

# Kelly Marie Diamond, PhD

Postdoctoral Fellow, Seattle Children's Research Institute

[Kelly.Diamond@seattlechildrens.org](mailto:Kelly.Diamond@seattlechildrens.org) | [DiamondKMG.github.io](https://github.com/DiamondKMG) | @DiamondKMG

## Education

---

- 2015-2019 Ph.D. Biological Sciences, Clemson University, Clemson, SC  
*Functional morphology and environmental impacts on migration-related performance in amphidromous goby fishes*
- 2013-2015 M.S. Biological Sciences, Clemson University, Clemson, SC  
*Environmental effects on fish escape responses: impact of flow on the escape performance of the Hawaiian stream goby, *Sicyopterus stimpsoni**
- 2009-2013 B.S. Biology, University of Central Florida, Orlando, FL  
*Phylogenetic relationships and morphological variation in pitviper taxa*

## Professional Appointments

---

- 2020-Present Postdoctoral fellow, Seattle Children's Research Institute, Seattle, WA

## Publications

---

\*Undergraduate student, ‡ International Collaborator

- 2020 Blob RW, Baumann T, **Diamond KM**, Young VKH, Schoenfuss HL. Functional correlations of axial muscle fiber type proportions in the waterfall-climbing Hawaiian stream fish *Sicyopterus stimpsoni*. *Journal of Anatomy*. 236:1160–1166. <https://doi.org/10.1111/taja.13169>
- Diamond KM**, Lagarde R‡, Ponton D‡, Powder K, Schoenfuss HL, Walker JA, Blob RW. Integrating behavior, performance, and morphology to understand predator avoidance strategies in fishes. *Biology Letters*. *In review*.
- McAlpine-Bellis EA\*, Utsumi KL\*, Klein JRV\*, **Diamond KM**, Gilbert-Smith S\*, Garrison GE, Eifler M, Eifler D. Movement patterns and habitat use for sympatric species with differing prey detection strategies. *Herpetologica*. *In review*
- 2019 Blob RW, Lagarde R‡, **Diamond KM**, Keeffe RM, Bertram RS, Ponton D‡, Schoenfuss HL. Functional diversity of evolutionary innovations: insights from waterfall-climbing kinematics and performance of juvenile gobiid fishes. *Integrative Organismal Biology*. Obz029. <https://doi.org/10.1093/iob/obz029>
- Diamond KM**, Lagarde R‡, Schoenfuss HL, Walker JA, Ponton D‡, Blob RW. Ontogenetic change in escape behavior and performance of fishes experiencing different predator regimes. *Biological Journal of the Linnean Society*. 127: 324-336. <https://doiorg.libproxy.clemson.edu/10.1093/biolinnean/blz055>
- 2017 Taft NK, Taft BN, Henck H, **Diamond KM**, Schoenfuss HL, Blob RW. Comparative morphology and mechanical properties of the lepidotrichia of climbing and non-climbing Hawaiian gobioid fishes. *Cybium*. 41(2): 107-115.

- 2016 **Diamond KM**, Schoenfuss HL, Walker JA, Blob RW. Flowing water affects fish fast-starts: escape performance of the Hawaiian stream goby, *Sicyopterus stimpsoni*. *Journal of Experimental Biology*. 219: 3100-3105. <http://jeb.biologists.org/content/219/19/3100>
- 2014 **Diamond KM**, Trovillion D, Allen KE, Malela KM, Noble DA, Powell R, Eifler D, Gifford ME. Individual (co)variation in locomotor performance and field behavior in Curly-tailed Lizards, *Leiocephalus carinatus*. *Journal of Zoology*. 294: 248-254. <http://onlinelibrary.wiley.com/doi/10.1111/jzo.12175/full>

### Grants, Fellowships, and Awards (\$31,567)

---

- 2020 Postdoctoral Research Fellow, Seattle Children's Research Institute
- 2019 Vision Research Corporation, Phantom Camera Education Challenge (\$11,340)
- Clemson Professional Enrichment Grant (\$1000)
- Clemson Professional Development Grant for Graduate Student Research (\$1000)
- Biological Sciences Graduate Student Association, Travel Award (\$300)
- Alfred 'Hap' Wheeler Distinguished BSGSA Member Award
- 2018 American Philosophical Society, Lewis & Clark Fund for Exploration & Research (\$4300)
- American Museum of Natural History, Theodore Roosevelt Memorial Fund fellowship (\$3413)
- Findley Student Assistance Endowment (\$1500)
- Clemson Professional Enrichment Grant (\$648)
- 2017 Society for Integrative and Comparative Biology Fellowship of Graduate Student Travel (\$2000)
- Biological Sciences Graduate Student Association, Travel Award (\$400)
- Clemson Professional Enrichment Grant (\$750)
- Biological Sciences Graduate Student Association Commitment to Service
- 2016 American Society of Ichthyologists and Herpetologists, Edward C. Raney Grant (\$800)
- Biological Sciences Graduate Student Association, Travel Award (\$400)
- Clemson Professional Enrichment Grants (\$750, \$302, \$414)
- 2015 Biological Sciences Graduate Student Association, Travel Award (\$300)
- 2014 Sigma Xi Grant-in-Aid of Research (\$1000)
- Clemson Professional Enrichment Grant (\$650)

- 2014 Biological Sciences Graduate Student Association Commitment to Research
- 2012 Student Government Association Travel Award (\$300)
- 2011 Innovation through Institutional Integration Fellowship (2011-2013)
- 2010 Research and Mentoring Program Scholarship (2010-2011)  
Work Force Central Florida Grant for Undergraduate Research
- 2009 Florida Bright Futures Scholarship (2009-2013)

### Teaching and Leadership Experience

---

- 2018-2019 Founding member of Clemson University, College of Science Outreach Team  
*Organized science themed community events*
- 2014-2019 Creative Inquiry Mentor, Clemson University  
*Trained and oversaw independent projects of 9 undergraduate students*
- 2013-2019 Graduate teaching assistant. Clemson University  
*Labs: Vertebrate Biology, Comparative Vertebrate Morphology, Human Physiology, Mammalogy*
- 2018 Organizer, Graduate Research Brown Bag seminar series  
*Invited, advertised, and moderated semester long seminar series to highlight graduate student research*
- 2017- 2018 Clemson Hope- Paw Pals  
*Helped elementary school students to improve writing skills*
- 2017 Mentor, Erell Institute  
*Worked with undergraduate women to collect and analyze habitat use data in desert lizards*
- 2016-2018 Representative for Department of Biological Sciences to the College of Engineering and Sciences Student Advisory Board  
*PR committee and Outreach committee*
- 2016-2019 Mentor, New Foundations foster home for children  
*Worked one on one with a high school student to encourage learning and self esteem*
- 2014-2016 Clemson University Natural History Museum. Laboratory and Website Development  
*Developed content and created interactive display*
- 2014-2018 Guest lecture. Clemson University. Vertebrate Biology  
*Topics include Endothermy vs Ectothermy, Bird diversity, Dinosaurs & other Mesozoic diapsids, Mammal diversity*
- 2011-2013 Internet Science and Technology Fair primary school team mentor  
*Worked with e-learning students on science fair projects*

## Service Activities

---

2019-Present	Manuscript reviewer, <i>Integrative Organismal Biology</i>
2019-Present	Outreach associate for the journal <i>Integrative Organismal Biology</i> . <i>Write blog posts to promote journal articles, all posts can be read <a href="#">here</a></i>
2019-Present	Skype a Scientist volunteer <i>Skype with kids of all ages to talk about biomechanics, ecology, and how science works!</i>
2018	Served on panel for 'Writing a competitive travel grant,' SICB annual meeting, San Francisco, CA
2017	Tiger Talks encouraging elementary school students to pursue their interests in STEM
2016	Session moderator at the International Congress of Vertebrate Morphology
2015-2016	Bring Your Daughter to Clemson Day
2014 - 2016	Clemson Relay for Life team member
2013-2015	Graduate School Application Workshop, Clemson University

## Affiliations

---

2019-Present	Sigma Xi
2017-Present	Society for the Study of Evolution
2015-Present	International Society of Vertebrate Morphology
2014-Present	American Society of Ichthyologists and Herpetologists
2013-Present	Society for Integrative and Comparative Biology
2013- Present	Clemson Biological Sciences Graduate Student Association <i>Member 2013-Present. Officer 2014-2015 &amp; 2018</i>

## Presentations

---

\*Undergraduate Student, ‡ International Collaborator

2019 Morphology, performance, & anti-predator strategies of gobiid fishes across predator regimes. **KM Diamond**, R Lagarde‡, D Ponton‡, K Powder, HL Schoenfuss, RW Blob. ICVM. Prague, Czech Republic.

Migration performance: gobies do more than just climb waterfalls! **KM Diamond**. Invited seminar. Wake Forest University.

- 2019 Climbing and escape performance over migration pulses in the Hawaiian goby. **KM Diamond**, HL Schoenfuss, RW Blob. Annual SICB meeting. Tampa, FL
- Bendy to the bone: a study of climbing goby vertebrae. Forker GK\*, **Diamond KM**, Blob RW. Focus on Creative Inquiry. Clemson, SC
- 2018 Do predators take advantage of prey blind spots? McKamy AJ\*, Schneider NG\*, Diamond KM, Blob RW. SE SICB meeting, Clemson, SC.
- Bendy to the bone. Forker GK\*, **Diamond KM**, Blob RW. SE SICB meeting, Clemson, SC.
- 2018 Take it or leave it. Fast-start modulation in the great sculpin *Myoxocephalus polyacanthocephalus*. LM Penrod, A Daddino, **KM Diamond**, JL Johansen, JF Steffensen‡, P Domenici‡. Annual SICB meeting. San Francisco, CA
- Where to find the best bugs: a study of habitat use among lizard species with different movement strategies. EA Mcalpine-Bellis\*, GE Garrison, S Gilbert Smith\*, JRV Klein\*, KL Utsumi\*, **KM Diamond**, D Eifler, M Eifler. Annual SICB meeting. San Francisco, CA
- Does the form of stress matter? A comparison of Pacific sand lance (*Ammodytes hexapterus*). A Daddino, **KM Diamond**, L Penrod, JL Johansen, JF Steffenson‡, P Domenici‡. Annual SICB meeting. San Francisco, CA
- Do the best come first? Locomotor performance over the course of migration events in the amphidromous goby fish, *Sicyopterus stimpsoni*. **KM Diamond**, HL Schoenfuss, RW Blob. Annual SICB meeting. San Francisco, CA
- 2017 Locomotor performance over the course of migration events in the amphidromous goby fish, *Sicyopterus stimpsoni*. **KM Diamond**, RW Blob. Southeastern SICB meeting. Blacksburg, VA
- Comparative escape performance of prey fish species that face different degrees of range overlap with predators. **KM Diamond**, HL Schoenfuss, JA Walker, RW Blob. Clemson Biological Sciences Annual Student Symposium. Clemson, SC (3<sup>rd</sup> place oral presentation)
- Does ontogenetic environment influence escape response? Comparative escape responses of goby fishes through ontogeny and among islands. **KM Diamond**, HL Schoenfuss, JA Walker, RW Blob. Annual SICB meeting. New Orleans, LA
- Assessing the impacts of environmental contaminants on escape behavior in the migratory stream goby *Sicyopterus stimpsoni*. AM Rubin\*, **KM Diamond**, HL Schoenfuss, RW Blob. Annual SICB meeting. New Orleans, LA & Clemson Biological Sciences Annual Student Symposium. Clemson, SC (2<sup>nd</sup> place in best poster)

Comparative waterfall climbing kinematics of goby fishes from Hawai'i and Réunion: are recently evolved behaviors less variable? RM Keefe\*, **KM Diamond**, R Lagarde‡, D Ponton‡, RS Bertram, HL Schoenfuss, RW Blob. Annual SICB meeting. New Orleans, LA

Mechanical specializations of the fin rays in waterfall-climbing gobiid fishes. NK Taft, BN Taft, **KM Diamond**, HL Schoenfuss, RW Blob. Annual SICB meeting. New Orleans, LA

- 2016 Does ontogenetic environment correlate with escape behavior in fish? **KM Diamond**, HL Schoenfuss, JA Walker, and RW Blob. Southeastern SICB meeting. Durham, NC

Is fish escape performance influenced by flow? Tests in the Hawaiian stream goby, *Sicyopterus stimpsoni*. **KM Diamond**, HL Schoenfuss, JA Walker, and RW Blob. Annual SICB meeting. Portland, OR

Waterfall-climbing performance of gobiid fishes from La Réunion: how conservative are novel functional behaviors? RS Bertram, HL Schoenfuss, R Lagarde‡, D Ponton‡, **KM Diamond**, T Offerle, and RW Blob. Annual SICB meeting. Portland, OR

Field observation of intraspecific and predatory attack behaviors of the Hawaiian sleeper fish, *Eleotris sandwicensis*. AM Rubin\*, **KM Diamond**, HL Schoenfuss, and RW Blob. Presented at Annual SICB meeting. Portland, OR & Clemson Biological Sciences Annual Student Symposium. Clemson, SC

- 2015 Impacts of flow speed and attack direction on the fast-start escape response of the Hawaiian goby, *Sicyopterus stimpsoni*. **KM Diamond**, HL Schoenfuss, JA Walker, and RW Blob. Southeastern SICB meeting. Atlanta, GA.

Just keep swimming! Testing effects of flow speed and stimulus direction on escape behavior in a Hawaiian gobioid. **KM Diamond**. Clemson Biological Sciences Annual Student Symposium. Clemson, SC

Fast-start escape behavior in juvenile Hawaiian gobies, *Sicyopterus stimpsoni*: testing effects of flow speed and stimulus direction. **KM Diamond**, HL Schoenfuss, JA Walker, and RW Blob. Presented at: Southeastern SICB meeting. Chapel Hill, NC (2014) and Annual SICB meeting. West Palm Beach, FL (2015)

- 2014 Sistemática y biogeografía de *Bothriechis schlegelii* (Berthold, 1846) (Serpentes: Viperidae), una aproximación molecular y morfológica. JP Hurtado Gómez‡, **KM Diamond**, CL Parkinson, and JM Daza Rojas‡. IV Congreso Colombiano de Zoología. Cartagena de Indias, Colombia

Combined morphological and molecular analysis of rattlesnake phylogeny. AM Fenwick, **KM Diamond**, CL Parkinson. Southwestern Association of Naturalists Annual Meeting. Stillwater, OK

- 2014 Evolutionary history and polymorphism of the eyelash palm pitviper (*Bothriechis schlegelii*). **KM Diamond**, JP Hurtado Gómez‡, JM Daza Rojas‡, CL Parkinson. Biology of the Pitvipers Symposium. Tulsa, OK
- Individual variation in locomotor performance and field behavior in northern curly-tailed lizards (*Leiocephalus carinatus*): **KM Diamond\***, ME Gifford, and R Powell. Annual SICB meeting. Austin, TX
- 2013 Evolutionary history and polymorphism in the Eyelash Palm Pit-viper (*Bothriechis Schlegelii*): **KM Diamond**, and CL Parkinson. Presented at: Southeastern Ecology and Evolution Conference and Showcase of Undergraduate Research. Orlando, FL
- 2012 Phylogeny of rattlesnakes (*Crotalus and Sistrurus*) based on morphological and molecular data: **KM Diamond**, AM Fenwick, CL Parkinson. Presented at: Southeastern Ecology and Evolution Conference. Clemson, SC and Showcase of Undergraduate Research. Orlando, FL
- 2011 Understanding evolutionary relationships of rattlesnakes (*Crotalus and Sistrurus*): **KM Diamond**, AM Fenwick, CL Parkinson. Showcase of Undergraduate Research. Orlando, FL
- Combined morphological & molecular analysis of rattlesnake phylogeny: AM Fenwick, **KM Diamond**, CL Parkinson. Biology of the Rattlesnakes Symposium. Tucson, AZ