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Education

2013 Ph.D. *Marine Biology (in progress)* Texas A&M Univ-Corpus Christi Corpus Christi, TX
2006 B.S. *Biology, Environmental Science & Policy* Clark University Worcester, MA

Present Position

2010 – present *Graduate Research Assistant*, Fisheries and Ocean Health Research Group, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi, TX
Mentor: Dr. Greg Stunz, Endowed Chair for Fisheries and Ocean Health

Dissertation Research:

Title: Red snapper ecology in the Gulf of Mexico: Studies in mortality, recruitment, and connectivity.

Objectives: (1) Determine the effects of barotrauma on regulatory discard mortality using acoustic telemetry, (2) Tracking the potential spawning stock of the red snapper fishery using acoustic hydrophones, (3) Determine the extent of depredation experienced by regulatory discards in the red snapper fishery, (4) Assess the level of adaptive genetic variation present in red snapper populations in the Western Gulf of Mexico

2010 – present *Adjunct Faculty*, College of Science & Technology, Texas A&M University-Corpus Christi, TX

Professional Experience

2008 – 2009 *Graduate Teaching Assistant*, College of Science & Technology, Texas A&M University-Corpus Christi, TX
2007 – 2008 *Assistant Lab Manager*, Correlagen Diagnostics Inc., Waltham, MA
2006 – 2007 *Research Associate*, Correlagen Diagnostics Inc., Waltham, MA
2006 *Research Associate*, 21st Century Biochemicals, Marlboro, MA

- 2004 – 2006 *Undergraduate Research Assistant*, National Science Foundation REU, Biology Department, Clark University, Worcester, MA
- 2002 – 2006 *Proctor*, Goddard Library, Clark University, Worcester, MA
- 2001 *Research Technician*, Behavioral Sciences Department, New Mexico Highlands University, Las Vegas, NM

Teaching Experience

- 2010 *Adjunct faculty*, Professional Skills for Biologists, College of Science & Technology, Texas A&M University-Corpus Christi
- 2010 *Guest lecturer*, McNair Scholars workshop, Texas A&M University-Corpus Christi
- 2008 – 2009 *Teaching Assistant*, Functional Anatomy, Biochemistry II, Ecology, Marine Ecological Processes, Texas A&M University-Corpus Christi
- 2001 – 2002 *Assistant High School Teacher*, Brummana High School, Brummana, Lebanon

Publications

- 2008 Morra M, Geigenmuller U, Curran J, Rainville IR, Brennan T, **Curtis J**, Reichert V, Hovhannisyann H, Majzoub J, Miller DT. Genetic diagnosis of primary immune deficiencies. *Immunology and Allergy Clinics of N. Am.* 28(2): 387-412.
- 2007 Matheny PB, Wang Z, Binder M, **Curtis JM**, Lim YW, Nilsson RH, Hughes KW, Hofstetter V, Ammirati JF, Schoch CL, Langer E, Langer G, McLaughlin DJ, Wilson AW, Frøslev T, Ge ZW, Kerrigan RW, Slot JC, Yang ZL, Baroni TJ, Fischer M, Hosaka K, Matsuura K, Seidl MT, Vauras J, Hibbett DS. Contributions of *rpb2* and *tef1* to the phylogeny of mushrooms and allies (Basidiomycota, Fungi). *Molecular Phylogenetics and Evolution* 43: 430-451.
- 2006 Matheny PB, **Curtis JM**, Hofstetter V, Aime MC, Moncalvo JM, Ge ZW, Slot JC, Ammirati JF, Baroni TJ, Bougher NL, Hughes KW, Lodge DJ, Kerrigan RW, Seidl MT, Aanen DK, DeNitis M, Daniele GM, Desjardin DE, Kropp BR, Norvell LL, Parker A, Vellinga EC, Vilgalys R, Hibbett DS. Major clades of Agaricales: a multilocus phylogenetic overview. *Mycologia* 98(6): 982-995.
- 2006 James TY, Kauff F, Schoch CL, Matheny PB, Hofstetter V, Cox CJ, Celio G, Gueidan C, Fraker E, Miadlikowska J, Lumbsch HT, Rauhut A, Reeb V, Arnold AE, Amtoft A, Stajich JE, Hosaka K, Sung GH, Johnson D, O'Rourke B, Crockett M, Binder M, **Curtis JM**, Slot JC, Wang Z, Wilson AW, Schüssler A, Longcore JE, O'Donnell K, Mozley-Standridge S, Porter D, Letcher PM, Powell MJ, Taylor JW, White MM, Griffith GW, Davies DR, Humber RA, Morton JB, Sugiyama J, Rossman AY, Rogers JD, Pfister DH, Hewitt D, Hansen K, Hambleton S, Shoemaker RA, Kohlmeyer J, Volkmann-Kohlmeyer B, Spotts RA, Serdani M, Crous PW, Hughes KW, Matsuura K, Langer E, Langer G, Untereiner WA, Lücking R, Büdel B, Geiser DM, Aptroot A, Diederich P, Schmitt I, Schultz M, Yahr R, Hibbett DS, Lutzoni F, McLaughlin DJ,

Spatafora JW, Vilgalys R. Reconstructing the early evolution of the fungi using a six gene phylogeny. *Nature* 443(7113): 818-822.

Proceedings, Symposia, & Conference Presentations

* Denotes Best Presentation; †International/National; ^ΔRegional/Local

- 2010 **Curtis JM**, Stunz GW, Overath RD, Vega RR. Detection of wild versus hatchery-reared spotted seatrout using otolith chemistry. American Society of Ichthyologists and Herpetologists Annual Meeting. Providence, RI. †
- 2010 Lannon CR, Stunz GW, Johnson MW, **Curtis JM**. Sink or swim: Catch and release mortality of red snapper (*Lutjanus campechanus*). NSF Summer Undergraduate Research Symposium. Corpus Christi, TX. ^Δ
- 2010 *Pizano R, **Curtis JM**, Robillard MM, Stunz GW. Effects of barotraumas on red snapper (*Lutjanus campechanus*) in the Gulf of Mexico. Tenth Annual Sigma Xi Undergraduate Research Symposium. Texas A&M University - Corpus Christi, TX. ^Δ
- 2009 **Curtis JM**, Stunz GW, Overath RD, Vega RR. Identification of wild versus hatchery-reared spotted seatrout using otolith chemistry. American Society of Ichthyologists and Herpetologists Annual Meeting. Portland, Oregon †
- 2006 **Curtis JM**. Aquatic invasive species and the zebra mussel as a model of invasion. Apr 2006. Academic Spree Day Symposium, Clark University. Worcester, MA. ^Δ
- 2005 **Curtis JM**. Abundance and distribution of elkhorn coral (*Acropora palmata*) fragments following hurricane activity in South Caicos. Directed study symposium. The School for Field Studies, Center for Marine Resource Studies, Turks and Caicos Islands. ^Δ
- 2004 **Curtis JM**. Ecology of the northern seastar (*Asterias vulgaris*). Nunnemacher Research Symposium, Clark University, Worcester, MA^Δ

Awards & Honors

- 2011 *Student Scholarship* (\$1500) American Fisheries Society-Texas Chapter
- 2010 *Research Fellowship*, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi
- 2009 *Teaching Assistantship*, College of Science & Technology, Texas A&M University-Corpus Christi
- 2008 *Teaching Assistantship*, College of Science & Technology, Texas A&M University-Corpus Christi
- 2006 *Magna cum laude*, Clark University
1st academic honors: one semester
2nd academic honors: five semesters
- 2004 *Research Assistantship*, Research Experience for Undergraduates (NSF)

Professional Organizations

2010 – present American Fisheries Society
2010 – present Coastal Conservation Association
2010 – present National Audubon Society
2009 – present American Society of Ichthyologists and Herpetologists

Scientific Organizations:

2010 – present *Treasurer*, Marine Science Graduate Student Organization, Texas A&M University-Corpus Christi
2008 – present *Member*, Marine Science Graduate Student Organization, Texas A&M University-Corpus Christi

Research Experience

- Evaluating the effects of barotrauma on regulatory discards of red snapper using acoustic telemetry and fisheries independent catch data
- Tracking the potential spawning stock of the Gulf of Mexico red snapper fishery using a towable hydrophone and internal acoustic tags
- Effects of depredation on estimates of mortality for regulatory discards in the red snapper fishery in the Gulf of Mexico
- Assessing levels of adaptive genetic variation in red snapper populations in the Gulf of Mexico
- Identifying sources of recruitment in red snapper populations using microsatellite markers and parentage analysis
- Development of microsatellite markers for Atlantic croaker (*Micropogonias undulatus*)
- Assessing levels of genetic variation of Atlantic croaker in the Gulf of Mexico
- Discriminating wild from hatchery-reared spotted seatrout using otolith microchemistry
- Identifying essential fish habitat and site fidelity in spotted seatrout over longer temporal scales using otolith microchemistry
- Stock structure assessment of spotted seatrout along the Texas coast
- Quality assurance of DNA sequence data and disease variant identification in immunology, cardiology, and endocrinology assays
- Research and development in immunology, cardiology, and endocrinology assays used for the determination of genetic diseases
- “Assembling the Fungal Tree of Life”: Determining phylogenetic relationships among members of the basidiomycota fungi using nuclear and mitochondrial DNA sequencing
- Effects of hurricane activity on the abundance and distribution of Elkhorn coral fragments using circular line transects and GPS navigation
- Visual count surveys to assess biodiversity of herbivorous finfish and shellfish species in reef, mangrove, and seagrass communities
- Effects of high sedimentation on coral reefs caused by recreational diving and snorkeling activity

- Correlating intertidal elevation with periwinkle snail (*Littorina sp.*) density and northern seastar (*Asterias vulgaris*) abundance

Skills & Certifications

- SCUBA, PADI advanced open water, PADI enriched air diver
- American Red Cross CPR, First Aid, Oxygen, and AED
- Boating experience: powerboat, canoe, kayak, sailing
- Field sampling techniques: epibenthic sled, trawl, drop sampler, seine nets, gill nets
- Fish tagging: visible implant elastomer, Floy tags, internal acoustic tags
- Otolith studies: extraction, microstructural analyses, microchemistry
- Molecular techniques: DNA extraction, PCR, DNA sequencing, cloning, primer development
- Automation/robotics in DNA sequencing
- Acoustic telemetry
- Microsoft office suite
- Statistical analyses and data management
- Data analysis packages: SAS, R, SPSS, SigmaPlot
- DNA sequencing analysis software: Sequencher, Seqscape
- ArcGIS

Volunteer Service

- 2011 Moderator/notetaker, Challenges to Conserving and Sharing our Bays, Harte Research Institute for Gulf of Mexico Studies
- 2011 Moderator & Science Judge, National Ocean Sciences Bowl, Loggerhead challenge, Texas A&M University-Corpus Christi, TX
- 2009 Port Aransas Jetty Cleanup, Marine Science Graduate Student Organization, Texas A&M University-Corpus Christi
- 2009 Graduate student liaison to interviewing faculty candidates, Marine Science Graduate Student Organization Texas A&M University-Corpus Christi
- 2005 Orientation Coordinator, Admissions Office, Clark University, Worcester, MA