

Benjamin M. Perlman

Curriculum Vitae

California State University Long Beach • Dept. of Biological Sciences
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Appointments

Lecturer, California State University at Long Beach (January 2018 - present)

NIH Postdoctoral Fellow, University of California at Irvine (September 2016 - September 2018)

Advisor: Dr. Manny Azizi

Project: Biomechanics of frog jumping and dragonfly larvae feeding

AFOSR Postdoctoral Associate, Stanford University (September 2015 - August 2016)

Advisor: Dr. David Lentink

Project: Wing morphing of birds using a wind tunnel

Education

PhD in Biology, Wake Forest University (2016)

Advisor: Dr. Miriam A. Ashley-Ross

Dissertation: Biomechanics of mangrove rivulus, an amphibious fish

MS in Marine Science, Moss Landing Marine Laboratories (2010)

Advisor: Dr. Lara Ferry

Thesis: Morphology and swimming performance of surfperches

BS in Marine Biology, University of California at Santa Cruz (2003)

Advisor: Dr. Mark Carr

Project: Site fidelity of a juvenile coral reef fish

Select Courses and Certificates

CSULB Ascend Survey FLC participant (Fall 2022)

CSULB DFW FLC participant (Spring 2022 & Fall 2022)

CSULB Beach Mentor Community FLC participant (Spring 2022)

CSULB Graduation Writing Assessment Requirement Committee member (Fall 2020 to present)

CSULB Writing Intensive Course Development Ad hoc Committee member (Spring 2021 to present)

CSULB Faculty Learning Program participant (Fall 2020 and Spring 2021)

Co-organizer of CSULB CNSM Faculty Learning Community (Summer 2020)

Active Learning Classroom Training Course certificate at CSULB (Dec 18, 2019)

Desert Field Studies Course at CSU Desert Field Studies Consortium (October 2019)

Teaching as Research Pedagogy course at UCI (2018)

Center for the Integration of Research, Teaching and Learning (CIRTL) Associate at UCI (2017)

Teaching Excellence Program Certificate at UCI (2017)

GPS-BIOMED Alumni Mentoring Program at UCI (2017)

XROMM Short Course at Brown University (2016)

Teaching

Course Development and Instruction

Biol 211 Introduction to Evolution and Diversity Lecture & Lab at CSULB (Instructor of Record; Sp 2018; Sp 2019; Summer 2019; F 2019; Sp 2020; Summer 2020; Sp 2021; Summer 2021; F 2021; Sp 2022; Summer 2022; F 2022; Sp 2023)

Biol 208 Human Anatomy Lecture at CSULB [flipped] (Instructor of Record; Spring 2019; Fall 2019; Spring 2020; Fall 2020; Spring 2021; Fall 2021; Sp 2022; F 2022; Sp 2023)

Biol 208 Human Anatomy Lab at CSULB (Instructor of Record; Spring 2021; Spring 2022)

Biol 419 Ichthyology Lecture & Lab at CSULB (Instructor of Record; Fall 2020; Fall 2021; F 2022)

Biol 350 Ecology at CSULB [flipped format] (Instructor of Record; Spring 2020; Fall 2020; Spring 2021; Fall 2021; Spring 2022; Spring 2023)

Biol 296 & 496 Directed Research at CSULB (Instructor of Record; Fall 2022; Spring 2023)

Biol 207 Human Physiology Lecture & Lab at CSULB (Instructor of Record; Fall 2018)

Biol 205 Human Biology Lecture & Lab at CSULB (Instructor of Record; F 2018; Sp 2019; F 2019)

Introduction to Evolution and Diversity at CSULB (Instructor of Record; Spring 2018 - present)

This is the first of three required courses for Biology majors. Introduction to the cell, Mendelian genetics, Hardy Weinberg principles, phylogenetics, and all diversity of life. Responsible for logistics, syllabus, lectures, exams, grading, website, mentoring, lab curricula and development.

Ecology and Conservation Biology of Coral Reefs at WFU (Spring 2013, 2014, 2015)

I co-developed and co-taught this brand-new course with Dr. Miriam Ashley-Ross and Dr. Miles Silman. Responsible for syllabus, lectures, active learning exercises, pool quiz, grading, discussions, e-book updates, which I co-developed.

Ecology and Conservation Biology of Coral Reefs Lab at WFU (Spring 2013, 2014, 2015)

I developed a week-long international study abroad program at Lighthouse Reef Atoll, Belize to complement the seminar/lecture part of the course. Responsible for logistics, full operation, teaching, discussions, field work training, grading.

Project SEARCH Academy Instructor at WFU (June 2011, June 2012, June 2014, June 2015)

Responsible for teaching week-long science camp for middle school students from rural and under-represented schools to learn research techniques in the biomedical field. Led lectures and discussions and taught the students the scientific method and helped them carry out a project, along with teaching them how to make a poster using PowerPoint and have the students present the poster to other students, staff, and faculty to practice verbal and visual skills.

Student Oceanography Club Mentor at Monterey Bay Aquarium, Monterey, CA (2006 - 2010)

Taught marine science to middle school students twice per month. Led lectures, team-building activities, and co-led field trips to different marine ecosystems. Taught snorkel skills and identification of marine organisms in their natural habitat.

Instructor at Camp SEA Lab, Monterey, CA (March 2008 - June 2010)

Taught marine science to elementary and middle school students. Led lectures, field trips, activities, and discussions about marine ecology and oceanography.

Guest Lectures

XROMM – a tool for precise biomechanics research (12 students)

E117 Exercise Seminar at UC Irvine (March 2017)

Bio 320 Comparative Vertebrate Anatomy at WFU (18 students; lectured four times in April 2015)

An odd little fish that spends time...on land! (15 students)

Bio 322 Biomechanics at WFU (April 2014)

Vertebrate evolution and the water-land transition (180 students)

Introduction to Biology course at Guilford College, Greensboro, North Carolina

(October 2012, October 2013, November 2013, March 2014, October 2014, March 2015)

Anthozoans and cnidarians (20 students)

Bio 331 Invertebrate Zoology at WFU (Spring 2013)

Marine Biology and Climate Change (100 students)

Ocean Commotion event at SciWorks Children's Museum, Winston-Salem, NC

(Feb. 4th and 5th, 2011)

Microscope lesson for kindergarteners (20 students)

Piney Grove Elementary School, Kernersville, NC (December 2010)

Fish ecology lecture and fish dissection for underrepresented K-12 students (25 students)

Moss Landing Marine Labs, Moss Landing, CA (September 2008, August 2009)

Squid biology lecture and squid dissection for 5th grade students (60 students)

Convent of the Sacred Heart Elementary School, San Francisco, CA (May 2009)

The Deep Sea (100 students)

Camp SEA Lab (middle school science camp), Aptos, CA (July 2008)

Fishes of Monterey Bay: ecology, life history, and beyond (60 students)

Camp SEA Lab, Aptos, CA (July 2008)

Fish ecology lecture for 5th grade science classes (40 students)

Convent of the Sacred Heart Elementary School, San Francisco, CA (May 2006)

Teaching Assistant

Responsible for lab lectures, preparation and logistics, lab syllabus, lab practicals, group discussions, teaching statistics, grading quizzes and lab reports, field logistics.

Comparative Physiology at WFU (Fall 2011, Spring 2012, Fall 2012)

Comparative Vertebrate Anatomy at WFU (Spring 2013, Summer 2013, Spring 2015)

Genetics and Molecular Biology at WFU (Fall 2014)

Principles of Biology at WFU (Fall 2013)

Marine Ichthyology at MLML (Spring 2009)

NAUI Basic, Advanced, and Rescue SCUBA at UCSC (2000 - 2003)

AAUS Scientific Diving at UCSC (2002 - 2003)

Publications

* *Denotes undergraduate research assistant*

Perlman BM, Pouresfandiari P*, Azizi E. Does an anatomical latch amplify power during a frog jump? *In preparation*. (Manuscript available upon request)

Bressman NR, Simms M*, **Perlman BM**, Ashley-Ross MA. **2018**. Where do fish go when stranded on land? Terrestrial orientation and navigation of the mangrove rivulus *Kryptolebias marmoratus*. *Journal of Fish Biology*. doi: 10.1111/jfb.13802.

Perlman BM, Ashley-Ross MA. **2016**. By land or by sea: a modified C-start motor pattern drives the terrestrial tail-flip. *Journal of Experimental Biology*. 219: 1860-1865.

Tatarenkov A, Earley RL, **Perlman BM**, Taylor DS, Turner BJ, Avise JC. **2015**. Genetic subdivision and variation in selfing rates among Central American populations of the mangrove rivulus, *Kryptolebias marmoratus*. *Journal of Heredity*. 2015: 1-9.

Ashley-Ross MA, **Perlman BM**, Gibb AC, Long JH Jr. **2014**. Jumping sans legs: does elastic energy storage by the vertebral column power terrestrial jumps in bony fishes? *Journal of Zoology*. 117(1): 7-18

Pronko AJ*, **Perlman BM**, Ashley-Ross MA. **2013**. Launches, squiggles and pounces, oh my! The water-land transition in mangrove rivulus (*Kryptolebias marmoratus*). *Journal of Experimental Biology*. 216: 3988-3995. *Paper featured in Inside JEB, CBC radio, and other media.*

Ferry-Graham LA, Cailliet GM, **Perlman BM**. **2009**. Fish surveys at the Moss Landing Power Plant Outfall. In: www.sanctuarysimon.org.

Media

Teaching

[Creative teaching in biology class includes a ‘pool quiz’](#)

Interview with Bonnie Davis, Inside WFU, Office of Communications and External Relations
(published March 20, 2015)

[Creative teaching: more pool quiz media!](#)

[Diving into biodiversity: students study marine biodiversity in Belize](#)

Interview with Will Ferguson, WFU, Office of Communications and External Relations
(published March 26, 2014)

[Message in a Belizean bottle: think global, act local and step up plastics recycling](#)

Justin Catanoso, WFU Director of Journalism, covers our Belize course in National Geographic
(March 30, 2015)

[Think global, act local and step up recycling](#)

Justin Catanoso, WFU Director of Journalism, covers our Belize course in Triad Business Journal
(published March 27, 2015)

[Trouble In Paradise - Too Much Plastic In Our Oceans](#)

Keri Brown, 88.5 WFDD radio, interviews Justin Catanoso about part of our Belize field course
(aired on March 26, 2015)

Research

[Doing the Stingray Shuffle](#)

Interview with Julia Paskin, The Sunday Edition, The LA Report podcast on LAist, July 13, 2023
(aired on August 13, 2023; minutes 15:30 to 20:40)

[How This Two-Step Shuffle Can Save You From A Painful Stingray Attack](#)

Interview with Julia Paskin, Weekend Edition, KPCC/LAist 89.3 on July 13, 2023
(published on August 11, 2023, along with Gillian Morán Pérez)

[Why does the 'stingray shuffle' keep your feet safe at the beach? CSULB research found out](#)

Interview with Alicia Robinson, Long Beach Post
(published on July 1, 2023)

[Southern California considered stingray capital of the world, but just how many are there?](#)

Interview with Leanne Suter, ABC7 News
(aired on June 28, 2023)

[CSULB student researchers delve into stingray behavior](#)

Interview with Janis Carr, media journalist at CSULB
(published June 12, 2023)

[A fish out of water](#)

Interview with radio host Bob McDonald, Quirks and Quarks, Canadian Broadcasting Company
(aired January 4, 2014)

[Flipping fish adapt to land living](#)

Press release for Society for Experimental Biology meeting, Valencia, Spain
(released July 5, 2013)

Like a fish out of...

Interview by Graciela Flores, Senior Editor in Natural History Magazine
(published November 2013)

Is it a bird? Is it a plane? No, it's a mangrove rivulus

Inside JEB featured article, interviewed by Nicola
Stead (published November 1, 2013)

Not your typical fish out of water

Interview with Will Ferguson, WFU, Office of Communications and External Relations
(published August 2, 2013)

Fish field research in Monterey Bay by MLML graduate student

Friends of Moss Landing Marine Laboratories WAVE Newsletter Volume 14, Issue 1
(published Spring 2010)

Invited Seminars

California State University San Bernardino, Department of Biology, Animal Physiology course
Muscle mechanics and motor patterns (November 2019)

Keck Science Center, Department of Biology
Evolution of the pectoral girdle (March 2018)

Harvey Mudd College, Department of Biology
What the fish!?: biomechanics of the jumping mangrove rivulus (January 2018)

California State University Long Beach, Department of Biological Sciences
Squiggles, pounces, and tail-flips: the biomechanics of an amphibious fish (September 2017)

Wake Forest University Bio 312 Ecology and Conservation Biology of Coral Reefs course (in Belize)
Biomechanics and ecology of a jumping fish and frogs (March 2017)

University of California, Irvine Brews and Brains Holiday Celebration and Panel Discussion
Exercise induces sex change in an amphibious fish (December 2016)

Sonoma State University, Department of Biology
Squiggles, pounces, and tail-flips: the biomechanics of an amphibious fish (April 2016)

Raleigh Aquarium Society at North Carolina State University Veterinary School
What's that!? It's the mangrove rivulus, *Kryptolebias marmoratus*, a strange little fish that spends time on land (February 2015)

High Point University, Department of Biology (High Point, North Carolina)
Marine conservation: what does it mean and how do we do it? (April 2014)

Science Café at Buena Vista Grille (Winston-Salem, North Carolina)
The mangrove rivulus: the world's strangest fish?! (September 2011)

Aquarium of the Bay (San Francisco, CA)
Interspecific variation in morphology and swimming performance within surfperches
(Embiotocidae) From California (April 2010)

Research Mentees

Hanna Adamson, Sean Ono, Jacob Sobol, Anthony McGinnis, Brooke Morales, Jo Estrada, Grace Armendariz, Trinity Lozano, Samantha Widdoss, Justin Yip, Angela Velazquez (undergraduate student STABB Lab members at CSULB; Fall 2022 and Spring 2023)

Oral presentation on tail kinematics of round stingrays at CSULB Student Research Competition (March 2023) & SCAS Meeting (May 2023)

Oral presentation on round stingray barbs at CSULB Student Research Competition (March 2023) & SCAS Meeting (May 2023)

Kambria Galindo (tail kinematics of stingrays during their strikes; undergraduate student at CSULB)

Chris Garcia (tail kinematics of stingrays during their strikes; undergraduate student at CSULB)

Shyanne Thompson (temperature effects on butterfly wing kinematics during takeoff; undergraduate student at CSU Long Beach)

Poster presented at SICB Annual Meeting (January 2022)

Desiree Rogers (temperature effects on dragonfly larvae feeding kinematics; graduate student at Cal Poly Pomona; *outside committee member*)

Poster presented at SICB Annual Meeting (January 2019)

Matthew Mickle (dragonfly larvae feeding experiments; undergraduate student at UC Irvine)

Pouyan Pouresfandiari (bullfrog jumping study; undergraduate student at UC Irvine)

UCI Undergraduate Research Opportunity Program (UROP) internship (2016-2017) **(\$500)**

Poster presented at UROP Student Research Day (May 2017)

Poster presented at UCI Excellence in Research Program (June 2017)

Honors in Biology

Robert Ernst Prize for Excellence in Research in the Biological Sciences

Veronica Sanchez (bird wing morphing study; undergraduate student at Stanford University)

Mechanical Engineering Summer Undergraduate Research Institute internship (2016) **(\$6,000)**

Poster on obtaining quality images with a custom fluoroscope system (August 2016)

Sofia Minano (wind tunnel turbulence study; visiting graduate student at Stanford University)

Roshena MacPherson (bird eye-tracking study; graduate student at Stanford University; 2016)

Spencer Carpenter-Carter (WFU undergraduate student; now at UNC Chapel Hill Medical School)

WFU Undergraduate Summer Research Fellow (2011) **(\$4,500)**

Poster on jumping performance of largemouth bass at SICB (January 2012)

Poster at WFU Undergraduate Research Day (September 2011)

*Alexander Pronko** (WFU undergraduate student; now at Rutgers Medical School)

WFU Undergraduate Summer Research Fellow (2012) **(\$4,500)**

Poster on the water-land transition kinematics of the mangrove rivulus at SICB (January 2013)

Poster at WFU Undergraduate Research Day (September 2012)

Honors in Biology with invited oral presentation

**Pronko, Perlman, and Ashley-Ross* (2013) *Journal of Experimental Biology*

Matthew Tietbohl (WFU undergraduate student; now a Master's student at KAUST) **(\$1,000)**

Poster on the ossification of the vertebral column of mangrove rivulus at SICB (January 2014)

Honors in Biology

TA Ecology of Coral Reefs course in 2015

Michael Fasano (WFU undergraduate student; now in medical school at PCOM)

WFU Undergraduate Summer Research Fellow (2014) **(\$4,500)**

Poster on morphology and fiber type of axial muscles in mangrove rivulus at SICB (Jan 2015)

Poster at WFU Undergraduate Research Day (October 2014)

Honors in Biology with invited oral presentation

Mark Simms (WFU undergraduate student)

(\$750)

Poster on terrestrial habitat selection in mangrove rivulus at SICB (January 2015)

Poster at WFU Undergraduate Research Day (October 2014)

Anthony Basilio (undergraduate student at CSUMB; now at University of San Diego)

CSU Monterey Bay Undergraduate Research Opportunity Center internship (2009-2010)

Oral presentation on effects of body size on swim performance of black surfperch at CSU Student Research Competition (May 2011)

2nd place at CSU Student Research Competition (May 2011)

Poster at SACNAS National Conference (September 2010)

Poster at Western Society of Naturalists Meeting (November 2010)

Not listed: Another 10 undergraduate students from MLML and WFU.

Field Experience

Beach seines at Seal Beach, CA and Belmont Shore, CA (Nov 2021 - ongoing)

AAUS Scientific Diver with > 4,000 hours of underwater research in California, French Polynesia, Baja California, and Belize

Catching dragonfly larvae in Orange County, CA postdoctoral research (March - August 2017)

Catching European Starlings in Sonoma County, CA postdoctoral research (March - June 2016)

Lighthouse Reef Atoll, Belize (August 2011; March 2013, 2014, 2015, 2017)

Keys Marine Lab, Long Key, FL (June 2011)

USFWS San Francisco Bay National Wildlife Refuges Satellite Internship (April - Aug 2006)

Research diver at USC Wrigley Marine Science Center, Catalina Island, CA (June - Sept. 2005)

Research diver internship at UC Santa Cruz, Stillwater Cove, CA (May - October 2002)

PISCO Subtidal Research Diver Volunteer at UC Santa Cruz (2002-2003)

Intertidal biodiversity monitoring project, Bodega Marine Lab, Bodega Bay, CA (July 2008, April 2009, July 2009)

Fish and algae collection and monitoring in Elkhorn Slough, Moss Landing, CA (2006 - 2010)

Bamfield Marine Science Center, Vancouver Island, B.C., Canada (Summer 2007)

Monterey Bay Aquarium Research Institute Biological Oceanography field technician on the R/V Point Sur (August - October 2003)

Intertidal field and lab assistant studying mussel and sea star interactions, UCSC (2000)

Awards and Honors

Finalist WFU Do Something Challenge: How to change the world with \$5,000 (Jan 2015)

Finalist Best Student Oral Presentation in the Division of Comparative Biomechanics
SICB Annual Meeting, West Palm Beach, FL (January 2015)

3rd Place Best Student Oral Presentation in Biomechanics
SEB Meeting, Manchester, England (July 2014)

Research Grants and Scholarships

CSULB KURE Grant for Catalina Summer Research Experience (2023): **\$25,000**

CSULB KURE Grant for Catalina Summer Research Experience (2022): **\$25,000**

CSULB Biology Department teaching grant for high-speed cameras (2019): **\$15,000**

Dean's Fellowship at WFU (2010 - 2011): **\$2,000**

Company of Biologists Travel Award for SEB meeting in Manchester, England (2014): **\$600**

SEB Travel Award for SEB meeting in Valencia, Spain (2013): **\$400**

Tuttle-Newhall Travel Award (2011): **\$500**

WFU Alumni Student Travel Award (2010, 2011, 2012, 2013, 2015): **total \$1,500**

Elton C. Cocke Travel Fund (2010, 2011, 2012, 2013, 2014): **total \$2,500**

Vecellio Award for ICVM meeting in Barcelona, Spain (2013): **\$1,000**

Vecellio Award for George Washington University research trip (2015): **\$500**

Clarence F. and Lyle V. Burmahln Scholarship Financial Aid Award (2009): **\$250**

Signe Lundstrom Memorial Scholarship (2009): **\$250**

David and Lucile Packard Student Research and Travel Award (2009): **\$250**

San Jose State University Student Travel Award (2008): **\$200**

San Jose State University Grant (2006, 2007, 2008, 2009, 2010)

Contributed Presentations

2023 *Urobatis halleri* *strikes back!*: 3D tail kinematics of the round stingray
March 10, 2023 CSULB Student Research Competition
May 5, 2023 Southern California Academy of Sciences Meeting at UCSB
(**oral presentation by my undergraduate student, Sean Ono**)

Watch your step!: stingray sting prevention
March 10, 2023 CSULB Student Research Competition
May 5, 2023 Southern California Academy of Sciences Meeting at UCSB
(**oral presentation by my undergraduate student, Jacob Sobol**)

- 2022 *Introducing new evaluation practices to improve learning outcomes in Biol 208 Human Anatomy*
December 16, 2022 DFW Faculty Learning Community (CSULB)
(poster)
- Urobatis halleri strikes back!: 3D tail kinematics of the round stingray*
April 2022 (Shark Symposium at the Seattle Aquarium via Zoom)
(oral presentation by my undergraduate student, Kambria Galindo)
- Movin' on up: take-off performance in the orange sulphur butterfly*
January 2022 Society for Integrative and Comparative Biology (Phoenix, AZ)
(poster; co-presented with Shyanne Thompson – CSULB undergrad)
- 2019 *Effect of temperature on prey-strike performance of dragonfly nymphs*
January 2019 Society for Integrative and Comparative Biology (Tampa, FL)
(poster)
- 2018 *Does an anatomical latch amplify power during a frog jump?*
January 2018 Society for Integrative and Comparative Biology (San Francisco, CA)
(oral presentation)
- 2017 *Kinematics of the prey strike by dragonfly larvae*
October 2017 SW Organismal Biology Meeting (Harvey Mudd College; Claremont, CA)
(oral presentation)
- Does an anatomical latch amplify power during a frog jump?*
October 2017 UCI Postdoctoral Scholar Research Symposium (UCI; Irvine, CA)
(oral presentation)
- Exercise induces sex change in an amphibious fish*
January 2017 Society for Integrative and Comparative Biology (New Orleans, LA)
(oral presentation)
- 2016 *Exercise induces sex change in an amphibious fish*
November 2016 Southwest Organismal Biology Meeting (CSU Fullerton; Fullerton, CA)
(oral presentation)
- The Stoddart Society: long-term research on the ecology and conservation biology of Lighthouse Reef Atoll, Belize*
June 2016 International Coral Reef Symposium (Honolulu, Hawaii)
(oral presentation)
- Using stereo fluoroscopy to understand wing morphing during bird flight*
May 2016 Mechanical Engineering Conference (Stanford University; Stanford, CA)
(poster)
- Effects of captivity on terrestrial performance of mangrove rivulus (Kryptolebias marmoratus)*
January 2016 Society for Integrative and Comparative Biology (Portland, Oregon)
(oral presentation)
- 2015 *Revisiting the fossil record: can we predict the locomotion of fishes?*
March 2015 WFU Graduate Student Research Day 3-minute talk competition (W-S, NC)
(oral presentation)

An odd little fish that spends time...on land!

January 2015 Society for Integrative and Comparative Biology (West Palm Beach, FL)
(Best Student Oral Presentation finalist in Division of Comparative Biomechanics)

Morphology and fiber type of the axial musculature in adult Kryptolebias marmoratus (Cyprinodontiformes) and juvenile Micropterus salmoides (Perciformes)

January 2015 Society for Integrative and Comparative Biology (West Palm Beach, FL)
(poster)

Terrestrial habitat selection in the mangrove rivulus, Kryptolebias marmoratus

January 2015 Society for Integrative and Comparative Biology (West Palm Beach, FL)
(poster)

2014

An odd little fish that spends time...on land!

October 2014 DVM/DCB Regional SICB Meeting (UNC Chapel Hill, North Carolina)
(oral presentation)

Motor patterns of aquatic and terrestrial escape responses in the mangrove rivulus (Kryptolebias marmoratus)

July 2014 Society for Experimental Biology (Manchester, England)
(3rd place best oral presentation in General Biomechanics Session)

Motor patterns of aquatic and terrestrial escape responses in the mangrove rivulus (Kryptolebias marmoratus)

January 2014 Society for Integrative and Comparative Biology (Austin, Texas)
(oral presentation)

Terrestrial performance differs among genetically isolated populations of mangrove rivulus, Kryptolebias marmoratus

January 2014 Society for Integrative and Comparative Biology (Austin, Texas)
(poster)

What a fine spine: ontogenetic changes in the vertebral column of the mangrove rivulus (Kryptolebias marmoratus)

January 2014 Society for Integrative and Comparative Biology (Austin, Texas)
(poster)

2013

Citius, altius, fortius: jumping kinematics and kinetics in two distantly related teleosts

July 2013 International Congress of Vertebrate Morphology (Barcelona, Spain)
(oral presentation)

Citius, altius, fortius: jumping kinematics and kinetics in two distantly related teleosts

July 2013 Society for Experimental Biology (Valencia, Spain)
(oral presentation)

Citius, altius, fortius: jumping kinematics and kinetics in two distantly related teleosts

March 2013 Graduate Student Research Day, Wake Forest Univ. (Winston-Salem, NC)
(poster)

Citius, altius, fortius: jumping kinematics and kinetics in two distantly related teleosts

January 2013 Society for Integrative and Comparative Biology (San Francisco, CA)
(invited oral presentation)

- Going out for a bite: how the mangrove rivulus (Kryptolebias marmoratus) leaves the water to capture terrestrial prey*
January 2013 Society for Integrative and Comparative Biology (San Francisco, CA)
(invited poster)
- 2012 *Flipping out: jumping performance of mangrove rivulus (Kryptolebias marmoratus) from different geographic locations*
November 2012 Perspectives in Biology Meeting, Wake Forest Univ. (W-S, NC)
(poster)
- Flipping out: jumping performance of mangrove rivulus (Kryptolebias marmoratus) from different geographic locations*
March 2012 Graduate Student Research Day, Wake Forest Univ. (Winston-Salem, NC)
(poster)
- Flipping out: jumping performance of mangrove rivulus (Kryptolebias marmoratus) from different geographic locations*
January 2012 Society for Integrative and Comparative Biology (Charleston, SC)
(invited oral presentation)
- Jumping performance of largemouth bass (Micropterus salmoides) across a size gradient*
January 2012 Society for Integrative and Comparative Biology (Charleston, SC)
(poster)
- Heads or tails? Two different ways for fish to jump*
January 2012 Society for Integrative and Comparative Biology (Charleston, SC)
(poster)
- 2011 *Flipping out: jumping performance of mangrove rivulus (Kryptolebias marmoratus) from different geographic locations*
November 2011 DCB/DVM SE Regional SICB Meeting at WFU (Winston-Salem, NC)
(oral presentation)
- Just swim away: the C-start escape response in four species of surfperches (Embiotocidae) from central California*
January 2011 Society for Integrative and Comparative Biology (Salt Lake City, Utah)
(oral presentation)
- Just swim away: the C-start escape response in four species of surfperches (Embiotocidae) from central California*
Nov 2010 DCB/DVM SE Regional SICB Meeting at Virginia Tech (Blacksburg, VA)
(oral presentation)
- 2010 *Effects of body size on pectoral fin growth of black surfperch (Embiotoca jacksoni) from central California*
November 2010 Western Society of Naturalists Annual Meeting (San Diego, CA)
(poster)
- Swimming performance, as indicated by U_{crit} and the C-start escape response, in surfperches (Embiotocidae) from central California*
October 2010 Biology Tutorial at Wake Forest University (Winston-Salem, NC)
(oral presentation)

Don't be afraid, just swim away: the C-start escape response in four species of surfperches (Embiotocidae) from central California

May 2010 6th Annual College of Science Student Research Day at SJSU (San Jose, CA)
(poster)

Don't be afraid, just swim away: the C-start escape response in four species of surfperches (Embiotocidae) from central California

April 2010 Monterey Bay Nat. Marine Sanctuary Currents Symposium (Monterey, CA)
(poster)

Swimming performance, as indicated by U_{crit} and the C-start escape response, in surfperches (Embiotocidae)

January 2010 Society for Integrative and Comparative Biology (Seattle, Washington)
(oral presentation)

2009 *Swimming performance, as indicated by U_{crit} and the C-start escape response, in surfperches (Embiotocidae)*

November 2009 Western Society of Naturalists Annual Meeting (Monterey, California)
(oral presentation)

Fish surveys at the Moss Landing Power Plant Outfall

May 2009 5th Annual College of Science Research Day at SJSU (San Jose, CA)
(poster)

Fish surveys at the Moss Landing Power Plant Outfall

April 2009 Monterey Bay Nat. Marine Sanctuary Currents Symposium (Monterey, CA)
(poster)

Fish Surveys of the Moss Landing Power Plant Outfall

March 2009 Sanctuary Integrated Monitoring Network, MBNMS (Monterey, CA)
(oral presentation)

Interspecific variation in body and fin morphology within surfperches (Embiotocidae) from central California

January 2009 Society for Integrative and Comparative Biology (Boston, Massachusetts)
(oral presentation)

2008 *Interspecific variation in body and fin morphology within surfperches (Embiotocidae) from central California*

November 2008 Western Society of Naturalists Meeting (Vancouver, B.C., Canada)
(oral presentation)

Predicting habitat associations from the pectoral and caudal fin aspect ratios of surfperches (Embiotocidae)

April 2008 Monterey Bay National Marine Sanctuary Currents Symposium (Marina, CA)
(poster)

Predicting habitat associations from the pectoral and caudal fin aspect ratios of surfperches (Embiotocidae)

January 2008 Society for Integrative and Comparative Biology (San Antonio, Texas)
(poster)

Under pressure: ventilation and feeding in the white-spotted ratfish, Hydrolagus collicii (Chimaeroidea)

January 2008 Society for Integrative and Comparative Biology (San Antonio, Texas)
(poster)

2007 *Predicting habitat associations from the pectoral and caudal fin aspect ratios of surfperches (Embiotocidae)*

November 2007 Western Society of Naturalists Annual Meeting (Ventura, CA)
(poster)

Under pressure: ventilation and feeding in the white-spotted ratfish, Hydrolagus collicii (Chimaeroidea)

November 2007 Western Society of Naturalists Annual Meeting (Ventura, CA)
(poster)

Outreach and Community Events

Student Research Competition juror, CSULB (March 10, 2023)

CSU Long Beach BUILD program lab tour and discussion, UC Irvine (July 2018)

Broadening Participation Mentoring Program, SICB Meeting, San Francisco, CA (Jan 2018)

“What is a scientist?” outreach program, James Denman MS, San Francisco, CA (Jan 2018)

Judge for Division of Vertebrate Morphology best student posters, SICB Annual Meeting, San Francisco, CA (January 2018)

Co-organized the 2nd Annual University of California, Irvine Postdoctoral Scholar Research Symposium, UCI Applied Innovation, Irvine, CA (October 2017)

Ask-A-Scientist Night, Rancho San Joaquin Middle School, Irvine, CA (August 2017)

Grunion Run volunteer with Cabrillo Marine Aquarium, San Pedro, CA (June 2017)

TIGERS (Targeted Instruction Generating Excitement about Research and Science) program for Valencia HS students, Placentia, CA visiting our UCI lab (June 2017)

California State Science Fair Judge, California Science Center, Los Angeles, CA (April 2017)

Science Judge at LA Surf Ocean Science Bowl, Jet Propulsion Labs, Pasadena, CA (Feb 2017)

Lab tour for Early College HS (Costa Mesa, CA) students at UC Irvine (January 2017)

Judge for Division of Vertebrate Morphology best student posters and oral presentations, SICB Annual Meeting, New Orleans, LA (January 2017)

“What is a scientist?” outreach program, Madisonville Jr. High, Madisonville, LA (Jan 2017)

Science Judge at Sea Lion Ocean Science Bowl, Stanford University (February 2016)

Garden Club, Winston-Salem, NC (2012 - 2015)

WFU Biology Dept. research presentations at S.G. Atkins HS, Winston-Salem, NC (April 2015)

STEM @ Wake research demonstration/presentation for local high school students (April 2015)

STEM tour/demonstration of fish biomechanics at WFU for local and rural high schools (April 2013; April 2014)

Hanes Magnet School Science Fair Judge, Winston-Salem, NC (December 2013)
Canterbury Middle School research demonstration/presentation at WFU (Fall 2013)
Winston-Salem/Forsyth County School District Science Fair judge (February 2012)
North Carolina Regional Science Fair judge at SciWorks, Winston-Salem, NC (February 2011)
Ocean Commotion event at SciWorks, Winston-Salem, NC (February 2011)
Donated fish specimens to Pacific Grove Museum of Natural History 'World of Fishes' exhibit,
Pacific Grove, CA (2009)
Science Café at MLML (2008 - 2010)
Marine Mammal Stranding Network, Moss Landing, CA (November 2008)
Endless Summer fundraiser event for MLML (October 2007, 2008, and 2009)
MLML Open House puppet show (Fall 2006, Spring 2008, Spring 2009, Spring 2010)
MLML K-12 Education and Outreach (Spring 2009)

Professional Service

S.T.A.B.B. (Stingray and Butterfly Biomechanics) Lab at CSULB (Fall 2022 – current)
Ascend Survey FLC participant (Fall 2022)
DFW Faculty Learning Committee participant (Spring 2022 and Fall 2022)
Beach Mentor Community FLC participant (Spring 2022)
Graduation Writing Assessment Requirement Committee (GWARC) member (Fall 2020 to present)
GWARC Ad hoc Writing Intensive Course Design Committee member (Spring 2021 to present)
CSULB CNSM Dean's Scholarship Committee (Spring 2021 and 2022)
CSULB CNSM Faculty Learning Program participant (Fall 2020 and Spring 2021)
CSULB CNSM Faculty Learning Community Co-organizer (Summer 2020)
UCI Postdoctoral Association Co-Chair (July 2017 to present)
UCI Postdoctoral Association Chair of Finance (October 2016 - July 2017)
WFU Graduate Student Rep. on the Marine Biology faculty search committee (Fall 2012)
WFU Graduate Student Rep. to the Faculty in the Biology department (Fall 2011, Spring 2012)
WFU Parking and Traffic Committee Graduate Student Representative (Spring 2011, Fall 2011)
MLML Open House Activities Committee Chair (Spring 2008 & 2009)
MLML Graduate Student Body Treasurer (2007)

Peer Reviewer

Biological Journal of the Linnean Society (2019)
Journal of Experimental Zoology Part A (2015; 2018)
Journal of Experimental Biology (2014)

Environmental Biology of Fishes (2014)

Professional Affiliations

Southern California Academy of Sciences (2023)

Society for the Advancement of Biology Education Research (2019 - present)

Society for Integrative and Comparative Biology (2008 - present)

Society for Experimental Biology (2013 - 2014)

American Academy of Underwater Sciences (2001 - present)

International Society of Vertebrate Morphology (2013)

International Society of Reef Studies (2015)

UCI Postdoctoral Association (2016 - 2018)

Lighthouse Reef Conservation Institute (2011 - present)

Western Society of Naturalists (Fall 2006 – 2009)

