

MERCEDES SIEGLE-GAITHER

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<p>08/2015- Present</p> <p>2010-2015</p> <p>2012</p>	<p>EDUCATION</p> <p>Mississippi State University (Starkville, MS) <i>M.S. in Forest Hydrology, GPA: 3.82, President of the Graduate Student Association</i></p> <p>The University of Wisconsin-La Crosse (La Crosse, WI) <i>B.S. in General Biology, Minor: Science & Health</i> - Study abroad in Belize at Pelican Pouch Field Station, Marine Symbioses (BIO 460), January 2014</p> <p>The University of Newcastle-Callaghan (Callaghan, Australia) <i>Study abroad in Plant Biology, Ecology and Management of Flora, & International Communications</i></p>
<p>2015- Present</p> <p>2015</p> <p>2015</p> <p>2015</p> <p>2014</p>	<p>RESEARCH EXPERIENCE</p> <p>Mississippi State University (Starkville, MS) <i>Graduate Teaching Assistant & Research Assistant</i></p> <ul style="list-style-type: none"> - Grading undergraduate quizzes and projects - Assisting in teaching undergraduate dendrology and computer applications for forest resources, specifically plant identification - Carrying out research pertaining to forest hydrology and biogeochemistry, specifically setting up and monitoring stemflow, throughfall, and precipitation equipment in pine and oak stands - Analyses conducted in a forest hydrology and soils laboratory using a variety of techniques including combustion gas analysis and O¹⁸ and D stable isotope analysis in collaboration with Louisiana State University to develop better forest hydrological and biogeochemical models <p>University of Texas at Brownsville Biology Department (Brownsville, TX) <i>Graduate Teaching Assistant</i></p> <ul style="list-style-type: none"> - Carried out research and planning pertaining to artificial coral reefs - Taught undergraduate Biology Laboratories - Assisted with multiple experiments related to coral reefs and zooplankton genetic markers, conservation, and ecosystem ecology <p>University of Texas at Brownsville Coastal Dune Research (South Padre Island, TX) <i>Surveyor and Researcher</i></p> <ul style="list-style-type: none"> - Conducted beach-use surveys analyzing the public's knowledge of seagrass and coastal dune ecosystems - Interacting with the public about scientific issues involving beach erosion - Measuring transect lines, beach profiling, species identification, percent cover, and live animal trapping - Coastal plant identification <p>University of Texas at Brownsville Dive Research (Port Isabel, TX) <i>Science Diver</i></p> <ul style="list-style-type: none"> - Conducted fish and invertebrate surveys via SCUBA diving and involved in open ocean boating - Assisted with collecting HydroLab data, baiting hooks, fish measurements, and venting and decompressing red snapper <p>United States Navy's National Marine Mammal Care Foundation (San Diego, CA) <i>Marine Mammal Care Intern</i></p> <ul style="list-style-type: none"> - Assisted with experiments being carried out on Pacific Bottlenose Dolphins and California Sea Lions involving echolocation, auditory, and sonar detection - Diet preparation, facility maintenance, boat upkeep - Marine mammal care and training, assisted with veterinary procedures and check-ups, open ocean training, night security and medications, and animal husbandry - Mussel collection and preparation for the Surface Water Ambient Monitoring Program

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2014	University of Wisconsin-La Crosse Pelican Pouch Field Station (South Water Caye, Belize) <i>Marine Symbioses course (BIO 460)</i> -January 2014, <i>Independent Research course (BIO 499)</i> <ul style="list-style-type: none"> - Collected, noted, and identified various corals and symbiotic partners - Conducted independent research investigating the relationship between common sea fan (<i>Gorgonia ventalina</i>) populations and density and the fungal pathogen (<i>Aspergillus sydowii</i>)
2012	University of Newcastle-Callaghan (Newcastle, Australia) <i>Ecology and Management of Australian Flora course</i> <ul style="list-style-type: none"> - Learned hands-on weed ecology and management strategies, revegetation practices, the origin of plant biodiversity, and how to take proper field notes - Learned of wetland plant adaptations, ecology, management, and ecological roles for human use
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	CONFERENCE PRESENTATIONS
2016	Siegle-Gaither, ML. 2016. "Using deuterium and oxygen-18 isotopes to understand stemflow generation mechanisms" 3-Minute Thesis. Allen Hall, Mississippi State University, Starkville, MS. 17 November 2016. Oral Presentation.
2016	Siegle-Gaither, ML. 2016. "Using deuterium and oxygen-18 isotopes to understand stemflow generation mechanisms" Society of American Foresters 2016 National Convention. The Monona Terrace Community and Convention Center, Madison, WI. 05 November 2016. Oral Presentation.
2016	Siegle-Gaither, ML. 2016. "Using deuterium and oxygen-18 stable isotopes to understand mechanisms of stemflow generation as a function of tree species and climate." Ecological Society of America Annual Meeting. The Greater Fort Lauderdale-Broward County Convention Center, Fort Lauderdale, FL. 10 August 2016. Poster Presentation.
2016	Siegle-Gaither, ML. 2016. "Using deuterium and oxygen-18 stable isotopes to understand mechanisms of stemflow generation as a function of tree species and climate." Mississippi Water Resources Conference. The Hilton, Jackson, MS. 4 April 2016. Poster Presentation.
2016	Siegle-Gaither, ML. 2016. "Using deuterium and oxygen-18 stable isotopes to understand mechanisms of stemflow generation as a function of tree species and climate." 14th Annual Graduate Research Association Symposium. Mississippi State University, Starkville, MS. 2 April 2016. Poster Presentation.
2016	Siegle-Gaither, ML. 2016. "Using deuterium and oxygen-18 stable isotopes to understand mechanisms of stemflow generation as a function of tree species and climate." 63rd Annual Southern Hardwood Forest Research Group Meeting. Delta Research Foundation, Stoneville, MS. 18 February 2016. Poster Presentation.
2015	Siegle-Gaither, ML. 2015. "Using deuterium and oxygen-18 isotopes to understand stemflow generation mechanisms" 3-Minute Thesis. Allen Hall, Mississippi State University, Starkville, MS. 12 November 2015. Oral Presentation.
2014	Siegle-Gaither, ML. 2014. "Does an association exist between the density of Common Sea Fans (<i>Gorgonia ventalina</i>) and <i>Aspergillus sydowii</i> infection in the Caribbean?" Undergraduate Research and Creativity Day. University of Wisconsin-La Crosse. Valhalla Hall, La Crosse. 16 April 2014. Poster Presentation.
2014	Siegle-Gaither, ML. 2014. "Climate change: Diminishing our valuable coral reefs and seagrasses." GIS Student Poster Competition. University of Wisconsin-La Crosse. Valhalla Hall, La Crosse. 13 Dec. 2014. Poster Presentation.
2009	Siegle-Gaither, ML. 2009. "Community involvement by lending a helping hand around the yard." The Youth and Community Involvement Conference. Rochester. 5-7 Nov. 2009. Poster Presentation.

	OUTREACH OPPORTUNITIES	
2016-2017	<i>Mississippi State University Graduate Student Association, President</i>	
2016-2017	<i>7Seas, Ocean Ambassador</i>	
2016-2017	<i>Mississippi State University, Graduate School Ambassador</i>	
2016-2017	<i>Mississippi State University, Forestry Graduate Student Representative</i>	
2015-2016	<i>Mississippi State University Graduate Student Association, Member and Volunteer</i>	
2015-2016	<i>Noxubee National Wildlife Refuge, Canoe Day, Volunteer</i>	
2015-2016	<i>Coastal Study Days, Plankton Booth and Water Quality Volunteer</i>	
2015	<i>Texas Marine Mammal Stranding Network, Dolphin Caregiver</i>	
2015	<i>South Padre Island Beach Clean-Up, Volunteer</i>	
2015	<i>Dune Restoration Project, Restoration Crew Grass Planter</i>	
2013-2014	<i>University of Wisconsin-La Crosse, International Peer Advisor</i>	
	AWARDS	Total Awarded
2017	Aldo Leopold Foundation Conference Scholarship	NA
2016	MSU Graduate Student Association Travel Award	\$400
2016	MSU Travel Assistance Grant for Graduate Students	\$770
2016	Dr. William E. Gardiner Memorial Award	\$3000
2016	Mississippi State University Women's Club Scholarship	\$500
2016	Personal Crowdfunding	\$105
2016	Palmer Johnson Power Systems Scholarship	\$500
2015	Adams-Columbia Electric Cooperative Scholarship	\$500
2014	University of Wisconsin-La Crosse Study Abroad Stipend	\$750
2014	Palmer Johnson Power Systems Scholarship	\$1400
2013	The Orange Scholars Award	\$2500
2013	Palmer Johnson Power Systems Scholarship	\$1600
2012	The Orange Scholars Award	\$2500
2012	Xcel Energy Scholarship	\$1000
2012	Adams-Columbia Electric Cooperative Scholarship	\$500
2012	University of Wisconsin-La Crosse Study Abroad Stipend	\$475
2012	Palmer Johnson Power Systems Scholarship	\$1500
2012	Harry Gardiner International Studies Scholarship	\$500
2011	Palmer Johnson Power Systems Scholarship	\$1000
2010	Phillip Druce Scholarship	\$750
2010	Alma Daye Memorial Scholarship	\$250
2010	Westfield Lions Club Scholarship	\$500
2010	Budda-Box Cancer Outing Scholarship	\$400
2010	Germania Benefit Parade Scholarship	\$500
2010	Montello Masonic Lodge No. 141 Scholarship	\$500
2010	Westfield Chamber of Commerce Scholarship	\$500
2010	Adams-Columbia Electric Cooperative Scholarship	\$1000
	TECHNICAL SKILLS	
	<ul style="list-style-type: none"> - NAUI Advanced SCUBA certified and PADI Open Water SCUBA certified - GIS/GPS experience with data management and entry, Windows platforms, and Microsoft office - Global Mapper, Adobe Illustrator, ArcGis, and ArcMAP, software experience along with field use - American Red Cross adult and pediatric first aid, AED, CPR, and lifeguard training - Strong plant and animal identification and handling skills - Experience using D-nets, plankton tows, flow/depth meters, secchi disk, and data collection/entry - Extensive lab experience in biology and chemistry while using safe practices - High level of mental fortitude and awareness, able to take on a variety of tasks while motivating others concurrently, able to work well in teams or alone, and can delegate tasks efficiently - Extensive backcountry and wilderness experience including: canoeing, survival knowledge, camp setup, and leave no trace methodologies 	

2016 2016-2017	PROFESSIONAL MEMBERSHIPS <i>Ecological Society of America</i> , Member <i>Society of American Foresters</i> , Member
	PROFESSIONAL REFERENCES 1. Dr. Courtney Siegert , Mississippi State University, <i>Assistant Professor</i> Phone: 662-325-7481 Email: courtney.siegert@msstate.edu 2. Dr. Lori Bruce , Mississippi State University, <i>Dean of the Graduate School</i> Phone: 662-325-7400 Email: bruce@grad.msstate.edu 3. Dr. Scott Roberts , Mississippi State University, <i>Professor</i> Phone: 662-325-3044 Email: scott.roberts@msstate.edu