Kelly M. Diamond

DiamondK@Rhodes.edu | DiamondKMG.github.io | GitHub: @DiamondKMG

Professional Appointments

2022-Present	Assistant Professor,	Rhodes College.	Memphis, TN

2020-2022 Postdoctoral fellow, Seattle Children's Research Institute, Seattle, WA

Education

- 2019 Ph.D. Biological Sciences, Clemson University, Clemson, SC Functional morphology and environmental impacts on migration-related performance in amphidromous goby fishes
- 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
- 2013 B.S. Biology, University of Central Florida, Orlando, FL Phylogenetic relationships and morphological variation in pitviper taxa

Peer Reviewed Publications

ORCID: 0000-0001-8639-6795 *Undergraduate coauthor, ‡ International Collaborator

- 21. **Diamond KM**, Nishiura L, Sakihara T, Schoenfuss HL, Blob RW. When to go against the flow: examining patterns of performance over multi-day migration events in the Hawaiian stream fish, 'o'opu nōpili (*Sicyopterus stimpsoni*). In revision at *Integrative and Comparative Biology*.
- 20. **Diamond KM**, Olson C, Utsumi K, Eifler MA, Eifler DA. Allometry of shape, performance, and habitat use in the desert horned lizard, *Phrynosoma platyrhinos*. In press at *Ichthyology and Herpetology*.
- 19. Rogers LS, Lozier NR, Sapozhnikova YP **Diamond KM**, Davis JL Sisneros JA. Functional plasticity of the swim bladder as an acoustic organ for communication in a vocal fish. *Proceedings of the Royal Society B.* 290:20231839. http://doi.org/10.1098/rspb.2023.1839
- 18. McAlpine-Bellis EA*, Utsumi KL*, Klein JRV*, **Diamond KM**, Gilbert-Smith S*, Garrison GE, Eifler M, Eifler D. 2023. Movement patterns and habitat use for sympatric species *Gambelia wislizenii* and *Aspidoscelis tigris*. *Ecology & Evolution*. 13, e10422. https://doi.org/10.1002/ece3.10422
- 17. Munteanu VD, **Diamond KM**, Blob, RW. 2023. Limb bone strains during climbing in green iguanas (*Iguana iguana*): testing biomechanical release as a mechanism promoting morphological transitions in arboreal vertebrates. *Journal of Experimental Biology.* 226: jeb245175. https://doi.org/10.1242/jeb.245175
- 16. Blob RW, **Diamond KM**, Lagarde R, Maie T, Moody KN, Palecek-McClung AM, Ward JL, Schoenfuss HL. 2023. Integrating biomechanics in evolutionary studies, with examples from the amphidromous goby model system. *Journal of Experimental Biology*. 226: jeb244942. https://doi.org/10.1242/jeb.244942
- 15. **Diamond KM**, Burtner AE*, Siddiqui D*, Alvarado K*, Leake SU*, Rolfe S, Zhang C, Kwon RY, Maga AM. 2023. Examining craniofacial variation among crispant and mutant zebrafish models of human skeletal diseases. *Journal of Anatomy*. 243: 66-77. https://doi.org/10.1111/joa.13847

- 14. **Diamond KM**, Good CJ*, Johnny N, Sakihara TS, Edmison PL, Faust JA, Schoenfuss TA, Rubin AM*, Blob RW Schoenfuss HL. 2022. Assessing Occurrence and Biological Consequences of Contaminants of Emerging Concern on Oceanic Islands. *Water.* 14(3):275. https://doi.org/10.3390/w14030275
- 13. **Diamond KM**, Rolfe SM, Kwon RY, Maga AM. 2022. Computational anatomy and geometric shape analysis enables analysis of complex craniofacial phenotypes in zebrafish mutants. *Biology Open.* 11(2): bio058948 https://doi.org/10.1242/bio.058948
- 12. Elhamod M, **Diamond KM**, Maga AM, Bakis Y, Bart HL, Mabee P, Dahdul W, Leipzig J, Greenberg J, Avants B, Karpatne A. 2021. Hierarchy-guided neural networks for species classification. *Methods in Ecology and Evolution*. 13: 642–652. https://doi.org/10.1111/2041-210X.13768
- 11. Rolfe S, Pieper S, Porto A, **Diamond KM**, Winchester J, Shan S, Kirveslahti H, Doug Boyer D, Summers A, Maga AM. 2021. SlicerMorph: An open and extensible platform to retrieve, visualize and analyze 3D morphology. *Methods in Ecology and Evolution*. 12: 1816–1825. https://doi.org/10.1111/2041-210X.13669
- 10. **Diamond KM**, Lagarde R‡, Griner JG*, Powder KE, Schoenfuss HL, Walker JA, Ponton D‡, Blob RW. 2021. Interactions among multiple selective pressures decouple the form-function relationship in stream fishes. *Biological Journal of the Linnean Society*.134(3): 557–567 https://doi.org/10.1093/biolinnean/blab098
- 9. Forker GK*, Schoenfuss HL, Blob RW, **Diamond KM**. 2021. Bendy to the bone: links between vertebral morphology and waterfall climbing in amphidromous gobioid fishes. *Journal of Anatomy*. 239: 747-754. https://doi.org/10.1111/joa.13449
- 8. Schneider NG*, McDamy AJ*, Rubin AM*, Schoenfuss HL, Blob RW, **Diamond KM**. 2021. Do predators take advantage of prey blind spots? In-stream analysis of predator-prey interactions in Hawaiian stream fishes. *Ichthyological Explorations of Freshwaters*. 30(4): 289-297. http://doi.org/10.23788/IEF-1162
- 7. Leipzig J, Bakis Y, Wang X, Elhamod M, **Diamond KM**, Dahdul W, Karpatne A, Maga AM, Mabee P, Bart HL, Greenberg J. 2021. Biodiversity image quality metadata augments convolutional neural network classification of fish species. In: Garoufallou E., Ovalle-Perandones MA. (eds) *Metadata and Semantic Research*. *MTSR 2020. Communications in Computer and Information Science*, vol 1355. https://doi.org/10.1007/978-3-030-71903-6 1
- 6. Blob RW, Baumann T, **Diamond KM**, Young VKH, Schoenfuss HL. 2020. 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
- 5. **Diamond KM**, Lagarde R‡, Schoenfuss HL, Walker JA, Ponton D‡, Blob RW. 2019. Ontogenetic change in escape behavior and performance of fishes experiencing different predator regimes. *Biological Journal of the Linnean Society*. 127: 324-336. https://doi.org/10.1093/biolinnean/blz055
- 4. Blob RW, Lagarde R‡, **Diamond KM**, Keeffe RM*, Bertram RS, Ponton D‡, Schoenfuss HL. 2019. 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
- 3. Taft NK, Taft BN, Henck H, **Diamond KM**, Schoenfuss HL, Blob RW. 2017. Comparative morphology and mechanical properties of the lepidotrichia of climbing and non-climbing Hawaiian gobioid fishes. *Cybium*. 41(2): 107-115.

- 2. Diamond KM, Schoenfuss HL, Walker JA, Blob RW. 2016. 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
- 1. Diamond KM, Trovilion D, Allen KE, Malela KM, Noble DA, Powell R, Eifler D, Gifford ME. 2014. 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

Sigma Xi Grant-in-Aid of Research (\$1000)

Clemson Professional Enrichment Grant (\$650)

2014

2024 Rhodes Campus Life Accessibility & Inclusivity Award Rhodes independent research fellowship for student summer stipends - Using Machine Learning to process Data for Biological Questions (\$6,160) 2023 Rhodes independent research fellowship for student summer stipends - Using Machine Learning to process Data for Biological Questions (\$6,160) 2019 Vision Research Corporation, Phantom Camera Education Challenge – Awarded equipment usage for filming high speed videos of fish escape responses and climbing trials (eq. \$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)

KM Diamond

	Biologi	cal 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)	
Teach	ing and	Leadership Experience
2023		Co-organizer for <u>ImageDatapalooza</u> held August 14-17, 2023 at Ohio State University Hackathon style workshop sponsored by the <u>Imageomics Institute</u>
2023		SEED program mentor Mentored 2 highs school students on an independent research project
2022 -	present	Instructor of record, Rhodes College Courses: comparative vertebrate morphology, biology 2, research in biology
2020-P	Present	Advisory Board Member, Erell Institute Advise on projects and future directions for the non-profit research institute
2021-2	2022	Research mentor at Seattle Children's Research Institute Trained and oversaw independent projects of 4 undergraduate students
2020-2	2022	<u>SlicerMorph</u> Workshop Instructor Introduction to using SlicerMorph for collecting morphological measurements
2018-2	2019	Founding member of Clemson University, College of Science Outreach Team Organized science themed community events
2017-2	2020	Mentor, Erell Institute Develop research projects with pre-graduate students
2016-2	2019	Mentor, New Foundations foster home for children Worked one on one with a high school student to encourage learning and self esteem
2014-2	2019	Creative Inquiry Mentor, Clemson University Trained and oversaw independent projects of 9 undergraduate students
2013-2	2019	Graduate teaching assistant. Clemson University Labs: Vertebrate Biology, Comparative Vertebrate Morphology, Human Physiology, Mammalogy
2016-2	018	Lead teaching assistant. Vertebrate Biology Laboratory. Clemson University Organized 9-12 laboratory sections. Updated content to reflect new findings in the field and emphasize the connection between field observation and course content.
2016-2	2018	Representative for Department of Biological Sciences to the College of Engineering and Sciences Student Advisory Board PR committee and Outreach committee

2014-2018	Guest lecture. Clemson University. Vertebrate Biology Topics including: Endothermy vs Ectothermy, Bird diversity, Dinosaurs & other Mesozoic diapsids, Mammal diversity
2014-2016	Clemson University Natural History Museum. Laboratory and Website Development Developed content and created interactive displays
2011-2013	Mentor, Internet Science and Technology Fair Worked with e-learning students on science fair projects

Service & Outreach Activities

Service & Outreach Activities		
Reviewer for:	Biodiversitas Journal of Biological Diversity, Biology Letters, Integrative and Comparative Biology, Integrative Organismal Biology, Ecology and Evolution, Frontiers in Physiology, Ichthyology and Herpetology, Journal of Anatomy, Journal of Experimental Biology, Journal of Fish Biology, Methods in Ecology and Evolution, Proceedings of the Royal Society B, Royal Society Interface, Scientific Reports	
2023	Hosted biology department seminar speaker Doug Eifler. Rhodes College	
2022-2023	Graduate school application workshop organizer Fall 2022; Spring 2023	
2023	Chaired review committee for the Society for Integrative and Comparative Biology, Division of Vertebrate Morphology Mentorship Award	
2022	Hosted biology department seminar speaker Rick Blob. Rhodes College	
2022- Present	Host prospective Rhodes students in course lectures including BIOL 140/350	
2021-Present	Assistant Editor for Integrative and Comparative Biology Division of Ecology and Evolutionary Biology	
2020-2023	Ask an animal scientist! (http://askananimalscientist.com/) Created a website aimed at encouraging kids of all ages to ask questions about animals during the Covid-19 shutdown	
2019-2022	Skype a Scientist volunteer Talk virtually with kids of all ages about biomechanics, ecology, and how science works! I have spoken with students at all age levels in CT, FL, GA, MA, NC, NY, UT, VA, WA, Canada, and the UK through this program!	
2019-2022	Outreach associate for the journal Integrative Organismal Biology. Wrote blog posts to promote journal articles, see full list here: https://iobopen.com/author/kmdiamo/	
2018	Panelist, 'Writing a competitive travel grant,' SICB annual meeting, San Francisco, CA	
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	

KM Diamond

2017	Tiger Talks Encouraged elementary school students to pursue their interests in STEM	
2015-2016	Bring Your Daughter to Clemson Day Developed interactive, hands-on displays for girls interested in STEM	
2014 - 2016	Clemson Relay for Life team member Organized fundraisers for the American Cancer Society	
2013-2015	Graduate School Application Workshop, Clemson University Collected and presented content to help undergraduates apply to graduate programs	
Affiliations		
2019-Present	Sigma Xi Full member since 2023	
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 Divisions of Vertebrate Morphology, Comparative Biomechanics, and Ecology and Evolution	
2013- 2019	Clemson Biological Sciences Graduate Student Association Member 2013-2019. Officer 2014-2015 & 2018	
Professional Development		
2020-2021	Social Justice in Ecology Meetup group Meet biweekly to discuss readings and best practices for making ecology more equitable	
2020	Virtual Morphometrics Meetup group Met monthly to discuss cutting edge methods in quantifying morphology	
2020	Jackson Laboratories human and mammalian genetics and genomics: the 61st McKusick short course, virtual meeting	
2019	Educating the vertebrate morphologists of the 21st century: technology, pedagogy, and core concepts symposia. International Congress of Vertebrate Morphologists. Prague, Czech Republic.	
2016-2019	Clemson Writers Guild Met weekly to improve scientific writing skills	
2017	University of Washington Fish Biomechanics course, Friday Harbor, WA	
2015	National Institute for Mathematical and Biological Synthesis Tutorial on Evolutionary Quantitative Genetics	
2014	Teaching Colloquium Course. Clemson University Course focused on pedagogy and teaching methods	

Invited Presentations

- When to go against the flow: lessons from migrating fish. **KM Diamond**, HL Schoenfuss, RW Blob. Annual SICB meeting, Seattle WA
- 2023 Functional anatomy of muscles: Texas A&M Corpus Christi Functional Anatomy course. Virtual
- 2022 Using 3DSlicer for SciComm: Tell a story with digital dissections. Society for Integrative and Comparative Biology Workshop. Virtual
- 2021 Using AI to quantify phenotype. Presented virtually at Florida Museum of Natural History and in person at Rhodes College, Memphis, TN

Becoming an integrative biologist, how to work with people and methods from different fields. St. Cloud State University. Virtual

Computational anatomy and geometric shape analysis enables analysis of complex craniofacial phenotypes in zebrafish mutants. George Washington University. Virtual

Using microCT to quantify phenotype, Florida Atlantic University High School Lab Skills Workshop. Virtual

Ask a Scientist! King County Public Library. Virtual

2020 Using machine learning and computational anatomy to quantify phenotype. Seattle Children's Research Institute. Virtual

Using Slicermorph in Biomechanics. St. Mary's College. Virtual

Using quantitative anatomy to define cranial phenotypes in mutant zebrafish. University of Washington. Virtual

Ask an animal scientist live! Bill & Melinda Gates Foundation. Virtual

2019 Migration performance: Gobies do more than just climb waterfalls. Wake Forest University, Salem, NC

Student Presentations

The effects of nitrite on Endler's guppies. G Wheeling, B Leake. Presented at Rhodes SURCAS, at the Memphis Summer Scholars Research Symposium, and at the American Chemistry Society Fall meeting in San Francisco, CA.

Does age impact exploratory behavior? The effect of age on exploratory behavior in Endler's guppies, *Poecilia wingei*. S Heckmann. Rhodes SURCAS

Conference Presentations

^{*}Undergraduate Student, ‡ International Collaborator

- SICB = Society for Integrative and Comparative Biology
- The effects of age on exploratory behavior in Endler's Guppies (*Poecilia wingei*). SE Heckmann*, **KM Diamond**. Annual SICB meeting, Seattle WA
- The effects of body length on undisturbed swimming patterns of Endler's guppies (*Poecilia wingei*). Y Li*, **KM Diamond**. Annual SICB meeting, Seattle WA

Influence of waterfall-climbing style and ontogeny on fast-start performance in gobiid fishes. S Ravichandran*, **KM Diamond**, AM Palecek-McClung, RW Blob. Annual SICB meeting, Seattle WA

Grazing kinematics and the evolution of waterfall climbing in gobiid fishes. RW Blob, **KM Diamond**, Elpidio Buelecope‡, JA Cullen, T Maie, HL Schoenfuss. Annual SICB meeting, Seattle WA

2023 Starting a biological machine learning lab at a PUI. **KM Diamond**. Southeastern regional meeting for the Society for Integrative and Comparative Biology, Blacksburg, VA

Feeding kinematics of algal grazing in the Gobiid fish *Sicydium punctatum*: a missing link in the evolution of goby climbing mechanics. RW Blob, **KM Diamond**, J Cullen, T Maie, HL Schoenfuss. International Congress of Vertebrate Morphology, Cairns, Australia

Functional plasticity of the swim bladder in a vocal fish. L Rogers, N Lozier, Y Sapozhnikova, **KM Diamond**, J Sisneros. Annual SICB meeting, Austin, TX

Allometry of size and performance in the desert horned lizard (Phrynosoma platyrhinos). **KM Diamond**, C Olson, KL Utsumi, MA Eifler, DA Eifler. Annual SICB meeting, Austin, TX

Bigger, faster, stronger? The influence of body size on goby fast-start performance. S Ravichandran*, **KM Diamond**, HL Schoenfuss, RW Blob, AM Palecek-McClung. Annual SICB meeting, Austin, TX

The effects of *plod2* on zebrafish 3D craniofacial phenotype. A Burtner*, D Siddiqui*, **KM Diamond**. University of Washington Undergraduate Research Symposium.

Quantifying craniofacial phenotype of zebrafish with mutations in the sost gene, known homolog for human SOST associated with hyperostosis. SL Leake*, **KM Diamond**. University of Washington Undergraduate Research Symposium.

Using a semi-automated screening tool to quantify craniofacial variation in meox1 crispant zebrafish. K Alvarado*, **KM Diamond**. University of Washington Undergraduate Research Symposium.

2021 Computational anatomy and geometric shape analysis enables analysis of complex craniofacial phenotypes in zebrafish mutants. **KM Diamond**, RY Kwon, AM Maga. European Calcified Tissue Society meeting (virtual)

Machine learning-based segmentation and landmarking of 2D fish images. **KM Diamond**, BB Avants, AM Maga. Annual SICB meeting (virtual)

Geometric morphometrics of climbing kinematics in waterfall climbing goby fishes. JG Griner*, AM Palecek, **KM Diamond**, HL Schoenfuss, RW Blob. Annual SICB meeting (virtual)

Ontogenetic change in performance: do innovations constrain performance? HL Schoenfuss, **KM Diamond**, R Lagarde‡, T Maie, RW Blob. Annual SICB meeting (virtual)

Measuring craniofacial variability in zebrafish using computational anatomy. **Diamond KM**, Kwon RY, Maga AM. Presented at SCRI research symposia (virtual December 2020) and annual SICB meeting (virtual)

Linking morphology, performance, and behavior in the migration of stream goby fishes. **KM Diamond**, JG Griner*, R Lagarde‡, D Ponton‡, KE Powder, HL Schoenfuss, JA Walker, RW Blob. Annual SICB meeting. Austin, TX.

Comparative body shapes of amphidromous goby fishes living in different predator regimes. JF Griner*, **KM Diamond**, RW Blob. Annual SICB meeting. Austin, TX.

Do predators take advantage of prey blind spots? In-stream analysis of predator-prey interactions in Hawaiian stream fishes. NG Schneider*, AJ McKamy*, **KM Diamond**, RW Blob. Annual SICB meeting. Austin, TX.

Locomotor mechanics of juvenile alligators reveals ontogenetic changes in the roles of the foreand hindlimbs. M lijima‡, VD Munteanu, **KM Diamond**, RW Blob. Annual SICB meeting. Austin, TX.

Humeral strains during climbing in green iguanas: testing biomechanical release as a mechanism promoting morphological transitions in arboreal vertebrates. VD Munteanu, **KM Diamond**, CJ Mayerl, RW Blob. Annual SICB meeting. Austin, TX.

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.

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. GK Forker*, **KM Diamond**, RW Blob. Focus on Creative Inquiry. Clemson, SC

2018 Do predators take advantage of prey blind spots? AJ McKamy*, NG Schneider*, **KM Diamond**, RW Blob. SE SICB meeting, Clemson, SC.

Bendy to the bone. GK Forker*, KM Diamond, RW Blob. SE SICB meeting, Clemson, SC.

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 (3rd 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 (2nd place in best poster)

Comparative waterfall climbing kinematics of goby fishes from Hawai'i and Réunion: are recently evolved behaviors less variable? RM Keeffe*, **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 Sistematica y biogeografía de *Bothriechis schlegelii* (Berthold, 1846) (Serpentes: Viperidae), una approximacion molecular y morfológica. JP Hurtado Gómez‡, **KM Diamond**, CL Parkinson, and JM Daza Rojas‡. IV Congreso Colombiano de Zoologia. 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
 - 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