

# CV

Amberle McKee

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## EDUCATION:

- Fall '14 to Present University of California, Irvine  
PhD Biology; Expected graduation: May 2019
- Summer '14 University of Washington, Friday Harbor Laboratories  
Postbac, Biology  
Relevant Coursework: Functional Morphology and Ecology of Fishes
- Fall '09 to Spring '14 California State University, Long Beach  
B.S. Biology; Graduated: May 2014  
GPA: 3.584; GRE Scores (Percentiles): Verbal: 91; Quantitative: 78; Biology: 91  
Relevant coursework: Evolutionary Biology, Advanced Evolutionary Biology, General Ecology, Comparative Animal Physiology, BioStatistics, Molecular Cell Biology, General Genetics, General Chemistry (2 semesters), Organic Chemistry (2 semesters), Invertebrate Zoology, Vertebrate Zoology, Conservation Biology, Biological Modeling, Plant Morphology.

## RESEARCH EXPERIENCE:

- Summer '14 to present University of California, Irvine, Dr. Matt McHenry  
Title of project: Escape from looming stimuli  
Project description: I am using high speed videography, custom programming, and an automated setup to investigate how zebrafish react to different looming stimuli.
- Summer '14 University of Washington, Friday Harbor Laboratories, Dr. Adam Summers  
Title of project: Body undulation frequency affects burial performance in living and model flatfishes  
Project description: I investigated the role of undulation in burial in five species of flatfish in the Pacific Northwest using high speed video of live individuals as well as a physical model.
- Fall '12 to Spring '14 California State University, Long Beach, Dr. Bruno Pernet  
Title of project: Comparative study of feeding performance of marine invertebrate larvae  
Project description: I assessed feeding performance in marine larvae through studies of the clearance rates of food particles at different larval stages as well as measurements of the feeding appendages. I also created a mathematical model to compare different feeding modes in different environments.
- Spring '11 to Spring '13 California State University, Long Beach, Dr. Bruno Pernet  
Title of project: Substrate attributes determine gait in a terrestrial gastropod.  
Project description: I observed loping behavior in *Cornu aspersa* and several other terrestrial gastropods. I videotaped their locomotion and conducted experiments to determine the extent and reason for this gait choice.
- Fall '11 California State University, Long Beach, Dr. Ashley Carter  
Title of project: Influence of inbreeding on female mate choice in two species of *Drosophila*  
Project description: I created inbred and outbred lines of *Drosophila* and assessed preference for inbred or outbred mates within these lines

### **ABSTRACTS, PRESENTATIONS, & POSTERS:**

- McKee, A., MacDonald, I. Farina, S., and Summers, A. 2015. Body undulation frequency affects burial performance in living and model flatfishes. 15 minute oral presentation. Conference for the Society for Integrative and Comparative Biology, West Palm Beach, FL.
- McKee, A. A., Newton, S. M., Carter, A. J. R. 2014. Influence of inbreeding on female mate choice in two species of *Drosophila*. Poster. Conference for the Society for Integrative and Comparative Biology, Austin, TX.
- McKee, A., Voltzow, J., and Pernet, B. 2013. Substrate attributes determine gait in a terrestrial gastropod. 5 minute oral presentation. Southwest regional conference for the Society For Integrative and Comparative Biology. UC Riverside.
- McKee, A., Voltzow, J., and Pernet, B. 2013. Substrate attributes determine gait in a terrestrial gastropod. 10 minute oral presentation. Statewide Student Research Competition. CSU Long Beach & CSU Pomona.
- McKee, A., Voltzow, J., and Pernet, B. 2013. Substrate attributes determine gait in a terrestrial gastropod. Poster. Conference for the Society for Integrative and Comparative Biology, San Fransisco, CA.

### **PEER REVIEWED PUBLICATIONS**

- McKee, A., MacDonald, I. Farina, S., and Summers, A. (In Review). Undulation frequency affects burial performance in living and model flatfishes. *Zoology*.
- McKee, A. A., Newton, S. M., Carter, A. J. R. 2014. Influence of inbreeding on female mate choice in two species of *Drosophila*. *Journal of Insect Behavior*. 27:613-625
- McKee, A., Voltzow, J., and Pernet, B. 2013. Substrate attributes determine gait in a terrestrial gastropod. *Biological Bulletin*. 224:53-61

### **GRANTS, HONORS, & AWARDS**

- Ecology and Evolutionary Biology Departmental Travel Award 2015. Reimbursement of \$500 for travel costs to the January 2015 annual meeting for the Society for Integrative and Comparative Biology
- National Science Foundation Graduate Research Fellowship Program 2014. Fellowship awarded to outstanding, new graduate students to fund their research in graduate school. Includes a stipend and cost of education allowance.
- Robert D. Rhodes Award for the Outstanding Baccalaureate in the Department of Biological Sciences 2014. Award given to the student nominated for outstanding research experience in the biology department at Cal State Long Beach.
- CSULB Undergraduate Student Outstanding Research, Scholarly and Creative Activity Award 2014. Award given to the undergraduate student nominated for outstanding research, scholarly, or creative activity in the university.
- Best Undergraduate Student Talk 2013. Award for best talk given by an undergraduate at the southwest regional conference for the Society For Integrative and Comparative Biology.
- Best Student Poster Award 2013: Award for best poster presentation at the Annual Meeting of the Society For Integrative and Comparative Biology in the Division for Invertebrate Zoology.
- Wenner Strong Inference Award Runner-Up (2013): Runner-up for the award honoring posters presenting research that used a strong inference approach at the Annual Meeting of the Society For Integrative and Comparative Biology.
- Student Research Competition 2013: Won 1st place in the campus and statewide CSU Student Research Competitions in the category for Biological and Agricultural Sciences.
- California State University Long Beach Associated Student Inc. Student Travel Fund 2012: \$182.52 Awarded to offset travel expenses and registration fees for the January 2013 Annual Meeting of the Society For Integrative and Comparative Biology.

### **RELEVANT WORK EXPERIENCE:**

- Winter to Spring '14 University of California, Irvine  
Teaching Assistant/Discussion Leader for Bio 112L (Human Physiology Lab): I created activities and led laboratory activities to teach senior undergraduate students human physiology.
- Fall '14 University of California, Irvine  
Teaching Assistant/Discussion Leader for Bio 93 (Introductory Developmental and Cell Biology): I created and used new activities to teach first-year freshman students the fundamentals of cell biology.
- Fall '13 to Spring '14 Undergraduate Research Opportunities Program California State University, Long Beach  
Peer Advisor: I assist new students in achieving their research goals.
- Fall '12 to Spring '14 California State University, Long Beach, Dr. Bruno Pernet  
Lab Assistant: I perform various functions in maintaining a functional lab.

**RELEVANT VOLUNTEER EXPERIENCE:**

- Summers '11 & '12 American Pride, Children's Maritime Fund, Long Beach, Volunteer: I assisted sailing of the ship (including weighing/dropping anchor, raising/dropping sail, launching ship, securing dock lines, and performing night watch); led science lessons, kayak tours, snorkeling, and hikes; performed boat maintenance.
- Fall '09 to Present Marine Lab, California State University, Long Beach, Volunteer: I assist in animal husbandry (cleaning tanks, feeding animals, collecting marine animals in the field, primary caretaker of immature Aurelia jellyfish, prepared brine shrimp eggs to hatch).
- Fall '09 to '11 California State University, Long Beach Assistant Field Volunteer: I assisted two graduate students collect marine animals in the field for their research projects.

**RELEVANT SKILLS AND CERTIFICATIONS:**

**Field Skills:** Fishing; beach seining; fish measurements; trawling; fish identification

**Lab Skills:** Dissections of a multitude of animals; experience culturing algae and various marine invertebrate larvae; making Drosophila food media; and sorting Drosophila sexes; experience maintaining live fish; basic microscope skills; basic electronic skills; knowledge of Arduino and simple engineering, experience with high speed cameras

**Equipment Skills:** Flow cytometer; centrifuge; WINGMACHINE imaging system; laser cutter; extrusion style 3D printer

**Biostatistical and computer programs:** R, Matlab, Minitab, Excel, 123D Design, AutoDesk Inventor, Photron Viewer

**Other Relevant Skills:** Snorkeling, rowing, teaching, hiking, dealing with anchor, sails, and dock lines on a ship.

**Certifications:** First Aid/CPR, NAUI Open Water SCUBA, NAUI Advanced SCUBA, CSULB lab certifications (basic lab safety, compressed gas handling, autoclave operation), CSULB scientific certifications (human subjects ethics, animal studies ethics, conflict of interest, research misconduct), fire extinguisher training, chemical safety training, ergonomics training, electrical safety training.