

BRENT P. THOMA

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SUMMARY:

- **Peer-reviewed publications:** 15 (plus 2 *in review*)
- **Competitive grants or research awards:** 6 (total of \$239,260), 2 pending (total of 1.2 million)
- **Oral or poster presentations:** 22
- **Students mentored:** 2 undergraduates (Jing Zhang, 3+ years; Simon J. Pecnik, 3+ years)
- **Museum experience:** long-term work experience at 3 different museums, 3 trips as a visiting scientist
- **Field experience:** 6 research cruises, 9 coastal expeditions in SE Gulf of Mexico and off Belize
- **Classes taught:** 5 laboratories, one semester-long and one 7-week lecture & lab course, 20 guest lectures, and 2 teaching assistantships

PRIMARY RESEARCH INTERESTS:

- Evolution, phylogenetic systematics, ecology, biogeography, population genetics, and taxonomy of aquatic invertebrates with an emphasis on malacostracan crustaceans (e.g. crabs, lobsters, shrimp, krill, scuds, and mantis shrimp)
- Transcriptomics and the role differential gene expression plays in shaping patterns of speciation
- Patterns of speciation and population biology of Crustacea, with emphasis on the mechanisms of dispersal in taxa without planktonic larval stages

PRIMARY TEACHING INTERESTS:

Evolution, Phylogenetic Systematic Methods, Evolutionary Ecology, Marine Biology, Invertebrate Zoology, Introduction to Genomics, Organismal Biology, Aquatic Ecology, Limnology, Evolution & Adaptation of Arthropods, Population Biology, Molecular Biology, Oceanography, Genetics, Parasitology, Molecular Evolution, Biodiversity, Crustacean Biology, Biogeography, Scientific Illustration, Use of Databases in Collection Management

PROFESSIONAL EXPERIENCE:

Post-doctoral Research Associate: 2012-present, Laboratory for Crustacean Research, Department of Biology, University of Louisiana-Lafayette.

Graduate Research Assistant: 2011, Department of Biology, University of Louisiana-Lafayette.

Board of Regents Doctoral Fellow: 2006-2010, Department of Biology, University of Louisiana-Lafayette.

Instructor: 2005, Department of Coastal Sciences, Gulf Coast Research Laboratory, The University of Southern Mississippi.

EDUCATION:

- **Ph.D. Environmental and Evolutionary Biology**, University of Louisiana-Lafayette, 2012, Advisor: D.L. Felder
- **M.S. Coastal Sciences**, The University of Southern Mississippi, Gulf Coast Research Laboratory, 2006, Advisor: R.W. Heard
- **B.A. Biology with Honors**, University of Missouri-Columbia, 2003

PEER REVIEWED PUBLICATIONS:

- Felder, D.L., **B.P. Thoma**, W. Schmidt, T. Sauvage, S. Self-Krayesky, A. Chistoserdov, and H. Bracken-Grissom, S. Fredericq. 2014. Monitored Seaweeds and Decapod Crustaceans on Northwestern Gulf Deep Banks following the Deepwater Horizon Oil Spill. *BioScience*. 64: 808-819.
- Thoma, B.P.**, D. Guinot, and D.L. Felder. 2014. Evolution of American mud crabs (Crustacea, Decapoda, Brachyura, Xanthoidea) inferred from nuclear and mitochondrial markers with comments on adult morphology. *Zoological Journal of the Linnaean Society*. 170: 86-109. DOI: 10.1111/zoj.12093 (Early View posted online on 18 Dec 2013)
- Lai, C.Y., **B.P. Thoma**, P.K.L. Ng, P.C. Clark, and D.L. Felder. 2014. Phylogeny of eriphioid crabs (Brachyura, Eriphioidea) inferred from molecular and morphological studies. *Zoologica Scripta*. 43 (1): 52-64. DOI: 10.1111/zsc.12030 (Early View posted online on 18 Aug 2013)
- Lasley, R.M., C.Y. Lai, and **B.P. Thoma**. 2013. A new genus for *Chlorodiella longimana* (H. Milne Edwards, 1834) supported by morphology and molecular data, and a preliminary phylogeny of the subfamily Chlorodiellinae (Crustacea: Decapoda: Xanthidae). *Invertebrate Systematics*. 27 (4): 379-390. DOI: 10.1071/IS12075
- Thoma, B.P.**, P.K.L. Ng, and D.L. Felder. 2012. Review of the family Platyxanthidae Guinot, 1977 (Crustacea, Decapoda, Brachyura, Eriphioidea), with the description of a new genus and a key to genera and species. *Zootaxa*. 3498: 1-23.
- Thoma, B.P.** and D.L. Felder. 2012. Redescription of *Hexapanopeus lobipes* and its reassignment to *Milnepanopeus* n. gen. (Decapoda: Brachyura: Panopeidae). *Journal of Crustacean Biology*. 32 (1): 141-152.
- Felder, D.L. and **B.P. Thoma**. 2010. Description of *Etisus guinotae* n. sp., and discussion of its recent discovery in the Gulf of Mexico (Brachyura, Decapoda, Xanthidae). In Castro, P., P.J.F. Davie, P.K.L. Ng, & B. Richer de Forges (eds.) *Studies on Brachyura: a homage to Daniele Guinot*. *Crustacean Monographs* 11: 117-138.
- Thoma, B.P.**, C.D. Schubart, and D.L. Felder. 2009. Molecular phylogeny of the western Atlantic representatives of the genus *Hexapanopeus* (Decapoda: Brachyura: Panopeidae). In: Martin, J.W., K.A. Crandall, and D.L. Felder (eds.) *Decapod Crustacean Phylogenetics*. *Crustacean Issues*. Koenemann, S. (series ed.) Vol. 18. Boca Raton, London, New York: CRC Press, Taylor & Francis Group. 551-565 pp.
- Thoma, B.P.**, R.W. Heard, and D.L. Felder. 2009. Redescription of *Pinnixa arenicola* Rathbun, 1922 (Decapoda: Brachyura: Pinnotheridae), with new observations on its range and hosts. *Proceedings of the Biological Society of Washington*. 122 (1): 72-80.
- Thoma, B.P.** and R.W. Heard. 2009. A new species of the genus *Gammarus* (Crustacea: Amphipoda: Gammaridae) from the low salinity habitats in the northern Gulf of Mexico. *Zootaxa*. 2015: 42-54.
- Thoma, B.P.** 2008. Notes on crabs of the families Goneplacidae and Dorippidae (Decapoda: Brachyura) from the Dampier Archipelago, Western Australia. *Records of the Western Australian Museum Supplement No. 73*: 299-302.
- Heard, R.W., R.A. King, D.M. Knott, **B.P. Thoma**, and S. Thornton-DeVictor. 2007. A guide to the Thalassinidea (Crustacea: Malacostraca: Decapoda) of the South Atlantic Bight. *NOAA Professional Papers Series NMFS* 8: i-iii, 1-30.
- Thoma, B.P.**, R.W. Heard, and R. Vargas. 2005. A new species of *Parapinnixa* (Decapoda: Brachyura: Pinnotheridae) from Isla del Coco, Costa Rica. *Proceedings of the Biological Society of Washington*. 118 (3): 543-550.
- Foster, J.M., **B.P. Thoma**, and R.W. Heard. 2004. Range extensions and a review of the caprellid amphipods (Crustacea: Amphipoda: Caprellidae) from the shallow, coastal waters of the northern Gulf of Mexico (Suwannee River, Florida to Port Aransas, Texas) with an illustrated key to the species. *Gulf and Caribbean Research* 16: 161-175.

Foster, J.M., **B.P. Thoma**, and R.W. Heard. 2004. Stomatopoda (Crustacea: Hoplocarida) from the shallow, inshore waters of the northern Gulf of Mexico (Apalachicola River, Florida to Port Aransas, Texas). *Gulf and Caribbean Research* 16: 49-58.

GRANTS AWARDED (dollar amounts listed are those awarded to B.P. Thoma):

- **National Science Foundation: International Research Fellowship Program:** 2012, “Towards a Global Synthesis of Mud Crabs: Utilizing Phylogenetic Relatedness to Derive a Biologically Meaningful Classification and Infer Historical Origins of Cryptogenic Taxa”, Senior Principal Investigator (\$141,500), awarded but declined.
- **EDIT Support for Exchange of Researchers, "Old World, New World Xanthoidea: a synthesis":** 2010-2011, European Distributed Institute of Taxonomy, Participant, (Senior Principal Investigator - Paul Clark) (\$2,250).
- **Board of Regents Doctoral Fellowship:** 2006-2010, Louisiana State Board of Regents Doctoral Support Fund, University of Louisiana-Lafayette, Recipient (\$90,000).
- **Graduate Student Organization: Research Funds Grant:** 2006-2012 University of Louisiana-Lafayette, Recipient (\$3,750).
- **Bearcat Grant:** 2001, Northwest Missouri State University, Recipient (\$1,500).
- **E.B. Stueben Student Support Fund:** 2009, University of Louisiana-Lafayette, Recipient (\$260).

RESEARCH AND WORK EXPERIENCE:

Post-doctoral Research Associate, *Gulf of Mexico Research Initiative*: 2012-present, University of Louisiana-Lafayette, Lafayette, Louisiana.

Responsibilities: Design and implementation of hydrocarbon exposure studies, collection and analysis of RNASeq data, assessment of health of decapods on offshore hard banks (analysis of microbial lesion and gill-fouling data), mentor independent undergraduate researchers, train graduate students in field and laboratory techniques.

Graduate Research Assistant, *NSF-funded RAPID project*: 2011, University of Louisiana-Lafayette.

Responsibilities: Identification of macrocrustaceans from offshore banks.

Louisiana State Board of Regents Doctoral Fellow, *Assembling the Tree of Life: Decapoda*: 2006-2010, University of Louisiana-Lafayette.

Responsibilities: Morphological and molecular analysis of Cancroidea and Xanthoidea *sensu lato*.

Graduate Research Assistant, *Compass Point Decapod Larvae Project*: 2005-2006, The University of Southern Mississippi, Gulf Coast Research Laboratory, Invertebrate Zoology Section, Ocean Springs, Mississippi.

Responsibilities: Identification of decapod larvae from plankton.

Graduate Research Assistant, *Gulf Coast Research Laboratory Museum*: 2004-2005, The University of Southern Mississippi, Gulf Coast Research Laboratory Museum, Ocean Springs, Mississippi.

Responsibilities: Maintenance of Museum collections and database.

Graduate Research Assistant, *Sturgeon Feeding Grounds, Benthic Biodiversity Study*: 2004, The University of Southern Mississippi, Gulf Coast Research Laboratory, Invertebrate Zoology Section, Ocean Springs, Mississippi.

Responsibilities: Identification of benthic invertebrate species.

Student Laboratory Technician, *Arthropod Ecology Lab*: 2002-2003, University of Missouri-Columbia, Department of Biology, Columbia, Missouri.

Responsibilities: Identification of insects and arachnids from leaf litter samples.

Student Technician, *Northwest Missouri State University Museum*: 2000-2001, Northwest Missouri State University, Department of Biology, Maryville, Missouri.

Responsibilities: Maintenance of collections for General Zoology, Ornithology, Mammalogy, and Herpetology.

POSTERS AND PRESENTATIONS:

- Thoma, B.P.** 2013. Evolution and diversity of American mud crabs. California State University Stanislaus, Department of Biological Sciences, Turlock, California. Invited Speaker.
- Thoma, B.P.** 2013. Marine Invertebrate Zoology: Why I love it. UL-Lafayette Biological Society, Department of Biology, University of Louisiana-Lafayette. Invited Speaker.
- Thoma, B.P.** 2013. Molecular and morphological diversity of American mud crabs. Louisiana State University Museum Seminar Series, Baton Rouge, Louisiana. Invited Speaker.
- Thoma, B.P.**, J.C.Y. Lai, J.C. Mendoza, P.F. Clark, D. Guinot, P.K.L. Ng, and D.L. Felder. 2013. Evolutionary relationships of the superfamily Xanthoidea MacLeay, 1838 inferred from nuclear and mitochondrial markers. The Crustacean Society & Latin American Association of Carcinology Summer Meeting, San José, Costa Rica. July 7th-11th. Abstract, international. Oral presentation.
- Thoma, B.P.** 2013. Evolution of American mud crabs. Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institute, Washington, D.C. Invited Speaker.
- Felder, D.L., S. Fredericq, **B.P. Thoma**, E. Palacios-Theil, H.D. Bracken, and K. Crandall. 2013. Assessment of Deepwater Horizon spill impacts on shelf and slope decapod crustaceans. Gulf of Mexico Oil Spill & Ecosystem Conference, New Orleans, Louisiana. January 21st-23rd. Abstract, national. Oral presentation.
- Bracken-Grissom, H.D., D.L. Felder, **B.P. Thoma**, P. Cabezas, and K. Crandall. 2013. Biodiversity discoveries and gene expression studies applied to assess the stress response of decapod crustaceans affected by the Gulf of Mexico Deepwater Horizon oil spill. Gulf of Mexico Oil Spill & Ecosystem Conference, New Orleans, Louisiana. January 21st-23rd. Abstract, national. Oral presentation.
- Thoma, B.P.** 2012. Evolution of American mud crabs. Department of Biology, University of Wisconsin-Stevens Point, USA. Invited Speaker.
- Felder D.L., **B.P. Thoma**, E. Palacios-Theil, H. Bracken-Grissom, K.A. Crandall, and A.Y. Chistoserdov. 2012. Assessment of deepwater horizon spill impacts on benthic decapod crustaceans, 60-200m. Ocean Sciences Meeting, Salt Lake City. February 20th-24th. Abstract, regional. Oral presentation.
- Thoma, B.P.** and D.L. Felder. 2011. Phylogeography and hypotheses on historical origins for American panopeid and pseudorhombilid crabs (Brachyura: Xanthoidea). The Crustacean Society Summer Meeting, Honolulu, Hawaii, USA. June 6th-9th. Abstract, international. Oral presentation.
- Thoma, B.P.** and D.L. Felder. 2010. Molecular phylogeny of Xanthoidea sensu Ng et al. (2008), with emphasis on the Pseudorhombilidae. Seventh International Crustacean Congress, Qingdao, China. June 20th-25th. Abstract, international. Poster presentation.
- Felder, D.F., H.D. Bracken-Grissom, K.A. Crandall, J.A. Cuesta, S. De Grave, P.C. Dworschak, M. Ettinger, M. Finley, D. Kim, F.A. Mantelatto, J.W. Martin, E. Palacios Theil, G.C.B. Poore, J. Rasmussen, R. Robles, C.D. Schubart, **B.P. Thoma**, A. Toon, D. Tshudy, and A.M. Windsor. 2010. Molecular phylogeny of decapod crustaceans: Branches on the Tree of Life and their evolutionary implications. Seventh International Crustacean Congress, Qingdao, China. June 20th-25th. Abstract, international. Invited plenary talk.
- Bracken, H.D., D.L. Felder, J.W. Martin, R. Robles, **B.P. Thoma**, A.M. Windsor, E. Palacios-Theil, J. Rasmussen, D. Kim, and K. Crandall. 2009. A tree of life phylogeny for the Decapoda. The Crustacean Society Summer Meeting, Tokyo, Japan. September 20th-24th. Abstract, international. Oral presentation.
- Thoma, B.P.** and D.L. Felder. 2009. Molecular phylogeny of Xanthoidea sensu Ng et al. (2008), with emphasis on the subfamilies of Xanthidae. The Crustacean Society Summer Meeting, Tokyo, Japan. September 20th-24th. Abstract, international. Poster presentation.
- Lai, J.C.Y., **B.P. Thoma**, P.K.L. Ng, and D.L. Felder. 2008. Molecular phylogeny of the superfamily Eriphioidea (Crustacea: Decapoda: Brachyura): is the Eriphioidea monophyletic? The Crustacean Society Summer Meeting, Galveston, Texas. June 9th-13th. Abstract, international. Oral presentation.
- Thoma, B.P.**, C.D. Schubart, and D.L. Felder. 2008. Re-examination of *Hexapanopeus*, *Acantholobulus*, and related genera of the Panopeidae (Crustacea: Decapoda: Brachyura) by morphological and molecular methods. The Society of Integrative and Comparative Biology Annual Meeting, Henry B. Gonzalez Convention Center, San Antonio, Texas. January 2nd-6th. Abstract, international. Oral presentation.

- Thoma, B.P.** 2006. Pseudogenes as confounding factors in molecular phylogenetics. Seventh Annual Graduate Student Symposium. University of Louisiana-Lafayette. October 11th-13th. Abstract, regional. Oral presentation.
- Thoma, B.P.** 2005. The *Gammarus mucronatus* (Gammaridae, Amphipoda) species complex in the northern Gulf of Mexico: ecophenotypic variants or distinct species? XII International Colloquium on Amphipoda, National University of Ireland, Cork, Ireland. July 24th-27th. Non-abstract, international. Poster presentation.
- Thoma, B.P.** 2005. The *Gammarus mucronatus* (Gammaridae, Amphipoda) species complex in the northern Gulf of Mexico: ecophenotypic variants or distinct species? Sixth International Crustacean Congress, University of Glasgow, Glasgow, Scotland. July 17th-22nd. Abstract, international. Poster presentation.
- Thoma, B.P.** 2004. Taxonomy and morphology of the Decapoda. Florida Association of Benthologists Fall Crustacea Workshop, Long Key, Florida. October 13th-15th. Non-abstract, regional. Invited speaker.
- Foster, J.M. and **B.P. Thoma**. 2004. Preliminary investigations of the comparative occurrence of sponge dwelling amphipods in *Tedania ignis* (Porifera, Demospongiae, Tedaniidae) from a turtle grass bed and a red mangrove forest in the Florida Keys, USA. Annual Meeting of the Mississippi Academy of Sciences, Biloxi, Mississippi. February 19th-20th. Abstract, regional. Presenting author, poster presentation. Received Best Student Poster Award.
- Thoma, B.P.** and J.M. Foster. 2004. Comparative occurrence of sponge-dwelling amphipods in *Tedania ignis* (Demospongiae, Tedaniidae) from a turtle grass bed and a red mangrove forest in the Florida Keys, USA. Graduate Student Symposium co-hosted by The University of Southern Mississippi, University of South Alabama, and Louisiana State University, Gulf Coast Research Laboratory, Ocean Springs, Mississippi. January 30th-31st. Abstract, regional. Presenting author, oral presentation.

TEACHING EXPERIENCE:

- Survey of Marine Biology, Guest Lecturer (20 lectures):** 2009-2014 University of Louisiana-Lafayette, Department of Biology, Lafayette, Louisiana.
- Survey of Invertebrate Animals Laboratory, Instructor:** 2010, University of Louisiana-Lafayette, Department of Biology, Lafayette, Louisiana.
Responsibilities: Developed and implemented introductory lectures and discussion topics to complement lab exercises; developed, implemented, and evaluated student-assessment activities.
- Scientific Illustration and Biological Macrophotography, Lecturer & Laboratory Instructor (7-week module, graduate level - "Integration of Digital Techniques in Scientific Illustration"):** 2011, The University of Louisiana-Lafayette, Department of Biology, Lafayette, Louisiana.
Responsibilities: Developed and implemented lectures and laboratory exercises; developed, implemented, and evaluated student-assessment activities, including both in-class and independent projects.
- Special Problems in Taxonomic Database Development, Instructor & Course Developer:** 2005, The University of Southern Mississippi, Department of Coastal Sciences, Gulf Coast Research Laboratory, Ocean Springs, Mississippi.
Responsibilities: Designed and implemented course, including lectures, labs and student-assessment activities.
- Cell and Molecular Biology Laboratory, Instructor:** 2011, University of Louisiana-Lafayette, Department of Biology, Lafayette, Louisiana.
Responsibilities: Developed and implemented introductory lecture and discussion topics to complement lab exercises; developed, implemented, and evaluated student-assessment activities.
- Anatomy and Physiology Laboratory, Instructor:** 2012, University of Louisiana-Lafayette, Department of Biology, Lafayette, Louisiana.
Responsibilities: Implemented introductory lecture and discussion topics to complement lab exercises; developed, implemented, and evaluated student-assessment activities.

General Zoology Laboratory, Instructor: 2001 (Fall Semester), Northwest Missouri State University, Department of Biology, Maryville, Missouri.

Responsibilities: Developed and implemented introductory lectures and discussion topics to complement lab exercises; developed and evaluated student-assessment activities.

Marine Invertebrate Zoology, Teaching Assistant: 2004, Summer Field Program at The University of Southern Mississippi, Department of Coastal Sciences, Gulf Coast Research Laboratory, Ocean Springs, Mississippi.

General Zoology Laboratory, Teaching Assistant: 2001 (Spring Semester), Northwest Missouri State University, Department of Biology, Maryville, Missouri.

STUDENT MENTORING:

Undergraduate Honors Student (Jing Zhang), “Description of a new genus and species of Pseudorhombilidae (Crustacea: Decapoda: Brachyura)”: 2010-2013, University of Louisiana-Lafayette, Department of Biology, Lafayette, Louisiana.

Responsibilities: Mentoring the student as she develops and leads her own project; trained the student in molecular techniques, from DNA extraction to analyses of sequence data, taxonomy, and scientific illustration.

Undergraduate Technician and Independent Study Student (Simon J. Pecnik), “Revision of the brachyuran crab genus *Palicus* with emphasis on gonopod morphology”: 2009-2013, University of Louisiana-Lafayette, Department of Biology, Lafayette, Louisiana.

Responsibilities: Mentoring the student through daily activities associated with his independent study; training the student in museum curation and database maintenance, molecular techniques from DNA extraction to PCR, and scientific illustration.

MUSEUM EXPERIENCE:

University of Louisiana-Lafayette Zoological Collection (ULLZ), Research Associate; 2006-present, University of Louisiana-Lafayette, Lafayette, Louisiana.

Responsibilities: Creation and maintenance of a database for museum catalog and associated data including tissue samples, DNA extractions, PCR reactions, and sequence data associated with the collection. Train and oversee day-to-day activities of undergraduate technician(s) whose responsibilities include: cataloguing new materials (both in physical catalog and database), maintaining existing collections (e.g. adding preservative to samples in EtOH, upgrading jars and jar lids as required), processing loans (both incoming and outgoing).

Gulf Coast Research Laboratory Museum, Graduate Research Assistant: 2004-2005, The University of Southern Mississippi, Gulf Coast Research Laboratory Museum, Ocean Springs, Mississippi.

Responsibilities: Maintenance of Museum collections and database including: cataloguing new materials (both in physical catalog and database), maintaining existing collections (adding preservative to samples in EtOH and upgrading jars and jar lids as required), processing loans (both incoming and outgoing), backup and upgrade database system, interfacing with IT department to create web-accessible version of the database.

Northwest Missouri State University Museum, Student Technician: 2000-2001, Northwest Missouri State University, Department of Biology, Maryville, Missouri.

Responsibilities: Maintenance of teaching and research collections for General Zoology, Ornithology, Mammalogy, and Herpetology as well as exhibits for general public.

Smithsonian’s National Museum of Natural History, Museum Support Center, Visiting Scientist and Working-group participant: 2011 (14 days), Washington, D.C.

Responsibilities: Working with an international party including Drs. Peter Ng, Joelle Lai, J.C. Mendoza (National University of Singapore; Raffles Museum of Biodiversity), Danielle Guinot (Muséum National d'Histoire Naturelle, Paris), Paul Clark (Natural History Museum, London), and Darryl Felder (University of Louisiana-Lafayette; Laboratory for Crustacean Research) to integrate molecular and morphological

data to better understand phylogenetic relationships of the mud crabs on a global scale. Funded in-part by 'EDIT: Support for Exchange of Researchers'.

Smithsonian's National Museum of Natural History, Museum Support Center, Visiting Scientist: 2010 (6 days), Washington, D.C.

Responsibilities: Subsampling and identifying xanthoid material found in the Museum's accessioned material and collections.

Florida Museum of Natural History, Visiting Scientist: 2009 (3 days), University of Florida, Gainesville, Florida.

Responsibilities: Subsampling and identifying xanthoid material found in the Museum's accessioned material and collections.

FIELD EXPERIENCE:

2013, Research Scientist aboard the R/V Pelican, Gulf of Mexico Research Initiative funded expedition to the Gulf of Mexico; utilized box dredge and epibenthic skimmer to document decapod fauna of deepwater hard banks and collect samples to be used in transcriptome analyses and population genomics.

2012, Research Scientist aboard the R/V Pelican, Gulf of Mexico Research Initiative funded expedition to the Gulf of Mexico; utilized box dredge and epibenthic skimmer to document decapod fauna of deepwater hard banks and collect samples to be used in transcriptome analyses.

2012, Research Scientist at Smithsonian's Field Station on Carrie Bow Cay, Belize, Smithsonian Caribbean Coral Reef Ecosystems (CCRE) Program; collection and identification of benthic macrocrustaceans.

2012, Research Scientist aboard the R/V Tommy Munro, Florida SEAMAP; utilized fine-mesh otter trawl to collect fishery-independent data from sites along Florida's Gulf coast.

2011, Research Scientist aboard the R/V Pelican, National Science Foundation RAPID Expedition to the Gulf of Mexico; utilized box dredge and epibenthic skimmer to explore deepwater hard banks to record macrocrustacean diversity.

2010, Research Scientist aboard the R/V Pelican, National Science Foundation RAPID Expedition to the Gulf of Mexico; utilized box dredge and epibenthic skimmer to explore deepwater hard banks to record macrocrustacean diversity.

2008, Research Scientist at Smithsonian's Field Station on Carrie Bow Cay, Belize, Smithsonian Caribbean Coral Reef Ecosystems (CCRE) Program; shore collection of various benthic macrocrustaceans.

2004-2005, 2007-2008, 2010-2012, 2014, Volunteer for Bay Environmental Studies Team, 1 week each summer; collected benthic samples (snorkeling and SCUBA) from various habitats in St. Andrew Bay (Panama City), St. Joe Bay (Port St. Joe), and Florida Keys from Keys Marine Lab (Long Key) to Key West.

2005, Volunteer for Southeastern Regional Taxonomic Center aboard the R/V Nancy Foster; utilized otter trawl, box dredge, and ponar grab to collect benthic samples on hard-bottom habitats off Charleston, South Carolina.

2005, Volunteer for US Fish and Wildlife Service; collection of near shore benthic samples in suspected Gulf Sturgeon feeding grounds off Panama City, Florida.

HONORS AND AWARDS:

- **National Science Foundation: Research Experience for Undergraduates:** 2003, The University of Southern Mississippi and Jackson State University, Research Experience in Coastal and Marine Science Program.
- **Best Student Poster:** 2004, Annual Meeting of the Mississippi Academy of Sciences.
- **Recognition for achievement with distinction in the classroom and on the Major Field Test in Biology:** 2003, University of Missouri-Columbia, Division of Biological Sciences.
- **Transfer Regents Scholarship:** 2000-2001, Northwest Missouri State University.
- **Sharp Scholarship:** 2002, The University of Southern Mississippi, Gulf Coast Research Laboratory.

- **Dean's list:** 2002-2003, University of Missouri-Columbia.
- **Dean's list:** 2000-2001, Northwest Missouri State University.

VOLUNTEER AND SERVICE EXPERIENCE:

The Crabby Taxonomists (www.crabbytaxonomists.com). 2011-present. Creation and maintenance of a website to educate and excite the general public about marine invertebrates.

ULL Zoological Collection Catalog and Molecular Database. 2006-present. Creation and maintenance of a database that digitized the collection catalog and keeps track of all molecular work completed in the lab of Dr. Darryl Felder; University of Louisiana-Lafayette, Lafayette, Louisiana.

Graduate Student Symposium Organizing Committee. 2007. Department of Environmental and Evolutionary Biology, University of Louisiana-Lafayette, Lafayette, Louisiana.

Department of Biology Student Liaison to the Dean. 2001. Faculty elected position, liaison between students and the Dean of the College of Arts and Sciences; Northwest Missouri State University, Department of Biology, Maryville, Missouri.

Freshman Peer Advisor. 2001. Faculty nominated position, assisted faculty with setup and instruction of freshman seminar course, liaison between students and faculty of the Department of Biology; Northwest Missouri State University, Department of Biology, Maryville, Missouri.

Taxonomic Expert for AMRAT (Alabama-Mississippi Rapid Assessment Team). 2004. Identified crustacean specimens that were collected; Gulf Coast Research Laboratory, Ocean Springs, Mississippi.

Science Fair Judge. 2007. Louisiana Regional Science Fair; University of Louisiana-Lafayette, Lafayette, Louisiana.

Science Fair Judge. 2005. Ocean Springs Middle School, Ocean Springs, Mississippi.

Herpetology Proctor for Junior Science Olympiad. 2001. Northwest Missouri State University, Maryville, Missouri.

All in the family: A family tree for crabs. 2010. A presentation to 10th grade biology classes at Lafayette High School, Lafayette, Louisiana.

Peeling away the mystery of DNA: A banana DNA extraction lab. 2009. A presentation to 10th grade biology classes at Lafayette High School, Lafayette, Louisiana.

Carcinology: What is it and who cares? 2009. A presentation to 10th grade biology classes at Lafayette High School, Lafayette, Louisiana.

Invertebrate Zoology: Why should we care about critters without backbones anyway? 2008. A presentation to 10th grade biology classes at Lafayette High School, Lafayette, Louisiana.

Extinction of the Jellybelliidae: A laboratory exercise demonstrating natural selection in a predator-prey model. 2008. A presentation to 10th grade biology classes at Lafayette High School, Lafayette, Louisiana.

Carcinology: What is it and who cares? 2007. A presentation to 10th grade biology classes at Lafayette High School, Lafayette, Louisiana.

Wild Survival Tactics. 2004 & 2005. A presentation to 4th graders about the various tactics animals use to avoid predation in the wild; Popp's Ferry Elementary School, Biloxi, Mississippi.

PEER REVIEW:

Gulf and Caribbean Research; Journal of Experimental Marine Biology and Ecology; Journal of Crustacean Biology; Invertebrate Systematics; Journal of Heredity; Zoologica Scripta; Genetica (Gene)

PROFESSIONAL AFFILIATIONS (Past and Present):

The Biological Society of Washington; The Crustacean Society; Society of Systematic Biologists; The Willi Hennig Society; Society for Molecular Biology and Evolution; Golden Key International Honor Society; Phi Kappa Phi Honor Society; The Society for Integrative and Comparative Biology

PROFESSIONAL SKILLS:

ESRI Introduction to ArcGIS 1 Certified; May 2004.

PADI Open Water Certified SCUBA Diver; April 2004.

Snell Infrared, Level One Certified Infrared Thermographer; March 1999.