CV | NOVEMBER 2023

DR. CORINTHIA R. BLACK

CONTACT Mailing Address Email: corinthiablack@gmail.com

INFORMATION Smithsonian NMNH Web: coriblack.weebly.com

10th & Constitution NW

Office E-521 Washington, DC 20560

CURRENT Postdoctoral Researcher

POSITION Department of Entomology, Smithsonian National Museum of Natural

History, USA August 2022 – present

Principal Investigator: Dr. Hannah Wood

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EDUCATION Biology, Ph.D.

Auburn University

May 2017 – August 2022

Dissertation: Evolutionary Ecology of Loricariid Catfishes

Advisor: Dr. Jonathan Armbruster

Biology, M.S.

University of Northern Iowa

August 2011 – May 2013 (Degree awarded May 2014)

Thesis: Geometric morphometric analysis of skeletal shape variation

across the Pleuronectiformes Advisor: Dr. Peter Berendzen

Biology, B.A.

University of Northern Iowa August 2008 – May 2011

Liberal Arts, A.A. and A.S.

Clinton Community College, Iowa

August 2006 – May 2008

RESEARCH 2019 Company of Biologists Travelling Fellowship

FUNDING & Jun 2019 – Aug 2019, Company of Biologists, £2300 FELLOWSHIPS 2018 Graduate Student Research Award

Aug 2018, Society of Systematic Biologists, \$2000

2018 **Meredith Birchfield Endowed Fund for Excellence** Aug 2018, Auburn Museum of Natural History, \$750

2011 Graduate Research Awards for Student Projects

Aug 2011 – May 2013, University of Northern Iowa, \$1500

AWARDS & 2022 Cashner Student Award

DISTINCTIONS

American Society of Ichthyologists and Herpetologists

2018 Best Student Poster

Neotropical Ichthyological Association

ACCEPTED
PEERREVIEWED
PUBLICATIONS

CR Black, Armbruster JW. 2022, Nov. Integration and modularity in the diversity of the suckermouth armored catfishes. *Royal Society Open Science*. DOI: 10.1098/rsos.220713.

CR Black, Armbruster JW. 2022, Nov. Chew on this: Oral jaw shape is not correlated with diet type in Loricariid catfishes. *PLOS ONE*. DOI: 10.1371/journal.pone.0277102.

PB Berendzen, Holmes S., Abels J. **Black CR.** 2021, November. Morphological diversity within the Ozark minnow (Notropis nubilus: Cyprinidae). *Journal of Fish Biology*. DOI: 10.1111/jfb.14951.

CR Black, Armbruster JW. 2021, May. New method of isotopic analysis: Baseline Standardized Isotope Vector Analysis show trophic partitioning in loricariids. *Ecosphere*. DOI: 10.1002/ecs2.3503.

CR Black, Berendzen P. 2020, April. Shared ecological traits influence shape of the skeleton in flatfishes (Pleuronectiformes). *PeerJ*. DOI: 10.7717/peerj.8919.

MANUSCRIPT UNDER REVIEW J Elsherbini, AJ Alvey, **CR Black**, LS Menez, M Tan. (*Under Review*) Dynamic Adaptive Evolution and Modularity of Morphology in Catfishes of the Superfamily Aspredinoidea.

MANUSCRIPTS IN PREP **CR Black**, Shultz JW, and Wood HM. (*In Preparation*). Small but mighty: The evolution of an underestimated sclerite in spider "jaws".

CR Black and M Tan. (*In Preparation*). Not Too Sharp: Evolutionary Consequences of Venom in Catfish Fin Spines.

TECHNICAL REPORTS

KM Lawson, Schotz, AR, Jenkins AJ, Armbruster JW, **Black CR**, Callahan M, Goertzen L, Hansen C, Stephen CDR, Werneke D, Mendonca M, and Molina E. 2021, May. Planning Level Survey of Redstone Arsenal for At-Risk Species and Ecologically Significant Communities. Environmental Management Division, U.S. Army Garrison Redstone Arsenal.

INVITED UNIVERSITY SEMINARS **CR Black**. (20 October 2023) Why Are There So Many Fishes: The Evolutionary Drivers of Diversification. *Department of Entomology Fall Seminar*. University of Maryland: College Park; Invited Seminar.

CR Black. (1 June 2023) Why Are There So Many Fishes: The Evolutionary Drivers of Diversification. University of the Virgin Islands: St. Thomas, US Virgin Islands; Invited Seminar.

CR Black. (8 November 2021) The Evolution of Shape in the Suckermouth Armored Catfishes. *Fall Seminar Series*. University of Northern Iowa: Cedar Falls; Invited Seminar (virtual).

CONTRIBUTED PRESENTATIONS

CR Black and M Tan. (15 July 2023). Not Too Sharp: Evolutionary Consequences of Venom in Catfish Fin Spines. *Joint Meeting of Ichthyologists and Herpetologists*. Norfolk, VA.

CR Black, JW Shultz, and H Wood. (24 June 2023). Small but mighty: The evolution of an underestimated sclerite in spider "jaws". *Evolution Meeting*. Albuquerque, NM.

CR Black and JW Armbruster. (29 July 2022). Modularity Drives Diversity in Armored Catfishes. *Joint Meeting of Ichthyologists and Herpetologists*. Spokane, WA.

CR Black and JW Armbruster. (21 July 2021). Chew on this: Oral jaw shape is not correlated with diet type in Loricariid catfishes. *Joint Meeting of Ichthyologists and Herpetologists*. Virtual and Phenix, AZ.

CR Black and JW Armbruster. (21-25 June 2021). Chew on this: Oral jaw shape is not correlated with diet type in Loricariid catfishes. *Evolution Meeting*. Virtual Conference.

CR Black and JW Armbruster. (2-7 January 2021). Automated landmarking captures complex shapes in armored catfish jaws. *Society of Integrative and Comparative Biology*. Virtual Conference.

CR Black and P Berendzen. (23 June 2019). Convergence of Body Depth and Jaw Length of the Skeleton in Flatfishes (Pleuronectiformes). *Evolution Meeting*. Providence, RI.

CR Black, Werneke D., Bauer E., Helms B., Armbruster J. (17 November 2017). Aquatic Refuge and Recovery in the Face of Drought in a Biodiversity Hotspot. *Southeastern Fishes Council*. Chattanooga, TN.

CR Black and P Berendzen. (4 April 2013). Geometric Morphometric Analysis of Skeletal Shape Variation Across the Pleuronectiformes. *Graduate School Symposium*. University of Northern Iowa. Cedar Falls, IA.

CR Black and P Berendzen. (7 January 2013). Geometric Morphometric Analysis of Skeletal Shape Variation Across the Pleuronectiformes. *Society for Integrative and Comparative Biology*. San Francisco, CA.

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POSTER PRESENTATIONS **CR Black** and JW Armbruster. (4 January 2020). Shape Variation of Armored Catfishes in a Phylogenomic and Ecological Context Using 3D Geometric Morphometric Techniques (Loricariidae). *Society of Integrative and Comparative Biology*. Austin, TX.

CR Black, Werneke D., Bauer E., Helms B., and Armbruster J. (8 November 2018). Aquatic Refuge and Recovery in the Face of Drought in a Biodiversity Hotspot. *Southeastern Fishes Council*. McCormick, SC.

CR Black and JW Armbruster. (13 July 2018). Shape Analyses of the Peckoltia Clade Using 3D Geometric Morphometric Techniques (Loricariidae: Hypostominae). *Joint Meeting of Ichthyologist and Herpetologist*. Rochester, NY. *NIA Best Student Poster Winner

CR Black, Werneke D., Bauer E., Helms B., Armbruster J. (23 May 2018). Aquatic Refuge and Recovery in the Face of Drought in a Biodiversity Hotspot. *Society for Freshwater Science*. Detroit, MI.

CR Black, and P Berendzen. (9 July 2016). Geometric Morphometric Analysis of Skeletal Shape Variation Across the Pleuronectiformes. *Joint Meeting of Ichthyologist and Herpetologist*. New Orleans, LA.

TEACHING EXPERIENCE

Instructor of Record

Auburn University, Auburn, Alabama

2019 – 2022 Comparative Anatomy (BIOL 3010-D01)

Summer semester 2022

Evolution and Systematics (BIOL 3033)

Summer semester 2020

Organismal Biology (BIOL 1030)

Fall semester 2019

Highland Community College, Highland, Kansas

2014 – 2015 Human Anatomy (BS 104)

Fall 2014, Spring & Summer semesters 2015

Human Physiology (BS 105)

Fall 2014, Spring & Summer semesters 2015

Exercise Physiology (PE 250)

Spring semester 2015

Nutrition (BS 110)

Fall 2014 & Spring semesters 2015

Guest Lecture

2020 Howard University, Washington, D.C.

Comparative Anatomy – Digestive System (virtual)

Teaching Assistant

Auburn University, Auburn, Alabama

2017 – 2022 Comparative Anatomy Lab (BIOL 3011)

Fall semesters 2017, 2018, & 2020 Spring semesters 2017, 2018, 2019, & 2022 Anatomy and Physiology II Lab (BIOL 2511) 2021 Fall semester 2021 University of Northern Iowa, Cedar Falls, Iowa 2012 – 2013 Life: Continuity and Change Lab (BIOL 1015) Fall 2012 & Spring semester 2013 2012 Evolutionary Biology (BIOL 3100) Spring semester 2012 Cell Structure and Function (BIOL 2052) 2011 Fall semester 2011 **3D Slicer Workshop** ADDITIONAL 2020 **COURSEWORK** February 2020, Friday Harbor Labs, University of Washington Drs. Adam Summers, Murat Maga **PROFESSIONAL** American Society of Ichthyologists and Herpetologists (ASIH) Society for Integrative and Comparative Biology (SICB) **MEMBERSHIP** Society for the Study of Evolution (SSE) Society of Systematic Biologists (SSB) Reviewer for: Environmental Biology of Fishes, Ichthyology and **SERVICE** Herpetology, Journal of Fish Biology, Society of Systematic Biologists GSRA, Zootaxa 2024 **ASIH Board of Governors** January 2024 – present, Class of 2029 ASIH Diversity, Equality, Inclusion, and Belonging Committee 2020 January 2020 – August 2023, At-large member 2020 **Our STEM Story Seminar Series Committee** July 2020 – May 2021, Auburn University, Marketing and Technology Officer 2020 **College of Mathematics and Science Diversity Committee** June 2020 – May 2021, Auburn University, At-large member 2020 **Introduction to Geometric Morphometrics Workshop** November 2020, Southeastern Fishes Counsel Continuing Education Workshop, Creator and leader (virtual) 2014 **Assessment Committee** August 2014 – May 2015, Highland Community College, At-large member 2014 Go Green Team August 2014 – May 2015, Highland Community College, At-large member 2011 **Plinian Society (Evolution Club)** August 2011 – May 2012, University of Northern Iowa, Founder and President 2010 **Student Nature Society**

DR. CORINTHIA R. BLACK

August 2010 – May 2011, University of Northern Iowa, Public Relations Officer

OUTREACH	2020 - 2021	Skype a Scientist, Volunteer
	2018 - 2019	Boos and Bones, Auburn Museum of Natural History,
		Volunteer
	2017 - 2021	Fall Open House, Auburn Museum of Natural History,
		Volunteer
	2019	STEM Minority High School Visitation Day, Auburn
		University, Volunteer
	2018	Destination STEM, Auburn University, Volunteer
	2017	Barbour County Natural Resources Youth Camp,
		Volunteer science demonstration

MENTORING Graduate Students

Megan Ma, University of Maryland, Aug 2022 – present Mariom Adriana Carvajal, Univ of Maryland, Aug 2022 – May 2023 Jeremy Abels, University of Northern Iowa, Aug 2020 – Dec 2020

Undergraduate Students (Independent Research)

David Canseco Vielma, NMNH-NHRE, May 2023 – present Amy Peshku, University of Maryland, June 2023 – present Alexandria Brown, Auburn University, Aug 2020 – Dec 2021 Kyla Sanders, Auburn University, Aug 2019 – May 2020

Undergraduate Students

Teri Hodge, Auburn University, Aug 2019 – May 2019 Logan Enman, Auburn University, Aug 2019 – Nov 2019 Harrison Michaels, Auburn University, May 2018 – July 2018 Drew Douthit, Auburn University, Jan 2018 – May 2018