Jenna T. Baughman

CURRICULUM VITAE

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EDUCATION

Ph.D. Candidate
Department of Integrative Biology, Brent Mishler Lab
University of California, Berkeley (UCB)
Present

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

B.S. – Biology, Chemistry Minor
Purdue University, Indiana University—Purdue University—Indianapolis (IUPUI)
2012

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

RESEARCH AND PROFESSIONAL EXPERIENCE

2015-2020 PhD Research, UCB
Project: Investigating biochemistry, genomics, and evolutionary history of UV-tolerance in desert mosses
2018-2019 Graduate Student Researcher, UCB
2015-2016 Graduate Student Instructor, UCB
2014-2015 Teaching Assistant, CSULA
2009-2012 Research Intern, Orthopaedic Laboratories, Indiana University School of Medicine (IUSM)

PUBLICATIONS

1. **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:

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.; Srour, 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: *Contributed equally

3. 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:

FUNDING

Current

Berkeley Fellowship, UCB 2016-2018
$26,000.00

Pinto-Fialon Fellowship, UCB 2017-2018
$7735.00

American Bryological and Lichenological Society 2017
Anderson & Crum Field Bryology Research Award
$750

Contributions to ongoing funded research

NSF Division of Environmental Biology #163856
Title: Collaborative Research: Dimensions: Desiccation and Diversity in Dryland Mosses
PI: Brent Mishler, UCB
Role: Contributed data

Previous

California Botanical Society 2017
Graduate Student Symposium Travel Award
$200

American Bryological and Lichenological Society 2016
Annual Meeting Travel Award
$600

Graduate Student Research Allocations Committee Research Award 2016-2017
Graduate Student Research Funds
$300

Graduate Student Research Allocations Committee Research Award 2015-2016
Graduate Student Research Funds
$300

Graduate Student Research Allocations Committee Research Award 2015-2016
Graduate Student Conference Travel Funds
$250

NSF Research Coordination Network, Evo-Devo-Eco Network 2014
Research Exchange Grant
Title: Sex or survival? The genetic impacts of environment and energetic trade-offs for the Mojave Desert moss *Syntrichia caninervis* (Pottiaceae)

Amount: $3,000

HONORS & AWARDS

- Berkeley Fellowship, UCB (2016-2018)
- Pinto-Fialon Fellowship, UCB (2017)
- NSF National Research Traineeship, Environment and Society: Data Sciences for the 21st Century, UCB (2015-2017)
- Outstanding Graduate Student Instructor, UCB (2016)
- Minority Biomedical Research Support (MBRS) Research Initiative for Scientific Enhancement (RISE), MS-to-Ph.D. Graduate Research Fellowship, CSULA (2014-2015)
- Tutor of the Month, Tutor Doctor of San Gabriel Valley (2013)
- Rowland A. Sherrill Outstanding Religious Studies Student Award, Department of Religious Studies, IUPUI (2012)
- Christine Jakacky Mentor of the Year, IUPUI (2012)
- 13th Annual IUPUI Top 100 Outstanding Students, IUPUI (2012)
- Ronald E. McNair Post-Baccalaureate Achievement Scholar, IUPUI (2009-2012)
- 12th Annual IUPUI Top 100 Outstanding Students, IUPUI (2011)

SELECTED PRESENTATIONS

Oral Presentations

California Botanical Society Graduate Symposium — Santa Barbara, CA, USA, 2015
"Adaptation, facilitation, and refugia in Mojave Desert mosses"
Cal. Bot. Soc. Travel Award

Biocrust3 — Moab, UT, USA, 2016
Early Career Scientists Symposium
"Natural desert terraria: Characterization of hypolithic Mojave Desert moss community"
Biocrust3 Complimentary Registration Award

Biocrust3 — Moab, UT, USA, 2016
Molecular Frontiers Symposium
"Males of the Mojave Desert moss *Syntrichia caninervis* (Pottiaceae) are rare and shy"
Biocrust3 Financial Assistance Award

Botany — Savannah, GA, USA, 2016
"Natural desert terraria: Characterization of hypolithic Mojave Desert moss community"
ABLS Travel Award

Botany — Savannah, GA, USA, 2016
"Males of the Mojave Desert moss *Syntrichia caninervis* (Pottiaceae) are rare and shy"
ABLS Travel Award

California Botanical Society Graduate Symposium — Claremont, CA, USA, 2015

"Natural desert terraria: Characterization of hypolithic Mojave Desert moss community"
Awarded 1st Place, Completed Research Category

Poster Presentations
California Native Plant Society Conservation Conference San Jose, CA, USA, 2015
"Natural desert terraria: Characterization of hypolithic Mojave Desert moss community"
Awarded 1st Place Student Posters

SYNERGISTIC ACTIVITIES

- Reviewer for *Plant and Soil*

UNDERGRADUATE STUDENTS MENTORED

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

OUTREACH

- 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
- Advanced Canine Companion, Humane Society of Indianapolis 2012
- Youth Mentor "Big Sister," Big Brothers Big Sisters of Central Indiana 2010-2011

PROFESSIONAL ASSOCIATIONS

American Bryological and Lichenological Society
Botanical Society of America
~~Ecological Society of America~~
American Society of Naturalists
Society for the Study of Evolution
Society of Systematic Biologists
~~American Society of Plant Biologists~~
~~American Geophysical Union~~
California Native Plant Society

TEACHING

Graduate Student Instructor, UCB 2015, 2016
Course: BIO 1B, Introductory Biology Laboratory

Responsibilities: Prepared and co-taught weekly 3-hour laboratories for sections of 30 freshman-level undergraduates. Held weekly office hours. Graded quizzes, assignments, and lab exams.
**2015-2016 Outstanding Graduate Student Instructor Award*

Graduate Teaching Assistant, CSULA 2014
Course: BIOL 360, Ecology
Responsibilities: Prepared and taught weekly 3-hour laboratories for sections of 30 junior- and senior-level undergraduates. Held weekly office hours. Graded quizzes, assignments, and lab exams.

Graduate Teaching Assistant, CSULA 2014
Course: BIOL 156, Plant Biology for Non-Majors
Responsibilities: Prepared and taught weekly 3-hour laboratories for sections of 30 undergraduates from any level. Held weekly office hours. Graded quizzes, assignments, and lab exams.

Peer-Led Team Learning, Program Coordinator, IUPUI 2009-2012
Course: CHEM-C496, Methods in Teaching Chemistry
Responsibilities: Prepared and co-taught weekly 2-hour classes for sections of 30 undergraduates from any level. Held weekly office hours and graded assignments. Also included administrative responsibilities to organize and run the IUPUI Chemistry Peer-Led Team Learning program. Prepared scholarship authorizations, room reservations, interviewed and hired peer mentors, and helped existing mentors with course content and pedagogical development.

Workshop Leader, Peer-Led Team Learning, IUPUI 2008-2012
Course: CHEM-C105, General Chemistry I
Responsibilities: Prepared and taught weekly 2-hour classes for sections of 10 freshman-level undergraduates. Wrote and graded quizzes.

Recitation Mentor, Bepko Learning Center, IUPUI 2009
Course: BIOL-K103, Concepts of Biology II
Responsibilities: Prepared and taught weekly 1.5-hour classes for sections of 15-30 freshman-level undergraduates. Wrote and graded quizzes.

LANGUAGES

English – Native
Spanish – Intermediate
Portuguese – Intermediate