Jenna T. B. Ekwealor

CURRICULUM VITAE

Data Science Lab, Office of the Chief Information Officer, Smithsonian Institution
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RESEARCH INTERESTS

My research goals are to (1) understand the eco-physiological mechanisms of stress tolerance (2) characterize processes that generate and maintain diversity of life history and sexual systems, and (3) elucidate the evolutionary history of adaptation to extreme environments, including the transition of life to land itself. To accomplish these goals, I use a combination of controlled laboratory experiments, holistic field studies including manipulation of environmental variables, and bioinformatics and computational tools. My current research applies these integrative methods primarily to a diverse group of mosses that inhabit drylands throughout the world, accomplishing incredible physiological feats.

EDUCATION

2020 **Ph.D., Integrative Biology**, Eco-physiology, Department of Integrative Biology, University of California, Berkeley (UCB). *Dissertation title:* Tolerance of desiccation and UV radiation in mosses of the genus *Syntrichia* (Pottiaceae), from genomes to ecology. *Advisor:* Dr. Brent D. Mishler.

2020 **Certificate of Remote Instruction**, UCB. Graduate Student Instructor Teaching & Resource Center.

2015 **M.S., Environmental Science** with an Option in Environmental Biology, California State University, Los Angeles (CSULA)**.** *Thesis title:* Sex or survival? The genetic impacts of environment and energetic trade-offs for the Mojave Desert moss *Syntrichia caninervis* (Pottiaceae). *Advisor:* Dr. Kirsten M. Fisher.

2012 **B.S., Biology** with a Minor in Chemistry, Purdue University, Indiana University–Purdue University, Indianapolis (IUPUI). *Thesis title:* Pyk2 and megakaryocytes regulate osteoblast differentiation and migration via distinct and overlapping mechanisms. *Advisor:* Dr. Melissa Kacena.

2012 **B.A., Religious Studies**, Indiana University, IUPUI.

PROFESSIONAL APPOINTMENTS

2020– **Biodiversity Genomics Postdoctoral Fellow**, Data Science Lab, Office of the Chief Information Officer, Smithsonian Institution, under Dr. Rebecca Dikow.

2020 **Part-time Faculty**, Dept. of Biology, Natural History & Sustainability Program, Merritt College.

PUBLICATIONS [ORCID 0000-0001-9014-8786]

PEER-REVIEWED JOURNAL ARTICLES (*contributed equally, †undergraduate mentee)

8. **Ekwealor, JTB**, SD Benjamin, JZ Jomsky, MA Bowker, LR Stark, DN McLetchie, BD Mishler, and KM Fisher. Genotypic confirmation of a biased phenotypic sex ratio in a dryland moss using a novel RFLP technique. Accepted in *Applications in Plant Sciences.*

7. **Ekwealor, JTB** and BD Mishler. The transcriptomic effects of acute ultraviolet radiation exposure on two *Syntrichia* mosses. *Frontiers in Plant Science* (2021), DOI: 10.3389/fpls.2021.752913.

6. **Ekwealor, JTB**, TA Clark, O Dautermann, A Russell, S Ebrahimi, LR Stark, KK Niyogi, and BD Mishler. Natural ultraviolet radiation exposure alters photosynthetic biology and improves recovery from desiccation in a desert moss. *Journal of Experimental Botany* (2021), DOI: 10.1093/jxb/erab051.

5. Silva, Anderson T., B Gao, KM Fisher, BD Mishler, **JTB Ekwealor**, LR Stark, X Li, D Zhang, MA Bowker, JC Brinda, KK Coe, and MJ Oliver. To dry perchance to live: insights from the genome of the desiccation-tolerant biocrust moss *Syntrichia caninervis*. *The Plant Journal* (2020), DOI: 10.1111/tpj.15116.

4. **Ekwealor, JTB** and KM Fisher. Life under quartz: Hypolithic mosses in the Mojave Desert. *PLOS ONE* 15(7): e0235928 (2020), DOI: 10.1371/journal.pone.0235928. Press & Interviews: UCB Press Release, Smithsonian Magazine, The Guardian, The New York Times: Trilobites, Science Friday, WTF, Biology?, Scientific American, Scienmag Science Magazine, Phys.org, EurekAlert!, полит Pro Science, Wissenschaft.de.

3. **Ekwealor, JTB**, AC Payton, AE Paasch, KM Fisher, and SF McDaniel. 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.*, **JTB Ekwealor***, RA Hooker Y Cheng, WA Ciovacco, SA Balamohan, TL Srinivasan, BR Chitteti, PP Eleniste, MC Horowitz, EF Srour, A Bruzzaniti, RK Fuchs, and MA Kacena. 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.

1. Eleniste, Pierre P., V Patel, S Posritong, O Zero, H Largura, Y Cheng, ER Himes, M Hamilton, **JTB Ekwealor**, MA Kacena, and A Bruzzaniti. 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.

OTHER PUBLICATIONS

Ekwealor, JTB. 2020. A suntan effect in the Mojave Desert moss *Syntrichia caninervis*. Mojave National Preserve Science Newsletter. December 2020, 15-19.

MANUSCRIPTS IN REVIEW

Ekwealor, JTB, SD Benjamin, JZ Jomsky, MA Bowker, LR Stark, DN McLetchie, BD Mishler, and KM Fisher. Genotypic confirmation of a biased phenotypic sex ratio in a dryland moss using a novel RFLP technique. Under review with *Applications in Plant Sciences.*

AWARDS & HONORS

2020 **Biodiversity Genomics Postdoctoral Fellowship**, Office of the Chief Information Officer, Smithsonian Institution

2020 **Graduate Remote Instruction Innovation Fellowship**, University of California, Berkeley
2018 **Luso-American Education Foundation Scholarship**, Luso-American Education Foundation
2017 **Pinto-Fialon Fellowship**, University of California, Berkeley
2016 **Outstanding Graduate Student Instructor**, University of California, Berkeley
2015 **Environment & Society: Data Sciences for the 21st Century, NSF Research Traineeship**, University of California, Berkeley
2015 **Berkeley Fellowship**, University of California, Berkeley
2014 Minority Biomedical Research Support Research Initiative for Scientific Enhancement MS-to-PhD Graduate Research Fellowship, California State University, Los Angeles
2012 **Christine Jakacky Mentor of the Year Award**, Indiana University–Purdue University, Indianapolis

GRANT SUPPORT

CONTRIBUTIONS TO ONGOING FUNDED RESEARCH

2016-2021 NSF Division of Environmental Biology #163856
Title: Collaborative Research: Dimensions: Desiccation and Diversity in Dryland Mosses
PI: Brent D. Mishler, University of California, Berkeley

GRADUATE RESEARCH FUNDING

2020 **Myrtle Wolf Grant**, California Native Plant Society – East Bay Chapter ($1,400)
2020 Dissertation Award, Department of Integrative Biology, University of California, Berkeley ($2,500)
2020 **Paul Silva Student Research Grant**, California Botanical Society ($580)
2019 **Summer Grant**, Department of Integrative Biology, University of California, Berkeley ($3,500)
2019 **Research Grant**, California Native Plant Society – Bryophyte Chapter ($200)
2019 Grants-in-Aid-of-Research, Sigma Xi Berkeley Chapter ($200)
2018 **Mathias Graduate Student Research Grant,** University of California Natural Reserve System ($2,000)
2018 **Summer Research Award**, Department of Integrative Biology, University of California, Berkeley ($1,750)
2017 **Anderson & Crum Field Bryology Award**, American Bryological and Lichenological Society ($750)
2017 **Summer Research Award**, Department of Integrative Biology, University of California, Berkeley ($1,750)
2016 **Graduate Student Research Allocations Committee Research Award**, Department of **Integrative Biology**, University of California, Berkeley ($1,200 over four years)
2014 **Evo-Devo-Eco Research Exchange Network Grant**, National Science Foundation Research Coordination Network ($3,000)

UNDERGRADUATE RESEARCH FUNDING

2011 **Multidisciplinary Undergraduate Research Institute Program**, Departments of Earth Sciences and Anthropology, Indiana University–Purdue University, Indianapolis
2009 **Life Health Sciences Internship**, Orthopaedic Laboratories, Indiana University School of Medicine
2009 **Multidisciplinary Undergraduate Research Institute Program**, School of Liberal Arts and Herron school of Art and Design, Indiana University–Purdue University, Indianapolis
2009 **Ronald E. McNair Research Scholars Program**, Indiana University–Purdue University, Indianapolis

INVITED SEMINARS AND CONFERENCE PRESENTATIONS

INVITED RESEARCH SEMINARS

2022 Smithsonian Institution, Smithsonian Botanical Symposium
2022 University of Tennessee, Knoxville, Department of Ecology and Evolutionary Biology
2021 University of Colorado, Boulder, Department of Ecology and Evolution
2021 California Botanical Society, Botany Speaker Series
2021 University of Hawai'i at Mānoa, Evoluncheon, Ecology, Evolution and Conservation Biology Group
2021 University of California Botanical Garden, Garden Seminars Program

CONFERENCE PRESENTATIONS (†undergraduate mentee)

Ekwealor, JTB, S Nosratinia, K Guill, JC Brinda, J Jauregui-Lazo, MJ Oliver, and BD Mishler. 2021. Oral presentation. A global phylogeny of the dryland moss genus *Syntrichia.* Bryophytes, lichens, and northern ecosystems in a changing world: BL 2021, Virtual.

Ekwealor, JTB. 2021. Oral presentation. Moss with a suntan: The effects of natural ultraviolet radiation on the Mojave Desert moss *Syntrichia caninervis.* Annual meeting of the Southern California Academy of Sciences, Virtual.

Ekwealor, JTB, TA Clark, O Dautermann, A Russell, S Ebrahimi, LR Stark, KK Niyogi, and BD Mishler. 2020. Oral presentation. The photosynthetic effects of Mojave Desert sun on *Syntrichia caninervis.* Annual meeting of the Botanical Society of America: Botany, Virtual.

Ekwealor, JTB, SM Kosina, TR Northen, and BD Mishler. 2019. Oral presentation. The evolution of UV tolerance in Mojave Desert biocrust mosses. The 4th International Workshop on Biological Soil Crusts: Biocrust4, Minjerribah (North Stradbroke Island), Australia.
University of California, Berkeley Graduate Division Conference Travel Grant ($1500)

Ekwealor, JTB, SM Kosina, A Silva, TR Northen, and BD Mishler. 2019. Oral presentation. UV tolerance in Mojave Desert biocrust mosses. Annual meeting of the Botanical Society of America: Botany, Tucson, Arizona.
Honorable Mention for A. J. Sharp Award
ABLS Student Travel Award ($400)

Berkowitz, Dean†, **JTB Ekwealor**, S McClure, and BD Mishler. 2019. Poster presentation. Spatial phylogenetic diversity of native vascular plants in the Mojave National Preserve. Annual meeting of the Botanical Society of America: Botany, Tucson, Arizona.

Ekwealor, JTB, SM Kosina, A Silva, TR Northen, and BD Mishler. 2019. Oral presentation. UV tolerance in Mojave Desert mosses. Annual meeting of the International Association of Bryology: Bryology, Madrid, Spain.
University of California, Berkeley Department of Integrative Biology Graduate Student Research Allocations Committee Travel Award ($250)

Ekwealor, JTB. 2018. Poster presentation. UV tolerance in Mojave Desert soil mosses. Annual Meeting of the International Molecular moss Science Society, St. Petersburg, Florida.
iMOSS Trainee Fellowship Award

Ekwealor, JTB. 2018. Oral presentation. UV tolerance in Mojave Desert biological soil crust mosses. Annual meeting of the American Bryological and Lichenological Society, Nederland, Colorado.
ABLS Student Travel Award ($600)

Ekwealor, JTB. 2017. Oral presentation. Adaptation, facilitation, and refugia in Mojave Desert mosses. California Botanical Society Graduate Student Symposium, Santa Barbara, California.
California Botanical Society Travel Award ($200)

Larsen, L, J Harvey, C Saunders, S Newman, W Nardin, J Choi, A Hurst, and **JTB Ekwealor**. 2016. Oral presentation. The Everglades flow release experiments: A field test of multi-scale ecogeomorphic feedbacks. Annual meeting of the American Geophysical Union, San Francisco, California.

Ekwealor, JTB, K Millette†, and KM Fisher. 2016. Oral presentation. Desert terraria: Characterization of a Mojave Desert moss community under quartz rocks. The 3rd International Workshop on Biological Soil Crusts: Biocrust3, Early Career Scientists Symposium, Moab, Utah.
Biocrust3 Complimentary Registration Award

Ekwealor, JTB, AC Payton, AE Paasch, SF McDaniel, and KM Fisher. 2016. Oral presentation. Males of the Mojave Desert moss *Syntrichia caninervis* (Pottiaceae) are rare and shy. The 3rd International Workshop on Biological Soil Crusts: Biocrust3, Molecular Frontiers Symposium, Moab, Utah.
Biocrust3 Complimentary Registration Award

JTB Ekwealor, K Millette, and KM Fisher. 2016. Oral presentation. Natural desert terraria: Characterization of a hypolithic Mojave Desert moss community. Annual meeting of the Botanical Society of America: Botany, Savannah, Georgia.
ABLS Student Travel Award ($600)

Ekwealor, JTB, AC Payton, AE Paasch, SF McDaniel, and KM Fisher. 2016. Oral presentation. Males of the Mojave Desert moss *Syntrichia caninervis* (Pottiaceae) are rare and shy. Annual meeting of the Botanical Society of America: Botany, Savannah, Georgia.
University of California, Berkeley Department of Integrative Biology Graduate Student Research *Allocations Committee Travel Award ($250)*

Ekwealor, JTB, K Millette, and KM Fisher. 2015. Oral presentation. Natural desert terraria: Characterization of a hypolithic Mojave Desert moss community. California Botanical Society Graduate Student Symposium, Claremont, California.
Best Presentation Award, Completed Research Category

Ekwealor, JTB, K Millette, and KM Fisher. 2015. Oral presentation. Natural desert terraria: Characterization of a hypolithic Mojave Desert moss community. California Native Plant Society Conservation Conference, San Jose, California.
Best Student Poster Award

TEACHING EXPERIENCE

MERRITT COLLEGE, OAKLAND, CALIFORNIA

2020 Instructor, Natural History of the Bay Area: Bryophytes (remote field course)

UNIVERSITY OF CALIFORNIA, BERKELEY

2020 Graduate Student Instructor, California Natural History (remote field course)
2020 Graduate Student Instructor, Integrative Human Biology
2020 Graduate Student Instructor, Thriving in Academia, course website
2020 Graduate Student Instructor, Introduction to California Plant Life (field course; partially remote)
2019 Graduate Student Instructor, Ecosystems of California (field course)
2016 Graduate Student Instructor, Introductory Biology Laboratory
2015 Graduate Student Instructor, Introductory Biology Laboratory

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

2015 Teaching Assistant, Ecology Laboratory
2014 Teaching Assistant, Ecology Laboratory
2015 Teaching Assistant, Plant Biology Laboratory for Non-Majors

INDIANA UNIVERSITY–PURDUE UNIVERSITY, INDIANAPOLIS, INDIANA

2012 Recitation Leader, General Chemistry I Peer-Led Team Learning Recitation
2012 Undergraduate Co-Instructor, Peer-Led Team Learning Methods in Teaching Chemistry
2011 Recitation Leader, General Chemistry I Peer-Led Team Learning Recitation (remote)
2011 Undergraduate Co-Instructor, Peer-Led Team Learning Methods in Teaching Chemistry
2010 Recitation Leader, General Chemistry I Peer-Led Team Learning Recitation
2010 Undergraduate Co-Instructor, Peer-Led Team Learning Methods in Teaching Chemistry
2009 Recitation Leader, Concepts of Biology II Recitation
2009 Recitation Leader, General Chemistry I Peer-Led Team Learning Recitation
2009 Undergraduate Co-Instructor, Peer-Led Team Learning Methods in Teaching Chemistry
2008 Recitation Leader, General Chemistry I Peer-Led Team Learning Recitation

BIOLOGY WORKSHOPS

2021 Co-Instructor, Wonders of a dryland moss: *Syntrichia* from genomes to ecosystems, University & Jepson Herbaria, University of California, Berkeley
2019 Co-Instructor, Biocrusts: The Living Skin of the Earth, Expanding Your Horizons Girls' Conference, University of California, Berkeley

TEACHING WORKSHOPS

2021 Instructor, Biological Sciences Discipline Workshop, Teaching Conference for First-Time GSIs, University of California, Berkeley (remote)
2020 Instructor, Biological Sciences Discipline Workshop, Teaching Conference for First-Time GSIs, University of California, Berkeley

2018 Instructor, Biological Sciences Discipline Workshop, Teaching Conference for First-Time GSIs, University of California, Berkeley
2009 Co-Instructor, Relational Leadership–The Benefits You Can Reap!, Regional honors Symposium, Indiana University–Purdue University, Indianapolis

BIOINFORMATICS WORKSHOPS

2021– The Carpentries, Certified Instructor
2021 Instructor, The Unix Shell, The Carpentries: Software Carpentry, Smithsonian Institution
2019 Helper, Introduction to R, Git, Shell, and Reproducible Analysis in R, The Carpentries: Software Carpentry, University of California, Berkeley
2018 Helper, Introduction to Shell, Git, and R, The Carpentries: Data Carpentry, University of California, Berkeley
2018 Helper, Genomics Data Wrangling, The Carpentries: Data Carpentry, University of California, Berkeley

MENTORING EXPERIENCE

UNIVERSITY OF CALIFORNIA, BERKELEY

Undergraduate Research Mentees

A total of 5 students, including: Dean Berkowitz (Geography, 2018-2020), Jordan Jomsky (Data Science & Molecular & Cellular Biology, 2018-2021), Shloka Reddy (Molecular & Cellular Biology, 2018), Heloise Carion (Bioengineering, 2017-2018), and Easha Sagar (Molecular & Cellular Biology).

High School Research Mentees

A total of 2 students, including: José Adame Medina (Berkeley High School, 2019) and Angela Sacramento (Oakland Technical High School, 2018).

SMITHSONIAN INSTITUTION

Undergraduate Research Mentees

A total of 1 student: Dalila Lara (University of California, Santa Barbara, 2022. UCSB–Smithsonian Scholars Program).

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

Undergraduate Research Mentees

A total of 2 students, including: Brittanie Rodriguez (Biology, 2015) and Katelyn Millette (Biology, 2014).

FIELDWORK EXPERIENCE

DOCTORAL FIELDWORK (10/2016–06/2020)

Location: Mojave Desert, California (Sweeney Granite Mountains Desert Research Center)
Field Team: Jenna Ekwealor (lead), Somi Ekwealor
Research: The effects of UV natural radiation on a Mojave Desert moss (Ekwealor *et al.* 2021, Ekwealor *et al.* under review, Ekwealor *et al.* in prep).

MASTERS FIELDWORK (03/2014–06/2014)

Location: Mojave Desert, California (San Bernardino National Forest)
Field Team: Kirsten Fisher (lead), Jenna Ekwealor, Katelyn Millette

Research: Population genetics and community ecology of desert mosses (Ekwealor *et al.* 2017; Ekwealor and Fisher 2020, Ekwealor *et al.* under review).

VOLUNTEER FIELDWORK: SUPERVISORY SCIENTIST (03/2019) (†undergraduate mentee)
Location: Mojave Desert, California (Mojave National Preserve)
Field Team: Jess Phoenix (lead), Sheila McClure (lead) Jenna Ekwealor (botany lead), Matt Serna, Chris Giesgie, Julieta Ramos, Luis Vidal, Elysha Nygaard, Anselm Krause, Becca Janacek, Shanina Rice, Dean Berkowitz†, Mitzy Schaney, Chris Schaney, Hope Leer, MacKenzie Caron, Ricky Wagner, Faine Greenwood, Dan Scnarnecchia
Research: I led the botany team to survey plants in the study area with the science education non-profit organization Blueprint Earth. We also collected vascular plant specimens for genomic sequencing as a part of Dean Berkowitz's Honor's Senior Thesis project (https://github.com/d-berkowitz/mnp_spatial_phylo).

VOLUNTEER FIELDWORK: ASSISTANT (04/2015)
Location: Mojave Desert, California (Mojave National Preserve)
Field Team: Jess Phoenix (lead), Carlos Phoenix (lead) Jenna Ekwealor, Desiree Espericueta, Brittanie Rodriguez, Reno Gregory, Amanda Matthews, Sharena Rice
Research: Surveyed and identified plants in the study area with the science education non-profit organization Blueprint Earth.

VOLUNTEER FIELDWORK: ASSISTANT (03/2014)
Location: Mojave Desert, California (Mojave National Preserve)
Field Team: Jess Phoenix (lead), Carlos Phoenix (lead), Kirsten Fisher (botany team lead), Jenna Ekwealor, Desiree Espericueta, Brittanie Rodriguez, Stephanie Macias
Research: Surveyed and identified plants in the study area with the science education non-profit organization Blueprint Earth.

UNDERGRADUATE FIELDWORK (06/2011)
Location: Indiana (Angel Mounds State Historic Site)
Field Team: Jeremy J. Wilson (lead), Jenna Ekwealor, Sandra Haefner, Jonathan Baiden, Heui La Yang, Casey Baldwin
Research: Collected soil cores from a slough at a Middle Mississippian Native American civilization site. We then collected samples from these cores to look for evidence of anthropogenic transformation and the impact of climate change in the Ohio River Valley during the Late Prehistoric Period.

SERVICE AND SYNERGISTIC ACTIVITIES

UNIVERSITY SERVICE

2018–2021 Graduate Student Representative, Department of Integrative Biology Diversity, Equity, & Inclusion Faculty Committee, University of California, Berkeley
2018–2020 Graduate Student Representative, Department of Integrative Biology Curriculum Faculty Committee, University of California, Berkeley
2018–2019 Graduate Student Representative, Department of Integrative Biology Graduate Student Orientation Committee, University of California, Berkeley
2016–2019 Women in Science at Cal Organization Planning Committee, University of California, Berkeley

PROFESSIONAL SOCIETY SERVICE

SOCIETY LEADERSHIP

2018– Student/Post-doc Representative, International Molecular Moss Science Society
2018–2020 Social Media Chair, California Native Plant Society–Bryophyte Chapter

SOCIETY MEMBERSHIP

2021– Southern California Academy of Sciences
2021– Idaho Native Plant Society
2019– International Association of Bryologists
2018– International Molecular Moss Science Society
2016– Botanical Society of America
2016– American Bryological and Lichenological Society
2015– California Botanical Society
2014– California Native Plant Society

PEER-REVIEW FOR ACADEMIC JOURNALS

Functional Ecology, American Journal of Botany, Plant and Soil, Annals of Botany, The Bryologist, Plant Biology

PUBLIC OUTREACH

INTERVIEWS

2021 **WTF, Biology?**. "These moss are living their best life–under rocks." Interviewed to discuss my research and recent publication in *PLOS One* about hypolithic desert mosses. A podcast episode available on Apple Podcasts, Spotify, Google Podcasts, Breaker, Pocket Casts, and RadioPublic. May 19, 2021.

2020 **Science Friday**. "These moss are living their best life–under rocks." Interviewed to discuss my research and recent publication in *PLOS One* about hypolithic desert mosses. Aired on WNYC Studios and carried on over 400 public radio stations. September 11, 2020.

2020 **The New York Times**. "This moss uses quartz as a parasol." Interviewed to discuss my research and recent publication in *PLOS One* about hypolithic desert mosses. July 29, 2020.

2020 **Berkeley News: Research, Science & Environment**. "Desert mosses use quartz rocks as sun shades." Press release for my publication in *PLOS One* about hypolithic desert mosses. July 23, 2020. Several news articles were published based on this press release, including those published by: The Guardian, Smithsonian Magazine, Scientific American, Scienmag Science Magazine, Phys.org, EurekAlert!, and was also translated into Russian for полит Pro Science and into German for Wissenschaft.de.

OUTREACH IN K-16 CLASSROOMS

2020 **Invited speaker**, "10 Coolest Bryophyte Facts," Speculative Fiction, Bronx Arena High School. I gave an overview presentation of what I deem to be the coolest things about bryophytes and then had a conversation with students about ideas the presentation sparked. Students were later assigned to imagine a speculative world based on the presentation. Inspired by desiccation tolerance of mosses, one student designed with Sleeper Pods where humans could go into suspended animation to wait out the effects of climate change.

2020 **Networking Guest**, "Success Suits You!", Biotech Partners, Berkeley High School. I met with high school juniors and seniors interested in biotechnology to discuss their goals for internships and college.

2019 **Invited speaker**, Bay Area Science Festival: Celebrating Nature, University & Jepson Herbaria. I led a tour through the Herbaria and presented my research with example specimens from the collections.

2019 **Invited speaker**, "Introduction to Bryophytes," Plant Systematics, Department of Integrative Biology, University of California, Berkeley
2019 **Supervisory scientist**, Mission Mojave Educational Field Expedition, Blueprint Earth. I led a team of undergraduate researchers on a field plant survey.
2016 **Scientist mentor**, "Be a Scientist," Community Resources for Science, Willard Middle School, Berkeley, California. I led a group of four seventh graders through their own independent research projects over a period of six weeks.
2016 **Logistics volunteer**, Expanding Your Horizons Conference, University of California, Berkeley. I helped guide middle school girls through a full-day STEM conference.

PUBLIC TALKS AND BOOTHS

2019 **Cal Day**, University & Jepson Herbaria, University of California, Berkeley. I presented an interactive station about bryophytes for public visitors.
2018 **Cal Day**, University & Jepson Herbaria, University of California, Berkeley. I presented an interactive station about bryophytes for public visitors.
2016 **Cal Day**, University & Jepson Herbaria, University of California, Berkeley. I presented an interactive station about bryophytes and ferns for public visitors.
2012 **Volunteer Naturalist**, Marine Mammals section, Indianapolis Zoo. I engaged the public with marine mammal artifacts and with the live animal exhibits.

OTHER

2018 **Interview Day panel member**, Department of Integrative Biology, University of California, Berkeley.
2017 **Interview Day panel member**, Department of Integrative Biology, University of California, Berkeley.
2016 **Interview Day panel member**, Department of Integrative Biology, University of California, Berkeley.
2010–11 **Youth mentor "Big Sister"**, Big Brothers Big Sisters of Central Indiana

CODE

www.github.com/jenna-tb-ekwealor

SKILLS

Proficiency in R, Bash, Matlab, Git, & HTML. Additional experience programming in Python, Perl, & Java. Proficiency in bryological and other botanical microscopy (dissection, sectioning, and creating permanent slides).

LANGUAGES

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