

EMILY M ABBOTT

321 Steinhaus Hall, University of California, Irvine, Irvine, CA 92697

abbotte@uci.edu | www.emilymabbott.com

EDUCATION

- Azizi Laboratory, PhD candidate** 2012-present
Department of Ecology and Evolutionary Biology, UC Irvine, Irvine, CA
- Bachelor of Science, Major: Biology, Minor: Drawing, Liberal Arts Honors** 2004-2008
Providence College, Providence, RI
-

RESEARCH EXPERIENCE

- Azizi Lab Research Specialist** 2011-2012
Dept. of Ecology and Evolutionary Biology, UC Irvine, Irvine, CA
- Summer Scholar** 2011
Dept. of Orthopaedics, Children's Mercy Hospital, Kansas City, MO
- Roberts Lab Research Assistant** 2008-2011
Dept. of Ecology and Evolutionary Biology, Brown University, Providence, RI
- Rakow-Sutherland Scuba Diving Assistant** 2008 & 2010
Winter field expeditions, Liquid Jungle Laboratory, Isla Canales, Panama
- Costello Lab Technician** 2007-2008
Biology Dept., Providence College, Providence, RI
- Costello & Colin Lab Research Assistant** 2006 & 2007
Marine Biological Laboratory, Woods Hole, MA
-

TEACHING EXPERIENCE

- Instructor, Teaching Assistant Professional Development Program** Fall 2016
faculty: Dr. De Gallow
- Teaching Assistant (TA), Applied Human Anatomy Lab (BIO SCI D170)** Winter 2016
faculty: Dr. Justin Shaffer
- TA, Physiology of Extreme Environments (BIO SCI E155)** Fall 2015
faculty: Dr. Nancy Aguilar-Roca
- TA, Human Physiology (BIO SCI E109)** Winter 2015
faculty: Dr. Manny Azizi & Dr. Donovan German
- TA, Human Physiology Lab (BIO SCI E112L)** Fall 2012,
Winter '13 & Spring 2014
faculty: Dr. Nancy Aguilar-Roca

EMILY M ABBOTT

TA, Global Sustainability (EARTHSS 190CW/ SOCECOL 186CW) faculty: Dr. Peter Bowler	Spring 2013
TA, DNA to Organisms (BIO SCI 93) faculty: Dr. Marcelo Wood, Dr. Jorge Busciglio and Dr. Kim Green	Fall 2013
Undergraduate Mentor, Muscles & Movement (BIO 199)	2012-present

ADVANCED COURSEWORK & WORKSHOPS

UC Irvine:

Certified in Teaching Excellence, Center for Engaged Instruction	2016-2017
Safe Zone Ally Training, LGBT Resource Center	Spring 2016
Advanced Topics in R, Data Science Initiative	May 13, 2016
Certified in Undergraduate Research Mentoring	Fall 2014
TA Workshop: Dealing with Evaluations	Nov. 5, 2013
TA Workshop: Effective Writing Responses	Oct. 17, 2012

Center for Integration of Research, Teaching, and Learning (CIRTL):

Diversity in the College Classroom: Teaching the STEM Undergraduate	Fall 2016
Massive Open Online Course: Evidence-Based STEM Teaching	Fall 2014

Ecological Society of America:

Life Discovery- Doing Science Education Conference, San Jose, CA	Oct. 3-4, 2014
--	----------------

PUBLICATIONS

6. Azizi, E., *Larson, N.P., **Abbott E.M.**, Danos N. (2014) Reduce torques and stick the landing: limb posture during landing in toads. *Journal of Experimental Biology*. 217: 3742-3747.
5. **Abbott, E.M.**, Schwend, R.M. and Nandyala, S.V. (2014) Does a kaolin-impregnated hemostatic dressing reduce intra-operative blood loss and blood transfusions in pediatric spinal deformity surgery? *Spine*. 39(19): E1174-1180.
4. Astley, H.C., **Abbott, E.M.**, Azizi, E., Marsh, R.L. and Roberts, T.J. (2013) Chasing maximal performance: A cautionary tale from the celebrated jumping frogs of Calaveras County. *Journal of Experimental Biology*. 216: 3947-3953.
3. Azizi, E. and **Abbott, E.M.** (2012) Anticipatory motor patterns limit muscle stretch during landing in toads. *Biology Letters*. 9: doi: 10.1098/rsbl.2012.1045.
2. Roberts, T.J., **Abbott, E.M.** and Azizi, E. (2011) The weak link: Do muscle properties determine locomotor performance in frogs? *Philosophical Transactions of the Royal Society B*. 366: 1488-1495
1. *Weston, J., Colin, S.P., Costello, J.H. and ***Abbott, E.M.** (2009) Changing form and function during development in rowing hydromedusae. *Mar Ecol Prog Ser*. 374: 127-134

* designates undergraduate co-author

EMILY M ABBOTT

PRESENTATIONS

20. **Abbott, E.M.**, *Aikhionbare, I. and Azizi E. (2016) *Skeletal muscle architecture determines propensity for injury*. Oral presentation at the Society for Integrative and Comparative Biology (SICB). Portland, OR.
19. **Abbott, E.M.**, and Azizi E. (2015) *Can skeletal muscle fiber type or architecture influence the amount of eccentric injury?* Oral presentation at Southwest Organismal Biology (SWOB). Cal Poly Pomona, CA.
18. **Abbott, E.M.**, Sawicki, G. and Azizi, E. (2015) *Defining safety parameters of stretches applied to active muscle tendon units*. Poster presentation at the Society of Experimental Biology (SEB). Prague, Czech Republic.
17. **Abbott, E.M.**, Sawicki, G. and Azizi, E. (2015) *Modeling the effective utilization of tendons during eccentric contractions*. Oral presentation at SICB. West Palm Beach, FL.
16. **Abbott, E.M.** and Azizi, E. (2014) *Temperature dependence of muscle function alters the effective utilization of tendons*. Poster presentation at the American Physiological Society (APS). San Diego, CA.
15. *Thomsen, W. and **Abbott, E.M.** (2014) *When springs have sprung: tendon recoil rates at different temperatures*. Oral presentation at Southwest Organismal Biology (SWOB). Irvine, CA.
14. **Abbott, E.M.**, Sawicki, G. and Azizi, E. (2014) *Modeling the effective utilization of tendons during eccentric contractions*. Oral presentation at SWOB. Irvine, CA.
13. **Abbott, E.M.** and Azizi, E. (2014) *Muscle kinetics determine the effective utilization of tendons during eccentric contractions*. Oral presentation at the Alternative Muscle Club Meeting (AMC), San Diego, CA.
12. **Abbott, E.M.** (2014) *The dangers of impact: how muscles and tendons interact to dissipate energy and prevent injury*. Oral presentation at Winter Ecology and Evolutionary Biology Graduate Student Symposium (WEEBGSS). Irvine, CA.
11. **Abbott, E.M.** and Azizi, E. (2014) *Muscle relaxation rate may determine tendon recoil rate during energy dissipating tasks*. Oral presentation at the Society for Integrative and Comparative Biology (SICB). Austin, TX.
10. Holt, N.C., **Abbott, E.M.** and Azizi E. (2014) *Compliance, activation and the force-length relationship*. Oral presentation presented by Dr. Holt at the Society for Integrative and Comparative Biology (SICB). Austin, TX.
9. **Abbott, E.M.** and Azizi, E. (2013) *Muscle relaxation rate may determine tendon recoil rate during energy dissipating tasks*. Oral presentation at the regional SICB Division of Vertebrate Morphology (DVM). Riverside, CA.
8. **Abbott, E.M.** and Azizi, E. (2013) *The timing of muscle recruitment alters series elastic function during lengthening contractions*. Oral presentation at the Alternative Muscle Club Meeting (AMC), San Diego, CA.
7. Azizi, E. and **Abbott E.M.** (2013) *Anticipatory motor patterns limit muscle stretch during landing in toads*. Oral presentation at SICB, San Francisco, CA.
6. **Abbott, E.M.** and Azizi, E. (2013) *The timing of muscle recruitment alters series elastic function during lengthening contractions*. Oral presentation at SICB, San Francisco, CA.
5. *Rana, P.V., *Larson, N.P., **Abbott, E.M.** and Aziz, E. (2013) *How toads minimize torques to stick their landings*. Poster presentation at SICB, San Francisco, CA.

EMILY M ABBOTT

4. **Abbott, E.M.**, Azizi, E. and Roberts, T.J. (2012) *Extrinsic loading in Cuban tree frog jumping*. Oral presentation at SICB, Charleston, NC.
 3. **Abbott, E.M.**, Marsh, R.L., Astley, H., Azizi, E. and Roberts, T.J. (2010), *The celebrated jumping frogs of Calaveras County: how far can a frog really jump?* Oral presentation at SICB, Seattle, WA.
 2. **Abbott, E.M.**, and Roberts, T.J. (2009), *Elastic mechanisms as a determinant of anuran jumping performance: do toads bounce?* Oral presentation at DVM, Providence, RI.
 1. **Abbott, E.M.**, and Roberts, T.J. (2009), *Elastic mechanisms as a determinant of anuran jumping performance: do toads bounce?* Poster presentation at SICB, Boston, MA.
- * designates undergraduate co-author
-

COMMUNITY OUTREACH & LEADERSHIP ACTIVITIES

2016 Amazing Anatomy with the Anteaters, graduate student coordinator
2016 El Sol Future Health Champions volunteer, June 3, 2016
2014-2015, Ecology and Evolutionary Biology Graduate Student Representative
2013-present, Irvine School District, Ask-A-Scientist
2013-present, Irvine School District, Science Fair Judge
2013-present, AAUW Tech Trek lab host

AWARDS

2016 American Association of Anatomists, Education Outreach Grant, \$3000
2016 Data Science Initiative, Summer Fellow, \$6000
2016 UCI Center for Engaged Instruction, Pedagogical Fellowship, \$2,000
2016 Graduate Aid in Areas of National Need (GAANN) Fellowship, US Dept. of Education, \$11,010
2016, 2015 Dept. of Ecology and Evolutionary Biology Travel Award, 2x \$500
2015, 2014, 2013 Charlotte Magnum Student Support Award, SICB conference housing
2014 GAANN, US Dept. of Education, \$22,384
2014 Grover C. Stephens Memorial Fellowship Award, UC Irvine, \$1000
2014 NSF GRFP Honorable Mention
2014 Graduate Fellow Award, HHMI-UCI Teaching Fellows Program, \$500
2014, 2013 Dept. of Ecology and Evolutionary Biology Travel Award, 2x \$400
2013, Best Graduate Student Presentation, Regional SICB, UC Riverside, \$50
2007, Rhode Island NSF EPSCoR Fellowship, Providence College, \$3500

MEMBERSHIPS

Sigma Xi
Toastmasters International
Society of Integrative and Comparative Biology (SICB)
American Association of University Women (AAUW)
American Physiological Society (APS)
Society for Experimental Biology (SEB)

EMILY M ABBOTT

REFERENCES AVAILABLE UPON REQUEST