Jenna**; Kacena, Melissa A.; Bruzzaniti, Angela. Pyk2 and megakaryocytes regulate osteoblast differentiation and migration via distinct and overlapping mechanisms. *Journal of Cellular Biochemistry* 9999:1-11 (2015), DOI: 10.1002/jcb.25430
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### FELLOWSHIPS & TRAINEESHIPS

2015-2020	<b>Berkeley Fellowship</b> (UCB) (\$86,000 awarded over five years)
2017-2020	<b>Pinto-Fialon Fellowship</b> (UCB) (\$25,735 awarded over three years)
2018-2019	<b>Luso-American Education Foundation Scholarship</b> (\$1,000)
2015-2017	<b>Environment &amp; Society: Data Sciences for the 21<sup>st</sup> Century, An NSF Research Traineeship</b> (UCB)
2014-2015	<b>Minority Biomedical Research Support Research Initiative for Scientific Enhancement MS-to-Ph.D. Graduate Research Fellowship</b> (CSULA) (\$17,000)
2019-2012	<b>Ronald E. McNair Post-Baccalaureate Achievement Scholar</b> (IUPUI)

## HONORS &amp; AWARDS

2016	Outstanding Graduate Student Instructor, UCB
2013	Tutor of the Month, Tutor Doctor of San Gabriel Valley
2012	Rowland A. Sherrill Outstanding Religious Studies Student Award, IUPUI
2012	Christine Jakacky Mentor of the Year, IUPUI
2012	13 <sup>th</sup> Annual IUPUI Top 100 Outstanding Students, IUPUI
2011	12 <sup>th</sup> Annual IUPUI Top 100 Outstanding Students, IUPUI

## RESEARCH GRANTS

**Current**

2019	Department of Integrative Biology Summer Grant (UCB) (\$3,500)
2019	California Native Plant Society – Bryophyte Chapter Research Grant (\$200)
2019	Sigma Xi Berkeley Chapter Grants-in-Aid-of-Research (UCB) (\$200)
2018	Mathias Graduate Student Research Grant (UC Natural Reserve System) (\$2,000)

**Contributions to ongoing funded research**

2016-2019	NSF Division of Environmental Biology #163856
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	Title: Collaborative Research: Dimensions: Desiccation and Diversity in Dryland Mosses PI: Brent Mishler, UCB
<b>Previous</b>	
2017	Anderson & Crum Field Bryology Award (American Bryological and Lichenological Society) (\$750)
2018	Department of Integrative Biology Summer Research Award (UCB) (\$1,750)
2017	Department of Integrative Biology Summer Research Award (UCB) (\$1,750)
2016-2019	Department of Integrative Biology Graduate Student Research Allocations Committee Research Award (UCB) (\$1,200 over four years)
2014	Evo-Devo-Eco Research Exchange Network Grant (NSF Research Coordination Network) (\$3,000)

## CONFERENCE PRESENTATIONS

### Oral Presentations

2020	Botany Lunch, University & Jepson Herbaria, UC Berkeley, CA, USA "The Photosynthetic Effects of the Mojave Desert Sun on a Biological Soil Crust Moss"
2019	Biocrust4, North Stradbroke Island, Australia "UV Tolerance in Mojave Desert Mosses"
2019	Botany 2019, Tucson, AZ, USA "UV Tolerance in Mojave Desert Mosses" <i>Honorable Mention for A. J. Sharp Award</i> <i>ABLS Student Travel Award (\$400)</i>
2019	Bryology 2019, Madrid, Spain "UV Tolerance in Mojave Desert Mosses" <i>UCB Dept. of Integrative Biology Graduate Student Research Allocations Committee Travel Award (\$250)</i>
2018	American Bryological and Lichenological Society Meeting, Nederland, CO, USA "UV Tolerance in Mojave Desert Mosses" <i>ABLS Student Travel Award (\$600)</i>

- 2017 California Botanical Society Graduate Symposium, Santa Barbara, CA, USA  
“Adaptation, facilitation, and refugia in Mojave Desert mosses”  
*California Botanical Society Travel Award (\$200)*
- 2016 Biocrust3, Moab, UT, USA  
Molecular Frontiers Symposium  
“Males of the Mojave Desert moss *Syntrichia caninervis* (Pottiaceae) are rare and shy”  
*Biocrust3 Complimentary Registration Award*
- 2016 Biocrust3, Moab, UT, USA  
Early Career Scientists Symposium  
“Natural desert terraria: Characterization of hypolithic Mojave Desert moss community”  
*Biocrust3 Complimentary Registration Award*
- 2016 Botany 2016, Savannah, GA, USA  
“Natural desert terraria: Characterization of hypolithic Mojave Desert moss community”  
*ABLS Student Travel Award (\$600)*
- 2016 Botany 2016, Savannah, GA, USA  
“Males of the Mojave Desert moss *Syntrichia caninervis* (Pottiaceae) are rare and shy”  
*UCB Dept. of Integrative Biology Graduate Student Research Allocations Committee Travel Award (\$250)*
- 2015 California Botanical Society Graduate Symposium, Claremont, CA, USA  
“Natural desert terraria: Characterization of hypolithic Mojave Desert moss community”  
*Best Presentation Award, Completed Research Category*

### Poster Presentations

- 2018 International Molecular Moss Science Society Meeting, St. Petersburg, FL, USA  
“UV Tolerance in Mojave Desert Soil Mosses”  
*Best Student Poster Award*  
*iMOSS Trainee Fellowship Award*
- 2015 California Native Plant Society Conservation Conference, San Jose, CA, USA  
“Natural desert terraria: Characterization of hypolithic Mojave Desert moss community”  
*Best Student Poster Award*

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### DEPARTMENTAL TALKS

2019	Guest Lecture, Ecosystems of California, UCB “Evolution of Energetic Trade-Offs in Plant Herbivory Defense”
2019	Guest Lecture, Plant Systematics, UCB “Introduction to Bryophytes”
2018	Grad Students on Parade Lightning Talk, Botany Lunch, University & Jepson Herbaria, UCB “Volunteer botanizing in the Mojave National Preserve”
2016	Botany Lunch, University & Jepson Herbaria, UCB “Sex and survival: The impacts of energetic trade-offs for the Mojave Desert moss <i>Syntrichia caninervis</i> (Pottiaceae)”
2015	MORE & LSAMP Seminar, CSULA “Sex and survival: The impacts of energetic trade-offs for the Mojave Desert moss <i>Syntrichia caninervis</i> (Pottiaceae)”

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## TEACHING

### Teaching Appointments

2019-2020	Graduate Student Instructor, UCB
2015-2016	Graduate Student Instructor, UCB
2014-2015	Teaching Assistant, CSULA
2009-2012	Undergraduate Student Instructor, IUPUI
2008-2012	Recitation Leader, IUPUI

### Undergraduate Courses

Introduction to California Plant Life (Field Course), UCB	2020
Ecosystems of California (Field Course), UCB	2019
Introductory Biology Laboratory, UCB	2015, 2016
Ecology Laboratory, CSULA	2014, 2015
Plant Biology Laboratory for Non-Majors, CSULA	2014
Peer-Led Team Learning Methods in Teaching Chemistry, IUPUI	2009-2012
General Chemistry I Peer-Led Team Learning Recitation, IUPUI	2008-2012
Concepts of Biology II Recitation, IUPUI	2009

### Workshops

Biocrusts: The Living Skin of the Earth, Expanding Your Horizons Girls' Conference, UCB	2019
Introduction to R, Git, Shell, and Reproducible Analysis in R, Software Carpentry, UCB	2019
Biological Sciences Discipline Workshop, Teaching Conference for First-Time GSIs, UCB	2018
Introduction to Shell, Git, and R, Data Carpentry, UCB	2018
Introduction to Genomics Data Wrangling, Data Carpentry UCB	2018

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## RESEARCH EXPERIENCE

- 2015-Present      **Graduate Student Researcher**  
 Department of Integrative Biology  
 University of California, Berkeley  
 Laboratory of Dr. Brent Mishler  
*The evolution and eco-physiology of UV tolerance in dryland mosses*
- 2016                **Graduate Student Researcher**  
 Department of Geography  
 University of California, Berkeley  
 Laboratory of Dr. Laurel Larsen  
*Analysis of landscape features from RASCAL, a model of Florida everglades landscape evolution*
- 2013-2015        **Graduate Student Researcher**  
 Department of Integrative Biology  
 University of California, Berkeley  
 Laboratory of Dr. Kirsten Fisher  
*Sex or survival? The genetic impacts of environment and energetic trade-offs for the Mojave Desert moss *Syntrichia caninervis* (Pottiaceae)*
- 2009-2012        **Life Health Sciences Internship**  
 Orthopaedic Laboratories  
 Indiana University School of Medicine  
 Laboratory of Dr. Melissa Kacena  
*Characterization of C-Mpl and Pyk2 in skeletal growth and development and in bone-blood interactions*
- 2011                **Multidisciplinary Undergraduate Research Institute**  
 Departments of Earth Sciences & Department of Anthropology  
 Indiana University—Purdue University—Indianapolis  
 Laboratories of Dr. Gabriel Filippelli & Dr. Jeremy J. Wilson  
*Analysis of the ratio of carbon to nitrogen from soil cores in a Mississippian era Native American civilization site as a marker for landscape use change*
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## SERVICE

### I. Community

- Peer reviewer: *Plant and Soil*, *American Journal of Botany*, *Annals of Botany*, *Plant Biology*, and *The Bryologist*.
- Social Media Chair: California Native Plant Society, Bryophyte Chapter
- Student Representative: International Molecular Moss Science Society

### II. University

- Curriculum Faculty Committee, Department of Integrative Biology, UCB, 2018-2019
- Diversity Faculty Committee, Department of Integrative Biology, UCB, 2018-2019

- Graduate Student Orientation Committee, Department of Integrative Biology, UCB, 2018-2019
- Women in Science at Cal, Student Organization Planning Committee, UCB, 2016-2019

## MENTORSHIP

### Undergraduate Students

Dean Berkowitz, Mishler Lab, UCB	2018-2019
Jordan Jomsky, Mishler Lab, UCB	2018-2019
Shloka Reddy, Mishler Lab, UCB	
Heloise Carion, Mishler Lab, UCB	2017-2018
Easha Sagar, Mishler Lab, UCB	2017-2018
Brittanie Rodriguez, Fisher Lab, CSULA	2015
Katelyn Millette, Fisher Lab, CSULA	2014

### High School Students

José Adame Medina, Mishler Lab, Berkeley High School	2019
Angela Sacramento, Mishler Lab, Oakland Technical High School	2018

## OUTREACH

Networking Guest, Success Suits You! Biotech Partners, Berkeley High School	2020
Supervisory Scientist, Mission Mojave, Blueprint Earth	2019
Cal Day, Bryophyte Station, University & Jepson Herbaria, UCB	2019
Interview Day, Panel Member, "Life as an IB Graduate Student," UCB	2016, 2017, 2018
Cal Day, Bryophyte Station, University & Jepson Herbaria, UCB	2018
Cal Day, Bryophytes & Ferns Station, University & Jepson Herbaria, UCB	2016
"Be a Scientist" Mentor, Community Resources for Science	2016
Logistics Volunteer, Expanding Your Horizons Conference	2016
Field Researcher, Mission Mojave, Blueprint Earth	2014, 2015
Naturalist, Marine Mammals, Indianapolis Zoo	2012
Youth Mentor "Big Sister," Big Brothers Big Sisters of Central Indiana	2010-2011

## PROFESSIONAL SOCIETIES

California Native Plant Society, International Molecular Moss Society (iMOSS), American Bryological and Lichenological Society, Botanical Society of America, California Botanical Society

## SKILLS

Proficiency in R, Bash, Matlab, Git, & HTML. Experience programming in Python, Perl, & Java.  
Proficiency in bryophyte microscopy work (dissection, sectioning, and creating permanent slides).

## LANGUAGES

English (native), Spanish (limited working proficiency), Portuguese (limited working proficiency)