

**EMILY G WEIGEL, PHD**  
**SENIOR ACADEMIC PROFESSIONAL**  
**SCHOOL OF BIOLOGICAL SCIENCES**

**GEORGIA INSTITUTE OF TECHNOLOGY**    **EMILYGWEIGELPHD.COM**    **EMILY.WEIGEL@BIOSCI.GATECH.EDU**  
**950 ATLANTIC DRIVE**    **SKYPE: EMILY\_WEIGEL**  
**ATLANTA, GA 30332**    **OFFICE PHONE: 404-385-1713**

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**I. EARNED DEGREES**

Ph.D.	Zoology	2015
Ph.D.	Ecology, Evolutionary Biology & Behavior (EEBB) Michigan State University (MSU), East Lansing, Michigan NSF Bio/computational Evolution in Action CONSortium (BEACON) Dissertation Title: The Effects of Social Experience on Sexual Selection in Threespine Sticklebacks ( <i>Gasterosteus aculeatus</i> ) <i>Certificate in College Science Teaching</i>	2015
B.S.	Biology, <i>Highest Honors</i> Georgia Institute of Technology Honors Program International Plan and Research Option Minor: German Certificate: Integrative Biology Exchange Student: Technical University of Munich, Munich, Germany (2008-2009)	2010

**II. EMPLOYMENT HISTORY**

Senior Academic Professional, School of Biological Sciences, Georgia Institute of Technology	2021-present
Academic Professional, School of Biological Sciences, Georgia Institute of Technology	2016-2021
Director of Biology Internships, School of Biological Sciences	2017-present
Faculty and Academic Advisor	2016-present
NSF Course-Based Undergraduate Research Experiences (CUR) Postdoctoral Fellow, Spelman College	2015-2016
Advisor: Dr. Jen Kovacs	
Course Instructor, Evolution-in-Action, Spelman College	2016
Course Instructor, Animal Behavior, Spelman College	2015
Course Instructor, Evolutionary Biology for Non-Life Scientists, MSU	2013
Science Communication Fellow, BEACON Center for the Study of Evolution	2013
Preparing Future Faculty for the Assessment of Student Learning Fellow, MSU	2013
NSF Future Academic Scholars in Teaching (FAST) Fellow, MSU	2012-2013

**III. HONORS AND AWARDS**

Learning Analytics in STEM Education Research (LASER) Scholar	2022
Student Recognition of Excellence in Teaching: Class of 1934 CIOS Honor Roll (x2)	2022
Georgia Tech "Thank-a-Teacher" Recipient (x4)	2022
Georgia Tech CTL Scholarship of Teaching and Learning (SOTL) Award. \$3,000.	2022
Office of Faculty Professional Development (OFPD) Faculty Writing Fellow	2021-2022
Georgia Tech Faces of Inclusive Excellence Award	2021
National Center for Faculty Development and Diversity Daily Writer Award (x2)	2021

Science Education for New Civic Engagements and Responsibilities (SENCER) Assessment Faculty Mentoring Network	2021
Georgia Tech “Thank-a-Teacher” Recipient (x6)	2021
Reflective Teaching Badge, Center for Teaching and Learning	2021
SLS Faculty Sustainable Communities Teaching: People’s Choice Award, Honorable Mention	2021
Student Recognition of Excellence in Teaching: Class of 1934 CIOS Honor Roll (2x)	2021
Student Recognition of Excellence in Teaching: Class of 1934 CIOS Honor Roll	2020
National Center for Faculty Development and Diversity Daily Writer Award	2020
Ecological Society of America (ESA) Education Scholar	2020
SLS Award for Excellence in Community-Engaged Sustainability Teaching. \$1,250.	2020
Georgia Tech “Thank-a-Teacher” Recipient (x3)	2020
Quantitative Undergraduate Biology Education and Synthesis (QUBES) Data Access-Inclusive Pedagogy Faculty Mentoring Network	2020
Kendeda Building Teaching Fellow. \$1,000.	2020
10 X 10 X Tech Alumni Feature: Teachers	2019
National Center for Faculty Development and Diversity Daily Writer Award	2019
Georgia Tech CTL Undergraduate Educator Award. \$3,000.	2019
Georgia Tech Outstanding Undergraduate Academic Advising Faculty Advisor. \$2,000.	2019
Georgia Tech Earth Day Environmental Leadership Award	2019
Georgia Tech “Thank-a-Teacher” Recipient (x8)	2019
Quantitative Undergraduate Biology Education and Synthesis (QUBES) “Make Teaching R in Undergraduate Biology Less Excruciating (Make TRUBLE)” Faculty Mentoring Network	2018
Georgia Tech “Thank-a-Teacher” Recipient	2018
University System of Georgia Scholarship of Teaching and Learning Fellow. \$500.	2018
Serve-Learn-Sustain Level-1 Affiliate. \$1,000.	2018
Georgia Tech Diversity and Inclusion Fellow. \$1750.	2018
Quantitative Undergraduate Biology Education and Synthesis (QUBES) “Discrete Mathematics” Faculty Mentoring Network	2017
Serve-Learn-Sustain Excellence-in-Teaching (student-nominated)	2017
<i>The American Biology Teacher</i> Editor Honorarium. \$1000.	2017
Samuel J. Heyman Service to America Medal (Urban Waters Federal Partnership)	2017
All-MSU Excellence-in-Teaching Award (6 awarded across the university). \$1000.	2014-2015
MSU College of Natural Science Dissertation Continuation Fellowship. \$6000.	2015
MSU College of Natural Science Excellence-in-Teaching Award (1 awarded). \$1000.	2014-2015
Michigan Campus Compact Heart and Soul Award (Statewide Service Award)	2014
Women’s Center of Greater Lansing Tribute to Women Award, Nominee	2014
AT&T Faculty – Staff Award Competition in Instructional Technology, Best Technology-Enhanced Learning Innovation (ZOL 890: Grad Evolution Course)	2014
AT&T Faculty – Staff Award Competition in Instructional Technology, Best Online Course (ISB202: Foundations of Science, Massively Open Online Course-MOOC)	2014
MSU Graduate Student Leader of the Year, Honorable Mention	2014
NSF BEACON Science Communication Fellow. ~\$22,300.	2013
MSU College of Natural Science Dissertation Continuation Fellowship. \$4100.	2013
College of Natural Science Tracy Hammer Prof. Development Award. \$750.	2013
EEBB Program Summer Fellowship. \$1900.	2013
NSF Future Academic Scholars in Teaching (FAST) Fellowship. \$2000.	2012-2013
Council of Graduate Students (COGS) Disciplinary Leadership Award. \$3800.	2012-2013
NSF BEACON Representative, North American Gender Summit (Washington, D.C.)	2013
MSU Alliances for Graduate Education and the Professoriate, Leadership Institute Sponsored Fellow	2013
Preparing Future Faculty for the Assessment of Student Learning (PFF-ASL) Fellow.	2013
Gates Foundation-MSU Massively Open Online Course (MOOC) Fellowship. \$1000.	2013
Women’s Leadership Conference at MSU Student Keynote Speaker, Finalist	2012

MSU Department of Residence Education, “Learning Leader” Designation	2012
Bailey Scholars Teaching/Learning Program, Finalist	2012
MSU Graduate Academic Conference, Best Poster Presentation. \$500.	2012
EEBB Program Summer Fellowship. \$1800.	2012
Helsinki Summer School in Mathematical Ecology and Evolution Fellow (declined)	2012
NSF Graduate Research Fellowship, Honorable Mention.	2010, 2012
DAAD Deutsche Akademischer Austausch Dienst (German Academic Exchange Service), Young Ambassador	2009-2010

#### IV. SUMMARY OF HIGHER EDUCATION ADMINISTRATIVE AND LEADERSHIP EXPERIENCE

- Non-Tenure-Track Representative, Biological Sciences Advisory Committee 2021-present
- Chair, Biological Sciences Undergraduate Assessment Committee 2019-present
- Director of Biology Internships, School of Biological Sciences 2018-present
- Chair, Biology Internship Committee, School of Biological Sciences 2018-present
- Major, Minor, and International Plan Advisor, School of Biological Sciences 2016-present
- Georgia Tech Diversity and Inclusion Fellow (2018) and Selection Committee (2019) 2018-2019
- University System of Georgia Scholarship of Teaching and Learning Fellow 2018-2019
- Georgia Tech Climate Change Fellow 2018-2019

#### V. EDUCATION AND MENTORSHIP

##### A. COURSES TAUGHT

##### Georgia Tech

TERM	YEAR	COURSE NUMBER	COURSE NAME	SIZE
Spring	2023	BIOS 4401/BIOS 4401 GRA	Experimental Design and Statistical Methods	132
Spring	2023	BIOS 2301 (3 sections)	General Ecology Lab	35
Spring	2023	CETL 8718	Tech to Teaching Capstone Course	10
Spring	2023	BIOS 2694/2695/4694/4695	Undergraduate Internship	15
Spring	2023	VIP 2601/2602/3601/3602/ 4601/4602/6600/6603:	Living Building Science VIP	13
Spring	2023	VIP 2601/2602/3601/3602/ 4601/4602/6600/6603:	Getting to Know U	34
Spring	2023	BIOS/NEUR 4699	Undergraduate Research	2
Fall	2022	BIOS 2300	General Ecology	120
Fall	2022	BIOS 2301 (7 sections)	General Ecology Lab	97
Fall	2022	BIOS 2694/2695/4694/4695	Undergraduate Internship	13
Fall	2022	VIP 2601/2602/3601/3602/ 4601/4602/6600/6603:	Living Building Science VIP	27
Fall	2022	BIOS 4699/4698	Undergraduate Research	3
Summer	2022	BIOS 2694/2695/4694/4695	Undergraduate Internship	18
Summer	2022	BIOS 4471	Behavioral Biology (Online)	41
Spring	2022	BIOS 2694/2695/4694/4695	Undergraduate Internship	15
Spring	2022	VIP 2601/2602/3601/3602/ 4601/4602/6600/6603:	Living Building Science VIP	20
Spring	2022	BIOS 4401/BIOS 4401 GRA	Experimental Design and Statistical Methods	150
Spring	2022	BIOL 4697 (6 sections)	Biology Undergraduate Teaching	36

Spring	2022	BIOS 4699	Undergraduate Research	1
Spring	2022	CETL 2000 BIO	Undergraduate TA Prep Course	31
Spring	2022	CETL 8000 BIO	Graduate TA Prep Course	3
Fall	2021	BIOS 2694/2695/4694/4695	Undergraduate Internship	15
Fall	2021	BIOS 1108/1208	Intro to Organismal Biology	188
Fall	2021	BIOS 2301 (6 sections)	General Ecology Lab	95
Fall	2021	BIOS 4699	Undergraduate Research	3
Fall	2021	VIP 2601/2602/3601/3602/ 4601/4602/6600/6603	Living Building Science VIP	29
Summer	2021	BIOS 2694/2695/4694/4695	Undergraduate Internship (Limited Positions due to COVID)	3
Summer	2021	BIOS 4471	Behavioral Biology (Online)	39
Spring	2021	BIOS 1107	Biological Principles	151
Spring	2021	BIOS 1108	Intro to Organismal Biology	158
Spring	2021	BIOS 2694/2695/4694/4695	Undergraduate Internship (Limited Positions due to COVID)	7
Spring	2021	BIOS 4699	Undergraduate Research	1
Spring	2021	VIP 2601/2602/3601/3602/ 4601/4602/6600/6603	Living Building Science VIP	31
Fall	2020	BIOS 2300	General Ecology	95
Fall	2020	BIOS 2301 (4 sections)	General Ecology Lab	85
Fall	2020	BIOS 4699	Undergraduate Research	2
Fall	2020	BIOS 2694/2695/4694/4695	Undergraduate Internship (Limited Positions due to COVID)	5
Fall	2020	VIP 2601/2602/3601/3602/ 4601/4602/6600/6603	Living Building Science VIP	18
Summer	2020	BIOS 4471	Behavioral Biology (Online)	43
Summer	2020	BIOS 2694/2695/4694/4695	Undergraduate Internship (Positions Cancelled due to COVID)	2 (of 11 intended)
Spring	2020	BIOL 1520	Intro to Organismal Biology	141
Spring	2020	BIOL 1521	Honors Intro to Organismal Biology	80
Spring	2020	BIOS 2301 (3 sections)	General Ecology Lab	42
Spring	2020	BIOS 2694/2695/4694/4695	Undergraduate Internship	8
Spring	2020	BIOS 4699	Undergraduate Research	7
Spring	2020	VIP 2601/2602/3601/3602/ 4601/4602/6600/6603	Living Building Science VIP	17
Fall	2019	BIOL 1510	Biological Principles	220
Fall	2019	BIOL 1520	Intro to Organismal Biology	97
Fall	2019	BIOL 2336 (4 sections)	General Ecology Lab	64
Fall	2019	BIOL4699	Undergraduate Research	2
Fall	2019	BIOL 2694/2695/4694/4695	Undergraduate Internship	11
Fall	2019	BIOL/EAS4813/8813	Special Topics- Extreme Atlanta: Climate Change in Urban Spaces	6
Summer	2019	BIOL 2694/2695/4694/4695	Undergraduate Internship	11
Spring	2019	BIOL 1510	Biological Principles	164
Spring	2019	BIOL 1520	Intro to Organismal Biology	114
Spring	2019	BIOL 2694/2695/4694/4695	Undergraduate Internship	10
Spring	2019	BIOL 4697 (3 sections)	Biology Undergraduate Teaching	17
Spring	2019	BIOL 4699	Undergraduate Research	4
Spring	2019	CETL 2000 BIO	Undergraduate TA Prep Course	8

Fall	2018	BIOL 2694/2695/4694/4695	Undergraduate Internship	9
Fall	2018	BIOL 2335	General Ecology	91
Fall	2018	BIOL 2336 (4 sections)	General Ecology Lab	64
Fall	2018	BIOL4699	Undergraduate Research	5
Summer	2018	BIOL 2694/2695/4694/4695	Undergraduate Internship	6
Summer	2018	BIOL 4471	Behavior Biology	21
Spring	2018	BIOL 1520	Intro to Organismal Biology	103
Spring	2018	BIOL 1521	Honors Intro to Organismal Biology	78
Spring	2018	BIOL 2336 (3 sections)	General Ecology Lab	42
Spring	2018	BIOL 4590	Research Project Lab (with Zoo Atlanta)	14
Spring	2018	BIOL 4699	Undergraduate Research	1
Fall	2017	BIOL 1510	Biological Principles	215
Fall	2017	BIOL 2336 (4 sections)	General Ecology Lab	57
Fall	2017	BIOL 4697 (3 sections)	Biology Undergraduate Teaching	25
Fall	2017	CETL 2000 BIO (2 sections)	Undergraduate TA Prep Course	18
Fall	2017	CETL 8000 BIO	Graduate TA Prep Course	21
Summer	2017	BIOL 1510	Biological Principles	40
Summer	2017	BIOL 4471	Behavior Biology	21
Spring	2017	BIOL 1520	Intro to Organismal Biology	113
Spring	2017	BIOL 1521	Honors Intro to Organismal Biology	74
Spring	2017	BIOL 4696 (3 sections)	Biology Undergraduate Teaching	4
Spring	2017	BIOL 4697 (3 sections)	Biology Undergraduate Teaching	11
Spring	2017	BIOL 8997 (3 sections)	Biology Graduate Teaching	32
Spring	2017	CETL 2000 BIO (2 sections)	Undergraduate TA Prep Course	10
Spring	2017	CETL 8000 BIO	Graduate TA Prep Course	2
Fall	2016	BIOL 1510	Biological Principles	229
Fall	2016	BIOL 2335	General Ecology	71
Fall	2016	BIOL 2336 (4 sections)	General Ecology Lab	45

### Spelman College

Spring	2015	BIO 365	Animal Behavior	Co-Instructor	20
Spring	2016	BIO 325	Evolution-in-Action	Co-Instructor	16

### Michigan State University

Summer	2015	ZOL341	Fundamental Genetics (Online)	Graduate TA and Remote Testing Coordinator	210
Spring	2014	ISB208L (3 Sections)	Water, Food, and the Environment,	Laboratory Instructor	81
Fall	2013	ZOL890	Evolutionary Biology for Non-Life Scientists	Co-Instructor	5 across MSU & University of Idaho
Summer	2013	ZOL341	Fundamental Genetics (Online)	Graduate TA	210
Fall	2012	BS172	Organisms and Populations	Graduate TA	173

Fall	2012	ZOL415	Ecological Aspects of Animal Behavior	Graduate TA & Discussion Leader	28
Fall	2012	BS162 (1 Section)	Organisms and Populations Laboratory	Laboratory Instructor	18
Spring	2012	BS162	Organisms and Populations Laboratory	Curriculum Development	42
Spring	2012	BS162 (3 Sections)	Organisms and Populations Laboratory	Laboratory Instructor	42
Fall	2011	BS172	Organisms and Populations	Graduate TA	131
Fall	2011	BS162 (3 Sections)	Organisms and Populations Laboratory	Laboratory Instructor	38
Spring and Summer	2013	ISB202	Foundations of Science, Gates-Foundation-Supported Massively Open Online Course (MOOC)	Curriculum Development	1000+
Spring	2012	CSE891	Multidisciplinary Approaches to the Study of Evolution	Graduate TA	20

## B. ACADEMIC AND CAREER ADVISING AND GUIDANCE RESPONSIBILITIES

Advisor for Readmission, School of Biological Sciences	2021-present
Director of Biology Internships, School of Biological Sciences	2018-present
International Plan Advisor, School of Biological Sciences	2017-present
Biology Major and Minor Advisor, School of Biological Sciences	2016-present
Tech to Teaching Capstone Mentor, Andrew Schulz	2021
Physiology Minor Undergraduate Advisor, School of Biological Sciences	2016-2018

## C. RESEARCH ADVISING AND GUIDANCE

### C1. Undergraduate Students Supervised

Sammi Rice	Georgia Tech Undergraduate Research Assistant	2023-
Farzeen Himani	Georgia Tech Undergraduate Research Assistant	2022-
Erin Kistenberg	Georgia Tech Undergraduate Research Assistant <i>Senior Thesis</i> , Predictors of Sense of Belonging in Major-Restricted and All-Majors Sections of Introductory Biology Courses <i>Winner, President's Undergraduate Research Award</i>	2021-2022
Evelyn Her	Georgia Tech Undergraduate Research Assistant	2022
Yuntao Liu	Georgia Tech Undergraduate Research Assistant	2022
Molly Niepokoy	Georgia Tech Undergraduate Research Assistant <i>Senior Thesis</i> , The Relationship between Course Engagement Modalities and Undergraduate Student Belonging in Introductory Biology Courses <i>Poster Presenter, Society for the Advancement of Biology Education Research (SABER)</i>	2021-2022
Basma Hamid	Georgia Tech Undergraduate Research Assistant	2022
Jalen Brown	Georgia Tech Undergraduate Research Assistant <i>Winner, 2020 Undergraduate Research Science Award (URSA) (GT College of Science)</i>	2020-2021

	<i>Winner, 2021 USG Early Research Scholars (GT College of Science and University System of Georgia)</i> <i>Winner, President's Undergraduate Research Award (Travel)</i> <i>Poster Presenter, National Conference on Undergraduate Research (NCUR)</i>	
Alicia Caughman	Georgia Tech Undergraduate Research Assistant <i>Winner, NSF Graduate Research Fellowship (GRFP)</i> <i>Poster Presenter, Discipline-based education research across STEM disciplines (X-DBER)</i> <i>Poster Presenter, Teaching and Learning Conference: Lighting the Way for Deeper Learning</i> <i>First-author publication, CBE Life Sciences Education</i>	2020-2021
Jordan Baxter	Georgia Tech Undergraduate Research Assistant	2020
Anh Vu	Georgia Tech Undergraduate Research Assistant	2020
Mechelle Chen	Georgia Tech Undergraduate Research Assistant <i>Poster Presenter, Society for the Advancement of Biology Education Research (SABER)</i>	2020
Adriana Dason	Georgia Tech Undergraduate Research Assistant	2020
Trent Johnson	Georgia Tech Undergraduate Research Assistant	2020-2021
Maria Zulfiqar	Georgia Tech Undergraduate Research Assistant	2020
Sam Naab	Georgia Tech Undergraduate Research Assistant <i>First-author publication, The American Biology Teacher</i>	2019-2020
Noah Arnold	Georgia Tech Undergraduate Research Assistant <i>Poster Presenter, Society for the Advancement of Biology Education Research (SABER)</i>	2019
Chandler Grove	Georgia Tech Undergraduate Research Assistant	2019
Dania Taha	Georgia Tech Undergraduate Research Assistant	2019
Brady Young	Georgia Tech Undergraduate Research Assistant <i>REU in Design and Innovation Lab with the Smithsonian NHM</i>	2019
Brianna Hayden	Georgia Tech Undergraduate Research Assistant	2018
Nolan Hubbard	Georgia Tech Undergraduate Research Assistant	2018
Isabel Veith	Georgia Tech Undergraduate Research Assistant	2018
Camille Mosley	Bee-INSPIRED Undergraduate Research Assistant <i>Winner, 2018 Annual Bio Medical Research Conference for Minority Students (ABRCMS) Best Poster Presentation</i> <i>Winner, Lester Travel Grant (Emory University)</i> <i>Winner, SACNAS 2018 Travel Scholarship</i>	2018-2019
Juanita Pardo	Georgia Tech Undergraduate Research Assistant <i>Winner, College of Sciences Travel Award</i> <i>Winner, President's Undergraduate Research Award (Travel)</i> <i>Winner, Student Government Association Travel Award</i> <i>Poster Presenter, National Association of Biology Teachers (NABT)</i>	2018-2019
Lily Akbarzadeh	Georgia Tech Undergraduate Research Assistant	2018
Ryan Knipe	Georgia Tech Undergraduate Research Assistant	2017-2018
Tyler Oliver	Georgia Tech Undergraduate Research Assistant	2017
Geena Darnell	Bee-INSPIRED Undergraduate Research Assistant	2016-2017
Daniel Dominguez	Bee-INSPIRED Undergraduate Research Assistant	2016-2017
Beanca Michel	Spelman Undergraduate Research Assistant	2015-2016
Kiera Brown	Spelman Undergraduate Research Assistant	2015-2016
Wangui Hymes	Spelman Undergraduate Research Assistant <i>Winner, 2016 CURE Summer Research Grant</i>	2015-2016

	<i>Winner, 2015 Annual Bio Medical Research Conference for Minority Students (ABRCMS) Best Oral Presentation</i>	
Sophie Breitbart	Wesleyan University Mentee Matched via MentorNet	2015-2019
Ellyse Cipolla	MSU Undergraduate and Post-baccalaureate Research Assistant	2013-2014
Marquita Tillotson	MSU Undergraduate Research Assistant <i>Winner, 2014 College of Natural Science Spring Undergraduate Research Scholarship</i>	2013-2014
Gavin Rienne	MSU Undergraduate Research Assistant <i>Winner, 2014 College of Natural Science Spring Undergraduate Research Scholarship</i> <i>Winner, 2014 Best Poster Presentation Undergraduate Research and Arts Forum 2014</i>	2013-2014
Savannah Foster	MSU Undergraduate Research Assistant	2013-2014
Benjamin (Ben) Wurst	High School and Undergraduate Research Assistant	2013
Anna Reh-Gingerich	MSU Undergraduate Research Assistant <i>Winner, 2013 Midwest Ecology and Evolution Conference Best Undergraduate Poster Award</i> Author, “ <i>How Environmental Fluctuations are Reflected in Three-Spined Stickleback Sexual Signals</i> ” in the <i>Red Cedar Undergraduate Research (ReCUR) Journal</i> in December 2016	2012-2013
Felicia Harmon	MSU Undergraduate Research Assistant	2012
Angela Marchand	MSU Undergraduate Research Assistant	2010-2012

## C2. Undergraduate Student Thesis Committees as Second Reader

- Philippe Lamarche, BS 2022, “Investigating The Effects of Climate Change on Mud Crab Foraging Behavior”
- Clarke Britton, BS 2022, “Development of an Experimental Design Card Sorting Task to Analyze Differences in Understanding of Biological Novices and Experts”
- Amna Amir, BS 2022, “Change in lizard body size and jaw morphology since the late Pleistocene in Natural Trap Cave”
- Katy McCarthy, BS 2022, “Trait Co-Evolution in *Anurans*”
- Taraji Long, BS 2022, “Social Network Analysis: Understanding Student Performance and Belonging in the Biology Major”
- Emma Whitson, BS 2022, “Increase in Positive Perceptions of an OER Textbook Despite Decrease in Learning Outcomes in Majors Biological Principles”
- Julia Ciaccia, BS 2022, “The True Cost: An Analysis of Course Registration Patterns in the College of Sciences”
- C.J. Andrews, BS 2022, “Using Infrared Technology to Examine Emotion & Arousal in Brown Capuchin Monkeys (*Sapajus [Cebus] apella*)”
- Piper Rackley, BS 2022, “Utilizing Chemical Tracers to Observe Differences in Ecological Niches of Two Species of Thresher Sharks”
- Anais Paterno, BS 2022, “Cognition in Beaded Lizards”
- Tyler Vernon, BS 2021, “Predicted Future Climate Conditions Do Not Affect the Body Condition Index of Atlantic Blue Crab”
- Mattie Rountree, BS 2021, “Evaluating putative social behaviors displayed by juvenile diamondback terrapins (*Malaclemys terrapin*)”
- Yassin Watson, BS 2021, “Development of a Conceptual Framework for Experimental Design in Life Sciences Laboratory Education Among Novices, Graduate Students, and Experts”
- Jadyn Sethna, BS 2021, “Activity budget and Spatial Behavior in Emerald Tree Boas (Boidae: *Corallus batesii*)”



Jillian Brashear, BS 2020, “Using Ascorbic Acid And High Salinity To Extend The Viability Of *Proales similis* (Rotifera) Diapausing Eggs”

Savannah Berry, BS 2020, “Activity budgets in Emerald Tree Boas (Boidae: *Corallus batesii*)”

Nami Otsuka, BS 2020, “The inability to forage causes pacing activity in *Cryptoprocta ferox* at Zoo Atlanta”

Nancy Park, BS 2020, “Expanding Test Methods for Marine Ecotoxicology Using *Proales similis*”

Esther Woo, BS 2020, “Comparing the two methods of quantifying species niche and fitness difference”

Karolina Zabinski, BS 2020, “Reduced Initial Latencies in a Problem-Solving Task After a Two-Year Hiatus Suggests Long Term Memory in Varanid Lizards”

Taylor Cooper, BS 2019, “Numerical abilities in juvenile box turtles”

Barbara Kipreos, BS 2019, “The Relationship Between Window Surface Area and Bird-Building Collisions”

Emily Adams, BS 2018, “Juvenile growth rate of the Guatemalan Beaded Lizard”

### C3. Graduate Thesis Committees

Harry Tuazon, PhD Candidate, TBD

Sung An, PhD 2022, Computer Science, “Processes and Outcomes of Systems Thinking in an Interactive Modeling Environment”

Alex Draper, PhD 2022, Biological Sciences, “Impacts of Climate Change on Physiology, Behavior, and Predator-Prey Interactions in Oyster Reef Communities”

Cara Lin, MS Biology 2018, “Fish Response to Macroalgal Removal”

## D. EDUCATIONAL INNOVATIONS AND OTHER CONTRIBUTIONS

### D1. NEW COURSES DEVELOPED

#### **BIOL4813: Extreme Atlanta: Climate Change in Urban Spaces**

Developed in collaboration with Zachary Handlos (EAS) as part of the funded GT Climate Fellows Program, students this unique project-based interdisciplinary course will be exposed to local problems within the greater Atlanta, GA region tied to global climate change. Students will investigate local impacts in the context of atmospheric, hydrological and land processes on the city, including a detailed look at the biological impacts to organisms in this region (including humans)! Through 3 module projects and a final term project, students will learn about the consequences of climate change in the region and brainstorm adaptation and mitigation strategies to help combat and prevent such negative consequences.	2019
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#### **BUZZ Course: Stream Ecology and Citizen Science**

Developed in collaboration with GT Professional Education, Serve-Learn-Sustain and Community Partners. In this course, students actively engage with community partners currently doing work in urban streams (e.g., West Atlanta Watershed Alliance, Chattahoochee River Keeper). Through a series of Saturday workshops and on-site stream work, students learn about the ecological history and future of Atlanta through biodiversity and other indicators of stream health.  Under the guidance of facilitators based in academia, in the community, and in government agencies, the course equipped participants with:	2018
<ul style="list-style-type: none"> <li>● On-site training at local stream sampling sites</li> </ul>	

<ul style="list-style-type: none"> <li>• Ability to identify the hallmarks of a healthy stream and engage with watershed history</li> <li>• Knowledge of nationally standardized tools and techniques for monitoring water quality and ecosystem health</li> <li>• Experience collecting data as a part of a national, long-term stream monitoring project</li> <li>• An opportunity to share findings through the presentation and development of materials which can be used after the course by the partners Although the workshops were open to participants on a ‘drop-in’ basis, students who successfully completed the all parts of the course received a badge denoting their accomplishment through GT professional education.</li> </ul>	
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## D2. COURSE REDEVELOPMENT

### **BIOS 2301 (Formerly BIOL 2336) General Ecology Laboratory**

Integration of International MOTUS Bird-tracking technologies for CURE experiments within the course	2022
Fully-flipped all labs to use custom-developed SWIRL in R modules for coding/statistics instruction.	2019
Developed and implemented SWIRL in R modules for teaching experimental design statistics to students. Implemented new modeling experiment on disease spread to connect ecology and community health more explicitly for students.	2018
Developed and implemented new laboratories to included modeling and statistical coding representative of current ecology. Developed new labs to address issues of scale from molecular ecology to large community scale.	2017
Developed and implemented embedded, semester-long tree monitoring project in collaboration with the GT Arboretum and the National Phenology Network. Modified existing and created new assignments (Lab Notebook entries, Mini-Proposals) and rubrics to scaffold student learning. Began embedded community-based service learning in partnership with West Atlanta Watershed Alliance and US Fish and Wildlife.	2016

### **BIOS/BIOL 4471 Behavior Biology**

Developed and implemented completely flipped-class format with pre-class reading assignments and post-class homeworks and exams delivered online. Class time focused on the design and interpretation of primary literature experiments, with a focus on graphical understanding, proposal writing, and Question-Hypothesis-Prediction (QHP) experimental design.	2016
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### **BIOS/BIOL 4590 Research Project Laboratory**

Developed and implemented authentic research theme of social and cognitive behavior in captive animals; Students designed individual hypothesis-based research projects within this theme to conduct through Zoo Atlanta	2018
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## D3. INSTRUCTIONAL MATERIALS DEVELOPED

**BIOS 4401 Experimental Design and Biostatistics**

Developed active-learning based lecture course covering probability distributions and statistical testing using. Course assignments focus on developing metacognitive and intuitive ideas around real, published biological experiments as case studies in what to do, and what *not* to do	2022
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**BIOS/BIOL 1220 Biology of Sex and Death**

Developed new multi-week laboratory protocols for sexual selection labs; supervised the implementation of the lab by postdoc; published work in JMBE	2018
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**BIOS 1107/1207 (Formerly BIOL 1510) Biological Principles**

Developed new and revised existing Bio1510 website pages and formative assessment questions to support fully flipped classroom model and better align with committee-developed Learning Objectives	2017
Led initiative among Introductory Biology Committee to revisit alignment of current objectives with national standards; develop learning objectives for each class session in the course; Developed new Learning Objectives for Ecology module	2016

**BIOS 1108/1208 (Formerly BIOL 1520) Intro to Organismal Biology**

Developed new and revised existing Open Education Resource textbook-replacement website pages for Biodiversity Module ( <a href="http://bio1520.biology.gatech.edu/">http://bio1520.biology.gatech.edu/</a> ); Revised existing and developed new lecture Learning Objectives	2017-2021
Developed preliminary textbook Open Education Resource textbook-replacement website pages for all course readings ( <a href="http://bio1520.biology.gatech.edu/">http://bio1520.biology.gatech.edu/</a> )	2016

**BIOL 2335 General Ecology Lecture**

Developed transcripts to go along with the course content presented in video format (to support students needing accommodations for flipped-format videos)	2018
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**VI. RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITIES**

\*DENOTES WORK AT GEORGIA TECH, BOLDED DENOTES STUDENT CO-AUTHORS

**A. PUBLICATIONS****A1. Refereed Book Chapters**

1. Weigel, E. (2022) Haha How-to: Making the comedy of (studying) life come alive. Teach Biology With a Sense of Humor: Why (and How to) Be a Funnier and More Effective Biology Teacher and Laugh All the Way to Your Classroom. *The Curious Academic Publishing ASIN : B09KQ95LVY*
2. Weigel, E., Mead, L., & McElhinny, T. (2020) Student learning across course instruction in Genetics and Evolution. *Evolution in Action: Past, Present, and Future.* (pp. 513-534). Springer, Cham.

3. Boughman, J.W., Keagy, J., & Weigel, E. (2017). Sexual Selection and Speciation. In: Oxford Bibliographies in Evolutionary Biology (J. Losos, ed.) *Oxford University Press, New York*.

## A2. Refereed Journal Articles

1. Weigel, E. and Angra, A. (*In Press*). Teaching in Tandem: Using graphs in an active-learning classroom to shape students' understanding of biology concepts. *Journal of College Science Teaching*.\*
2. **Caughman, A.** and Weigel, E. (2022). Biology students' attitudes towards math and CS closely linked. *CBE Life Science Education*. 21(3), ar43.\* [pdf](#)
3. **Schulz, A.K.** †, **Shriver, C.** †, Aubuchon, C., Weigel, E.G., Kolar, M., Mendelson III, J.R., Hu, D. L. (2022). A Guide for Successful Research Collaborations between Zoos and Universities. *Integrative and Comparative Biology*. icac096.\* †= denotes co-first-authorship [pdf](#)
4. Reid, J. and Weigel, E. (2022). Examining Perspectives of Teaching among Biology Teaching Assistants. *Journal of College Science Teaching*. 51(3): 67-77.\* [pdf](#)
5. **Naab, S.** and Weigel, E. (2021). A Birds-Eye View of Using Drones in the Classroom. *The American Biology Teacher*. 83 (6), 407-410.\* [pdf](#)
6. Bates, A. E., Primack, R. B., ... Weigel, E., and Duarte, C. M. (2021). Global COVID-19 lockdown highlights humans as both threats and custodians of the environment. *Biological Conservation*. 263: 109175.\* [pdf](#)
7. **Cooper, T., Zabinski, C., Adams, E., Berry, S., Pardo-Sanchez, J., Reinhardt, E., Roberts, K., Watzek, J.,** Brosnan, S., Hill, R., Weigel, E., and Mendelson III, J. R. (2020). Long-term memory of a complex foraging task in monitor lizards (Reptilia: Squamata: Varanidae). *Journal of Herpetology*. 54 (3): 378–383.\* [pdf](#)
8. **Pruett, J.** and Weigel, E. (2020) Concept map assessment reveals short-term community-engaged fieldwork enhances sustainability knowledge. *CBE Life Science Education*. 19(3): ar38.\* [pdf](#)
9. **Mobley, R.,** Weigel, E., and Boughman, J. (2020) Does humic acid alter visually and chemically guided foraging in stickleback fish? *Animal Cognition*. 1-8. [pdf](#)
10. **Breitbart, S.T.,** and Weigel, E. (2019). Visualizing a Disease Outbreak Using ESRI Story Maps. *Teaching Issues and Experiments in Ecology*, 15: 1. \* [pdf](#)
11. Hill, R. L., Huskisson, S. M., Weigel, E., and Mendelson III, J. R. (2019). Growth rates of juvenile Boa constrictor under two feeding regimes. *Zoo Biology*, 38 (2), 209-213. \* [pdf](#)
12. Angra, A., Weigel, E., and Onstine, A. (2018). Claw Waving for Sex: An Inquiry-Based Lab to Teach Sexual Dimorphism and Behavior in Fiddler Crabs. *Journal of Microbiology & Biology Education*. 19(2). \* [pdf](#)

13. Taylor, A. and Weigel, E. (2016). Using Twitter for Student Learning & Connecting with Scientists. *The American Biology Teacher*. 78 (7): 599-602. [pdf](#)
14. Weigel, E., Tinghitella, R. M., and Boughman, J.W. (2015). No evidence for adjustment of maternal investment under alternative mate availability regimes. *Journal of Fish Biology*. 88(2): 508–522. [pdf](#)
15. Weigel, E.,<sup>+</sup> Testa, N. D.,<sup>+</sup> Peer, A. and Garnett, S.C. (2015). Context matters: sexual signaling loss in digital organisms. *Ecology and Evolution*. 5(17):3725–3736. [pdf](#) <sup>+</sup>Co-First Authors
16. Weigel, E. (2015). Modern Graduate Student Mentors: Evidenced-Based Best Practices and Special Considerations for Mentoring Undergraduates in Ecology and Evolution. *Ideas in Ecology and Evolution* 8: 14–25. [pdf](#)
17. Weigel, E., DeNieu, M., and Gall, A.J. (2014). Oh, Behave! Behavior as an interaction between genes and the environment. *The American Biology Teacher* 76(7): 460-465. [pdf](#) (Lesson featured at the 2014 Professional Development Conference of the National Association of Biology Teachers (Cleveland, OH) during the BEACON/NESCent Evolution Teacher Workshop - “Evolution in Action)
18. Tran, M.V., Weigel, E., and Richmond, G. (2014). Analyzing Upper Level Undergraduate Knowledge of Evolutionary Processes: Can Class Discussions Help? *Journal of College Science Teaching* 43(5): 80-90. [pdf](#)
19. Tinghitella, R. M., Weigel, E., Head, M., and Boughman, J.W. (2013). Flexible mate choice when mates are rare and time is short. *Ecology and Evolution*. 3 (9): 2820–2831.
20. Zielke, H., Adamzyk, C., Berens, M., Conrad, R., Geringer, M., Oellers, J., Ottermanns, R., Rehage, N., Schneider, A.J., Simon, A., Spira, D., Weigel, E., Ahlf, W., Feiler U., Seiler, T.-B., and Hollert, H. (2011) A question of timing - Time-dependence of results in three sediment contact test systems using fish embryos, bacteria and nematodes. Doctoral Dissertation. Chapter 3, pages 45-73. [pdf](#)\*
21. Weigel, E. (2008). Rotifer Ecotoxicology: Behavioral Avoidance of Toxicants. *Honors Thesis*. Georgia Tech ePublications. Faculty Advisor: Dr. Terry Snell, Second Reader: Dr. Julia Kubanek [pdf](#)\*

### A3. Refereed Conference Presentations with Proceedings

1. **An, S.**, Weigel, E., and Goel, A. (2022). Exploring the effects of guidance in ill-defined learning environment. Conference Paper. International Conference on Intelligent Tutoring Systems (ITS2022). Bucharest, Romania. 6/27-7/1/22.\* [pdf](#)
2. **Pardo-Sanchez, J.**, and Weigel, E. (2021) Performance, Prediction, and Preparedness: Do Biology- Major-Specific Courses Provide an Advantage?. Conference Paper. National Association of Biology Teachers Biology Education Symposium. Atlanta, Georgia. 11/11-14/21. \* [pdf](#)
3. **An, S.**, Rugaber, S., Weigel, E., and Goel, A. (2021) Cognitive Strategies for Parameter Estimation in Model Exploration. Conference Paper. 43rd Annual Conference of the Cognitive Science Society. Vienna, Austria. 7/26-29/21. \* [pdf](#)

4. **An, S., Broniec, W.,** Rugaber, S., Weigel, E., Hammock, J., and Goel, A. (2021). Recognizing Novice Learner's Modeling Behaviors. Conference Paper. International Conference on Intelligent Tutoring Systems (ITS2021). Online due to COVID. 6/7-11/21.\* [pdf](#)
5. **An, S.,** Bates, R., Hammock, J., Rugaber, S., Weigel, E., and Goel, A. (2020). Scientific Modeling Using Large Scale Knowledge. Conference Paper. International Conference on Artificial Intelligence in Education (AIED 2020). Ifrane, Morocco (Online due to COVID). 7/6-10/20. [pdf](#) \*
6. **Clopton, S.** and Weigel, E. (2019) "The Use of UAVs as Tools to Enhance the Study of the Ecological Impacts of Sustainable Development. Oral Presentation. Associated Schools of Construction 55th Annual International Conference. Denver, Colorado. 4/10-13/19. \*
7. Weigel, E. (2018). Ecological Change: Who calls campus home? Oral Presentation. National Association of Biology Teacher's Planet Power Sustainability Symposium. San Diego, California. 11/10/18.\*

## **B. OTHER PUBLICATIONS AND CREATIVE PRODUCTS**

1. **Altman-Kurosaki, N. T., Brown, E. R., Roney, S. H.,** Weigel, E. (2022). Tree Biomass and Phenology. QUBES Educational Resources. [doi:10.25334/M232-RY51](https://doi.org/10.25334/M232-RY51) \*
2. Peña-Gonzalez, A. and Weigel, E. (2021). The Human Microbiome Biodiversity in Health and Disease. QUBES Educational Resources. [doi:10.25334/C094-BX29](https://doi.org/10.25334/C094-BX29) \*
3. **Caughman, A.** and Weigel, E. (2021). Investigating human impacts on Southeastern US stream ecology using R. QUBES Educational Resources. [doi:10.25334/P995-7G91](https://doi.org/10.25334/P995-7G91) \*
4. Weigel, E. (2020). Investigating human impacts on stream ecology: Scaling up from Local to National with a focus on the Southeast. ESA Data Access - Inclusive Pedagogy, QUBES Educational Resources. doi:[10.25334/66FP-9M34](https://doi.org/10.25334/66FP-9M34) \*
5. Weigel, E. and Lackey, A. C. R. (2020). Basic Statistics. Make Teaching with R in Undergraduate Biology Less Excruciating, QUBES Educational Resources. [doi:10.25334/N0T7-DD80](https://doi.org/10.25334/N0T7-DD80) \*
6. **Lauer, D.** and Weigel, E. (2020). Island Biogeography. Make Teaching with R in Undergraduate Biology Less Excruciating, QUBES Educational Resources. [doi:10.25334/ABY7-GQ05](https://doi.org/10.25334/ABY7-GQ05)
7. **Kho, M.** Weigel, E. (2020). R Subsetting Tutorial. Make Teaching with R in Undergraduate Biology Less Excruciating, QUBES Educational Resources. [doi:10.25334/GZCA-S726](https://doi.org/10.25334/GZCA-S726)
8. **McWhirt, M.E.** and Weigel, E. (2019). Population Ecology in Swirl: Estimating Population Sizes. Make Teaching with R in Undergraduate Biology Less Excruciating, QUBES Educational Resources. [doi:10.25334/W5TS-HR94](https://doi.org/10.25334/W5TS-HR94) \*
9. **McWhirt, M.E.** and Weigel, E. (2019). Optimal Foraging in Swirl. Make Teaching with R in Undergraduate Biology Less Excruciating, QUBES Educational Resources. [doi:10.25334/38NY-HP77](https://doi.org/10.25334/38NY-HP77) \*
10. Weigel, E. (2019). Population Demography in Swirl. Make Teaching with R in Undergraduate Biology Less Excruciating, QUBES Educational Resources. [doi:10.25334/Q4XN08](https://doi.org/10.25334/Q4XN08) \*

11. Weigel, E. (2014). Discussing evolution is fruitful: Or, Why I don't shut up about evolution. NSF BEACON Evolution 101. Blog of BEACON: An NSF Center for the Study of Evolution in Action.
12. Weigel, E. (2014). Mock Interviews are Nothing to Mock. NSF BEACON Evolution 101. Blog of BEACON: An NSF Center for the Study of Evolution in Action.
13. Weigel, E. (2013). BEACON Buzz. Bi-Monthly Newsletter of BEACON: An NSF Center for the Study of Evolution in Action. *Multiple Editions*.
14. Weigel, E. (2012). Maternal Effects. NSF BEACON Evolution 101. Blog of BEACON: An NSF Center for the Study of Evolution in Action.
15. **Tameesh, F.** and Weigel, E. (2012). Adaptive Dynamics Models and Game Theory. NSF BEACON Evolution 101. Blog of BEACON: An NSF Center for the Study of Evolution in Action.
16. Weigel, E. (2011). The "Mating" Game. NSF BEACON Researchers at Work. Blog of BEACON: An NSF Center for the Study of Evolution in Action.
17. Weigel, E. (2009). A Night with Dan Gordon. November 2009 Issue. The HyPe: Georgia Tech Honors Program News.
18. Weigel, E. (2009). Verhaltensbeobachtungen an männliche Lisztäffchen (*Saguinus oedipus*) im Tierpark Hellabrunn (Behavioural observations on male cotton-top tamarins in Hellabrunn Zoo). Lehrstuhl für Tierökologie, Wissenschaftszentrum Weihenstephan, Technische Universität München (Department of Animal Ecology, Weihenstephan Science Center, Technical University of Munich). Betreuer (PI): Prof. Dr. R. Gerstmeier
19. Weigel, E. (2009). Investigation of bioavailability and uptake of pollutants from spiked sediments using the sediment contact assay with zebrafish – follow up project B. UROP International Projekt, Institut für Umweltforschung, RWTH Aachen.
20. Weigel, E. (2008). It's Not About The Money. September 2008 Issue. The HyPe: Georgia Tech Honors Program News.

## C. PRESENTATIONS

### C1. POSTERS AND ABSTRACTS

1. Weigel, E. and **Niepoky, M.** (2022). Investigating Belongingness and Breakouts in Online Introductory Biology Courses. Poster Presentation. Society for the Advancement of Biology Education Research (SABER) National Meeting. University of Minnesota - Twin Cities, Minnesota. 7/7-10/22. \*
2. Aikens, M. and Weigel, E. (2022). Once is Not Enough: Biology Students' Values for Math in Biological Contexts Shows Little Improvement After One Semester of a Life Science Course that Integrates Quantitative Material. Poster Presentation. Society for the Advancement of Biology Education Research (SABER) National Meeting. University of Minnesota - Twin Cities, Minnesota. 7/7-10/22. \*

3. Erdmann, R, Weigel, E., Furrow, R., Ledford, J., Caporale, N., Ahuja, A., Metzger, K., and Booth, C. (2022). Learning communities dedicated to the usage of R in postsecondary biology instruction and education research. Poster Presentation. Society for the Advancement of Biology Education Research (SABER) National Meeting. University of Minnesota - Twin Cities, Minnesota. 7/7-10/22. \*
4. Weigel, E. and Reid, J. W. (2022). When Do I Start Feeling Like a Teacher?": How TA Teaching Perspectives and Identity Influence Their Teaching and Learning Views. Poster Presentation. University System of Georgia Teaching and Learning Conference. Online. 4/1/22. \*
5. Weigel, E. (2021). Effects of classroom space on student attitudes and knowledge of sustainability. Poster Presentation. Society for the Advancement of Biology Education Research (SABER) National Meeting. University of Minnesota - Twin Cities, Minnesota (Online due to COVID). 7/9;16;23;30/21. \*
6. **Brown, J., Pardo-Sanchez, J.** and Weigel, E. (2021). Effects of Anxiety and Test-Taking Strategies on Exam Differences Between Biology and Non-Biology Majors. National Conference of Undergraduate Research (NCUR). Online due to COVID. 4/12-14/2021.\*
7. **Caughman, A.** and Weigel, E. (2021). Biology students attitudes towards math and CS closely linked, with some important exceptions. Teaching and Learning Conference: Lighting the Way for Deeper Learning. University of Tennessee, Knoxville (Online due to COVID). 3/30/2021.\*
8. Weigel, E. and Reid, J. W. (2021). Examining Perspectives of Teaching among Biology Teaching Assistants. Poster Presentation. Celebrate Teaching Day. Georgia Tech. Atlanta, Georgia. 3/7/21.
9. **Caughman, A.** and Weigel, E. (2021). Biology Student Attitudes toward Math and CS Closely Linked. X-DBER 2021. University of Nebraska-Lincoln (Online due to COVID). 3/1-3/2021.\*
10. Weigel, E., **Chen, M.**, and **Arnold, N.** (2020) Unpacking the black box: How do student values, behavior, and course content interact to determine student success in a flipped course? Poster Presentation. Society for the Advancement of Biology Education Research (SABER) National Meeting. University of Minnesota - Twin Cities, Minnesota (Online due to COVID). 7/10;17;24;31/20. \*
11. Weigel, E. (2020). Flipping Black Boxes!: Does student engagement depend on individual expectancy value? Poster Presentation. Celebrate Teaching Day. Georgia Tech. Atlanta, Georgia. 3/10/20. \*
12. Handlos, Z. and Weigel, E. (2020). Extreme Atlanta: Using Project-Based Learning to Enhance Student Scientific Abilities within the Context of an Interdisciplinary Climate Change/Urbanization Course. Annual Meeting of the American Meteorological Society. Boston, Massachusetts. 1/12-16/20. \*



13. **An, S.**, Bates, R., Hammock, J., Rugaber, S., Weigel, E., and Goel, A. (2019). Cognitive Assistance for Inquiry-based Modeling. Poster Presentation. Advances in Cognitive Systems. Cambridge, Massachusetts. 8/2-5/19. \*
14. **An, S.**, Bates, R., Hammock, J., Rugaber, S., Weigel, E., and Goel, A. (2019). Learning by doing: Supporting experimentation in inquiry-based modeling. Poster Presentation. Cognitive Science 2019. Montreal, Canada. 7/24-27/19. \*
15. **Mosley, C.**, Johnson, T., and Weigel, E. (2019). Determining Aquatic Biodiversity and Stream Health of the Proctor Creek Watershed Using eDNA Technology. Poster Presentation. AAS Water Science Poster Session at Confluence 2019. Helen, Georgia. 3/22-24/19. \*
16. Weigel, E. and Angra, A. (2019). Graphing in the Classroom. Poster Presentation. Celebrate Teaching Day. Georgia Tech. Atlanta, Georgia. 3/12/19. \*
17. Weigel, E. (2018). Making Georgia Tech's Family Friendly Policies Visible. Poster Presentation. Georgia Tech. Atlanta, Georgia. 11/13/18. \*
18. **Pardo Sanchez, J.** and Weigel, E. (2018) Performance, Prediction, and Preparedness: Do Biology-Major Specific Courses Provide an Advantage? Poster Presentation. National Association of Biology Teachers Annual Meeting. San Diego, California. 11/8-11/18.
19. **Mosley, C.**, Johnson, T., and Weigel, E. (2018). Determining Aquatic Biodiversity and Stream Health of the Proctor Creek Watershed Using eDNA Technology. Poster Presentation. Annual Biomedical Research Conference for Minority Students (ABRCMS). Indianapolis, Indiana. 11/14-17/18. \*\*Best Poster Presentation Winner\*\* \*
20. **Mosley, C.**, Johnson, T., and Weigel, E. (2018). Determining Aquatic Biodiversity and Stream Health of the Proctor Creek Watershed Using eDNA Technology. Oral Presentation. Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS). San Antonio, Texas. 10/11-13/18. \*
21. Weigel, E. and Angra, A. (2018) Using Graphing Materials to Improve Undergraduate Biology Students' Graph Choice, Construction, and Interpretation in an Upper-Division Animal Behavior Lecture Course. Poster Presentation. Society for the Advancement of Biology Education Research (SABER) National Meeting. University of Minnesota - Twin Cities, Minnesota. 7/27-29/18. \*
22. Weigel, E. and Angra, A. (2018) Using Graphing Materials to Improve Undergraduate Biology Students' Graph Choice, Construction, and Interpretation in an Upper-Division Animal Behavior Lecture Course. Poster Presentation. Celebrate Teaching Day. Georgia Tech. Atlanta, Georgia. 3/8/18. \*
23. Weigel, E. and Angra, A. (2017) Using Graphing Materials to Improve Undergraduate Biology Students' Graph Choice, Construction, and Interpretation in an Upper-Division Animal Behavior Lecture Course. Poster Presentation. STEM Education Research Partnering. Georgia Tech, Atlanta, Georgia. 12/5/17. \*
24. Weigel, E. and Angra, A. (2017) Using Graphing Materials to Improve Undergraduate Biology Students' Graph Choice, Construction, and Interpretation in an Upper-Division Animal Behavior Lecture Course. Poster Presentation. National Association of Biology Teachers Annual Meeting. St. Louis, Missouri. 11/10-13/17.

25. Weigel, E., Kovacs, J.L., and Werren, J.H. (2016). Evolutionary novelty: Horizontal gene transfer in the kissing bug, *Rhodnius prolixus*. Poster Presentation. Institutional Research and Academic Career Development Awards (IRACDA) Annual Conference. University of Arizona, Tucson, Arizona. 6/12-14/16.
26. Weigel, E., Mead, L., and McElhinny, T. (2016) How and why can knowledge of concepts in genetics improve student understanding of concepts in evolution? Poster Presentation. Institutional Research and Academic Career Development Awards (IRACDA) Annual Conference, University of Arizona Tucson, Arizona. 6/12-14/16.
27. **Michel, B.**, Weigel, E., and Kovacs, J.L. (2016). Determining the Difference Between Commercial Honey and Hive Honey. Poster Presentation. Spelman Research Day. Atlanta, Georgia. 4/15/16.
28. **Brown, K.**, Weigel, E., Kovacs, J.L., and Werren, J.H. (2016). Identifying candidate shared horizontally transferred genes in the kissing bug, *Rhodnius prolixus*. Poster Presentation. The Society for Integrative and Comparative Biology (SICB) Annual Meeting. Portland, Oregon. 1/3-7/16.
29. Weigel, E., Kovacs, J.L., and Werren, J.H. (2015). Evolutionary novelty: Horizontal gene transfer in the kissing bug, *Rhodnius prolixus*. Poster Presentation. The SouthEastern Ecology and Evolutionary Genetics (SEPEEG). Eatonton, Georgia. 10/23-25/15.
30. Mobley, R.B., **Foster, S.R.**, **Tillotson, M.L.**, Weigel, E., and Boughman, J.W. (2015) Multisensory Influences of Humic Acid on Threespine Stickleback Behavior. Poster Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Congress. East Lansing, Michigan. 8/15-18/15.
31. Weigel, E. and Taylor, A. (2015) #SciStuChat. Poster Presentation. ComSciCon, Microsoft New England Research and Development Center. Cambridge, Massachusetts. 6/18-20/15.
32. Weigel, E. and Boughman, J.W. (2014) Short-term density exposure affects male reproductive success in threespine stickleback (*Gasterosteus aculeatus*). Poster Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Congress. East Lansing, Michigan. 8/16-19/14.
33. Weigel, E. and Boughman, J.W. (2014) Short-term density exposure affects male reproductive success in threespine stickleback (*Gasterosteus aculeatus*). Poster Presentation. International Society for Behavioral Ecology. CUNY Animal Behavior Institute, Hunter College, City University of New York. New York, New York. 7/31-8/5/14.
34. Weigel, E., Mead, L., and McElhinny, T. (2014) How and why can knowledge of concepts in genetics improve student understanding of concepts in evolution? Poster Presentation. Society for the Advancement of Biology Education Research (SABER) National Meeting. University of Minnesota - Twin Cities, Minnesota. 7/17-20/14.
35. **Tillotson, M.**, **Foster, S.**, Mobley, R., Weigel, E., and Boughman, J.W. (2014). Testing the effect of reproductive state on olfaction in threespine stickleback. Poster Presentation. University Undergraduate Research and Arts Forum. East Lansing, Michigan. 4/4/14.
36. **Rienne, G.**, Weigel, E., and Boughman, J.W. (2014). Seasonal patterns of male stickleback (*Gasterosteus aculeatus*) courtship and nesting activity. Poster Presentation. University

Undergraduate Research and Arts Forum. East Lansing, Michigan 4/4/14. **\*\*Best Poster Presentation Winner\*\***

37. **Foster, S.**, Weigel, E., and Boughman, J.W. (2014). Is bigger really better?: Nest size doesn't influence female mate choice in threespine stickleback (*Gasterosteus aculeatus*). Poster Presentation. University Undergraduate Research and Arts Forum. East Lansing, Michigan. 4/4/14.
38. **Cipolla, E.**, Weigel, E., and Boughman, J.W. (2014). Differences observed in nesting and mating behavior in high and low density treatments of male stickleback fish. Poster Presentation. Midwest Ecology and Evolution Conference (MEEC). University of Dayton. Dayton, Ohio. 3/1-2/14.
39. **Foster, S.**, Weigel, E., and Boughman, J.W. (2014). Is bigger really better?: Nest size doesn't influence female mate choice in Threespine stickleback (*Gasterosteus aculeatus*). Poster Presentation. Midwest Ecology and Evolution Conference (MEEC). University of Dayton. Dayton, Ohio. 3/1-2/14.
40. **Rienne, G.**, Weigel, E., and Boughman, J.W. (2014). Seasonal Patterns of Male Stickleback (*Gasterosteus* spp.) Courtship and Nesting Activity. Poster Presentation. Midwest Ecology and Evolution Conference (MEEC). University of Dayton. Dayton, Ohio. 3/1-2/14.
41. **Rienne, G.**, Weigel, E., and Boughman, J.W. (2013). Seasonal Patterns of Male Stickleback (*Gasterosteus* spp.) Courtship and Nesting Activity. Poster Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Review. East Lansing, Michigan. 12/10/13.
42. **Cipolla, E.**, Weigel, E., and Boughman, J.W. (2013). Differences observed in nesting and mating behavior in high and low density treatments of male stickleback fish. Poster Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Review. East Lansing, Michigan. 12/10/13.
43. Weigel, E., **Cipolla, E.**, **Reh-Gingerich, A.**, and Boughman, J.W. (2013) Density impacts nest timing, not weight, in a stickleback fish. Poster Presentation. BEACON Day @ North Carolina A&T State University. Greensboro, North Carolina. 10/2-3/13.
44. Weigel, E., **Cipolla, E.**, and Boughman, J.W. (2013) The effects of a density shift on nesting and mating behavior in a species of stickleback fish. Poster Presentation. Michigan Alliances for Graduate Education and the Professoriate (AGEP)-King-Chavez-Parks Future Faculty Fellows (KCP-FFF) Fall Conference. East Lansing, Michigan. 9/6/13.
45. Weigel, E., **Cipolla, E.**, **Reh-Gingerich, A.**, and Boughman, J.W. (2013) The effects of a density shift on nesting and mating behavior in a species of stickleback fish. Poster Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Congress. East Lansing, Michigan. 8/14/13.
46. **Cipolla, E.**, Weigel, E., and Boughman, J.W. (2013) The effects of a density shift on nesting and mating behavior in a species of stickleback fish. Poster Presentation. Mid-Michigan Symposium for Undergraduate Research Experiences (Mid-SURE). East Lansing, Michigan. 7/24/13.
47. **Reh-Gingerich, A.**, Weigel, E., and Boughman, J.W. (2013). Male Courtship Activity Fluctuates Across the Season. Poster Presentation. University Undergraduate Research and Arts Forum. East Lansing, Michigan. 4/12/13.

48. **Reh-Gingerich, A.** and Weigel, E. (2013). Male Courtship Activity Fluctuates Across the Season. Poster Presentation. Midwest Ecology and Evolution Conference (MEEC). University of Notre Dame. South Bend, Indiana. 3/22-24/13. **\*\*Best Undergraduate Poster Winner\*\***
49. Weigel, E. (2012). Sexual Signaling Loss in Empirical, Theoretical, and Digital Systems. Poster Presentation. Cyber Infrastructure Days. East Lansing, Michigan. 10/25-26/12.
50. Weigel, E. (2012). Sexual Signaling Loss in Empirical, Theoretical, and Digital Systems. Poster Presentation. NSF Science and Technology Center Annual Meeting. Arlington, Virginia. 8/28-29/12.
51. Weigel, E., Tinghitella, R. M., and Boughman, J.W. (2012). Mate availability influences timing and number of clutches in sticklebacks. Poster Presentation. First Joint Congress on Evolutionary Biology. Ottawa, Ontario, Canada. 7/6-10/12.
52. Weigel, E. and Tinghitella, R. M. (2012). Mate availability and hybridization in the threespine stickleback. Poster Presentation. Council of Graduate Students Graduate Academic Conference. East Lansing, Michigan. 3/30/12. **\*\*Best Poster Presentation Winner\*\***
53. Weigel, E. and Tinghitella, R. M. (2012). Mate availability and hybridization in the threespine stickleback. Poster Presentation. Midwest Ecology and Evolution Conference (MEEC). Cincinnati, Ohio 3/24/12.
54. Weigel, E. and Tinghitella, R. M. (2011). Mate availability and hybridization in the threespine stickleback. Poster Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Review. East Lansing, Michigan. 12/7/11.
55. Weigel, E. and Tinghitella, R. M. (2011). Mate availability and hybridization in the threespine stickleback. Poster Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Congress. East Lansing, Michigan. 8/10/11.
56. Weigel, E. (2010). Behavioral Observations of Male Cotton-top Tamarins (*Saguinus oedipus*). Undergraduate Research Symposium. Poster Presentation. Atlanta, Georgia. 3/16/10.
57. Zielke, H., Adamzyk, C., Rehage, R., Weigel, E., Spira, D., Preuss, T.G., Schmidt, B., Feiler, U., Seiler, T.-B., and Hollert, H. (2009). Effects of ageing on bioavailability and uptake of pollutants from spiked sediments. Poster Presentation. SETAC-GLB. Munich, Germany. 10/5-7/09.
58. Weigel, E. (2008). Rotifer Ecotoxicology: Behavioral Avoidance of Toxicants. Poster Presentation. Honors Program Student Expo. Atlanta, Georgia. 4/24/08.
59. Weigel, E. (2008). Honor Rolls: The Honors Program Bike Initiative. Poster Presentation. Honors Program Student Expo. Atlanta, Georgia. 4/24/08.
60. Weigel, E. (2008). Rotifer Ecotoxicology: Behavioral Avoidance of Toxicants. Poster Presentation. Undergraduate Research Symposium. Atlanta, Georgia. 4/3/08.

## **C2. ORAL PRESENTATIONS**

1. Weigel, E., Kistenberg, E., and Niepokoy, M. (2022). Be there to Belong: Sense of Belonging in Major-Restricted and All-Majors Sections of Introductory Science Courses. Oral Presentation.

- Scholarship of Teaching and Learning Summit. Kennesaw State University. Kennesaw, GA. 10/6-7/22.\*
2. Moore, M.E., J.D. Marcette, G.S. McDowell, and Weigel, E.G. (2022) November 12, 2022. Reflecting On Who's Coming To Dinner: Broadening Participation vs. Inclusion In Biology Education. National Association of Biology Teachers (NABT) Annual Meeting. Indianapolis, IN. 11/10-13/22.\*
  3. Weigel, E. (2022). Developing Statistical Reasoning Through Instruction with Graphs. Teaching and Learning Conference: Lighting the Way for Deeper Learning. University of Tennessee, Knoxville. 3/29/22.\*
  4. Weigel, E. and Angra, A. (2021). Active Stem Teaching of Graphs Results in Better Stats Knowledge as a Byproduct. Scholarship of Teaching and Learning Summit. Kennesaw State University. Kennesaw, GA. 10/7-8/21. \*
  5. Weigel, E. (2021). The Low-down on Lockdown: How our behavior during Covid has shaped wild animals. Serenbe Institute for Art, Culture, and the Environment. Atlanta, Georgia (Online due to COVID). 10/2/21. \* **Invited Talk**
  6. Weigel, E. (2021) Who calls Georgia Tech home? Wildlife on Campus. Tech- UGA Urban Naturalist Certificate program. Atlanta, GA. 5/15/21. \* **Invited Talk**
  7. Weigel, E. (2020). COVID-19 and Animal Behavior. Oral Presentation. University of Georgia Veterinary School Animal Behavior Club. Athens, Georgia (Online due to COVID). 12/9/20. \* **Invited Talk**
  8. Caporale, N., Martinez, L., Weigel, E., McClenny, A., Hike, N., Tenneal, R., Hibler, T., and Moore, M. How To Teach Inclusively: Tips, Tricks, and Evidence for Your Biology Course. National Association of Biology Teachers (NABT) Annual Meeting. Baltimore, MD (Online due to COVID). 11/6-7/20. \* **Invited Panel Presentation**
  9. Reid, J. W., and Weigel, E. (2020). What Do TA Teaching Perspectives Say About Their Views of Teaching and Learning? Oral Presentation. Biology Teaching Assistant Project Virtual Conference. 10/26/20. \*
  10. Weigel, E. (2020). The Journey of a Biologist: Meet Dr. Weigel. Tri-Beta Kick-Off Meeting. Oral Presentation. Georgia Tech. Atlanta, Georgia (Online due to COVID). 9/17/20. \* **Invited Talk**
  11. Weigel, E. (2020). Concept Map Assessment Reveals Short-Term Community-Engaged Fieldwork Enhances Sustainability Knowledge. Pedagogy Education Research Club (PERC) Seminar Series. Georgia State University. Atlanta, Georgia (Online due to COVID). 9/14/20. \* **Invited Talk**
  12. Weigel, E. (2020). Do you see what I see? Teaching and Assessing with Visuals. Oral Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Congress. East Lansing, Michigan (Online due to COVID). 8/12-14/20. \* **Invited Keynote**
  13. Cowles, E. A., Kurth, C., Milks, K., Phillipson-Mower, T., and Weigel, E. (2019). Thirty Lessons, Demos, and Labs to Teach about Environmental Change. Oral Presentation. National Association of Biology Teachers (NABT) Annual Meeting. Chicago, IL. 11/14-16/19. \*

14. Weigel, E. (2019). Learn R, in R: Crash-course in using Swirl for an Easy Guide to Crunching Numbers. Oral Presentation. National Association of Biology Teachers (NABT) Annual Meeting. Chicago, IL. 11/14-16/19. \*
15. **Pruett, J.** and Weigel, E. (2019). Community-engaged fieldwork increases sustainability knowledge breadth, depth, & complexity. Oral Presentation. International Society for the Scholarship of Teaching and Learning (ISSOTL) Annual Meeting. Atlanta, Georgia. 10/9-12/19.\*
16. **Pardo, J., Taylor, A.,** Dallas, H., Weigel, E. and Mendelson II, J. (2019). An Ontogeny of Spatial Use in Sidewinders. Oral Presentation. Biology of Pitvipers Conference. Rodeo, New Mexico. 7/11-14/19. \*
17. Weigel, E. and **O’Sullivan, T.** (2019) Is struggle necessary?: Exposure to R statistical programming and the effect on associated quantitative skills and values in biology. Oral Presentation. Society for the Advancement of Biology Education Research (SABER) National Meeting. University of Minnesota - Twin Cities, Minnesota. 7/26-28/19. \*
18. Goel, A., **An, S.,** Bates, R., Hammock, J., Rugaber, S., and Weigel, E. (2019). VERA Goes to College: Inquiry-Based Modeling for Learning about Ecology in College-Level Biology. Oral Presentation. Machine Learning in Science and Engineering 2019. Atlanta, Georgia. 6/10/19. \*
19. Baykina, M., Massey, A., Metzler, M., Ruiz-Funes, M., and Weigel, E. (2019). SoTL Research Projects from the USG SoTL Fellows. Oral Presentation. University System of Georgia Teaching and Learning Conference. Athens, Georgia. 4/11/19. \*
20. Angra, A. and Weigel, E. (2019). Teaching Graphing Skills in an Animal Behavior Lecture Classroom. Oral Presentation. University System of Georgia Teaching and Learning Conference. Athens, Georgia. 4/10/19. \*
21. Weigel, E. (2019). Exposure to guided tutorials in statistical programming in R and associated quantitative skills in biology. Oral Presentation. Scholarship of Teaching and Learning (SoTL) Commons Conference. Savannah, Georgia. 1/21/19. \*
22. Weigel, E. and Dagenhart, R. (2018). Collaboration across Ecology and Architecture courses for deeper student understanding of the built environment. Oral Presentation. SLS Faculty Showcase. Atlanta, Georgia. 12/6/18. \* **Invited Talk**
23. Weigel, E. (2018). Ecology Education and VERA- Results of a Pilot Study. Oral Presentation. BESPOKES: Big Data in Ecology Meeting. University of North Texas. Dallas, Texas. 12/3/18. \* **Invited Talk**
24. Weigel, E. (2018). Making Georgia Tech’s Family Friendly Policies Visible. Oral Presentation. Georgia Tech. Atlanta, Georgia. 11/13/18. \* **Invited Talk**
25. Weigel, E. (2018). Meet Dr. Weigel. Tri-Beta Kick-Off Meeting. Oral Presentation. Georgia Tech. Atlanta, Georgia. 8/27/18. \* **Invited Talk**
26. Lee, M., Stephens-Cooley, M., Weigel, E. and Conn, C. (2018). Enhancing the Postdoctoral Experience through Liberal Arts Colleges. Oral Presentation. Council of Undergraduate Research Annual Meeting. Washington, D.C. 7/1-3/18. \*

27. Weigel, E. (2018). Collaboration across Ecology and English courses to document the health and history of a community. Oral Presentation. SLS Faculty Showcase. Atlanta, Georgia. 4/30/18. \* **Invited Talk**
28. Weigel, E. (2018). Nurturing Citizenship and Partnership thru Biology. Oral Presentation. Science and Engineering for Social Good Conference. Atlanta, Georgia. 2/9-11/18. \*
29. Weigel, E. (2017). Modeling in K-16 Ecology Education. Smithsonian Institute BESPOKES: Big Data in Ecology Meeting. Oral Presentation. Washington, D.C. 12/14/17. \* **Invited Talk**
30. Weigel, E. (2017). Urban Ecology and Biodiversity of the Built Environment. Oral Presentation. Sustainable Undergraduate Research Fellows Meeting. Atlanta, Georgia. 9/25/17. \* **Invited Talk**
31. Weigel, E. (2017). Sustainable Education: Ecology Lab as a Case Study. Oral Presentation. Georgia Tech Serve-Learn-Sustain Luncheon with US Department of Education. Atlanta, Georgia. 9/20/17. \* **Invited Talk**
32. **Darnell, G.** and Weigel, E. (2017) Patterns in Sexual Dimorphism and Mate Choice of Anoles and Geckos: The Exceptions. Oral Presentation. BeeINspired Research Expo. Georgia Tech. Atlanta, Georgia. 7/19/17. \*
33. **Dominguez, D.** and Weigel, E. (2017) Database on the sexual characteristics and behaviors in the order Testudines. Oral Presentation. BeeINspired Research Expo. Georgia Tech. Atlanta, Georgia. 7/19/17. \*
34. Weigel, E. (2016). Evolution is Sexy! Oral Presentation. Brookwood High School AP Biology Program. Atlanta, GA. 8/12/16. \* **Invited Talk**
35. Weigel, E. and Boughman, J.W. (2016) Courtship experience and success affect male behavioral, morphological, and extended phenotypes. Oral Presentation. Evolution 2016. Austin Convention Center. Austin, Texas. 6/17-21/16.
36. Kovacs, J.L., Weigel, E., **Brown, K.**, and Werren, J.H. (2016). Evolutionary and Ecological Impacts of Horizontal Gene Transfer in Arthropods. Oral Presentation. Evolution 2016. Austin Convention Center. Austin, Texas. 6/17-21/16.
37. **Brown, K.**, Weigel, E., Kovacs, J.L., and Werren, J.H. (2016). Horizontal Gene Transfer in Arthropods. Oral Presentation. Spelman Research Day. Atlanta, Georgia. 4/15/16.
38. Mobley, R.B., **Foster, S.R.**, **Tillotson, M.L.**, Weigel, E.G., and Boughman, J.W. (2016) Fish Brains on Acid: Stickleback Visual and Olfactory Perception in Response to Altered Humic Environments. Midwestern Ecology and Evolution Conference. Oral Presentation. Miami University. Oxford, Ohio. 3/19-20/16.
39. Kovacs, J.L., Weigel, E., **Brown, K.**, and Werren, J.H. (2016). Evolutionary and Ecological Impacts of Horizontal Gene Transfer in Arthropods. Oral Presentation. Emerging Researchers National Conference in STEM. Washington, D.C. 2/25-27/16.
40. Weigel, E., Kovacs, J.L., and Werren, J.H. (2016). Evolutionary novelty: Horizontal gene transfer in the kissing bug, *Rhodnius prolixus*. Oral Presentation. The Society for Integrative and Comparative Biology (SICB) Annual Meeting. Portland, Oregon. 1/3-7/16.

41. Weigel, E. (2015). Sex and Experience: Does Practice Help? Weekly Seminar of BEACON: An NSF Center for the Study of Evolution in Action. East Lansing, Michigan. 9/18/15.
42. Weigel, E. and Boughman, J.W. (2015) Short-term shifts in demography can have lasting consequences on extended phenotypes. Oral Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Congress. East Lansing, Michigan. 8/15-18/15.
43. Weigel, E. and Boughman, J.W. (2015) Doing the right thing, the right amount: Male investment and reproductive success in the threespine stickleback (*Gasterosteus aculeatus*). Oral Presentation. Southeastern Ecology and Evolution Conference. University of Georgia. Athens, Georgia. 3/13-15/15.
44. Weigel, E. (2015) [\*Hot or not? Just Try\*](#) Science Research Presentation for TEDxMSU. Oral Presentation. East Lansing, Michigan. 3/4/15. **Invited Talk**
45. Weigel, E. (2014) Oh, Behave! Behavior as an interaction between genes and the environment. Oral Presentation. BEACON/NESCent Evolution Teacher Workshop - "Evolution in Action" for the 2014 Professional Development Conference of the National Association of Biology Teachers. Cleveland, Ohio. 11/15/14. **Invited Talk**
46. Weigel, E. (2014). Investment in Reproduction. ZOL 415: Ecological Aspects of Animal Behavior, MSU. Oral Presentation. East Lansing, Michigan. 10/8/14. **Invited Talk**
47. Weigel, E. (2014). Threespine Stickleback as a Model of Evolution. Brookwood High School AP Biology Program. Oral Presentation. Atlanta, Georgia. 9/24/14. **Invited Talk**
48. Weigel, E., Mead, L., and McElhinny, T. (2014). Curriculum Interplay: What Putting Genetics Courses First Can Show Us About How Students Understand Evolution. Oral Presentation. 2nd Life Discovery – Doing Science Education Conference. San José State University. San José, California. 10/3-4/14.
49. Weigel, E., Mead, L., and McElhinny, T. (2014) Genetic Variation as a Pivotal Point in Genetics-to-Evolution Course Sequences. Oral Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Congress. East Lansing, Michigan. 8/16-19/14.
50. Weigel, E. and Boughman, J.W. (2014) Short-term density exposure affects male reproductive success in threespine stickleback (*Gasterosteus aculeatus*). Oral Presentation. Evolution 2014. Raleigh Convention Center. Raleigh, North Carolina. 6/20-24/14.
51. Weigel, E. (2014). Temporal Patterns in Sexual Selection in Threespine Stickleback (*Gasterosteus aculeatus*). Oral Presentation. EDGE (Enthusiasts of Diversity, Genetics, and Evolution) Seminar. University of Georgia. Athens, Georgia. 3/7/14.
52. Weigel, E. (2014). Traveling Through Time and Space: The CIRTL-Exchange Journey. Oral Presentation. NSF Center for the Integration of Research, Teaching, and Learning (CIRTL) Network Leaders Meeting. University of Georgia. Athens, Georgia. 3/7/14.
53. Weigel, E. (2014). How and why can knowledge of concepts in genetics improve student understanding of evolution? Oral Presentation. Biology Education Research Group Seminar. University of Georgia. Athens, Georgia. 3/5/14.



54. Weigel, E. and Boughman, J.W. (2014) “Low” and Behold: Short-term exposure to low-density conditions is enough to positively influence male reproductive success in Threespine stickleback (*Gasterosteus aculeatus*). Oral Presentation. Midwest Ecology and Evolution Conference (MEEC), University of Dayton. Dayton, Ohio. 3/1-2/14. **Invited Talk**
55. Weigel, E. (2014) Studying Threespine Sticklebacks. Journalism (JRNL) 472/872-Science and Health Writing, MSU. Oral Presentation. East Lansing, Michigan. 1/26/14. **Invited Talk**
56. Weigel, E. (2013) What is BEACON? Exhibit Presentation. National Association of Biology Teachers 75<sup>th</sup> Annual Meeting. Atlanta, Georgia. 11/21-22/13.
57. Weigel, E. (2013) Genetics and Evolution in Natural Populations. Oral Presentation. FW101: Introduction to Fisheries and Wildlife, MSU. East Lansing, Michigan. 11/5/13. **Invited Talk**
58. Weigel, E. (2013). Natural and Sexual Selection in the Threespine Stickleback. Oral Presentation. Brookwood High School AP Biology Program. Atlanta, Georgia. 10/24/13. **Invited Talk**
59. Weigel, E., Mead, L., and McElhinny, T. (2013) The Disorder of Order: How Genetics Knowledge Impacts Student Understanding of Evolution. Oral Presentation. CIRTL Teaching-As-Research (TAR) Graduate Webinar Series. Online. 9/18/13. **Invited Talk**
60. Weigel, E., Mead, L., and McElhinny, T. (2013) The disorder of order: How genetics knowledge impacts student understanding of evolution. Oral Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Congress. East Lansing, Michigan. 8/14/13.
61. Tinghitella, R. M., Weigel, E., Head, M., and Boughman, J.W. (2013) Flexible mate choice when mates are rare and time is short. Oral Presentation. 50th Annual Conference of the Animal Behavior Society. Boulder, Colorado. 7/28-8/1/13.
62. Weigel, E. (2013). How and why can knowledge of concepts in genetics improve student understanding of evolution? Oral Presentation. MSU FAST Fellows Symposium. East Lansing, Michigan. 4/30/13.
63. Weigel, E. (2013). How and why can knowledge of concepts in genetics improve student understanding of evolution? Oral Presentation. Symposium on Teaching, Learning and Graduate Education at MSU: A Joint Endeavor of FAST, IIT, and RCAH Fellows. East Lansing, Michigan. 4/19/13.
64. Weigel, E. (2013). Genetically Hardwired: How and why can knowledge of concepts in genetics improve student understanding of concepts in evolution? Oral Presentation. NSF Center for the Integration of Research, Teaching, and Learning (CIRTL) Online Teaching-as-Research Conference. 4/16/13.
65. Weigel, E., Tinghitella, R. M., and Boughman, J.W. (2013). Play the odds: Mate availability, not timing, impacts female reproductive investment. Oral Presentation. Midwest Ecology and Evolution Conference (MEEC). University of Notre Dame. South Bend, Indiana. 3/22-24/13.
66. Weigel, E. (2013). Fishing for a Mate: Threespine Stickleback Mating Across the Season. Oral Presentation. Alliances for Graduate Education and the Professoriate (AGEP) Meeting. East

Lansing, Michigan. 3/14/13.

67. Weigel, E. (2013). Temporal Impacts of Sexual Selection in Threespine Stickleback. Oral Presentation. Ecology, Evolutionary Biology, and Behavior (EEBB) Program Colloquium 3/13/13. **Invited Talk**
68. Weigel, E. and **Reh-Gingerich, A.** (2012). Male Courtship Activity Fluctuates Across the Season. Poster Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Review. East Lansing, Michigan. 12/11/12.
69. Weigel, E. (2012). Exponential and Logistic Population Growth, Oral Presentation. BS162: Introduction to Organisms and Populations, MSU. 11/19/12. **Invited Talk**
70. Weigel, E. (2012). Sex and Sexual Selection. Oral Presentation. BEACON Graduate Course (MSU and University of Washington), ZOL 890-601: Evolutionary Biology for Non-Life Scientists, MSU and U Idaho. 10/25/12. **Invited Talk**
71. Tinghitella, R. M., Weigel, E., and Boughman, J.W. (2012). Flexible mate choice in response to intrinsic and social cues: Effects of mate availability and time of season. Oral Presentation. Seventh International Conference on Stickleback Behavior and Evolution. Seattle, Washington. 7/29/12-8/4/12.
72. Weigel, E., Tinghitella, R. M., and Boughman, J.W. (2012). Temporal fluctuations in clutch timing as a mechanism for sexual signaling loss. Poster Presentation. BEACON: An NSF Center for the Study of Evolution in Action Annual Congress. East Lansing, Michigan. 7/17/2012.
73. Tinghitella, R. M., Weigel, E., and Boughman, J.W. (2012). Flexible mate choice in response to extrinsic and intrinsic cues: Effects of mate availability and aging. Oral Presentation. First Joint Congress on Evolutionary Biology. Ottawa, Ontario, Canada. 7/6-10/12.
74. Lucek, K., Rowe, H., and Weigel, E. (2011). An analytically tractable model for competitive speciation. Oral Presentation. FroSpects Winter School for Eco-evolutionary Modeling of Speciation. Abisko, Sweden. 3/11/11.
75. Weigel, E. (2011). Sexual signaling loss. Oral Presentation. FroSpects Winter School for Eco-evolutionary Modeling of Speciation. Abisko, Sweden. 3/7/11.
76. Weigel, E. and Schenkl, B. (2010). Balancing roles: Working as a research and study liaison to Germany while pursuing an undergraduate degree. Oral Presentation. DAAD North America Young Ambassador Conference. New York, New York. 8/20/10.
77. Weigel, E. (2010). The importance of international experience in undergraduate research. Oral Presentation. DAAD North American Young Ambassador Conference. New York, New York. 8/20/10.
78. Weigel, E. (2009). What is *The Tower*? How to submit, work for, and find *The Tower* across campus. Oral Presentation. Undergraduate Research Kaleidoscope. Atlanta, Georgia. 9/9/09.
79. Weigel, E. (2009). Behavioral Observations of Male Cotton-top Tamarins (*Saguinus oedipus*): Role of Males in Cooperative Breeding. Oral Presentation. Tierpark Hellabrunn-Technical University of Munich: Zoo Behavioral Study Cooperation End-of-Year Review. Munich, Germany. 7/23/09.

80. Weigel, E. (2008). Behavior of Cotton-top Tamarins (*Saguinus oedipus*) in Zoos. Oral Presentation. Tierpark Hellabrunn-Technical University of Munich: Zoo Behavioral Study Cooperation Fall Preview. Munich, Germany. 12/17/08.

## **D. GRANTS AND CONTRACTS**

### **D1. AS PRINCIPAL INVESTIGATOR**

Title of Project: Acoustic Sensor Development in the EcoCommons  
Sponsor: GVU/IPaT Research and Engagement Grant Program  
Role: PI  
Total Dollar Amount: \$20,000  
Period of Contract: 2019-2020 academic year

Title of Project: Guided Tutorials to Understand Atlanta's Ecology  
Sponsor: Serve-Learn-Sustain  
Role: PI  
Total Dollar Amount: \$2,500  
Period of Contract: 2019-2020 academic year

Title of Project: Scholarship of Teaching & Learning (SOTL) Publication Grant, "Progression of Written Explanations of Evolution"  
Sponsor: Spelman College  
Role: PI  
Total Dollar Amount: \$600  
Period of Contract: 2016-2017 academic year

Title of Project: Spelman SOTL Pedagogy Grant, "Assessment"  
Sponsor: Spelman College  
Role: PI  
Total Dollar Amount: \$300  
Period of Contract: 2016-2017 academic year

### **D2. AS CO-PRINCIPAL INVESTIGATOR**

Title of Project: RCN-UBE Incubator: R in Education and Assessment of Learning (REAL)  
Sponsor: NSF UBE RCN  
Role: Co-PI (with R. Erdmann, N. Caporale, and A. Ahuja)  
Total Dollar Amount: \$74,866  
Period of Contract: 09/01/2020-08/31/2021

Title of Project: "Tracking the Evolution Discussion on Social Media"  
Sponsor: NSF BEACON Center  
Role: Co-PI (with Dozier, Agrawal, Williams (NCA&T); Brown-Clarke (MSU); Walker (Highpoint University))  
Total Dollar Amount: \$43,819 (Funds remained at NCA&T after transition to Tech)  
Period of Contract: 2016-2017 academic year  
Candidate's share: Funds remained at NCA&T after transition to Tech

Title of Project: "Writing Though STE(A)M: Engaging Evolution in Creative Spaces"  
Sponsor: NSF BEACON Center

Role: Co-PI (with C. Rohrbacher-NCA&T)  
Total Dollar Amount: \$26,191  
Period of Contract: 2016-2017 academic year  
Candidate's share: Funds remained at NCA&T after transition to Tech

### **D3. AS SENIOR PERSONNEL OR CONTRIBUTOR**

Title of Project: Georgia Tech GAANN Graduate Fellowships in Biology  
Sponsor: US Department of Education  
PI: Lachance, J.  
Total Dollar Amount: \$303,396.00  
Role: Steering Committee

Title of Project: Enhancing Undergraduate Biology Education through Science Communication in our Communities  
Sponsor: NSF UBE RCN Incubator  
PI: Murphy, S.  
Role: Steering Committee

Title of Project: Building retrofits for Bird Safety  
Sponsor: Disney Conservation Fund  
PI: A. Beteul (Atlanta Audubon Society)  
Role: Partner institution; data collection and management

### **D6. INTERNAL FUNDING FOR INSTRUCTION AND OTHER UNDERGRADUATE INITIATIVES**

Title of Project: Creating the Next Tech Tower  
Sponsor: Tech Fee Fund  
Role: PI (with Onstine)  
Total Dollar Amount: \$66,948 (specifically to Ecology Lab)  
Period of Contract: 2021-2022 academic year

Title of Project: Biological Sciences Upper Division Undergraduate Instructional Lab Equipment  
Sponsor: Tech Fee Fund  
Role: Co-PI (with Balog, Decker, Kerr, and Onstine)  
Total Dollar Amount: \$10,592 (specifically to Ecology Lab)  
Period of Contract: 2019-2020 academic year

Title of Project: Serve-Learn-Sustain Toolkit Grant  
Sponsor: Serve-Learn-Sustain  
Role: Author  
Total Dollar Amount: \$500  
Period of Contract: 2019-2020 academic year

Title of Project: Empowering Policy and Decision Makers to Model the Impacts of Climate Change  
Sponsor: GT Climate Change Fellows Program  
Role: Co-PI (with A. Goel and J. Koval)  
Total Dollar Amount: \$30,000  
Period of Contract: 2018-2019 academic year

Title of Project: Creation and Implementation of the Interdisciplinary Course: Extreme Atlanta:  
Climate Change in Urban Spaces  
Sponsor: GT Climate Change Fellows Program  
Role: Co-PI (Z. Handlos and T. Michney)  
Total Dollar Amount: \$8,000  
Period of Contract: 2018-2019 academic year

Title of Project: Green Lab Equipment for the Living Building Ecology Lab  
Sponsor: Georgia Tech Technology Fee Funds  
Role: Author  
Total Dollar Amount: \$42,582  
Period of Contract: 2017-2018 academic year

Title of Project: Serve-Learn-Sustain Course Development Grant  
Sponsor: Serve-Learn-Sustain  
Role: Author  
Total Dollar Amount: \$1,000  
Period of Contract: 2017-2018 academic year

Title of Project: Serve-Learn-Sustain Curricular and Co-Curricular Grant  
Sponsor: Serve-Learn-Sustain  
Role: Author  
Total Dollar Amount: \$3,500  
Period of Contract: 2017-2018 academic year

Title of Project: Biodiversity of the Living Building  
Sponsor: Living Building Challenge Project Grant  
Role: Co-Authored with M. Weissburg  
Total Dollar Amount: \$9,500  
Period of Contract: 2017-2018 academic year

Title of Project: Serve-Learn-Sustain Curricular and Co-Curricular Grant  
Sponsor: Serve-Learn-Sustain  
Role: Author  
Total Dollar Amount: \$1,100  
Period of Contract: 2016-2017 academic year

**D7. PROFESSIONAL DEVELOPMENT AND SERVICE FUNDING RECEIVED AS A GRADUATE STUDENT**

NSF BEACON Spring Travel Grant	\$375	2016
NSF BEACON Publication Grant, "Sexual Selection in Avida"	\$1560	2015
Society for the Study of Evolution Travel Grant	\$825	2015
Spelman Workshop Grant, "Metacognition in the Classroom: Teaching, Learning and Assessment"	\$300	2015
NSF BEACON Summer Conference Travel Grant	\$1000	2014
EEBB Program Summer Travel Award	\$500	2014
Society for the Study of Evolution Outreach Grant, "Evolutionary Anthropology Activity: Examining Hominid Remains"	\$800	2014
MSU Graduate School Travel Fellowship	\$350	2014
NSF BEACON Spring Conference Travel Grant	\$1200	2014
NSF BEACON Fall Conference Travel Grant	\$2409	2013
NSF BEACON Travel Grant	\$1200	2013

MSU John R. Shaver Graduate Research Award	\$1800	2013
NSF BEACON Travel Grant	\$600	2012
MSU Green Games Award (for green initiatives on campus)	\$750	2012
NSF BEACON Travel Grant	\$500	2012
MSU Green Games Award (for green initiatives on campus)	\$1000	2011
EEBB Travel Fellowship	\$400	2011
MSU John R Shaver Graduate Research Award	\$1200	2011
NSF BEACON Travel Grant	\$1000	2011
GT Honors Program, Student Challenge Fund Grant for Campus Bike Share	\$2500	2007-10

## E. OTHER SCHOLARLY AND CREATIVE ACCOMPLISHMENTS

### E1. Science Communication Through Partnership with the MSU Museum

Virtual Outreach Program Presenter, Senses of Adaptation	2013
Mutation Station (Genetics of Evolution) Exhibit Designer (Opened Oct. 2013)	2012-2013
Silent Spring Exhibit Contributor: Role of Women in Science (June-Dec. 2012)	2012
Creation of the Rachel Carson MSUM and GWIS Partnership Award	2011
GWIS Darwin Discovery Day Presentation of a Timeline of Women in Science	2011-2012
Darwin Discovery Day, Planning Committee (-2013); Presenter (2011-2014)	2011-2014

### E2. Consulting and Creation of Software and Educational Materials

Campus Safari (Map-Based Android App for Campus Wildlife)	2020
Graphing Pedagogy Expertise, McGraw-Hill Graphing Interactives	2020
Scientific Expertise, Cove Dating App	2018-2019
Evidence-Based Argument Developer, Middle-School NGSS (In Collaboration with Dr. Todd Reeves, through funding from Northern Illinois University's Center for the Interdisciplinary Study of Language and Literacy)	2016
Film Project Consultant, Ecology Laboratory at Proctor Creek	2016

## F. SOCIETAL AND POLICY IMPACTS

- Campus Wildlife Responses (original 10/26/2021; update posted on 10/31/22): <https://news.gatech.edu/features/2021/10/wildlife-home-campus> (also appeared in Daily Digest and ran in the Whistle; Top 10 reads across GT)
- International Plan coverage (8/6/2018): <https://news.gatech.edu/features/plan-global-proportions>
- Coursework in the field, as covered in the Saporta Report (5/13/2018): <https://saportareport.com/citizen-scientists-gathering-information-to-inform-policy-decisions-in-west-atlanta/>
- Living Building Biodiversity monitoring:
  - <http://www.livingbuilding.gatech.edu/documenting-effects-living-building-biological-diversity-and-succession> (video)
  - <https://livingbuilding.kendedafund.org/2017/07/26/6-pilot-projects-involve-students-in-living-building/>
- University System of Georgia Fellows (4/17/2018): [https://www.usg.edu/facultydevelopment/centers/program\\_spotlight/welcome\\_to\\_the\\_2018\\_2019\\_usg\\_sotl\\_fellows](https://www.usg.edu/facultydevelopment/centers/program_spotlight/welcome_to_the_2018_2019_usg_sotl_fellows)

## VII. SERVICE

## A. PROFESSIONAL CONTRIBUTIONS

Guest Lecturer, Georgia Tech Summer College Research Internship (SCRI) Program	2022
CEISMC Georgia Tech K-12 Summit	2022
Guest Lecturer, LMC 6650 Project Studio	2022
Panelist, How CIRTl Impacted My Career: Hearing from Teaching Faculty	2022
Expert Commentator, “Realizing the Vision: Designing a Community Science Collaboratory for the U.N. Sustainable Development Goals” Atlanta Global Studies Center’s Atlanta Global Research & Education Collaborative (AGREC)	2021
Poster Competition Judge, National Association of Biology Teachers (NABT) Meeting	2021
Co-Host, Inclusive Environments and Metrics in Biology Education and Research (iEMBER) Session, “Going Back to In-Person Instruction: A Pandemic Discussion”	2021
Workshop Facilitator, Science Education for New Civic Engagements and Responsibilities (SENCER) Course Design	2021
Guest Lecturer, LMC 3705 Principles of Information Design	2021
Abstract Judge, Annual Bio Medical Research Conference for Minority Students (ABRCMS)	2021
Urban Wildlife, Guest Expert, Urban Naturalist Certificate Program (Tech-UGA)	2021
Panel Organizer and Conference Planning Committee, Center for the Integration of Research, Teaching and Learning (CIRTl) Network Alumni Meeting	2021
Panelist, iEvoBio Education Panel, Integrating Computational Thinking in Domain Coursework	2021
Workshop Presenter, A Discussion of “Wealth, Race, and Wildlife (in partnership with Serve-Learn-Sustain)”	2020
Workshop Facilitator for Life Science Track, STEM Teacher @ Tech via CEISMC	2020
Panelist, Office of the Vice Provost for Graduate Education and Faculty Development Panel for New Faculty	2020
Interviewed for English 1102 (Misemer) for Science Communication	2020
Poster Competition Judge, Career, Research, and Innovation Development Conference	2020
Guest Lecturer, Special Topics 4803 Drone tech applications in the build environment	2019
Panelist, Serve-Learn-Sustain (SLS) Open House	2019
Panelist, CTL “Words from the Wiser” Panel for New Faculty	2019
Panelist, First Generation at Tech Seminar hosted by the GT Library	2019
Guest Speaker, Going through the IRB Process, USG Chancellor’s Fellows Working Group	2019
Panelist, Using Clickers for Teaching and Learning	2019
Reviewer, CTL Teaching Assistant (TA) Awards Committee	2019-2022
Assessment Partner, Serve-Learn-Sustain (SLS)	2019
Content Creator, Serve-Learn-Sustain (SLS) Assessment Guide	2019
Panelist, Teaching Large Classes, GT CTL Graduate Professional Development	2019
Panelist, Early Career Teaching Faculty, GT CTL Graduate Professional Development	2018
Guest Lecturer, Urban Ecology Course, GT Honors Program	2018
Assessment Partner, Serve-Learn-Sustain (SLS)	2018
Judge, IRACDA 2018 Conference (postdoctoral scholars in teaching)	2018
Roundtable discussion leader: “Bridging Worlds for Diversity and Inclusion: The Inclusion of Social Science with Biology Education Research Through the iEMBER Network”. Society for the Advancement of Biology Education Research (SABER) National Meeting	2018
Roundtable discussion leader: “iEMBER science identity project”. Society for the Advancement of Biology Education Research (SABER) National Meeting	2018
NSF-Sponsored Quantitative Bio Workshop at Spelman, Co-Organizer	2016

Spelman Research Day Moderator, Oral Presentations in Biology	2016
Faculty Reviewer, Spelman's Undergraduate Research Journal, <i>Continuum</i>	2016
Oral Presentation Judge, Southeast Ecology and Evolution Conference (SEEC)	2015
Facilitator for Incorporating Research into the Curriculum, Life Discovery Conference	2015
NSF Science and Technology Center Annual Meeting, BEACON Representative	2015
Society for the Study of Evolution Workshop Assistant, "Experiencing Evolution: A Professional Development Workshop for Undergraduate Educators"	2014
Graduate School Invited Panelist, Midwest Ecology and Evolution Conference	2014
Guest Scientist, MSU's Journalism 472/872-Science and Health Writing (13 students)	2014
Society for the Study of Evolution Workshop Planning Committee, "Avoiding Extinction in the Classroom: A Professional Development Workshop for Undergraduate Educators"	2013
Founding Member, Collaborative Research in Education, Assessment, and Teaching Environments for the fields of Science, Technology, Engineering, and Mathematics. (CREATEforSTEM) Graduate Student Group at MSU	2013
Contributing Blogger, Office of the Vice President for Research & Graduate Studies Blog	2013
Contributing Blogger, Nature Afield: Notes on Biophilia	2013
MSU Graduate Student Representative, Zoology Curriculum Committee	2013-2015
MSU Women's Advisory Committee to the Vice President for Student Affairs & Services	2013-2014
BEACON Technical Staff, Science Communication	2013
Planned Graduate Student/Post-Doc Activities for the 2012 NSF Site Visit to BEACON	2012
"Careers Outside of Academia" Panel Session Host	2012
MSU Graduate Student Representative to Zoology Faculty & Chair Search	2012-2013
BEACON Student / Postdoc Association, MSU Liaison	2012-2014
BEACON Faculty Interview Usher	2012
Finalist for Student Keynote Speaker for the 2012 Women's Leadership Conference	2012
COGS Graduate Academic Conference Poster Session Judge	2011
BEACON Graduate Student Focus Group	2011
MSU Graduate Women in Science (GWIS) Chapter Liaison and Vice President	2011-2013
MSU GWIS Professional Development Committee	2011-2013
MSU Zoology Representative to COGS (Council of Graduate Students)	2011
MSU COGS Representative to the All University Traffic and Transit Committee	2011
MSU GWIS Community Outreach Committee, Chair	2010-2014
MSU GWIS Undergraduate Mentoring Committee	2010-2014
MSU GWIS Community Outreach Committee	2010-2014
MSU Owen Graduate Association (OGA) Logistics Coordinator	2010-2011
Appointed MSU OGA representative to COGS	2010
Alumni Advisor & Training Presenter for 2011-2012 DAAD Young Ambassador Program	2010-2012
ACC Meeting of the Minds Undergraduate Research Conference, "Research Careers" Panel Session Moderator	2010
NSF BEACON Fellow, Sexual Selection Group	2010-2011

## B. PUBLIC AND COMMUNITY SERVICE

Community Science Collaboratory	2022
Panelist, Alliances for Graduate Education and the Professoriate (AGEP) Career Panel	2021
Expert Comment, <i>The Atlantic</i> <a href="https://www.theatlantic.com/science/archive/2021/07/mammal-adulticide/619512/">https://www.theatlantic.com/science/archive/2021/07/mammal-adulticide/619512/</a>	2021
ActivateATL   Dept. of Parks & Rec. Focus Group on Sustainability	2021
ActivateATL   Dept. of Parks & Rec. Focus Group on Sustainability	2020



National Institute of Neurological Disorders and Stroke (NINDS) Educational Resource Expert Commenter	2020
Expert Comment, The Daily Helmsman newspaper at the University of Memphis <a href="http://www.dailyhelmsman.com/news/memphis-zoo-asks-for-bamboo-donations-although-it-may-be/article_d261897a-54b0-11e9-a38c-afd916077d74.html">http://www.dailyhelmsman.com/news/memphis-zoo-asks-for-bamboo-donations-although-it-may-be/article_d261897a-54b0-11e9-a38c-afd916077d74.html</a>	2019
Expert Comment, PBS NOVA at WGBH in Boston <a href="https://www.pbs.org/wgbh/nova/article/hyenas-climbing-social-ladder-easier-friends">https://www.pbs.org/wgbh/nova/article/hyenas-climbing-social-ladder-easier-friends</a>	2019
Community Open House: Equity and the Living Building at Georgia Tech	2018
GT Pursuing Urban Sustainability Camp (PUSH), Faculty Support	2018
Recruitment at College of Sci. Events for Transfer Students	2018-present
Duluth Middle School Teacher Development in “STEAM” Education	2017
Recruitment at College of Sci. It’s All About Science and Math (IAASM) program	2016-present
Represented the School of Biological Sciences at the College of Sciences Open House for Family Weekend	2016-present
Abstract Judge, Annual Bio Medical Research Conference for Minority Students	2016
Georgia Tech International Plan Alumni Panel	2015
Guest Scientist, MSU ISB202: Applied Organismal and Environmental Biology	2015, 2017
Interviewed Scientist, University of New Hampshire Undergraduate Animal Behavior Course	2015
Entomology Session Volunteer, Brookwood High School Science Olympiad Invitational	2015
Digital Guest Scientist, McWane Science Center Biotechnology Camp at UAB	2015
Studying Evolution, Murphy Elementary Science Fair	2015
Sciencepalooza! Science Fair Judge at MacDonald Middle School	2013- 2015
Stickleback Lab Science Tour for Shabazz Elementary 3 <sup>rd</sup> Graders	2014
Human Evolution Guest Scientist, Dewitt High School	2014
Evaluator, Mid-Michigan Symposium for Undergraduate Research Experiences (Mid-SURE), Agriculture & Animal Science Section	2013
GWIS Mentoring Program Mentor to Undergraduate Scientist Savannah Foster	2013
Studying Evolution, Marble Elementary Science Night	2013
Stickleback Lab Tour on Evolution, 3-6 <sup>th</sup> year students at Stepping Stones Montessori	2013
FabFems Role Model Directory of Women in Science	2013
Monthly Twitter Discussion Nights, #scistuchat, with Overton High School Biology (TN)	2013-2016
Grad School Panel Session for Honors Intro to Ecology	2013
Computing and Evolution: Demos for 4 <sup>th</sup> Graders at Marble Elementary School	2013
Volunteer (Write-It, Do-It & Experimental Design) for MI Science Olympiad	2011-2013
College Ambition Program (CAP) Panelist: College in the Sciences	2012
Computing and Evolution: Demos for 6 <sup>th</sup> Graders at Glencairn Elementary School	2012
Mentor for Future Science Leaders Program for Daegu Science High School (Korea)	2012
BEACON Presenter for Spartan International High School Engineering Program	2012
Lab tour guide, Multicultural Apprenticeship & High School Honors Science Programs	2012
GWIS Girls Math and Science Day Volunteer	2012-13, ‘15
The Summer Undergraduate Research Forum (SURF) Judge and Room Moderator for Oral Presentations in Biological Sciences	2012
Brookwood High School (Snellville, GA) Presentation on Studying Sexual Selection, “What Can You Do With A Degree in Biology?” Series	2012-2014
Graduate Student Facilitator at SROP Graduate School Networking Dinner	2011-2013
Hosted “Graduate School Interviews” Workshop	2012, 2013
GWIS Pre-UURAF Undergrad Poster Review Coordinator	2012
Undergraduate Research and Arts Forum Undergrad Poster Judge	2012, 2014

Volunteer and Recruiter for Inaugural Graduate Ambassadors at the Spring University Undergraduate Research and Arts Forum (UURAF)	2011
Hosted “Demystifying Grad School” Workshop	2011
Hosted “Graduate School Personal Statements” Workshop	2011
Zoology Graduate Affairs Committee Luncheon/Panel for Prospective Students	2011
22 <sup>nd</sup> Annual Lansing’s Girl’s Math and Science Conference Coordinator and IT Specialist	2011
Presenter at Science Day at Plainwell Elementary School	2011
GWIS Undergraduate Mentoring Committee Member	2010-2014
BEACON NCA&T Prospective Student Host	2010-2011
Hosted “CV/Resume Workshop for Undergraduates Applying to Grad School” Workshop	2010
Girl Scouts of America “CSI” Event Volunteer	2007
RoboCup 2007 Event Volunteer and German Translator	2007

### C. INSTITUTE CONTRIBUTIONS

#### C1. COMMITTEES AND OTHER SERVICE

Institute Assessment Council	2020-Present
Teaching Effectiveness, Advocacy, and Mentoring Committee, College of Sciences	2022-Present
Committee Member, AP Hiring Search Committee, Neuroscience Program	2022-2023
Committee Member, Wellness Lecturer Hiring Search Committee, Biological Sciences	2022-2023
Retention-Graduation Subgroup, Institute Enrollment Strategy PLC team	2022
Committee Member, Brook Byers Institute for Sustainable Systems BioSci GRA Nominations	2022
External Reviewer, BME Teaching Evaluation	2022
Faculty Status & Grievance Committee	2021-present
Reviewer, GT Pre-Health Advising Personal Statement Review Session	2021
Committee Member, AP Hiring Search Committee, School of Biological Science	2021
Club Advisor, ConnecTech (virtual networking undergraduate club)	2021
College of Sciences, School of Biological Sciences Chair Review Committee	2020-2021
Video Collaboration Review Task Force	2021
College of Sciences, Neuroscience Program Hiring Committee, external expert reviewer	2020
Institute Strategic Plan, “Lead by Example” Working Group	2020
Faculty Representative to the Office of Academic Effectiveness, Assessment Software Com.	2019-2020
GT FIRE Advisory Committee, “Piloting the Next in General Education” (PIs: Berry & Potts)	2019
Committee, Creation of SCaRP Sustainable Cities Minor SLS	2019
School of Biological Sciences Student Learning Outcome Assessment Team (SOBSSLOAT)	2018-present
CTL Faculty Teaching Scholars Project Reviewer	2018
CTL Teaching-As-Research Project Reviewer	2018
School of Biological Sciences Biology Internship Committee, member	2017-present
GT International Plan Committee, member	2017-present
Georgia Tech Green Labs Committee, member	2017-2018
School of Biological Science Introductory Biology Committee, member	2016-present
School of Biological Sciences Biology Education Group	2016-present
GT Pre-Health Advising Mock Interview Session Moderator	2016, 2017
Feedback session host, CTL 2000/8000 Microteaching for grad and undergraduate TAs	2016-present

#### C2. LEADERSHIP ROLES

School of Biological Sciences Undergraduate Assessment Committee, Chair	2019-present
GT Student Computer Ownership Committee (Chair 2019-2021)	2018-2021
School of Biological Sciences Biology Internship Committee, Chair	2018-present

School of Biological Sciences International Plan Advisor	2017-present
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#### D. OTHER PROFESSIONAL ACTIVITIES

Reviewer, <i>KSU Scholarship of Teaching and Learning (SOTL) Summit</i>	2022
Reviewer, <i>American Naturalist</i>	2020-2021
Reviewer, <i>Journal of Biological Education</i>	2020-present
Reviewer, <i>Behavioral Ecology and Sociobiology</i>	2019-present
Reviewer, <i>National Association of Biology Teachers (NABT) Education Research Section</i>	2019-present
Reviewer, <i>International Society for the Scholarship of Teaching and Learning (ISSOTL)</i>	2019-present
Reviewer, <i>Ecology and Evolution</i>	2019-present
Mentoring Academic Professional Program	2018
Reviewer, <i>Journal for STEM Education Research</i>	2018
Reviewer, <i>Society for the Advancement of Biology Education Research (SABER)</i>	2018-present
Reviewer, <i>CBE-Life Sciences Education</i>	2017, 2020
Reviewer, <i>Behavioral Processes</i>	2017
NSF Panel Reviewer (DEB/IOS/BRC-BIO/DBI)	2016, 2022
Board of Editors, <i>Life: The Excitement of Biology</i>	2016
Reviewer, <i>Evolution Education and Outreach</i>	2015
Reviewing Editor, <i>The American Biology Teacher</i>	2014-present
Reviewer, <i>The American Biology Teacher</i>	2014
Reviewer, BEACON Proposals submitted to Thrust Group 1 (Genomes, Networks & Evolvability)	2014
Reviewer, BEACON Proposals submitted to Thrust Group 3 (Ecological Communities & Collective Dynamics) and Education and Outreach calls	2013
Associate Editor of Submission & Review, <i>The Tower</i> , Undergraduate Research Journal	2009-2010
Contributing writer/photographer, GT Honors Program Newsletter, "The HyPe"	2008-2010
Student Reviewer and Copyeditor, <i>The Tower</i> , Undergraduate Research Journal	2008-2009

#### VIII. PROFESSIONAL GROWTH AND DEVELOPMENT

##### A. TEACHING AND ADVISING

Guiding Students to use Data to Support their Scientific Reasoning	2022
Grading Reimagined: Rethinking Assessment with Emerging Grading Techniques	2022
Trans101	2022
AI in Education	2022
Belonging: The Science of Creating Connection and Bridging Divides	2022
Know your students - a university organized tool for equity	2022
Biological and Environmental Data Education (BEDE) Network Meeting	2022
BioInteractive Data Explorer: Reducing Barriers to Student Engagement with Data	2022
CourseKata - Why R (and not Python)?	2022
Curricular Analytics Community	2022
BioInteractive Data Explorer: Reducing Barriers to Student Engagement with Data	2022
FALCoN: Writing good assessment questions: the good, the bad, and the ugly.	2022
STEM Learning through Community Engagement	2022
Uncommon Sense Teaching: Practical Tips from Neuroscience to Help Students Learn	2022
GT Retreat Exploring Effective Teaching	2022
Chancellor's Faculty Learning Community, Classroom Assessment Techniques	2021-2022
Navigating CIOS Reporting in SmartEvals for Faculty/Instructors	2021
Teaching Citational Practice: A Critical Feminist Approach	2021

Why, When & How to Support LGBTQIA+ Students with a focus on trans/nonbinary lives	2021
Negotiating Discomfort	2021
Repurposing Class Recordings For Future Use	2021
Documenting Effective Teaching Behaviors	2021
Rubrics and flipped classrooms: What are they and how do they work in biostatistics classes?	2021
How to support students in times of local/global distress	2021
Reluctant participants: How do you hook your students?	2021
Navigating Assessment Reporting in GT Cloud-Based Assessment Management System	2021
Developing Trust and Psychological Safety	2021
Identify and Strategically Capitalize on Your Own Productivity Hot Spots	2021
Improving statistical skills through storytelling	2021
Encouraging Engagement in Large Classes	2021
Better Learning Through Belonging	2021
Around Online STEM Learning: Learning Gains and Assessing Success	2021
How to teach and use RStudio Cloud in the Classroom	2021
Fostering connections by making room for chattering students	2021
Pathways to Administration and Leadership	2021
Library and Electronic Resources for Courses	2021
Inquiry-based Labs During and After a Pandemic	2020
Chancellor's Faculty Learning Community on Hybrid/Remote Lab and Studio Courses	2020-2021
Environmental Justice in Ecological Research and Education	2020
Equity, Diversity, and Inclusion in Digital Learning	2020
Built-in Flexibility: Lessons learned to engage your community virtually	2020
Sustaining the Conversation: A Review of Georgia Tech's Work Towards Racial Justice through the Lens of 3 Sustainable Development Goals	2020
Trauma Informed Pedagogy: What it is and Why it Matters	2020
Boost Class Morale: Host a Social Night for College Students or Faculty	2020
How to Be An Anti-Racist Educator	2020
How To Be An Antiracist	2020
Aligning Your Teaching with the Four-Dimensional Ecology Education (4DEE) Framework	2020
Assess What's Important: Creating 4DEE Aligned Assessments That Show How Students Use Their Ecological Knowledge	2020
Are students learning as much as they think they are? The role of (dis)fluency with passive and active learning	2020
Designing Virtual Labs for Fall Classes	2020
Leveraging Learning Science for Optimal Course Design, Teaching Practices, and Encouraging Proper Student Study Practices	2020
Conceptualizing Diversity in Higher Education	2020
Stepping Up: How Might Current Events Impact Our Teaching?	2020
GT Overview of AV Technologies for Hybrid/Remote Learning	2020
Wellness and Technology	2020
Transforming the Conversation about Teaching Evaluation in Higher Education: Thoughts from the National Academies' Roundtable on Systemic Change in Undergraduate STEM Education	2020
Faculty and Student Surveys for Characterizing Online Teaching	2020
Design Summer Syllabus for Remote Teaching	2020
Course Engagement Best Practices	2020
Keep Teaching: Advice from Thank a(n Online) Teacher Recipients	2020
Think Globally, Teach Locally	2020
Networked Improvement Communities, Complex Adaptive Systems and the Learning Analytics Research Collaborative	2019

LGBTQIA Safe Space Training	2019
Understanding and Using Analytics in Canvas	2019
CourseSource: A Place to Find & Publish Active Learning Course Material	2019
Maintaining an Active Research Agenda on the Alt-Ac Track	2019
Creating Conditions for Well-Being in Georgia Tech's Learning Environments	2019
Smarter Feedback: Providing Enhanced Feedback through Digital Technology	2019
Understanding Sustainability Through Transdisciplinary Narratives"	2019
Strengths Discovery Workshops (I & II)	2019
Teaching to the SDGs through Sustainability Action Research and Sustainable Business Curricula	2019
Managing Multiple Roles: How to be a Faculty Member and an Administrator	2019
Engaging Students in the Teaching of Statistics	2019
Diversity and Inclusion Leadership Seminar	2018
Getting and Keeping Student Attention	2018
CTL Syllabus Clinic	2018
CTL Workshop, "Little Actions, Big Impact"	2018
Leveraging Canvas to Create Engaging Learning Experiences	2018
CIRTL Flexible Design and the Rigor Needed	2018
Cultivating Critical Thinking through Critical Reflection on Experience Within and Beyond the Classroom	2018
Red Cross CPR and First Aid Certification	2018
Advising Professional Development: The Role Of Values Clarification In Student Career Development	2017
Partnering With Millennials In The Classroom And Lab	2017
Community-engaged Learning	2017
Dealing With The Unexpected	2017
Feminism And STEM Teaching	2017
Active Learning In Stem Classes Big And Small	2017
Managing Difficult Conversations Through The Lens Of Social Identity	2017
How To Design A Great Storytelling Project: Insights From NPR Training	2017
Fellowships In Research And Science Teaching (FIRST) Program Teaching Course, Emory University	2016
Center For Teaching And Learning (CTL) Book Club	2016
Education Symposium: Making Evolution Work - Synthesizing Research And Applied Practice To Inform Both Fields	2016
Evo101 (Evolution Educator Workshop At Evolution 2016)	2016
Assessment (2-day Symposium At Spelman College)	2016
National Center For Faculty Diversity And Development (NCFDD) Academic Time Management	2016
CIRTL Preparing The College Students Of Tomorrow In Biology	2016
Certificate In College Teaching Program, Michigan State University	2011-2015
Project-based Learning	2015
Crawling Out Of The Time Suck: Grading, Evaluation, And Feedback	2015
Teaching Research And Resources Center Metacognition Summer Workshop	2015
Inquiry-based Learning	2015
Scifund Challenge Outreach Class For Scientists, Online Course Through Scifund	9-10/2014
Engaging A Diverse Student Body In Stem By Teaching Critical Thinking	2014
Twitter In The Classroom	2014
Assessment Leaders Colloquium (invited)	2014
Leading Discussions: Strategies For Engaging All Participants	2014
Assess 101	2014

The Future Of Learning + Instructional Space Design Innovation (invited)	2013-2014
Electronic Distractions In The Classroom: Managing & Utilizing The Instant Connections To The World	2013
Next Generation Science Standards, Presented By Dr. Stephen Pruitt	2013
Teaching And Technology: Speed Dating With Technology	2013
Teaching And Technology: Thinking About Teaching With Technology	2013
Teaching Pedagogy And Technology	2013
Resources For Persons With Disabilities	2013
How To Design And Teach Science Courses Online, MSU	1-5/2013
Science Online 2013 Science Communication Conference	2013
NSF Center For The Integration Of Teaching, Research, And Learning (CIRTL) Course: Pathways To Scientific Teaching, MSU	8-10/ 2012
University Graduate Certification In College Teaching Institute	2012
Creating The Inclusive Classroom	2012
MSU University Safe Zone Training (LGBTQIA Inclusiveness)	2011, 2013
How People Learn: A Cognitive Science Perspective	2012, 2013
Question, Persuade, Refer (QPR) Suicide Prevention Training	2011-13, '22
Teaching As Leadership	2011
Teaching Your First College Class: Developing Effective (& Life Long!) Teaching Strategies As A TA	2010
TA/ Student Rights And Responsibilities	2010
Associate Provost and Graduate School Support	2010
Being a TA: TA Program & MSU Teaching Resources	2010
Effective Teaching: What Is It? How Do You Do It? How Do You Know You've Done It?	2010
Catching Up / Looking Forward (course Planning Seminar)	2010
The Doctors Are In! – Successful TAs Talk About Teaching And Graduate Student Success	2010
Understanding Mood	2010
American Council for the Teaching of Foreign Languages: German Teaching Certification	2009

## B. RESEARCH AND THE ENTERPRISE OF SCIENCE

Cultivating Your Network of Mentors, Sponsors & Collaborators	2022
Qualtrics in Canvas	2022
Learning Analytics in STEM Education Research (LASER) Institute	2022
Social Media Training for GT Faculty and Researchers	2022
PEER Virtual Gateway	2022
Understanding Levers of Change in Academia	2021
Getting Started in Education Research with PEER	2021
Evaluating and Improving Team Performance	2021
#SMARTer Together Webinar on AgTech Research & Opportunities	2021
Opportunities for Fellowships, Awards, and Recognition	2021
Coordinating Multiple-Related Teams	2021
Developing NSF and NIH Training Grants	2021
Negotiation	2021
Self-Care to Sustain Your Research and Writing	2021
Interviewing and Selecting Research Team Members	2021
Developing Trust and Psychological Safety	2021
Leading Teams	2021
Faculty Undergraduate Research Panel: Challenges of mentoring undergraduate research students during the pandemic	2020
Sustainable Facilities Forum	2020

Cross-Disciplinary Research in Biology Education	2020
Where Do We Go From Here: Disruptive Actions to Abolish Anti-Black Racism in STEM	2020
Project to Publication—the Art of Manuscript Revision (Multi-week course)	2020
Clickstream Data to Machine Learning: Educational Research and Collaboration with C21U	2020
Physics of Behavior Virtual Workshop	2020
Using Scrum to effectively manage/lead a VIP team	2019
Deliberately Innovating with CNE	2019
Navigating the Barriers to Getting Your STEM Grant Funded	2019
Every Summer Needs a Plan	2019
UN RCE Networking and Marketplace Gathering	2019
Daily Writing for Academic Scientists and Engineers	2019
Identifying and Developing Your Leadership Style	2018
Pivot Grant Search Training	2018
General Biosafety Training	2018
Grant Seeking in the Modern World (sponsored by the Ecological Society of America)	2018
CIRTL Why Do A Qualitative Study?	2018
Building A Publishing Pipeline	2017
Undergraduate Research: Why And How To Engage; Incorporation Into Your Research Proposals Including NSF Career Education Plan; Georgia Tech Opportunities Including Vertically Integrated Program (VIP) And Research Experiences For Undergraduates (REU)	2017
CIRTL Leveraging Authentic Teaching And Research Practices For Successful NSF and NIH Proposals	2016
The ABT Framework: A New Science Communication Tool, With Dr. Randy Olson	2016
Managing Your Digital Identity	2015
Animal Behavior Society (abs) Temporal Variation In Behavior Workshop	2015
How To Successfully Manage Multiple Projects	2015
Healthy Productivity	2015
Science Communication (SEEC 2015)	2015
Thriving In Your First Year As Faculty: Women In Stem	2015
Thriving In Your First Year As Faculty: What To Expect And How To Prepare	2015
Thriving In Your First Year As Faculty: The Academic Job Search	2015
How To Use Social Media For Engaged Scholarship	2014
Financial Wellness: Negotiating Your Job Offer	2014
Professional Image, Writing Productivity, Reviewing	2014
Writing Winning Grant Proposals	2014
Communication Skills For Women	2014
Goal Setting & Achieving Seminar	2014
Leading From The Inside Out: Discover And Understand The Power Of Your Story	2014
MSU Leadership Institute (giving Feedback & Forming Vision Statements)	2013
Interviewing And Negotiations	2013
Job Search: "Tap The 80%: How To Find The Jobs That Are Not Advertised"	2013
Mentoring Matters	2013
Strengthsfinder	2013
Effective Networking	2013
Traditionalists, Boomers, X's And Y's...oh My! Communicating And Collaborating In A Multigenerational Workplace	2013
Communicating Stem Effectively: It's All About Connecting!	2013
Creating Your Brand	2013
Negotiating Your Worth	2013
Marketing Yourself And Transferable Skills	2013
Corporate And Foundation Funding	2013

Securing Academic Positions	2013
Successful Productivity, Successful Living	2013
Planning For A Sustainable Career: From Graduate Student To Professional	2013
Writing Processes & Strategies For Academic Writing	2013, 2015
Managing Time And Academic Relationships	2013, 2015
Developing A Work-life Balance For Sustaining A Productive Career And Your Sanity	2013
Women's Issues In Conflict Management And Negotiation	2013
Post-perfectionism Workshop	2013
Endnotex6 Tutorial	2013
NSF CIRTl Online Coffee Hour Series: Building An Academic Career-Alternative Academic Careers	2013
Doctoral Dissertation Improvement Grant Writing	2013
Fellowship And Career Opportunities	2013
NSF Center For The Integration Of Teaching, Research, And Learning (CIRTl) Course: Research Mentoring, Online Course Through University Of WI-Madison	8-11/2012
Intellectual Property	2012
Politics Of Collaboration Networks	2012
iPython: An Open Source Environment For Scientific Computing	2012
Career Path: Always Have An Objective, But Be Open To Change	2012
Project Management	2012
Frospects Winter School For Eco-evolutionary Modeling Of Speciation (Mathematical Modeling); Abisko, Sweden	5/2011
Avoiding & Negotiating Conflict In Your Graduate Career	2011
Personal Responsibility In Conducting Research And Career	2011
Responsible Animal Research	2011
Objectivity & Conflicting Interest In Academic Research	2011
Setting Expectations	2011
From Doctoral Student To Post-doc	2011
From Graduate Student To Professor: How To Be Effective In The Academy	2011
From CV To Resume Webinar	2011
Developing Your Leadership Potential	2010
Responsibility And Integrity In Career	2010
Responsible Decision-making In Academic Research: Ethical & Moral Perspectives	2010
Zoological Field Study: Native Fauna Of The Garda Region; Garda, Italy	2009