Jenna T. B. Ekwealor CURRICULUM VITAE

Office of the Chief Information Officer, Smithsonian Institution

<u>ekwealorj@si.edu</u> www.jennaekwealor.com

EDUCATION

- 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.
- 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.

PUBLICATIONS [ORCID 0000-0001-9014-8786]

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

- Ekwealor, JTB, TA Clark, O Dautermann, A Russell, S Ebrahimi, LR Stark, KK Niyogi, 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.
- Silva, Anderson T., B Gao, KM Fisher, BD Mishler, JTB Ekwealor, LR Stark, X Li, D Zhang, MA Bowker, JC Brinda, KK Coe, 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: <u>UCB Press Release</u>, 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, 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.

MAY 2021 PAGE 1 OF 10

- 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, 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.
- Eleniste, Pierre P., V Patel, S Posritong, O Zero, H Largura, Y Cheng, ER Himes, M Hamilton, JTB Ekwealor, MA Kacena, 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 and BD Mishler. The transcriptomic effects of acute UV radiation exposure on two *Syntrichia* mosses.

MANUSCRIPTS IN PREPARATION

Ekwealor, Jenna TB, SD Benjamin, J Jomsky†. Comparing phenotypic and genotypic population sex ratios in a dioicous moss using a novel RFLP technique.

Mishler, Brent D.; **JTB Ekwealor**, S Nosratinia, JC Brinda, J Jauregui-Lazo, C Caswell-Levy, K Guill, MA Oliver. A global phylogeny and classification of the dryland moss genus *Syntrichia*.

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
- 2013 **Tutor of the Month**, Tutor Doctor of San Gabriel Valley
- 2012 **Rowland A. Sherrill Outstanding Religious Studies Student Award**, Indiana University–Purdue University, Indianapolis
- 2012 Christine Jakacky Mentor of the Year Award, Indiana University–Purdue University, Indianapolis
- 2012 **13th Annual IUPUI Top 100 Outstanding Students Award**, Indiana University–Purdue University, Indianapolis
- 2011 **12th Annual IUPUI Top 100 Outstanding Students Award**, Indiana University–Purdue University, Indianapolis

MAY 2021 PAGE 2 OF 10

> 2009 Ronald E. McNair Post-Baccalaureate Achievement Scholarship, 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 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

2021	Colorado University, Boulder, Department of Ecology and Evolution (forthcoming)
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 (*presenting author, †undergraduate mentee)

PAGE 3 OF 10 MAY 2021

Office of the Chief Information Officer Smithsonian Institution <u>ekwealorj@si.edu</u> <u>www.jennaekwealor.com</u>

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. (forthcoming)

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. 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*

MAY 2021 PAGE 4 OF 10

Office of the Chief Information Officer Smithsonian Institution <u>ekwealorj@si.edu</u> <u>www.jennaekwealor.com</u>

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

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*

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

MAY 2021 PAGE 5 OF 10

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

- 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 Mentoring Symposium,
	Indiana University–Purdue University, Indianapolis

BIOINFORMATICS WORKSHOPS

2021-present	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

MAY 2021 PAGE 6 OF 10

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

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).

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 team 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

MAY 2021 PAGE 7 OF 10

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	Leader	hin
BUCICIV	Leader	ши

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

Society Membership

	r
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

- 2021 American Journal of Botany
- 2019 Plant and Soil
- 2018 American Journal of Botany, Annals of Botany
- 2017 The Bryologist, Plant Biology

PUBLIC OUTREACH

Interviews

- 2021 <u>WTF, Biology?</u>. "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 <u>Science Friday</u>. "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 <u>The New York Times</u>. "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 <u>Berkeley News: Research, Science & Environment</u>. "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

MAY 2021 PAGE 8 OF 10

Office of the Chief Information Officer Smithsonian Institution <u>ekwealorj@si.edu</u> www.jennaekwealor.com

by: <u>The Guardian, Smithsonian Magazine</u>, <u>Scientific American</u>, <u>Scienmag Science Magazine</u>, <u>Phys.org</u>, <u>EurekAlert!</u>, and was also translated into Russian for <u>полит Pro Science</u> and into German for <u>Wissenschaft.de</u>.

Outreach in K-16 Classrooms

- 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.
- 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.
- 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, Berkelev.
- 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

MAY 2021 PAGE 9 OF 10

Office of the Chief Information Officer Smithsonian Institution

<u>ekwealorj@si.edu</u> <u>www.jennaekwealor.com</u>

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)

MAY 2021 PAGE 10 OF 10