

SUMMARY OF ACTIVITIES

TEACHING 30%	
<p>Courses Taught at AU</p> <ul style="list-style-type: none"> • BIOL 1030: Organismal Biology • BIOL 3010: Comparative Anatomy • BIOL 3030: Evolution & Systematics • BIOL 3033: Evolution & Systematics, Distance • BIOL 4980: Undergraduate Research • BIOL 7160: Systematic Ichthyology • BIOL 7200: Organic Evolution • BIOL 7970: Phylogenetic Systematics • BIOL 7970: Museum Curation • BIOL 7970: Museum Practicum 	<p>Advising</p> <ul style="list-style-type: none"> • Completed <ul style="list-style-type: none"> • Ph.D., 8 Chair, 6 member • MS, 7 chair, 5 member • Current <ul style="list-style-type: none"> • Ph.D., 3 chair, 4 member • MS, 1 chair, 2 member • Undergraduate <ul style="list-style-type: none"> • >200 <p>Textbooks Written</p> <ul style="list-style-type: none"> • BIOL 1010 Lab Manual • BIOL 1030 Lab Manual
RESEARCH 45%	
<p>Total External Awards</p> <ul style="list-style-type: none"> • \$9,065,193 TL, \$2,813,682 AU <p>Select Research Awards</p> <ul style="list-style-type: none"> • NSF RAPID: Aquatic refuge and recovery in the face of drought in a biodiversity hotspot. \$170,986 • All Cypriniformes Species Inventory: NSF, \$2,680,578 TL, \$785,482 AU • Collection Improvement Grants: NSF, \$429,878, and \$347,602 <p>Metrics</p> <ul style="list-style-type: none"> • H-index 25, 2402 citations 	<p>Presentations</p> <ul style="list-style-type: none"> • 90 Presentations at National Meetings, 84 while at AU • 30 invited talks and symposium presentations, 1 plenary talk • Organized 3 symposia <p>Awards</p> <ul style="list-style-type: none"> • AU Alumni Professor, 2007-2011 <p>Publications</p> <ul style="list-style-type: none"> • Journal: 75 (70 AU) • Chapters: 6 (all AU)
SERVICE and OUTREACH 10%	
<p>Professional</p> <ul style="list-style-type: none"> • 7 NSF panels • >300 Journal Articles Reviewed • 5 Textbooks Reviewed • Associate Editor Copeia (2003-2006) • Associate Editor Zootaxa (2016-now) • Chair, Special Publications Committee, American Society of Ichthyologists and Herpetologists • Board of Governors, American Society of Ichthyologists and Herpetologists <p>University</p> <ul style="list-style-type: none"> • Outside Reader – 7 Ph.D. • Faculty Advisor: AU Secular Students Alliance 	<p>COSAM</p> <ul style="list-style-type: none"> • Dean’s Medalist Committee • AUExplore <p>Department</p> <ul style="list-style-type: none"> • 8 search committees • Chair of Evolutionary Genetics and Systematics Core • Committees: Graduate Studies, Strategic Planning, Collection (chair), Funds for Excellence • Faculty Adviser, Conservation Track • Museum Open Houses • Played Charles Darwin during 2009 Darwin Celebration • Faculty Adviser: Marine Biology Club
Administration 15%	
<ul style="list-style-type: none"> • Director, Auburn University Museum of Natural History 	<ul style="list-style-type: none"> • Supervise 10 staff members and research and outreach activities

PERCENTAGE BREAKDOWN OF DUTIES

Allocation of time:	Activity	Percent
	Teaching	<u>30</u>
	Research	<u>45</u>
	Service	<u>10</u>
	Administration	<u>15</u>

HONORS AND AWARDS

Associate Editor, Ichthyology, Zootaxa, January 2016-present.

Alumni Professor, Auburn University Alumni Association, October 2007-2011.

Associate Editor, General Ichthyology, American Society of Ichthyologists and Herpetologists, October 2002-2006.

Chair of Special Publications Committee, American Society of Ichthyologists and Herpetologists, 2001-present.

Teacher of the Year, Auburn University Beta Beta Beta, Biological Honor Society, 2000-2001

Board of Governors, American Society of Ichthyologists and Herpetologists, 2009-present.

Dean's Research Initiative, College of Science and Math, Auburn University, \$4,400, Air-breathing in Loricariid Catfishes - A Potentially Unique Method of Respiration in Fishes. 2000.

Philip W. Smith Memorial Fund Award, Illinois Natural History Survey, \$375 for travel to South America, March 1997.

University of Illinois at Urbana-Champaign, incomplete list of teachers ranked excellent by their students, Ecology, Ethology, and Evolution 337 Ichthyology, 1995.

Edward C. Raney Memorial Fund Award, American Society of Ichthyologists, 1995.

The Department of Ecology, Ethology, and Evolution of the University of Illinois Graduate Student Award, 1995.

Philip W. Smith Memorial Fund Award, Illinois Natural History Survey, 1995.

Ernst Mayr Award, Harvard University, 1994.

University of Illinois at Urbana-Champaign, Incomplete list of teachers ranked excellent by their students, for Biology 120 Genetics, Evolution, and Biodiversity, 1994.

SCHOLARLY CONTRIBUTIONS

Teaching

Courses taught in last 5 years

Semester	Course#	Course Title	% taught	Hours total	Hours Lab	Enrollment
Summer 2017	BIOL 3011	Comparative Anatomy Lab	100	1	1	23
	BIOL 3013	Comparative Anatomy	100	3	0	24
	BIOL 4980	Undergraduate Research	100	2	0	5
	BIOL 7960	Museum Practicum	100	1	0	2
	BIOL 7960	Museum Education	100	1	0	1
	BIOL 8990	Research and Dissertation	100	1	0	2
Spring 2017	BIOL 3010	Comparative Anatomy	100	4	1	140
	BIOL 3033	Evolution and Systematics	100	3	0	24
	BIOL 4980	Undergraduate Research	100	2	0	5
	BIOL 7960	Museum Education	100	1	0	1
	BIOL 7990	Research and Thesis	100	1	0	1
	BIOL 8990	Research and Dissertation	100	1	0	3
	IDSC 4980	Interdisciplinary Science Capstone Experience	100	1	0	1
Fall 2016	BIOL 3033	Evolution and Systematics	100	3	0	19
	BIOL 4980	Undergraduate Research	100	2	0	3
	BIOL 7200	Evolutionary Biology	5	3	0	18
	BIOL 7960	Museum Education	100	1	0	2
	BIOL 7990	Research and	100	1	0	1

		Thesis				
	BIOL 8990	Research and Dissertation	100	1	0	2
Summer 2016	BIOL 4980	Undergraduate Research	100	2	0	4
	BIOL 7960	Museum Practicum	100	1	0	6
	BIOL 7960	Museum Education	100	1	0	2
	BIOL 7990	Research and Thesis	100	1	0	1
	BIOL 8990	Research and Dissertation	100	1	0	1
Spring 2016	BIOL 3010	Comparative Anatomy	100	4	1	130
	BIOL 3033	Evolution and Systematics	100	3	0	16
	BIOL 4980	Undergraduate Research	100	2	0	8
	BIOL 7990	Research and Thesis	100	1	0	1
	BIOL 8990	Research and Dissertation	100	1	0	1
Fall 2015	BIOL 3030	Evolution and Systematics	100	3	0	61
	BIOL 3033	Evolution and Systematics	100	3	0	12
	BIOL 4980	Undergraduate Research	100	2	0	7
	BIOL 7990	Thesis	100	1	0	2
	BIOL 8990	Dissertation	100	1	0	4
Summer 2015	BIOL 3010	Comparative Anatomy	100	4	1	20
	BIOL 3033	Evolution and Systematics	100	3	0	18
	BIOL 4980	Undergraduate Research	100	2	0	3
	BIOL 7990	Thesis	100	2	0	2
	BIOL 8990	Dissertation	100	1	0	4
Spring 2015	BIOL 3010	Comparative Anatomy	100	4	1	134
	BIOL 4980	Undergraduate Research	100	2	0	7
	BIOL 7990	Thesis	100	1	0	1
	BIOL 8990	Dissertation	100	1	0	4
Fall 2014	BIOL 3030	Evolution and	100	3	0	75

		Systematics				
	BIOL 4980	Undergraduate Research	100	2	0	9
	BIOL 8990	Dissertation	100	1	0	3
	BIOL 7990	Thesis	100	1	0	1
	BIOL 8990	Dissertation	100	1	0	3
Summer 2014	BIOL 3010	Comparative Anatomy	100	4	1	35
	BIOL 4970	Mentored Inst. in Teaching	100	2	0	1
	BIOL 4980	Undergraduate Research	100	2	0	2
	BIOL 7990	Thesis	100	1	0	2
	BIOL 8990	Dissertation	100	1	0	5
Spring 2013	BIOL 3010	Comparative Anatomy	100	4	1	143
	BIOL 4980	Undergraduate Research	100	2	0	7
	BIOL 7970	Museum Curation Practicum	60	2	0	10
	BIOL 8990	Dissertation	100	1	0	1
Summer 2012	BIOL 3010	Comparative Anatomy	100	4	1	46
	BIOL 4980	Undergraduate Research	100	2	0	1
	BIOL 7990	Thesis	100	1	0	2
	BIOL 8990	Dissertation	100	1	0	5
Fall 2013	BIOL 4980	Undergraduate Research	100	2	0	5
	BIOL 8990	Dissertation	100	1	0	3
	BIOL 7990	Thesis	100	1	0	1
	BIOL 8990	Dissertation	100	1	0	3
Spring 2012	BIOL 3010	Comparative Anatomy	100	4	1	136
	BIOL 4980	Undergraduate Research	100	2	0	7
	BIOL 7990	Thesis	100	1	0	1
	BIOL 8990	Dissertation	100	1	0	3
Summer 2012	BIOL 3010	Comparative Anatomy	100	4	1	67
	BIOL 4980	Undergraduate Research	100	2	0	4
	BIOL 7990	Thesis	100	1	0	1
	BIOL 8990	Dissertation	100	1	0	2

Fall 2012	BIOL 3030	Evolution and Systematics	100	3	0	76
	BIOL 4980	Undergraduate Research	100	2	0	6
	BIOL 8990	Dissertation	100	1	0	3
	BIOL 7970	Museum Curation	60	2	0	10
	BIOL 7990	Thesis	100	1	0	1
	BIOL 8990	Dissertation	100	1	0	3

Graduate Students Completed

AS MAJOR PROFESSOR

Name	Institution	Degree	Completion	Current Position
Justin Evans	AU-DBS	MS	2002	City Engineer, Tampa, FL
Carrie Allison	AU-DBS	MS-NT	2003	U.S. Fish and Wildlife, Louisville, KY
T. Paul Pera	AU-DBS	MS	2004	Lawyer, Memphis, TN
David Werneke	AU-DBS	MS	2005	Curator, AUMNH
Nathan Lujan	AU-DBS	Ph.D.	2009	Postdoc, University of Toronto
Ricardo Betancur	AU-DBS	Ph.D.	2009	Asst. Prof., University of Puerto Rico, Rio Piedras
Marcelo Melo	AU-DBS	Ph.D.	2009	Asst. Prof. Institute of Oceanography, Federal University of São Paulo
C. Keith Ray	AU-DBS	MS	2010	Instructor, Reinhardt College, GA
Lesley de Souza	AU-DBS	Ph.D.	2011	Rapid Inventories Program, Field Museum of Natural History
Shobnom Ferdous	AU-DBS	Ph.D.	2013	Instructor, AU
Paul Wiczorek	AU-DBS	MS	2015	Ph.D. Student, U. South Florida
Milton Tan	AU-DBS	Ph.D.	2016	Postdoc, Emory University
Pamela Hart	AU-DBS	MS	2016	Ph.D. Student, LSU
Carla Stout	AU-DBS	Ph.D.	2017	Postdoc, Cal Poly University, Pomona, CA
Edward Burress	AU-DBS	Ph.D.	2017	Postdoc, University of California, Davis

Justin D. Evans, MS, June 1999 - May 2002. Taxonomic and phylogenetic assessment of the *Hemiacistrus annectens* group by morphometric and molecular methods (Teleostei: Loricariidae)

Carrie Allison, MS (nonthesis), August 2001-August 2003, a guide to the loricariids of the Rupununi District, Guyana.

Thomas Paul Pera, MS, August 2000 - December 2004. Taxonomic assessment of the silverjaw minnow, *Notropis buccatus* Cope (Cyprinidae).

David C. Werneke, MS, August 2000 - May 2005. Variation within the genus *Labidesthes* Cope (Atheriniformes: Atherinopsidae) and its influence on the validity of the fiery-finned silverside (*Labidesthes vanhyingi* Bean and Reid).

Ricardo Betancur, Ph.D., August 2004 – May 2009. Systematics and evolutionary history of sea catfishes (Siluriformes: Ariidae).

Nathan Lujan, Ph.D., August 2002 – May 2009. Jaw morpho-functional diversity, trophic ecology, and historical biogeography of the neotropical suckermouth armored catfishes (Siluriformes: Loricariidae).

Marcelo Melo, Ph.D., August 2004 – August 2009. Taxonomic and phylogenetic revision of the family Chiasmodontidae (Perciformes:Acanthomorpha).

Keith Ray, MS., August 2006 – December 2010. Redescription and morphometric analysis of *Isorineloircaria* (Siluriformes: Loricariidae).

Lesley de Souza, Ph.D., August 2003 – December 2011. Hydrological link between the Amazon River Basin and the eastern Guiana Shield on the Neotropical ichthyofauna.

Shobnom Ferdous, Ph.D., August 2004 – December 2014. Geometric Morphometrics and Phylogeny of the Catfish genus *Mystus* Scopoli (Siluriformes:Bagridae) and North American Cyprinids (Cypriniformes).

Paul Wiczorek, MS, August 2012-December 2015. Ecomorphological analysis of cyprinids in the Mobile Bay Basin

Milton Tan, Ph.D., August 2009-August 2016. Evolution of Miniaturization and Paedomorphism in Fishes of the Order Cypriniformes.

Pamela Hart, MS, May 2013-August 2016. Diversity and Conservation of the Southern Cavefish, *Typhlichthys subterraneus*.

Carla C. Stout, Ph.D. August 2010-May 2017. Minnows and molecules: resolving the broad and fine-scale evolutionary patterns of Cypriniformes.

Edward Buress, Ph.D. August 2012-August 2017. Patterns and rate of ecological diversification among Neotropical cichlid fishes

AS COMMITTEE MEMBER

Name	School	Degree	Completion	Current Position
Brian Phillips	AU-FAA	MS	2001	Environmental Consultant, TX
Abigail Sorenson	AU-DBS	MS	2004	Deceased
Michael Gangloff	AU-DBS	Ph.D.	2004	Assistant Professor, Appalachian State College
Steven J. Herrington	AU-FAA	Ph.D.	2004	Research Scientist, The Nature Conservancy, St. Louis, MO
Jeremy Wright	U. Florida	MS	2007	Curator, New York State Museum

Alfred Thomson	U. Florida	MS	2008	Curator, Florida Fish and Wildlife Research Institute
Tiago Carvalho	PUCRS,	MS	2008	Postdoctoral Fellow, Academy of Natural Sciences of Drexel University
Matthew Thomas	SIUC	Ph.D.	2011	Kentucky Fish and Wildlife, Frankfort, KY
Alexis Janosik	AU-DBS	Ph.D.	2012	Assistant Professor, University of West Florida
Alfred Thomson	U. Florida	Ph.D.	2014	Curator, Florida Fish and Wildlife Research Institute
Christopher Hamilton	AU-DBS	Ph.D.	2015	Postdoc, University of Florida

Graduate Students – Current

AS MAJOR PROFESSOR

Name	Institution	Degree	Start	Expected Completion	Progress
Malorie Hayes	AU-DBS	Ph.D.	2011	2018	Candidate
Tobit Liyandja	AU-DBS	MS	2016	2018	Courses
Corinthia Black	AU-DBS	Ph.D.	2017	2022	Courses
Courtney Weyand	AU-DBS	Ph.D.	2017	2022	Courses

AS COMMITTEE MEMBER

Name	Institution	Degree	Start	Expected Completion	Progress
Charles Stephen	AU-DBS	Ph.D.	2012	2017	Candidate
Timothy Roberts	AU-DBS	MS	2013	?	Writing
Rebecca Godwin	AU-DBS	Ph.D.	2014	2019	Candidate
Viktoria Bogantes	AU-DBS	Ph.D.	2015	2019	Candidate
Kellie Bourguignon	AU-DBS	MS	2015	2017	Research
Fredericka Hamilton	AU-ENT	Ph.D.	2015	2020	Proposal

Courses and Curricula Developed

Biology 1010, The Diversity of Life - on committee that designed the course and wrote the labs. Enrollment ~700/year. Basic science course for nonmajors.

Biology 1030, Organismal Biology – helped develop labs, wrote lectures for the course. Taught 3 times. Enrollment ~800/year. Required for all majors in biology related disciplines.

Biology 3010, Comparative Anatomy - developed the quarter and semester courses including lecture and lab. This is a comprehensive course on the evolution of vertebrate organ systems. We follow characters as they develop and change into features that we see in living vertebrates. Course was completely revamped in 2014. Taught >30 times. Enrollment ~260/year. Most biomedical sciences, prevet, premed, and predent, students must take this or another course.

Biology 3030, Evolution and Systematics – developed a modern course on evolution in Fall 2008. The course covers basic phylogenetics and evolution. The course covers both traditional evolution as well as advanced concepts in genetics, genomics, and development. Taught 7 times since 2008. Enrollment ~160/year. Underwent a full revision in 2014 and preparation as an online course. Required course for most non-professional students in biology-related disciplines.

Biology 3033, Evolution and Systematics, distance – developed my BIOL 3030 course for distance learning. Enrollment ~60/year. Taught 3 times since 2015.

Biology 7160, Systematic Ichthyology - developed a graduate course on systematics and how it applies to fishes. This course was a survey of fish taxa and modern phylogenetic literature. The lab usually involved a web component, including designing a web page to identify fishes. Taught 3 times since 2000. Enrollment 6/semester.

Biology 7970, Phylogenetic Systematics – developed a graduate course in systematics with Ken Halanych and Leslie Goertzen. Taught the first third of the course on history, taxonomy, and basic phylogenetic techniques. Taught once. Enrollment 20.

Biology 7970, Museum Curation – codeveloped a 2-hour graduate lecture/discussion course on museum curation. Taught once, 2012. Enrollment 10.

Biology 7970, Museum Practicum – codeveloped a 2-hour graduate course on direct museum curation (which involved moving the collections). Taught once, 2013. Enrollment 10.

Biology 7200, Organic Evolution - developed a graduate course on evolution. This course was a survey of evolution literature for graduate students. Taught once. Enrollment 9.

Publications pertaining to teaching.

2. Lishak, E. Wester, J. Dobie, **J. Armbruster**, R. Boyd, D. Folkerts, and C. Guyer. 2001. Survey of Life, Biology 1010. Contemporary Publishing of Raleigh, Raleigh.
1. Folkerts, D., **J. Armbruster**, J. Feminella, R. Dute, R. Lishak, M. Dalrymple, F. Lawrence, W. Mason, and C. Peterson. 2002. Organismal Biology: Biology 1030 Lab Manual. Contemporary Publishing of Raleigh, Raleigh.

Other Contributions to Teaching

Biology 1030, Organismal Biology Website. WebCT. Provided lecture notes and slides and a weekly bonus quiz that is graded electronically. No longer active.

Biology 1030, Organismal Biology Lab Website. www.auburn.edu/~armbrjw/Biology_1030. Mainly provides photographs of the rat dissection. No longer active.

Biology 3010, Comparative Anatomy Website. Canvas (formerly Blackboard and WebCt): supplementary notes, outlines, and drawings for the course. Also provides updated grade lists for the students.

Biology 3030, Evolution and Systematics Website. Canvas (formerly Blackboard): supplementary notes, outlines, and drawings for the course. Also provides updated grade lists for the students.

Biology 3033, Evolution and Systematics, distance, Website. Canvas: supplementary notes, outlines, and drawings for the course. Also provides updated grade lists for the students. Additionally provides discussion groups, videoed lectures via Panopto, and exams for distance students.

Biology 4980: Supervised over 100 students in the past 10 years.

Teaching Philosophy

I believe that I should give students everything possible to succeed and then let them be adults and choose how they want to learn. In modern times, this includes a comprehensive website. I have designed websites for my two major courses that include lecture notes, quizzes, access to current grades, etc. Students have found these sites to be very helpful. I also believe that it is the job of a teacher to keep in touch with his/her students at all times. In small classes this is easy, but in large classes it is virtually impossible. In the large classes, I try to e-mail the students frequently with information and have an open-door philosophy.

I believe in making classes challenging. I believe that it is better to give a difficult exam and then curve the grades than to design an exam that does not as effectively test material, but gives a good grade distribution. I believe that I have found the right combination of difficulty and fairness in my classes and my evaluations are high suggesting that I have found that combination.

With graduate work, I feel my role is more to help steer the students in the correct direction and not to micromanage them. The most important lesson to be learned in graduate school is self-reliance. I currently have students working on a wide range of ichthyology and they are all doing wonderful, publishable work. Research at an undergraduate level is also extremely important. I have had numerous undergraduates work for me in the recent past. Three have published with me. Three students received COSAM Undergraduate Research Fellowships. The way I now run undergraduate projects is that the first semester the students work for me, and the second semester (if they return), they work on a project that they will publish.

Research/Creative Work

Article-length Publications

Articles on original research published in refereed publications. In my discipline, first author papers are the most critical, and author order indicates the amount of work each author has performed. On occasion, lab leader is last author, and these can be identified by a higher than expected percent contribution by me. Most papers are available as pdf's on my website: www.auburn.edu/~armbrjw.

Book Chapters (peer reviewed)

*indicates chapter with a graduate student author

6. **Armbruster, J.W.**, N.K. Lujan, and P. Sleen. To be published Dec. 2017. Loricariidae – suckermouth armored catfishes. Book chapter, Field Guide to the fishes of the Amazon, Orinoco, and Guianas. Princeton University Press. 75% JWA.

5. Taphorn, D.C., **J.W. Armbruster**, D. Fernandes, M. Kolmann, E. Liverpool, H. López Fernández and D.C. Werneke. 2017. Chapter 8: Fishes of the Upper Potaro River, Guyana. Pp. 142–154 in L.E. Alonso, J. Persaud, and A. Williams, *Biodiversity Assessment Survey of the Kaieteur Plateau and Upper Potaro, Guyana*, BAT Survey Report 2. World Wildlife Fund, Georgetown, Guyana.
4. **Armbruster, J.W.** 2015. Presentación (Forward). In Prado, P.J., W. Aguirre, E.L. Moncayo, R.N. Amaya, F.N. Salazar, E.R. Monsalve, E.Z. Hugo, A.T. Noboa, and J.V. Rivera. *Guía de Peces para Aguas Continentales en la Vertiente Occidental del Ecuador*. Pontificia Universidad Católica del Ecuador Sede Esmeraldas (PUCESE); Universidad del Azuay (UDA) y Museo Ecuatoriano de Ciencias Naturales (MECN) del Instituto Nacional de Biodiversidad. Esmeraldas, Ecuador. Pp. 6–7.
3. **Armbruster, J.W.** 2013. Darwin and Collections. In Bradley, J. and J. Lamar, eds. *Charles Darwin: A Celebration of His Life and Legacy*, NewSouth Books. Pp. 41-56.
2. **Armbruster, J.W.** 2011. Global Catfish Biodiversity. *American Fisheries Society Symposium* 77:15–37.
1. *Lujan, N.K. and **J.W. Armbruster**. 2011. Geological and hydrological history of the Guyana Shield and historical biogeography of its fishes. In Albert, J.A. and R. E. Reis, eds. *Historical Biogeography of Neotropical Freshwater Fishes*. University of California Press. Pp. 211-224. 40% JWA.

Articles on original research published in refereed publications. Impact factors provided 2015 – present.

*indicates paper with a graduate student author

** indicates paper with undergraduate student author

77. Ferdous, S., & **J.W. Armbruster**. Accepted 4/15. Guide to use MorphoJ for Geometric Morphometric Analysis. *Bio-Protocol*. 40% JWA. Impact Factor: not available.
76. *Bonato, K.O., E.D. Burress, C.B. Fihalo, and **J.W. Armbruster**. In Press 7/17. Resource partitioning among syntopic Characidae corroborated by gut content and stable isotope analyses. *Hydrobiologia*. 10% JWA. Impact factor: 1.964.
75. *Hayes, M.M. and **J.W. Armbruster**. 2017. The taxonomy and relationships of the African small barbs (Cypriniformes: Cyprinidae). *Copeia* 105:348–362. DOI: 10.1643/CI-15-348. 45% JWA. Impact Factor: 1.144.
74. *Burress, P.B.H., E.D. Burress, and **J.W. Armbruster**. 2017. Body shape variation within the Southern Cavefish, *Typhlichthys subterraneus* (Percopsiformes: Amblyopsidae). *Zoomorphology* 2017 (13 pages). doi:10.1007/s00435-017-0360-0. 30% JWA. Impact factor: 1.242.
73. Moran, C.J., M. O'Neill, **J.W. Armbruster**, and A.C. Gibb. Accepted 4/16. Can members of the Southwestern *Gila robusta* species complex be distinguished by their morphological features? *Journal of Fish Biology*. 15% JWA. Impact Factor: 1.246.

72. *Burruss, E.D., J.M. Holcomb, M. Tan, and **J.W. Armbruster**. 2017. Ecological diversification associated with the benthic-to-pelagic transition by North American minnows. *Journal of Evolutionary Biology* 2017:549–560. 15% JWA. Impact Factor: 3.483.
71. Arcila, D., R. Vari, L.J. Revell, **J.W. Armbruster**, M.L.J. Stiassny, K. Ko, M.H. Sabaj, J. Lundberg, G. Orti, and R. Betancur-R. 2017. Gene genealogy interrogation advances resolution of recalcitrant phylogenies. *Nature Ecology and Evolution* 1(20):1–10. DOI: 10.1038/s41559-016-0020. 5% JWA. Impact Factor: not available, new journal.
70. Godwin, J.C., D.C. Werneke, D.A. Steen, and J.W. Armbruster. 2016. Two significant records of exotic neotropical freshwater fish observed in southern Alabama. *Southeastern Naturalist* 15:N57–N60. 10% JWA. Impact Factor: 0.513.
69. *Stout, C.C., M. Tan, A.R. Lemmon, E.M. Lemmon, and **J.W. Armbruster**. 2016. Resolving Cypriniformes relationships using an anchored enrichment approach. *BMC Evolutionary Biology* 16:244 (13 pages). 25% JWA. Impact Factor: 3.406.
68. *Niemiller, M.L., K.S. Zigler, P.B. Hart, B.R. Kuhajda, **J.W. Armbruster**, B.N. Ayala, and A.S. Engel. 2016. First definitive record of a stygobiotic fish (Percopsiformes: Amblyopsidae: *Typhlichthys*) from the Appalachians karst region in the eastern United States. *Subterranean Biology* 20:39–50. 10% JWA. Impact Factor: not available.
67. ***Armbruster, J.W.**, M.L. Niemiller, and P.B. Hart. 2016. Morphological Evolution of the Cave-, Spring- and Swampfishes of the Amblyopsidae (Percopsiformes). *Copeia* 104:763–777. 90% JWA. Impact Factor: 1.144.
66. Matamoros, W.A., C.D. McMahan, C.R. Mejia, P.H. House, **J.W. Armbruster**, P. Chakrabarty. 2016. First record of the non-native armored catfish *Hypostomus cf. niceforoi* (Fowler, 1943) (Siluriformes: Loricariidae) from Central America. *Occasional Papers of the Museum of Natural Science, Louisiana University* 87: 1–12. 20% JWA. Impact Factor: not available.
65. *Tan, M., L.S. de Souza, and **J.W. Armbruster**. 2016. A new species of *Panaqolus* (Siluriformes: Loricariidae) from the rio Branco. *Neotropical Ichthyology* 14: e150033. DOI: 10.1590/1982-0224-20150033. 25% JWA. Impact Factor: 0.802.
64. Liu S., J. Yao, L. Bao, C. Jiang, R. Wang, L. Sun, Y. Li, Y. Zhang, J. Zhang, T. Zhou, Q. Zeng, Q. Fu, S. Gao, N. Li, S. Koren, Y. Jiang, A. Zimin, P. Xu, A. Phillippy, X. Geng, L. Song, F. Sun, C. Li, X. Wang, A. Chen, Y. Jin, Z. Yuan, Y. Yang, S. Tan, E. Peatman, J. Lu, Z. Qin, R. Dunham, Z. Li, T. Sonstegard, J. Feng, R. Danzmann, S. Schroeder, B. Scheffler, M. Duke, L. Ballard, H. Kucuktas, L. Kaltenboeck, H. Liu, **J. Armbruster**, Y. Xie, M. Kirby, Y. Tian, M. Flanagan, W. Mu, G. Waldbieser. 2016. The channel catfish genome sequence provides insights into the evolution of scale formation in teleosts. *Nature Communications* 7:11757. DOI: 10.1038/ncomms11757 . 5% JWA. Impact Factor: 11.470.
63. *Burruss, E.D., Holcomb, J.M., Bonato, K.O., & **J.W. Armbruster**. 2016. Body size is negatively correlated with trophic position among minnows. *Royal Society Open Science* 3:150652. <http://dx.doi.org/10.1098/rsos.150652>. 20% JWA. Impact Factor: not available, new journal.

62. *Burress, E.D., Holcomb, J.M., & **J.W. Armbruster**. 2016. Ecological clustering within a diverse minnow assemblage according to morphological, dietary and isotopic data. *Freshwater Biology* 61:328–339. 25% JWA. Impact Factor: 2.933.
61. **Armbruster, J.W.** & N.K. Lujan. 2016. A New Species of *Peckoltia* from the Upper Orinoco (Siluriformes: Loricariidae). *Zookeys* 569:105–121. 75% JWA. Impact Factor: 0.9333.
60. * Ray C.K. & **J.W. Armbruster**. 2016. The Genera *Isorineloricaria* and *Aphanotorulus* (Siluriformes: Loricariidae) with description of a new species. *Zootaxa* 4072:501–539. 40% JWA. Impact Factor: 0.994.
59. * **Hayes, M.M., E.R. Krahl, D.C. Werneke, & **J.W. Armbruster**. 2016. Conservation genetics of the Broadstripe Shiner, *Pteronotropis euryzonus*, an endemic species of the middle Chattahoochee River. *Aquatic Conservation: Marine and Freshwater Ecosystems* 26:429–444. DOI: 10.1002/aqc.2602. 20% JWA. Impact Factor: 2.415.
58. Winemiller, K.O. & 39 coauthors. 2016. Hydropower expansion in the Amazon, Congo and Mekong—a looming threat to global biodiversity. *Science* 351:128–129. 3% JWA. Impact Factor: 34.661.
57. *Tan, M. & **J.W. Armbruster**. 2016. Two new species of spotted *Hypancistrus* from the rio Negro drainage (Loricariidae: Ancistrini). *Zookeys* 552:123–135. 40% JWA. Impact Factor: 0.933.
56. ***Armbruster, J.W.**, C.C. Stout, & M.M. Hayes. 2016. An Empirical Test for Convergence and Social Mimicry Using African Barbs (Cypriniformes: Cyprinidae). *Evolutionary Ecology* 30:435–450. doi:10.1007/s10682-015-9811-6. 65% JWA. Impact Factor: 1.875.
55. Werneke, D.C. & **J.W. Armbruster**. 2015. Silversides of the genus *Labidesthes* (Atheriniformes: Atherinopsidae). *Zootaxa* 4032: 535–550. 25% JWA. Impact Factor: 0.906.
54. Khaironizam, M.Z., M. Zakaria-Ismail, & **J.W. Armbruster**. 2015. Cyprinid fishes of the genus *Neolissochilus* in peninsular Malaysia. *Zootaxa* 3962:139–157. Doi: 10.11646/zootaxa.3962.1.7. 30% JWA. Impact Factor: 0.906.
53. ***Armbruster, J.W.**, D.C. Werneke, & M. Tan. 2015. Three new species of saddled loricariid catfishes and a review of *Hemiancistrus*, *Peckoltia* and allied genera (Siluriformes). *ZooKeys* 480: 97–123. doi: 10.3897/zookeys.480.6540. 75% JWA. Impact Factor: 0.9333.
52. Lujan, N.K., **J.W. Armbruster**, N. Lovejoy, & H. López-Fernández. 2015. Multilocus molecular phylogeny of the suckermouth armored catfishes (Siluriformes: Loricariidae) with a focus on subfamily Hypostominae. *Molecular Phylogenetics and Evolution* 82:269–288. 15% JWA. Impact Factor: 4.064.
51. Correa, S. B., R. Betancur-R., B. de Mérona, & **J.W. Armbruster**. 2014. Diet shift of red belly pacu *Piaractus brachypomus* (Cuvier, 1818) (Characiformes: Serrasalminidae), a Neotropical fish, in the Sepik-Ramu River Basin, Papua New Guinea. *Neotropical Ichthyology* 12:827–833. 15% JWA.
50. *Ray, C. K., M. Tan, & **J.W. Armbruster**. 2014. First Record of *Chrosomus erythrogaster* (Cypriniformes: Cyprinidae) in the Mobile Basin. *Southeastern Naturalist* 13:N33–36. Doi:

10.1656/058.013.0402. 20% JWA.

49. *Taphorn, D. C., **J. W. Armbruster**, F. Villa-Navarro, & C. K. Ray. 2013. Transandean *Ancistrus* (Siluriformes: Loricariidae). *Zootaxa* 4: 343–370. 30% JWA.
48. **Armbruster, J. W.** & D. C. Taphorn. 2013. Description of *Neblinichthys peniculatus*, a new species of loricariid catfish from the Río Paragua. *Neotropical Ichthyology* 11:65–72. 80% JWA.
47. **Armbruster, J.W.** 2012. Standardized measurements, landmarks, and meristic counts for cypriniform fishes. *Zootaxa* 3586:8–16. 100% JWA.
46. **Armbruster, J. W.**, L. M. Page, & R. L. Mayden. 2012. Preface to: Papers supported by the All Cypriniformes Species Inventory Project (ACSII) including those presented at the International Conference in Chiang Mai, Thailand, 13–16 January 2012. *Zootaxa* 3586:6–7. 75% JWA.
45. *Lujan, N.K., K. O. Winemiller, & **J. W. Armbruster**. 2012. Cryptic trophic radiation within a hyperdiverse catfish lineage. *BMC Evolutionary Biology* 12 (124):1–12. 30% JWA.
44. de Souza, Lesley S., **J. W. Armbruster**, & D. C. Werneke. 2012. The influence of the Rupununi portal on distribution of freshwater fish in the Rupununi district, Guyana. *Cybum* 36:31–43. (Special issue on the Guyana Shield). 40% JWA.
43. *Tan, M. and **J. W. Armbruster**. 2012. *Cordylancistrus santarosensis* (Siluriformes: Loricariidae), a new species with unique snout deplation from the Río Santa Rosa, Ecuador. *Zootaxa* 3243: 52–58. 40% JWA.
42. *Lujan, N.K. and **J. W. Armbruster**. 2012. Morphological and functional diversity of the mandible in suckermouth armored catfishes (Siluriformes: Loricariidae). *Journal of Morphology* 273:24–60. 40% JWA.
41. *Lujan, N.K., **J. W. Armbruster**, and B. Rengifo. 2011. A New Basal Ancistrini Genus and Species from the Andes of Northern Peru (Siluriformes: Loricariidae). *Copeia* 2011:497–502. 35% JWA.
40. Lujan, N.K. and **J. W. Armbruster**. 2011. Two new genera and species of Ancistrini (Siluriformes: Loricariidae) from the Western Guiana Shield. *Copeia* 2011: 216–225. 40% JWA.
39. **Armbruster, J. W.** and D.C. Taphorn. 2011. A New Genus and Species of Weakly Armored Catfish from the Upper Mazaruni River (Siluriformes: Loricariidae). *Copeia* 2011:46-52. 75% JWA.
38. Taphorn, D.C., **J.W. Armbruster**, H. López-Fernández, and C. R. Bernard. 2010. Description of *Neblinichthys brevibracchium* and *N. echinasus* from the upper Mazaruni River, Guyana (Siluriformes: Loricariidae), and recognition of *N. roraima* and *N. yaravi* as distinct species. *Neotropical Ichthyology* 8:615–624. 40% JWA.
37. Taphorn, D.C., **J.W. Armbruster**, and D. Rodríguez-Olarte. 2010. *Ancistrus falconensis* n. sp. and *A. gymnorhynchus* Kner (Siluriformes: Loricariidae) from central Venezuelan Caribbean coastal streams. *Zootaxa* 2345:19–32. 40% JWA.

36. *Betancur-R, R. and **J.W. Armbruster**. 2009. Molecular clocks provide new insights into the evolutionary history of galeichthyine sea catfishes. *Evolution* 63:1232–1243. 15% JWA.
35. *Lujan, N.K., M. Arce, and **J.W. Armbruster**. 2009. A new black *Baryancistrus* with blue sheen from the upper Orinoco (Siluriformes: Loricariidae). *Copeia* 2009:50–56. 30% JWA.
34. *de Souza, L.S., M.R.S. Melo, C.C. Chamon, and **J.W. Armbruster**. 2008. A new species of *Hemiancistrus* from the Araguaia River drainage in Brazil (Siluriformes: Loricariidae). *Neotropical Ichthyology* 6:419–424. 20% JWA.
33. **Armbruster, J.W.** 2008. The Genus *Peckoltia* with the Description of Two New Species and a Reanalysis of the Phylogeny of the Genera of the Hypostominae (Siluriformes: Loricariidae). *Zootaxa* 1822:1–76. 100% JWA.
32. **Armbruster J.W.** and D.C. Taphorn. 2008. A new species of *Pseudancistrus* from the Río Caroni, Venezuela (Siluriformes: Loricariidae). *Zootaxa* 1731:33–41. 75% JWA.
31. ****Armbruster, J.W.**, L.A. Tansey, and N.K. Lujan. 2007. *Hypostomus rhanthos* (Siluriformes: Loricariidae), a new species from southern Venezuela. *Zootaxa* 1553: 59–68. 60% JWA.
30. *Lujan, N.K., **J.W. Armbruster**, and M.H. Sabaj. 2007. Two new species of *Pseudancistrus* (Siluriformes: Loricariidae) from southern Venezuela. *Ichthyological Exploration of Freshwaters* 18:163–174. 25% JWA.
29. ***Armbruster, J.W.**, N.K. Lujan, and D.C. Taphorn. 2007. Four new species of *Hypancistrus* from southern Venezuela (Siluriformes: Loricariidae). *Copeia* 2007:62–79. 60% JWA.
28. **Armbruster, J.W.** and L.M. Page. 2006. Redescription of *Pterygoplichthys punctatus* and description of one new species of *Pterygoplichthys* (Siluriformes: Loricariidae). *Neotropical Ichthyology* 4:401–409. 75% JWA.
27. *Pera, T.P. and **J.W. Armbruster**. 2006. *Notropis amplamala*, a new species of silverjaw minnow (Cypriniformes: Cyprinidae). *Copeia* 2006:423–430. 30% JWA.
26. *Reis R. E., E. H. L. Pereira, and **J. W. Armbruster**. 2006. Delturinae, a new loricariid catfish subfamily (Teleostei, Siluriformes), with a revision of *Delturus* and *Hemipsilichthys*. *Zoological Journal of the Linnean Society* 147:277-299. 30% JWA.
25. *Werneke, D.C., M.H. Sabaj, N.K. Lujan, and **J.W. Armbruster**. 2005. *Baryancistrus demantoides* and *Hemiancistrus subviridis*, two new uniquely colored species of loricariids from Venezuela (Siluriformes: Loricariidae). *Neotropical Ichthyology* 3: 533–542. 20% JWA.
24. *Werneke, D.C., **J.W. Armbruster**, N.K. Lujan, and D.C. Taphorn. 2005. *Hemiancistrus guahiborum*, a new suckermouth armored catfish from Southern Venezuela (Siluriformes: Loricariidae) *Neotropical Ichthyology* 3: 543–548. 35% JWA.
23. **Armbruster, J.W.** 2005. The loricariid catfish genus *Lasiancistrus* (Siluriformes) with description of two new species. *Neotropical Ichthyology* 3: 549–569. 100% JWA.

22. ***Armbruster, J. W.** and L. de Souza. 2005. *Hypostomus macushi*, a new species of the *Hypostomus cochliodon* group from Guyana. *Zootaxa* 920:1–12. 60% JWA.
21. ***Armbruster, J. W.** and D. C. Werneke. 2005. *Peckoltia cavatica*, a new loricariid catfish from Guyana and a redescription of *P. braueri* Eigenmann (Siluriformes). *Zootaxa* 882:1-14. 75% JWA.
20. **Armbruster, J. W.** 2004. *Pseudancistrus sidereus*, a new species from southern Venezuela (Siluriformes: Loricariidae) with a redescription of *Pseudancistrus*. *Zootaxa* 628:1–15.
19. **Armbruster, J. W.** 2004. Phylogenetic relationships of the suckermouth armored catfishes (Loricariidae) with emphasis on the Hypostominae and the Ancistrinae. *Zoological Journal of the Linnean Society* 141:1-80. (Monograph). 50% Auburn.
18. **Armbruster, J. W.** 2003. *Peckoltia sabaji*, a new species from the Guyana Shield (Siluriformes: Loricariidae). *Zootaxa* 344:1-12.
17. **Armbruster, J. W.** 2003. The species of the *Hypostomus cochliodon* group (Siluriformes: Loricariidae). *Zootaxa* No. 249: 1-60. 75% Auburn.
16. Hardman, M., L. M. Page, M. H. Sabaj, **J. W. Armbruster**, and J. H. Knouft. 2002. Comparison of fish surveys in the Essequibo and other coastal drainages of Guyana in 1908 and 1998. *Ichthyological Exploration of Freshwaters* 13:225-238. 15% JWA.
15. **Chockley, B. R. and **J. W. Armbruster**. 2002. *Panaque changae*, a new species of loricariid catfish (Teleostei) from eastern Peru. *Ichthyological Exploration of Freshwaters*. 50%, JWA.
14. **Armbruster, J. W.** 2002. *Hypancistrus inspector*, a new species of suckermouth armored catfish (Loricariidae: Ancistrinae) with comments on loricariid feeding modes. *Copeia* 2002:86-92. 100% JWA.
13. **Armbruster, J. W.** and F. Provenzano. 2000. Four new species of the suckermouth armored catfish genus *Lasiancistrus* (Loricariidae: Ancistrinae). *Ichthyological Exploration of Freshwaters* 11:241-254. 90% JWA.
12. ***Armbruster, J. W.**, M. H. Sabaj, M. Hardman, L. M. Page, and J. H. Knouft. 2000. Catfish genus *Corymbophanes* (Loricariidae: Hypostominae) with description of one new species: *Corymbophanes kaiei*. *Copeia* 2000:997-1006. 80% JWA.
11. *Sabaj, M. H., **J. W. Armbruster**, and L. M. Page. 1999. Spawning in *Ancistrus* with comments on the evolution of snout tentacles as a novel reproductive strategy: larval mimicry. *Ichthyological Exploration of Freshwaters* 10:217-229. 50% Auburn, 30% JWA.
10. ***Armbruster, J. W.** and M. Hardman. 1999. Redescription of *Pseudorinelepis genibarbis* (Loricariidae: Hypostominae) with comments on behavior as it relates to air-holding. *Ichthyological Exploration of Freshwaters* 10:53-61. 25% Auburn, 80% JWA.

9. **Armbruster, J. W.** 1998. Modifications of the digestive tract for holding air in loricariid and scoloplacid catfishes. *Copeia* 1998:663-675. 5% Auburn.
8. **Armbruster, J. W.** 1998. Phylogenetic relationships of the suckermouth armored catfishes of the *Rhinelepis* group (Loricariidae: Hypostominae). *Copeia* 1998:620-636. 5% Auburn.
7. **Armbruster, J. W.** 1998. Review of the loricariid catfish genus *Aphanotorulus* and redescription of *A. unicolor* (Teleostei: Siluriformes). *Ichthyological Exploration of Freshwaters* 8:253-262. 5% Auburn.
6. **Armbruster, J. W.** and L. M. Page. 1997. Generic reassignments of the loricariid species *Monistiancistrus carachama* Fowler 1940, *Plecostomus lacerta* Nichols 1919, and *Rhinelepis levis* Pearson 1924 (Teleostei: Siluriformes). *Copeia* 1997:227-232. 80% JWA.
5. Page, L. M., **J. W. Armbruster**, and M. H. Sabaj. 1996. Redescription of *Glyptoperichthys scrophus* (Cope), a loricariid catfish from Peru. *Ichthyological Exploration of Freshwaters* 7:185-191. 30% JWA.
4. Johnston, C. E., **J. W. Armbruster**, and C. A. Laird. 1996. Parallel swims as a means of intra- and interspecific assessment in stream fishes. *Environmental Biology of Fishes* 46:405-408. 20% JWA.
3. **Armbruster, J. W.** and L. M. Page. 1996. Redescription of *Aphanotorulus* (Teleostei: Loricariidae) with description of one new species, *A. ammophilus*, from the Río Orinoco basin. *Copeia* 1996:379-389, 90% JWA.
2. **Armbruster, J. W.** and L. M. Page. 1996. Convergence of a cryptic saddle pattern in benthic freshwater fishes. *Environmental Biology of Fishes* 45:249-25. 75% JWA.
1. **Armbruster, J. W.** 1994. Early season nesting success of mourning doves (*Zenaida macroura*) in central Illinois. *Transactions of the Illinois Academy of Science* 87:71-82. 100% JWA.

Popular articles on my original research published in non-refereed publications.

1. **Armbruster, J. W.** 2001. In Search of the Lost World of Loricariids: An Adventure to the Potaro River, Guyana. Harnischwelse II, special publication of D.A.T.Z. 100% Auburn. Article on our 1998 trip to Guyana.

Publications submitted or soon to be submitted.

- *Burress, E.D. and **J.W. Armbruster**. Submitted 2/17. Morphological convergence among cichlid fishes spans ecosystems and continents. *Biology Letters*. 20% JWA. Impact Factor: 2.823.
- *Burress E. D., F. Alda, A. Duarte, M. Loureiro, **J. W. Armbruster**, and P. Chakrabarty. Submitted 5/2017. Phylogenomics of pike cichlids (Cichlidae: *Crenicichla*): the rapid evolution and trophic diversification of an incipient species flock. *Journal of Evolutionary Biology*. 5% JWA. Impact Factor: 3.483.

- *Burruss, E.D., L. Piálek, J. R. Casciotta, A. Almirón, M. Tan, **J. W. Armbruster**, and O. Říčan. Resubmitted 8/2017. Lake- and island-like adaptive radiations replicated in rivers. *Proceedings of the Royal Society B*. 5% JWA. Impact Factor: 4.82.
- *Burruss, E.D., M. Tan, and **J.W. Armbruster**. Submitted 2/17. Body and pharyngeal jaw shape evolution are correlated across the Neotropical cichlid phylogeny. *Journal of Evolutionary Biology*. 15% JWA. Impact Factor: 3.483.
- de Souza, L.S., **J.W. Armbruster**, P. Willink, & C. Knapp. Fish assemblages of central Guyana's Rupununi wetlands, an important corridor between the Amazon and Essequibo River basins. *Neotropical Ichthyology*. Was accepted 2015, but lead author did not complete reviews. Resubmit in 2017. 30% JWA.
- Lujan, N.K., **J.W. Armbruster**, and N.R. Lovejoy. Submitted 5/2017. Multilocus phylogeny and generic revision of the Guiana Shield endemic *Lithoxus* clade of suckermouth armored catfishes (Loricariidae: Hypostominae). *Systematics and Biodiversity*. 40% JWA. Impact factor: 2.127.
- Lujan, N.K., **J.W. Armbruster**, and D.C. Werneke, T.F. Texeira, and N.R. Lovejoy. Accepted 5/2017. Phylogeny of the western Guyana highlands endemic catfish genus *Corymbophanes* (Loricariidae, Hypostominae), with description of a new species and new sister genus. *Systematics and Biodiversity*. 45% JWA. Impact factor: 2.127.
- *Staley, M., G.E. Hill, C.C. Josefson, **J.W. Armbruster**, and C. Bonneaud. Submitted 8/2017. Testing the role of host exposure in the emergence of a bacterial pathogen. *Journal of Infection and Immunology*. 5% JWA. Impact factor: 3.731.
- *Stout, C.M., **J.W. Armbruster**, and R.L. Mayden. An evaluation of relationships within the family Leuciscidae (Cypriniformes: Cyprinoidei) with insight into biogeographical patterns. 30% JWA. 95% complete.
- *Stout, C.M., **J.W. Armbruster**, and M. Raley. Genetic differentiation without morphological differentiation in the Longnose Shiner (*Notropis longirostris*). 80% complete. 30% JWA.
- *Stout, C.M., **J.W. Armbruster**, and R.L. Mayden. Phylogenomics of the shiner clade (Cypriniformes: Leuciscidae). *Molecular Phylogenetics and Evolution*. 85% complete. Impact Factor: 4.018.
- *Tan, M. & **J.W. Armbruster**. Submitted 3/2017. Diagnosing Effects of Systematic Error and Phylogenetic Signal in Phylogenomics: A Case Study on the Order Cypriniformes. *Systematic Biology*. 10% JWA. Impact Factor: 8.225.
- Tan, M. and **J.W. Armbruster**. Submitted 5/2017. Revised classification of extant genera of fishes of the order Cypriniformes (Teleostei: Ostariophysii). *Zootaxa*. 30% JWA. Impact Factor: 0.972.
- Tan, M. & **J.W. Armbruster**. Transcriptomic insights into functional genomic evolution of paedomorphic Cypriniformes. 90% complete.
- *Tan, M. and **J.W. Armbruster**. Submitted 11/15, rejected 2/16, will be resubmitted. Patterns of Body Size Evolution and Miniaturization in Danioninae (Cyprinidae). *Evolution*. 20% JWA.

Invited Lectures

2010. Catfish 2010: Conservation, Ecology, and Management of Catfish: The Second International Symposium. Plenary Speaker, "Global Catfish Diversity".
2008. Gothenburg Aquarium Society, Gothenburg, Sweden. "Paraphyly and the plecostomus: unraveling the taxonomic nightmare of loricariids."
2007. Bucks County Aquarium Society, Philadelphia, PA. "Paraphyly and the plecostomus: unraveling the taxonomic nightmare of loricariids."
2006. Greater Potomac Aquarium Society Catfish Meeting, Baltimore, MD. "Paraphyly and the plecostomus: unraveling the taxonomic nightmare of loricariids."
2004. Department of Fisheries and Allied Aquacultures, Auburn, AL. "The Catfishes of the World and How We Intend to Describe Them All"
2004. Catfish Research Group, Wigan, England, two talks presented. "Paraphyly and the plecostomus: unraveling the taxonomic nightmare of loricariids" and "The Fishes of Guyana".
2003. Reinhardt College, Waleska, GA. "The Fishes of Guyana: Journeys into the Mountains and Savannas".
2001. Auburn University, Beta Beta Beta honors biology society, Auburn, AL.
2001. Auburn University, Department of Fisheries and Allied Aquacultures, Auburn, AL.
2000. Atlanta Area Aquarium Society, Atlanta, GA.
2000. Auburn University, Beta Beta Beta, biological honors society, Auburn, AL.
2000. Auburn University, Department of Physics Awards Banquet, Tallahassee, AL.
2000. Auburn University, College of Science and Math Awards Banquet, Auburn, AL.
1999. Auburn University, Department of Biological Sciences, Auburn, AL.
1998. National Museum of Natural History, Smithsonian Institution, Washington, DC.
1998. Los Angeles County Natural History Museum, Los Angeles, CA.
1998. University of Minnesota, St. Paul, MN.
1998. Smithsonian Tropical Research Institute, Balboa, Panamá.
1998. Auburn University, Department of Zoology and Wildlife Science, Auburn, AL.
1997. Cornell University, Ithaca, NY

1997. University of Illinois, Department of Ecology, Ethology, and Evolution, Urbana, IL.

1997. Champaign-Urbana Aquarium Society, Urbana, IL.

Papers presented at Professional Meetings

*indicates paper with a graduate student author

** indicates paper with undergraduate student author

§ indicates invited presentations

95. Tan, M, and **J.W. Armbruster**. 2017. Diagnosing Effects of Systematic Error and Phylogenetic Signal in Phylogenomics: A Case Study on the Order Cypriniformes. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Austin, TX. 20% JWA.

94. Sperstad, Z., P. Berendzen, A. Simons, **J.W. Armbruster**, E. Lemmon, and A. Lemmon. 2017. Phylogenomics of Catostomidae. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Austin, TX. 5% JWA (presented by JWA).

93. *Stout, C.C. and **J.W. Armbruster**. 2017. Molecular systematics of Notropis and related shiners (Cypriniformes: Leuciscidae). Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Austin, TX. 40% JWA (presented by JWA).

92. **J.W. Armbruster**, N.K. Lujan, D.C. Werneke, and D. Bloom. 2017. The Characidium declivirostre group with description of two new species (Characiformes: Crenuchidae). Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Austin, TX. 80% JWA.

91. Tan, M, and **J.W. Armbruster**. 2017. Diagnosing Effects of Systematic Error and Phylogenetic Signal in Phylogenomics: A Case Study on the Order Cypriniformes. Evolution 2017, Portland, OR. 20% JWA.

90. *Hart, P. and **J.W. Armbruster**. 2016. Molecular relationships within *Typhlichthys subterraneus* (Percopsiformes: Amblyopsidae) and conservation implications. Southeastern Fishes Council Annual Meetings, Jackson, MS. 30% JWA. Third place in best student paper competition.

89. *Burress, E.D., J.M. Holcomb, M. Tan, and **J.W. Armbruster**. 2016. Ecological diversification associated with the benthic-to-pelagic transition by North American Minnows. Southeastern Fishes Council Annual Meetings, Jackson, MS. 30% JWA. Third place in best student paper competition.

88. **Armbruster, J.W.**, N.K. Lujan, and L.S. deSouza. The Proto-Berbice, an Ancient River that Influences the Modern Distributions and Conservation Challenges of Freshwater Fishes throughout the Western Guiana Shield. IVth International Congress on Biodiversity of the Guiana Shield, Georgetown, Guyana.

87. *Tan, M, and **J.W. Armbruster**. 2016. Transcriptome Evolution of Paedomorphic Cyprinidae. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, New Orleans, LA. 30% JWA.

86. * Hayes, M. and **J.W. Armbruster**. 2016. A new genus of minnow in West Africa and a new species

- from the Ogooué River Basin in Gabon (Cypriniformes: Cyprinidae). Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, New Orleans, LA. 30% JWA.
85. * Burress, E.D., J. Casciotta, O. Rican, L. Piálek, M. Tan, and **J.W. Armbruster**. 2016. Parallel Phenotypic Diversification and Rapid Speciation of *Crenicichla* Species Flocks: Riverine Analogs to the East African Great Lake Cichlids. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, New Orleans, LA. 10% JWA.
84. * Burress, E.D., F. Alda, P. Chakrabarty, and **J.W. Armbruster**. 2016. Phylogenomics of the Pike Cichlids (Cichliformes: Cichlidae: Crenicichla). Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, New Orleans, LA. 10% JWA.
83. *Burress, E.D., J. Casciotta, O. Rican, L. Piálek, M. Tan, and **J.W. Armbruster**. 2016. Parallel Phenotypic Diversification and Rapid Speciation of *Crenicichla* Species Flocks: Riverine Analogs to the East African Great Lake Cichlids. Evolution 2016, Austin, TX. 10% JWA.
- 82.*Tan, M, and **J.W. Armbruster**. 2016. Functional genomic evolution of paedomorphic Cypriniformes. Evolution 2016, Austin, TX. 30% JWA.
- 81.*Stalley, M, G. Hill, **J.W. Armbruster**, and C. Bonneaud. 2016. Insights into the factors limiting disease emergence in a natural host-pathogen system. Evolution 2016, Austin, TX. 5% JWA.
- 80.*Tan, M, and **J.W. Armbruster**. 2016. The All Cypriniformes Tree of Life: A Resource for Comparative Studies Applied to Diversification and Evolution of Body Size. Society for Integrative and Comparative Biologists, Portland, OR. 30% JWA.
79. * ** Benesh, K., M. Tan, & **J.W. Armbruster**. 2015. Urbanization and range stability of *Etheostoma tallapoosae* and *Etheostoma stigmaeum*. Southeastern Fishes Council, Gainesville, FL. 25% JWA.
78. *Tan, M. & **J.W. Armbruster**. 2015. Minnows on the Edge: Incorporating Phylogeny into Conservation Biology. Southeastern Fishes Council, Gainesville, FL. 25% JWA.
77. * **Hayes, M., E.R. Krahl, D.C. Werneke, & **J.W. Armbruster**. 2015. Population genetics of the Broadstripe Shiner, *Pteronotropis euryzonus*, an endemic species of the Middle Chattahoochee River. Southeastern Fishes Council, Gainesville, FL. 25% JWA. **WINNER**, best student paper.
76. * Hart, P.B. & **J.W. Armbruster**. 2015. Shape Variation among Lineages of the Southern Cavefish Species Complex in the Southeastern U.S. Southeastern Fishes Council, Gainesville, FL. 30% JWA.
75. ***Armbruster, J.W.**, E.D. Burress, S. Ferdous, M. Tan, and P.L. Wieczorek. 2015. Evolutionary ecology of the Cyprinidae. Southeastern Fishes Council, Gainesville, FL. 75% JWA.
74. *Tan M. & **J.W. Armbruster**. 2015. Transcriptome Evolution of Paedomorphic Cyprinids. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Reno, NV. Cypriniformes Inventory Symposium. 30% JWA.

73. §*Tan M. & **J.W. Armbruster**. 2015. The All Cypriniformes Tree of Life: A Resource for Comparative Studies Applied to Diversification and Evolution of Body Size. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Reno, NV. Cypriniformes Inventory Symposium. 30% JWA.
72. §*Stout, C.C., M. Tan. & **J.W. Armbruster**. 2015. Phylogeography of Leuciscinae. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Reno, NV. Cypriniformes Inventory Symposium. 30% JWA.
71. §*Hayes, M.M. & **J.W. Armbruster**. 2015. Morphological Investigation of the African Minnow Genus *Enteromius*. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Reno, NV. Cypriniformes Inventory Symposium. 30% JWA.
70. *Hart, P.B. & **J.W. Armbruster**. 2015. Systematics of the Southern Cavefish Species Complex in the Southeastern U.S. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Reno, NV. 30% JWA.
69. *Burress, E.D., M. Tan, & **J.W. Armbruster**. 2015. Craniofacial Diversification Across the Cichlid Fish Adaptive Radiation. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Reno, NV. 10% JWA.
68. * **Benesh, K. M. Tan, & **J.W. Armbruster**. 2015. Shape Variation and Evolution in the Genus *Phenacobius*. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Reno, NV. 10% JWA.
67. §***Armbruster, J.W.**, M. Tan, M.M. Hayes, & C.C. Stout. 2015. The Cypriniform African Invasion. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Reno, NV. Cypriniformes Inventory Symposium. 80% JWA.
66. §* **Hayes, M., E.R. Krahl, D.C. Werneke, and **J.W. Armbruster**. 2015. Population Genetics of the Broadstripe Shiner. Southern Division of the American Fisheries Society (SDAFS). Savannah, GA. (Oral Presentation), 25% JWA.
65. §***Armbruster, J.W.**, E.D. Burress, S. Ferdous, and P.L. Wieczorek. 2015. Evolutionary ecology of the Cyprinidae. Southern Division of the American Fisheries Society (SDAFS). Savannah, GA. (Oral Presentation), 75% JWA.
64. *Tan, M., C.C. Stout, A.R. Lemmon, E.M. Lemmon, & **J.W. Armbruster**. 2015. Phylogeny of paedomorphic fishes of Cypriniformes using anchored phylogenomics. Society of Integrative and Comparative Biology, West Palm Beach, FL.
63. *Burress, E.D., Holcomb, J.M., & **Armbruster, J.W.** 2014. The influence of phylogeny on minnow ecology, behavior, and physiology. Southeastern Fishes Council. Annual Meeting, Asheville, NC. (Oral presentation). 20% JWA. **WINNER**, best student paper.
62. *Hart, P.B., and **J.W. Armbruster**. 2014. Preliminary data for diagnosing putative lineages of the Southern Cavefish (*Typhlichthys subterraneus*) in Alabama. Southeastern Fishes Council Conference. Asheville, NC. (Poster). 20% JWA. **WINNER**, best student poster.

61. *Burress, E.D., M. Tan, & **J.W. Armbruster**. 2014. Ecological diversification among Neotropical Cichlid fishes. Joint Meeting of Ichthyologists and Herpetologists. Annual Meeting, Chattanooga, TN. 10% JWA
60. Ferdous, S. & **J.W. Armbruster**. 2014. Molecular phylogeny of catfish genus *Mystus* (Siluriformes:Bagridae). Asian Fish Biodiversity Conference (AFBC), Penang, Malaysia. (Oral Presentation). 20% JWA.
59. * **Krahl, Erika R., M. M. Hayes, D. C. Werneke, C. C. Stout, **J. W. Armbruster**. 2014. Genetic Structure and Dispersal Potential of the *Pteronotropis euryzonus* (Suttkus, 1955). American Society of Ichthyologists and Herpetologists. Chattanooga, TN. (Oral Presentation). 20% JWA.
58. *M. Tan, C.C. Stout, A.R. Lemmon, E.M. Lemmon, & **J.W. Armbruster**. 2014. Phylogenomics and the evolution of paedomorphism in Cyprinidae. Evolution 2014, Raleigh, NC. (Oral Presentation). 10% JWA.
57. *Tan, M. & **J.W. Armbruster**. 2014. What is Miniaturization? Evolution of body size in diminutive southeast Asian minnows of the subfamily Danioninae. Auburn University Graduate Scholars Forum. (Oral Presentation). 10% JWA.
56. *Diallo, S., **J.W. Armbruster**, et al. 2014. The Freshwater Fishes of Guinea. American Society of Ichthyologists and Herpetologists, Chattanooga, TN, 30 July – 3 August 2014.
55. *Hart, P.B. and **J.W. Armbruster**. 2014. Morphological Variation Among Southern Cavefish (*Typhlichthys subterraneus*) Lineages in Alabama. American Society of Ichthyologists and Herpetologists, Chattanooga, TN, 30 July – 3 August 2014.
54. Lujan, N.K., **J.W. Armbruster**, N.R. Lovejoy, and H. López-Fernández. 2014. Multilocus Molecular Phylogeny of the Suckermouth Armored Catfishes (Siluriformes: Loricariidae) with a Focus on the Subfamily Hypostominae. American Society of Ichthyologists and Herpetologists, Chattanooga, TN, 30 July – 3 August 2014.
53. *Ferdous, S. and **J.W. Armbruster**. 2014. The Identity of Catfishes Identified as *Mystus gulio* (Hamilton, 1822) (Teleostei: Bagridae), and Designation of a Neotype. American Society of Ichthyologists and Herpetologists, Chattanooga, TN, 30 July – 3 August 2014.
52. ***Armbruster, J.W.**, C.C. Stout, and M.M. Hayes. 2014. An Empirical Test for Convergence and Social Mimicry Using African Barbs (Cypriniformes). American Society of Ichthyologists and Herpetologists, Chattanooga, TN, 30 July – 3 August 2014.
51. *Tan, M., C.C. Stout, A.R. Lemmon, and **J.W. Armbruster**. 2014. Phylogenomics and the Evolution of Paedomorphism in the Cyprinidae. American Society of Ichthyologists and Herpetologists, Chattanooga, TN, 30 July – 3 August 2014.
50. *Stout, C.C., M. Tan, A.R. Lemmon, and **J.W. Armbruster**. 2014. Preliminary phylogeny of Cypriniformes based on anchored hybrid enrichment with a focus on Leuciscinae (true minnows). American Society of Ichthyologists and Herpetologists, Chattanooga, TN, 30 July – 3 August 2014.

49. *Hayes, M.M. and **J.W. Armbruster**. 2014. Making Sense of the Confusion: A molecular assessment of the genus 'Barbus' (Cypriniformes: Cyprinidae). American Society of Ichthyologists and Herpetologists, Chattanooga, TN, 30 July – 3 August 2014.
48. *Burruss, E.D., M. Tan, **J.W. Armbruster**. 2014. Ecological Diversification Among Adaptive Radiations of Neotropical Cichlids. American Society of Ichthyologists and Herpetologists, Chattanooga, TN, 30 July – 3 August 2014.
47. *Tan, M., C.C. Stout, A.R. Lemmon, and **J.W. Armbruster**. 2014. Many Trees for Mini Fishes: Phylogenomic analysis and gene tree discordance in paedomorphic cyprinid fishes. Southeastern Ecology and Evolution Conference, Georgia Southern University, GA.
46. *Stout, C.C., M. Tan, A.R. Lemmon, and **J.W. Armbruster**. 2014. Preliminary phylogeny of Cypriniformes based on anchored hybrid enrichment with a focus on Leuciscinae (true minnows). Southeastern Ecology and Evolution Conference, Georgia Southern University, GA.
45. ***Armbruster, J.W.**, M. L. Niemiller, and P.B. Hart. 2013. Status of the Southern Cavefish (*Typhlichthys subterraneus*) in Alabama and Tennessee. Southeastern Fishes Council, Guntersville State Park, AL, 14-15 November 2013.
44. * **Krahl, E. M.M. Hayes, D. C. Werneke, and **J. W. Armbruster**. 2013. Genetic Structure and Dispersal Potential of *Pteronotropis euryzonus* (Suttkus, 1955). Southeastern Fishes Council, Guntersville State Park, AL, 14-15 November 2013.
43. *Ray, C.K. and **J. W. Armbruster**. 2013. Where Did You Come From, Where Did You Go? A Look at *Rhinchthys atratulus* in the Black Warrior Basin. Southeastern Fishes Council, Guntersville State Park, AL, 14-15 November 2013.
42. *Stout, C.C., M. Raley, and **J.W. Armbruster**. Genetic structure and geometric morphometrics of *Notropis longirostris*. Southeastern Fishes Council, Guntersville State Park, AL, 14-15 November 2013.
41. *Wieczorek, P. and **J.W. Armbruster**. 2013. Can morphology accurately predict the successfulness of introduced species? Southeastern Fishes Council, Guntersville State Park, AL, 14-15 November 2013. 20% JWA.
40. *Hayes, M.M. and **J. W. Armbruster**. 2013. A Preliminary Phylogeny of West African 'Barbus' (Cyprinidae). Fifth International conference of the PanAfrican Fish And Fisheries Meeting, Bujumbura, Burundi, 18-22 Spetember, 2013.
39. ***Armbruster, J.W.**, C.C. Stout, and M.M. Hayes. 2013. Convergence of Species of "Barbus" in Cameroon. Fifth International conference of the PanAfrican Fish And Fisheries Meeting, Bujumbura, Burundi, 18-22 Spetember, 2013.
38. *Hayes, M.M. and **J. W. Armbruster**. 2013. A Preliminary Phylogeny of West African 'Barbus' (Cyprinidae). American Society of Ichthyologists and Herpetologists, Albuquerque, NM, 10-15 July 2013.

37. *Tan, M. and **J.W. Armbruster**. 2013. What is Miniaturization?: Lack of Miniaturization in the Evolution of Body Size in a Group Including Some of the Smallest Fishes in the World (Danioninae: Cyprinidae). American Society of Ichthyologists and Herpetologists, Albuquerque, NM, 10-15 July 2013. ASIH Stoye Award in General Ichthyology best student oral presentation. 20% JWA.
36. *Wieczorek, P. and **J.W. Armbruster**. 2013. Can morphology accurately predict the successfulness of introduced species? American Society of Ichthyologists and Herpetologists, Albuquerque, NM, 10-15 July 2013. 20% JWA.
35. *Tan, M. and **J.W. Armbruster**. 2013. Body size evolution of the Danioninae. Southeastern Ecology and Evolution Conference, University of Central Florida, FL. 20% JWA.
34. ***Armbruster, J. W.**, M. Hayes, and S. Ferdous, 2012. The shapes of *Lythrus* and what they mean for systematics and ecology. All Cypriniformes Species Inventory Project (ACSII) International Conference in Chiang Mai, Thailand, 13–16 January 2012.
33. ***Armbruster, J. W.** 2012. Standardized measurements, landmarks, and meristic counts for cypriniform fishes. All Cypriniformes Species Inventory Project (ACSII) International Conference in Chiang Mai, Thailand, 13–16 January 2012.
32. ***Armbruster, J. W.** 2012. Workshop on using Geometric Morphometrics. All Cypriniformes Species Inventory Project (ACSII) International Conference in Chiang Mai, Thailand, 13–16 January 2012.
31. *Ferdous, S. and **J. W. Armbruster**. 2012. Geometric Morphometrics as a tool to elucidate phylogenies: a review and test. Evolution Society, Ottawa, Canada, 2012.
30. Lujan, N.K., K. O. Winemiller, and **J. W. Armbruster**. 2012. Trophic diversity in the evolution and community assembly of loricariid catfishes. Evolution Society, Ottawa, Canada, 2012.
29. * **Tan, M. E., C. Williams, and **J. W. Armbruster**. 2011. Geometric morphometric analysis of *Hybopsis* (Cyprinidae). Southeastern Fishes Council, Chattanooga, TN.
28. ***Armbruster, J. W.**, M. Hayes, and S. Ferdous, 2011. The shapes of *Lythrus* and what they mean for systematics and ecology. Southeastern Fishes Council, Chattanooga, TN.
27. *Ray, C. K. and **J. W. Armbruster**. 2011. Redescription and morphometric analysis of *Isorineloricaria* (Siluriformes: Loricariidae). Joint Meeting of Ichthyologists and Herpetologists, Minneapolis, MN.
26. ***Armbruster, J. W.** 2010. Linear Thinking and its Perils in Understanding the Evolution of Amblyopsid Cavefishes (Teleostei: Percopsiformes). Joint Meeting of Ichthyologists and Herpetologists, Providence, RI.
25. §**Armbruster, J. W.** 2010. “Global Catfish Diversity”. Catfish 2010: Conservation, Ecology, and Management of Catfish: The Second International Symposium. Plenary.

24. §**Armbruster, J.W.** 2009. Loricarioid Catfishes: Species Diversity and Phylogeny. Joint Meeting of Ichthyologists and Herpetologists, Portland, OR; All Catfish Species Inventory Symposium.
23. **Armbruster, J.W.** 2008. Morphological phylogeny of the cavefishes (Amblyopsidae). Southeastern Fishes Council, Chattanooga, TN.
22. *Correa, S.B., **J.W. Armbruster**, and R. Betancur-R. 2008. Feeding Ecology of an Introduced Generalist Frugivorous Fish: the Fate of Pacu in the Sepik River, Papua New Guinea. Joint Meeting of Ichthyologists and Herpetologists, Montreal, Canada. 10% JWA.
21. **Armbruster, J.W.** and D.C. Werneke. 2008. Status survey of the Crystal Darter in Uphapee Creek, Mason Co., Alabama Department of Conservation and Natural Resources and Department of Fisheries and Allied Aquacultures, Auburn University, Annual Review Meeting. Auburn, AL. 75% JWA.
20. ***Armbruster, J.W.**, N.K. Lujan, and L. S. de Souza. 2007. Repeated trends in the biogeography of loricariid catfishes. American Society of Ichthyologists and Herpetologists. St. Louis, MO. 75% JWA.
19. **Armbruster, J.W.** and M.H. Hardman. 2006. Can morphology be misleading in loricariid phylogenetics? American Society of Ichthyologists and Herpetologists, New Orleans, LA.
18. *de Souza, L.S. and **J.W. Armbruster**. 2006. Taxonomy and biogeography of the loricariid catfish *Peckoltia sabaji*. American Society of Ichthyologists and Herpetologists, New Orleans, LA. 30% JWA.
17. *Lujan, N.K. and **J.W. Armbruster**. 2006. Phylogenetically informative new loricariid genera from the Western Guyana Shield. Poster. American Society of Ichthyologists and Herpetologists, New Orleans, LA. 30% JWA.
16. §Sabaj, M.H., **J.W. Armbruster**, C.J. Ferraris, Jr., J.P. Friel, J. G. Lundberg, and L.M. Page. All Catfish Species Inventory (ACSI) midterm report. American Society of Ichthyologists and Herpetologists, New Orleans, LA. 10% JWA.
15. **Armbruster, J.W.** 2005. Revisions of the Loricariid Catfish of the Genera *Lasiancistrus* and *Peckoltia* Sensu Stricto, American Society of Ichthyologists and Herpetologists, Tampa, FL.
14. Friel, J.P., **Armbruster, J. W.**, Ferraris, C. J. Jr.; Lundberg, J. G.; Page, L. M.; Sabaj, M. H. 2005. All catfish species inventory: 2005 progress report. American Society of Ichthyologists and Herpetologists, Tampa, FL. 10% JWA.
13. **Armbruster, J.W.** 2004. Neotropical catfishes and how we plan to describe them all. Southeastern Division of the American Fisheries Society, Oklahoma City, OK.
12. **Armbruster, J. W.** 2003. The hypostomine loricariids of Guyana. American Society of Ichthyologists and Herpetologists, Manaus, Brazil.

11. Sabaj, M. H. and **J. W. Armbruster**. 2003. Interesting fishes from 2002 Guyana Expedition with comments on their biogeography. American Society of Ichthyologists and Herpetologists, Manaus, Brazil. 25% JWA.
10. Reis, R., E. L. Pereira, and **J. W. Armbruster**. 2003. Delturinae, a new loricariid catfish subfamily (Teleostei, Siluriformes). American Society of Ichthyologists and Herpetologists, Manaus, Brazil. 10% JWA.
9. **Armbruster, J. W.** 2002. What is a Genus? American Society of Ichthyologists and Herpetologists, Kansas City, MO.
8. ***Armbruster, J. W.** 2000. New Insights in Loricarioid Systematics and a Reappraisal of the Decoupling Hypothesis. American Society of Ichthyologists and Herpetologists, La Paz, Baja California Sur, Mexico.
7. **Armbruster, J. W.** 2000. Resurrection of the Auburn University Museum Fish Collection. Alabama Fisheries Society, Alabama.
6. **Armbruster, J. W.** 1998. Relationships of the Suckermouth Armored Catfishes (Loricariidae) and the Evolution of Wood-eating in *Cochliodon*. American Society of Ichthyologists and Herpetologists, Guelph, Ontario, Canada.
5. **Armbruster, J. W.** 1997. Systematics of the neotropical catfish family Loricariidae with particular emphasis on Hypostominae. American Society of Ichthyologists and Herpetologists, Seattle, WA.
4. Sabaj, M. H., **J. W. Armbruster**, and L. M. Page. 1997. Spawning in *Ancistrus* (Siluriformes: Loricariidae) with comments on the evolution of snout tentacles as a novel reproductive strategy: Larval mimicry. American Society of Ichthyologists and Herpetologists, Seattle, WA. 20% JWA.
3. **Armbruster, J. W.** 1996. Adaptations for air breathing in loricariid and scoloplacid catfishes. Neotropical Ichthyological Association Symposium, American Society of Ichthyologists and Herpetologists, New Orleans, LA.
2. **Armbruster, J. W.** 1995. Revision of *Aphanotorulus* and its relationships within Hypostominae (Siluriformes, Loricariidae). American Society of Ichthyologists and Herpetologists, Edmonton, Alberta, Canada.
1. **Armbruster, J. W.** and L. M. Page. 1993. Convergence in a camouflage pattern in benthic freshwater fishes. American Society of Ichthyologists and Herpetologists, Austin, TX.

Exhibitions

Provided material for All Catfish Species Inventory exhibit, Academy of Natural Sciences, Philadelphia, PA. 2003-present.



Performances (local)

Spring 2009. Played Charles Darwin for the Department of Biological Sciences Darwin Celebration. Dressed as Darwin for lectures and for a birthday celebration on the Auburn University concourse.

Worldwide Web Publications

2002. FISHBOT - a computer-based fish identification tool. The FISHBOT is designed to take keys and species field guides into the 21st century. The FISHBOT uses interactive tables instead of couplets to separate species, provides photographs and short comparisons to other species to make sure that you have identified the fish correctly, and then leads you to a detailed description of the species. This project was designed and implemented by my systematic ichthyology class. 100% Auburn. No longer active.

2001, revised in 2005 by COSAM IT. Auburn University Museum Mammal Database Access site. https://fp.auburn.edu/cosam/fish_search/search.asp. 100% Auburn.

2000. Duckfest: an Ichthyological Exploration of the Duck River, Tennessee. A description and photos of a collecting trip to the Duck River attended by most of the major ichthyologists in the southeastern United States. <http://george.cosam.auburn.edu:591/duckfest/duckfest.html>. 100% Auburn. No longer active.

1999, revised 2001, 2002. Auburn University Museum Fish Collection Website. The website details the collection and includes a searchable database designed by **J.W. Armbruster** that provides locality information for all of the fish collection and photographs for some of the specimens. <http://www.auburn.edu/cosam/collections/fish/index.htm>. 100% Auburn.

1999, revised by COSAM IT in 2005. Auburn University Museum Herp Database Access site. https://fp.auburn.edu/cosam/herp_search/search.asp. 100% Auburn.

1999, majorly revised in 2005. Loricariidae Home Page. A set of pages detailing my work on the suckermouth armored catfishes. The pages provide a key to the genera and detailed descriptions and photographs of all genera. Some species are also described and keys are provided. The pages are accessed by scientists and aquarists the world over.

http://www.auburn.edu/academic/science_math/res_area/loricariid/fish_key/lorhome/index.html.

100% Auburn.

8. Funded Grants and Contracts.

PI is listed first, on collaborative proposals, lead institution is indicated. Shaded sections are AUMNH grants on which I am a PI/co-PI for a total of \$930,804 since becoming Director in 2016 and \$1,737,484 total.

Title	PI's	Source Period Budget	Funded (mo/yr)
Establishment of Wetland Reference Sites in Alabama	B. Helms, D. Steen, M. Barbour, A. Schotz, and J.W. Armbruster	Environmental Protection Agency 8/17-8/19 \$229,452	Funded 8/2017
Environmental Education at the Robert G Wehle Nature Center	J.W. Armbruster and M. K. Stone	Alabama Department of Conservation and Natural Resources 8/17-7/18 \$21,000	Funded 8/2017
Planning Level Survey of Redstone Arsenal for At-Risk Species and Ecologically Significant Communities	J.W. Armbruster , Jim Godwin, David Steen, Brian Helms, Jason Bond, Michael Barbour	Department of Defense, Redstone Arsenal 9/30/16-12/15/17 \$242,366	Funded (5/17)
RAPID: Aquatic refuge and recovery in the face of drought in a biodiversity hotspot	B. Helms, J.W. Armbruster , M. Barbour, J. Godwin, and D.C. Werneke	NSF/ 3/15/2017-3/14/2018 \$170,986	Funded 3/17
Creation of a display for Auburn University's Dinosaur Egg	J.W. Armbruster	Auburn University Tiger Giving Day 2/17-12/17 ~12,000	Funded 2/17
Range-wide status assessment of <i>Phlox pulchra</i> (Wherry's Phlox)	J.W. Armbruster and A. Schotz	US Fish and Wildlife Service 10/16-9/18 \$15,000	Funded 9/16
Range-wide status assessment of <i>Hexastylis speciosa</i> (Harper's Ginger)	J.W. Armbruster and A. Schotz	US Fish and Wildlife Service 10/16-9/18 \$15,000	Funded 9/16

Addition to Planning Level Survey of Redstone Arsenal for At-Risk Species and Ecologically Significant Communities	J.W. Armbruster , Michael Barbour, Jim Godwin, Curtis Hansen, Al Schotz, David Steen, Jason Bond	Department of Defense, Redstone Arsenal 9/30/16-12/15/17 \$29,000	Funded 9/16
Planning Level Survey of Redstone Arsenal for At-Risk Species and Ecologically Significant Communities	J.W. Armbruster , Michael Barbour, Jim Godwin, Curtis Hansen, Al Schotz, David Steen, Jason Bond	Department of Defense, Redstone Arsenal 9/30/16-12/15/17 \$170,000	Funded 9/16
Environmental Education at the Robert G Wehle Nature Center	J.W. Armbruster and M. K. Stone	Alabama Department of Conservation and Natural Resources 8/16-7/17 \$21,000	Funded 8/2016
Turkey Creek Survey for Flattened Musk Turtle	J.W. Armbruster and J. Godwin	US Fish and Wildlife Service 7/16-10/18 \$5,000	Funded 7/2016
Impacts of mining on fish diversity and diet in the Mazaruni river basin, Guyana	E. Liverpool, D.C. Taphorn H. López- Fernández J.W. Armbruster	University of Guyana \$33,000 No money to Auburn (3/1/15-3/1/16)	Funded 2/2015
Aquatic Biodiversity of the Western Guiana Shield	J.W. Armbruster (PI) N.K. Lujan	COYPU Foundation \$48,983 (10/1/14-10/1/16)	Funded (10/2014)
The Range and Relationships of Three Undescribed Species of <i>Typhlichthys</i> (Percopsiformes: Amblyopsidae) in Alabama	J.W. Armbruster (PI) M.L. Niemiller	Alabama Department of Conservation and Natural Resources Section 6 \$14,800.00 (10/1/15-10/1/16)	Funded (10/2014)
Conservation status of amblyopsid cavefishes (family Amblyopsidae) and other cave-obligate fauna in Tennessee	M.L. Niemiller (PI) J.W. Armbruster K. Zigler	Tennessee State Wildlife Grants \$14,000	Funded (6/2012)
Documenting new undescribed species of the cavefish genus <i>Typhlichthys</i> (Percopsiformes: Amblyopsidae) in Alabama	J.W. Armbruster (PI) M.L. Niemiller	Alabama Department of Conservation and Natural Resources Section 6 \$11,091.00	Funded (10/2012)
Collaborative PBI: All Cypriniformes Species – Phase II of an Inventory of the Otophysi	L.M. Page (UF, lead institution) J.W. Armbruster R.L. Mayden (SLU)	National Science Foundation 2010-2014 \$785,482 AU portion \$2,680,578 total	Funded (9/10)
Improvements to the Auburn University Natural History Museum	L. Goertzen (PI) J.W. Armbruster J. Feminella (AU-DBS) C. Guyer (AU-DBS)	National Science Foundation 2010-2013 \$429,878	Funded (2/10)

Environmental Impact Assessment of a Bauxite Mine in Suriname	J.W. Armbruster	ERM (contract) 2009-2010 ~\$23,000 to date	Funded (9/09)
Supplement to All Catfish Species Inventory Project (supplement provided from the parent grant's participant funds)	J.W. Armbruster (PI) R. Betancur (AU-DBS) L.S. de Souza (AU-DBS)	National Science Foundation/University of Florida 2007 \$32,000	Funded (07/07)
Viability of the Crystal Darter in Uphapee Creek	J.W. Armbruster (PI) D.C. Werneke (AU-DBS)	Alabama Department of Conservation and Natural Resources 2006-2007 \$6,000	Funded (10/06)
Supplement to Systematics of Guyana and Brazilian Shield Endemic Catfishes of the Tribe Ancistrini and Biogeography of the Shield Regions	J.W. Armbruster	National Science Foundation 2004-2005 \$18,304	Funded (04/04)
The Acoustical Environment of Suckermouth Armored Catfishes and How it is Affected by Morphology	J.W. Armbruster	Auburn University Competitive Research Grants 2004-2005 \$2,954	Funded (04/04)
PBI: All Catfishes Species Inventory – Phase I of an Inventory of the Otophysi	L.M. Page (PI, UF) J.W. Armbruster C.J. Ferraris (UF) J.P. Friel (Cornell) J.L. Lundberg (ANSP) M.H. Sabaj (ANSP)	National Science Foundation 2003-2009 \$447,089 AU portion \$4,688,504 total	Funded (09/03)
Improvements to the Auburn University Aquatic Invertebrate, Fish, and Reptile Collections	J.W. Armbruster (PI) J. Feminella (AU-DBS) C. Guyer (AU-DBS)	National Science Foundation 2003-2005 \$347,602	Funded (05/03)
Sound Production as a Potential Management Tool for Cavefishes (Amblyopsidae)	J.W. Armbruster (PI) C.E. Johnston (AU-FAA)	Alabama Department of Conservation and Natural Resources 2001-2002 \$10,000	Funded (06/01)
Systematics of Guyana and Brazilian Shield Endemic Catfishes of the Tribe Ancistrini and Biogeography of the Shield Regions	J.W. Armbruster	National Science Foundation 2001-2004 \$238,267	Funded (08/01)
Recovery of a Swamp Fish Assemblage from Drought	J.W. Armbruster (PI) C.E. Johnston (AU-FAA)	USDA Forest Service 2001 \$6,000	Funded (02/01)
Herp and Fish Georeferencing Project	C. Guyer (PI, AU-DBS) J.W. Armbruster	Alabama State Lands Division	Funded (04/04)

		2000-2001 \$15,000	
Herp and Fish Georeferencing Project	C. Guyer (PI, AU-DBS) J.W. Armbruster	USDA Forest Service 1999-2000 \$1,500	Funded (09/99)
Herp and Fish Georeferencing Project	C. Guyer (PI, AU-DBS) J.W. Armbruster	Alabama State Lands Division 1999-2000 \$12,700	Funded (07/98)
The Fishes of Guyana	L.M. Page (PI, INHS) J.W. Armbruster	National Geographic \$25,000	Funded (06/98)

Description of Scholarly Program

My work is on the systematics, taxonomy, and evolutionary ecology of South American Catfishes, minnows and their relatives in North America, Eurasia, and Africa, and the North American Cavefishes. My lab has also worked on the systematics of the deep-sea swallows (Chiasmodontidae) and the marine catfishes (Ariidae), evolutionary ecology of cichlids, population genetics of the Rupununi Region of Guyana, and biogeography of freshwater and marine fishes. I use morphology, genetics, and genomics to assess relationships of fishes, and use those phylogenies to ask questions on the origins and maintenance of diversity in fishes. I also do basic survey work, with most work currently concentrated in the caves of Alabama and the South American country of Guyana (last 10 years: Bangladesh, Cameroon, Democratic Republic of Congo, Guinea, Guyana, New Guinea, Peru, Suriname, Thailand, Uruguay, Venezuela, Redstone Arsenal, AL). We were also awarded an NSF RAPID award in 2017 to study the ability of fishes, crayfishes, and mussels to recolonize drought affected streams based on the vagility of the species; this study will involve qualified sampling and environmental DNA. The main projects are listed below.

The systematics of the South American catfish subfamily Hypostominae (Loricariidae) based on osteology, digestive tract anatomy, genetics, and genomics.

Description of new species of suckermouth armored catfishes (Loricariidae), worm catfishes (Trichomycteridae), cavefishes (Amblyopsidae), and South American darters (Crenuchidae).

Functional ecology of feeding in loricariid catfishes.

Survey of the fishes of Guyana.

Phylogenetics and taxonomy of the North American cavefishes (Amblyopsidae).

Taxonomy of minnows of the tribe Smiliogastrini in Africa.

Evolutionary ecology of North American minnows.

Effects of vagility of stream organisms to recolonize streams after extreme drought.

In addition, as curator of the Auburn University Museum Fish Collection, I am concerned with collection maintenance and growth. I have increased access to the collections via the internet, have increased the number of loans of material we fill, and increased the number of specimens accessioned into the museum. We received NSF collections improvement grants in 5/03 and 5/10 for the collections. Partially due to my leadership, we have hired three collection managers and received funding for casework for the bird and mammal collections and built a new building to house the collections on the central campus. The fish collection database is searchable on its own database, vernet, and GBIF.

Outreach

Commentary

Description. My involvement with the Auburn University Museum entails a significant amount of outreach to the community. The collections are served on the web so that anyone can retrieve the data. I am also actively involved in identifying exotic species around the world.

I have produced a web page on the fishes that I study that is used widely by the scientific and aquarium communities. Aquarists have translated the pages a few times into other languages. The fishes I study are in high demand by aquarists, and I frequently give talks at aquarium societies where I describe the process of what goes into describing species. A colleague that attended one of these meetings called my description of modern taxonomy the best presentation of the information he has heard.

I have also been involved in AUExplore, COSAM's annual presentation to younger students and I give tours of the museum collections.

As director of the museum, I am in charge of the numerous outreach efforts of the museum, and am seeking to develop educational materials to go along with museum activities. We have received funding for the museum's first official display (for a dinosaur egg) in 2017.

Mission. Make collections data and taxonomic information broadly available.

Scholarship. I produce all of my own materials based on my scientific studies.

Impact. My web site is broadly used by scientists and aquarists.

Outreach publications- sample of publications on or about my research

Note, the Peckoltia greedoi, description was taken up by news organizations around the world, and below are just 2 of the earliest examples. Also, the dinosaur egg display that we have planned has received significant local press, and below are two examples.

11. Yawn, A.J. Montgomery Advertiser, Modern tech has Alabama dinosaur egg ready to hatch.

<http://www.wsfa.com/story/34659638/cr-12-rare-dinosaur-egg-at-auburn>

10. Davis, J. 2017. County Road 12, WSFA: Rare dinosaur egg at Auburn.

<http://www.wsfa.com/story/34659638/cr-12-rare-dinosaur-egg-at-auburn>

9. Landau, J. 2015. Auburn professor names new catfish species after 'Star Wars' character Greedo. New York Daily News. <http://www.nydailynews.com/new-catfish-species-named-star-wars-character->

[greedo-article-1.2152656.](#)

8. Izadi, Elahe. 2015. The newest species of catfish is named after Greedo from 'Star Wars'. Washington Post. <http://www.washingtonpost.com/news/speaking-of-science/wp/2015/03/17/the-newest-species-of-catfish-is-named-after-greedo-from-star-wars/>
7. Dell'Amore, C. 2012. Pictures: New Suckermouth Armored Catfish Discovered. National Geographic Daily News. April 10, 2012. http://news.nationalgeographic.com/news/2012/04/pictures/120410-new-armored-suckermouth-catfish-discovery-animals-science/#/tan-armbruster-catfish-1_51291_600x450.jpg
6. Barnett, A. 2004. Strange but true: Bush-face. BBC Wildlife Magazine, 22(2):32. Popular description of larval mimicry hypothesis of Sabaj et al. (1999).
5. Hoover, A. 2004. Catfish Hunters. Explore: Research at the University of Florida, Spring 2004:18-23.
4. Leslie, M. 2003. Netting new catfish. Science 299:1289. Description of website developed for the All Catfish project.
3. Montaigne, F. 2002. Catfish Hunters. National Geographic Magazine, May 2002. Article on our 1998 expedition to Guyana.
2. **Armbruster, J. W.** 2001. In Search of the Lost World of Loricariids: An Adventure to the Potaro River, Guyana. Harnischwelse II, special publication of D.A.T.Z. 100% Auburn. Article on our 1998 trip to Guyana.
1. Seidel, I. 2001. Interview: Jonathan W. Armbruster. Harnischwelse II, special publication of D.A.T.Z. German aquarium magazine that caters to catfish enthusiasts.

Electronic products.

2002. FISHBOT - a computer-based fish identification tool. The FISHBOT is designed to take keys and species field guides into the 21st century. The FISHBOT uses interactive tables instead of couplets to separate species, provides photographs and short comparisons to other species to make sure that you have identified the fish correctly, and then leads you to a detailed description of the species. This project was designed and implemented by my systematic ichthyology class. 100% Auburn. No longer active.

2001, revised in 2005 by COSAM IT. Auburn University Museum Mammal Database Access site. https://fp.auburn.edu/cosam/fish_search/search.asp. 100% Auburn. No longer active.

2000. Duckfest: an Ichthyological Exploration of the Duck River, Tennessee. A description and photos of a collecting trip to the Duck River attended by most of the major ichthyologists in the southeastern United States. <http://george.cosam.auburn.edu:591/duckfest/duckfest.html>. 100% Auburn. No longer active.

1999, revised 2001, 2002. Auburn University Museum Fish Collection Website. The website details the collection and includes a searchable database designed by **J.W. Armbruster** that provides locality

information for all of the fish collection and photographs for some of the specimens.
<http://www.auburn.edu/cosam/collections/fish/index.htm>. 100% Auburn. No longer active, but a new site is up for specimens (<http://www.csm.auburn.edu/specify-solr/fishvouchers/>) and tissues (<http://www.csm.auburn.edu/specify-solr/fishtissues/>), and collections are available on fishnet (fishnet2.net), vertnet (<http://portal.vertnet.org/search>), and GBIF (<http://www.gbif.org>).

1999, revised by COSAM IT in 2005. Auburn University Museum Herp Database Access site.
https://fp.auburn.edu/cosam/herp_search/search.asp. 100% Auburn.

1999, majorly revised in 2005. Loricariidae Home Page. A set of pages detailing my work on the sucker-mouth armored catfishes. The pages provide a key to the genera and detailed descriptions and photographs of all genera. Some species are also described and keys are provided. The pages are accessed by scientists and aquarists the world over.
http://www.auburn.edu/academic/science_math/res_area/loricariid/fish_key/lorhome/index.html.
100% Auburn.

Service

University

Spring 2016-2017 – Alumni Professor Awards Committee

Spring 2016 – Auburn University Intramural Grants Program Panel.

Spring 2010-present – Faculty Advisor for the Auburn Secular Students Alliance.

Spring 2009 – played the roll of Charles Darwin in the departments celebration of the 200th anniversary of his birth and 150th anniversary of the publication of “Origin of Species”. Attended lectures and events dressed as Darwin.

October 2002 – Helped in the development of a display for the Auburn University Natural History Learning Center in the Dean’s tent at Homecoming.

November 2000, February 2001 - provided tours of the Auburn University Museum Fish Collection to Auburn University classes.

February 1999 – talked to kindergarten children about fishes at the Child Study Center, Auburn University.

College

GUTS (getting under the surface) program – October 2016, provided a lesson on fish anatomy and morphology to fifth-sixth graders.

Science Café – August 2016, provided a lecture/discussion on the use of drones in biodiversity research.

Provided displays/demonstrations at AUExplore – April 2005-present

March 1999, 2000, February 2001 – Science Olympiad, wrote and proctored the test for the water quality section.

Member of the Dean's Medalist Committee, 1999-present.

Department

Member of the Graduate Studies Committee, 2016-present.

Member of the Ecophysiological Search Committee, 2015-2016.

Member Tenure and Promotion Committee, 2015-present

Leader of the Evolutionary Genetics and Systematics Core, 2014-2016.

Member of the DBS Strategic Planning Committee, 2013-2016.

Chair of the Director of the Auburn University Museum of Natural History search committee 2010-2011.

Member of the Vertebrate Physiologist search committee 2009-2011

Member of the Plant Systematist search committee 2003-2004

Member of the awards committee 2002-2005

Member of the Department Chair Search Committee 2002-2003

Member of the Funds for Excellence Undergraduate Research Awards Committee, 2000-present.

Member of the Marine Biologist Search Committee, 2000-2002.

Member Biology 1010 Course Committee, Dept. of Biological Sciences, 2000.

Member of Museum Collections Committee, Dept. of Biological Sciences, 1998-present, chair 2003-2006, 2016-present

Marine Biological Society Faculty Advisor, 1998-2002.

Professional Service

Society Affiliations

American Association for the Advancement of Science: 1997-2004

American Society of Ichthyologists and Herpetologists: 1991-present

Biological Society of Washington: 1997-2004

Neotropical Ichthyological Association: 1995-present

Society of Systematic Biologists: 1997-present

Editorship

Associate Editor, Ichthyology, *Zootaxa*. January 2016-present.

Associate Editor, General Ichthyology, *Copeia* (the journal of the American Society of Ichthyologists and Herpetologists). October 2002-2006.

Committees

Member Awards Committee, Annual meeting of the American Society of Ichthyologists and Herpetologists, American Elasmobranch Society, and Herpetologist's League, Kansas City, MO, 2002.

Chair Special Publications Committee, American Society of Ichthyologists and Herpetologists, 2001 - present.

Member Awards Committee, Annual meeting of the American Society of Ichthyologists and Herpetologists, American Elasmobranch Society, and Herpetologist's League, Guelph, Ontario, Canada, 1999.

Member Local Committee, Annual meeting of the American Society of Ichthyologists and Herpetologists, American Elasmobranch Society, and Herpetologist's League, Champaign, Illinois, 1992.

Reviews (303 journal articles as of 2016)

- 2016: Biological Journal of the Linnean Society – 2, *Copeia* – 1, European Journal of Taxonomy – 1, Journal of Fish Biology – 1, Molecular Phylogenetics and Evolution -1, Neotropical Ichthyology – 1, Peer J – 1, Zoological Journal of the Linnean Society – 1, Plos 1 – 1, Zookeys – 1, Zoologica Scripta – 1, *Zootaxa* (associate editor) - 27
- 2015: *Acta Ethologica* – 1, Aquatic Conservation, Marine and Freshwater Ecosystems – 1, Bioinvasion Records – 1, *Copeia* – 3, *Cybium* – 1, *Hydrobiologia* – 1, Journal of Biogeography – 1, Journal of Fish Biology – 2, Molecular Phylogenetics and Evolution – 1, Neotropical Ichthyology – 2, NSF – 1, Subterranean Biology – 1, Systematic Biology – 2, Zoological Journal of the Linnean Society – 6, *Zoologica Scripta* – 2, Zookeys – 2, *Zootaxa* – 3.
- 2014: Animal Biodiversity and Conservation – 1, Biodiversity Data Journal – 1, *Copeia* – 1, Evolutionary Biology – 1, Molecular Phylogenetics and Evolution – 1, Neotropical Ichthyology – 1, NSF – 1, *Revista Caldasia* – 1, Zookeys – 3, and *Zootaxa* – 2
- 2013: African Journal of Biotechnology – 1, AUJUS – 1, Bioinvasions – 1, Biology Letters – 2, Checklist - 1, *Copeia* – 1, Journal of Tropical Ecology – 1, Neotropical Ichthyology – 1, Zoological Journal of the Linnean Society – 2, NSF (IOS Panel) – 12, Zookeys – 1, and *Zootaxa* – 5
- 2012: Bioinvasions – 2, Bioscience – 1, *Copeia* – 1, Journal of Biogeography – 1, Journal of Fish Biology – 1, Journal of Natural History – 1, Neotropical Ichthyology – 2, *Revista Biología Tropical* – 1, Zoological Journal of the Linnean Society – 1, and *Zootaxa* – 5.
- 2011: Journal of Fish Biology – 2, Neotropical Ichthyology – 1, Zoological Journal of the Linnean Society (3).

- 2010: Copeia -2, Zoological Studies – 1, Neotropical Ichthyology – 1.
- 2009: Aquatic Invasions -1, Biosciences -1, Copeia -2, Neotropical Ichthyology -2, NSF -1, Zootaxa -1.
- 2008: Acta Ichthyologica et Piscatoria – 1, Biochemical Genetics -1, Biological Invasions – 1, Book Chapter – 1, Copeia – 1, Marine and Freshwater Research – 1, National Geographic Grant – 2, Neotropical Ichthyology – 2, NSF – 1, Proceedings of the Academy of Natural Sciences of Philadelphia – 1.
- 2007: Bioscience – 1, Copeia - 2, Environmental Biology of Fishes – 2, Journal of Fish Biology -2, Neotropical Ichthyology – 2, NSF – 1, Physiological and Biochemical Zoology – 1, Southeastern Naturalist – 1, Zoological Journal of the Linnean Society – 1, Zootaxa – 1.
- 2006: Copeia –18 (all but 2 as editor), Neotropical Ichthyology – 2, Environmental Biology of Fishes – 1, Journal of Fish Biology – 1, General Biology Text – 4 chapters, National Science Foundation – 3, Zootaxa – 3.
- 2005: Copeia –28 (all but 1 as editor), Neotropical Ichthyology – 5, General Biology Text – 3 chapters, National Science Foundation – 22 (served on the Biological Research Collections panel in September), Zootaxa – 3.
- 2004: Copeia –27 (all but 1 as editor), Neotropical Ichthyology – 3, Genetica – 1, General Biology Text – 13 chapters, Journal of Fish Biology – 1, National Science Foundation – 17 (served on the Biological Research Collections panel in September), Zootaxa – 1.
- 2003: Biological Society of Washington-1, Copeia 29 (28 as editor), Neotropical Ichthyology – 2, Zootaxa-1, National Science Foundation-1, Comparative Anatomy lab manual.
- 2002: Copeia-13 (8 as editor), Ichthyological Exploration of Freshwaters-1, Journal of Fish Biology-1, National Science Foundation-2, 10 chapters of a general biology text.
- 2001: Copeia-3, Ichthyological Exploration of Freshwaters-3, Proceedings of the Academy of Natural Sciences of Philadelphia-1, National Science Foundation-15
- 2000: Journal of Fish Biology-1, National Science Foundation-1
- 1999: Ichthyological Exploration of Freshwaters-1, Copeia-2
- 1998: Book: *Phylogeny and Classification of Neotropical Fishes*-1, Copeia-1, Ichthyological Exploration of Freshwaters-1.

NSF Panels

Division of Environmental Biology, four panels. Division of Integrative Organismal Systems – one panel and one preproposal panel.