Kaitlin M. Baudier, PhD

Kaitlin.Baudier@usm.edu | (601) 266-4660 | 118 College Dr. Mailbox #5018
Lab Website | ORCID | Google Scholar Profile

Research Interests

Evolution, ecology, and behavior of social insects
Physiological ecology
Biogeography

Education

2017 **Doctor of Philosophy - Biological Sciences**
Drexel University, Philadelphia, PA

2008 **Bachelor of Science, *cum laude* - Biological Sciences**
Louisiana State University, Baton Rouge, LA

Academic Positions

2026-present **Associate Professor,** School of Biological, Environmental and Earth Sciences, University of Southern Mississippi, Hattiesburg, MS

2021-2026 **Assistant Professor,** School of Biological, Environmental and Earth Sciences, University of Southern Mississippi, Hattiesburg, MS

2017-2020 **Postdoctoral Research Associate,** Social Insect Research Group, School of Life Sciences, Arizona State University, Tempe, AZ

2012-2017 **PhD Student/Candidate,** Department of Biodiversity, Earth & Environmental Sciences, Drexel University, Philadelphia, PA

2010-2012 **Entomologist,** Department of Entomology, Audubon Insectarium, Audubon Nature Institute, New Orleans, LA

2009 **Research Associate,** Department of Entomology, Louisiana State University, Baton Rouge, LA

Additional Training

2019-2020 Weaving the Future of Animal Behavior Workshops, Animal Behavior Society

2009 Neotropical Social Insects Course, Organization for Tropical Studies, Costa Rica

Professional Affiliations

International Union for the Study of Social Insects
Entomological Society of America
Mississippi Association of Entomologists, Nematologists, and Plant Pathologists
Animal Behavior Society
Association for Tropical Biology and Conservation

Honors & Awards

2026 USM Student Accessibility Services – SAS Champion Faculty Award Recipient

2024 USM College of Arts & Sciences – Faculty Advisor and Mentor Award Nominee

2024 USM Drapeau Center for Undergraduate Research – Mentor of the Year Nominee

2017 Organization for Tropical Studies, Outstanding student paper – honorable Mention

2016 XXV International Congress of Entomology, 2nd place grad student oral presentation

2015 Drexel Research Day, 1st place graduate poster in Biology & Biomedical Research

2013 & 2015 Drexel University Teaching Excellence Award Nominee

2013 Drexel Students Tackling Advanced Research (STAR) Outstanding Mentor Award

2012-2014 Drexel College of Arts & Sciences Dean's Fellowship

Peer-Reviewed Journal Articles

2026-present (Associate Professor at USM):

Lynch C, Baudier KM, Montgomery D, Barrett M (2026). Amount and composition in nutritional geometry: simplex-based tools for choice and mixture experiments. *Proceedings of the Royal Society B. In press*

Prendergrast CT**, Harrison JF, Baudier KM (2026). Behavioral note: Variation in reflective flow predicts speed of obstruction circumnavigation on *Atta colombica* foraging trails. *Neotropical Naturalist.* 6(2):1-9.

Marley CM**, Halsey V**, Blackburn L**, Stan KD, Baudier KM (2026). Exotic two-spined trap-jaw ants (*Odontomachus haematodus*) in urban parks of Hattiesburg, Mississippi: Recommended sampling methods and notes on nesting biology. *Midsouth Entomologist*. 19(1):86-101.

2021-2025 (Assistant Professor at USM):

Robinson KM*, Baudier KM (2025). Novel description of stingless bee (*Tetragonisca angustula*) mobbing defense against newly observed bullet ant (*Paraponera clavata*) predation. *Journal of Insect Behavior*. 38(2):23.

Robinson KM*, Mabry ZC**, Schonekas H**, Robles López KY*, Johnson AN**, Cipriani G**, Nguyen A**, Ziemke CH, Baudier KM (2025) Is disturbance stridulation in the passalid beetle *Odontotaenius disjunctus* a form of social communication? *Insectes Sociaux*. 72(4):513-521.

Robinson KM*, Baudier KM (2024) Stingless bee foragers experience more thermally stressful microclimates but have wider thermal tolerance breadths than other worker subcastes. *Frontiers in Ecology and Evolution*. 12:1405459.

Rowe E, Robles López KY*, Robinson KM*, Baudier KM, Barrett M (2024). Farmed cricket (*Acheta domesticus*, *Gryllus assimilis*, and *Gryllodes sigillatus*; Orthoptera) welfare considerations: Recommendations for Improving Global Practice. *Journal of Insects as Food and Feed.* 10(8):1253-1311.

Johnson A**, Ziemke CH, Yee DA, Baudier KM (2024) Notes on the natural history and climatic specializations of an endemic Caribbean paper wasp (Hymenoptera: Vespidae: *Mischocyttarus phthisicus*). *Caribbean Naturalist.* 96:1-8.

Robles López KY*, Sosa Calvo J, Zoppas de Albuquerque E, Calixto JM*, Baudier KM (2024) One ant's trash is another ant's treasure: Neotropical army ant middens are transient resources for a diverse assemblage of ants. *Biotropica*. 56(1):58-70.

O'Donnell S, Baudier KM (2023) Significant colony differences in thermal tolerances and decoupling of high and low critical temperatures in the army ant *Eciton burchellii parvispinum*. *Ecological Entomology*. 48(5):622-626.

Navas Zuloaga MG, Baudier KM, Fewell JH, Ben-Asher N, Pavlic TP, Kang Y (2023) A Modeling Framework for adaptive collective defense: Crisis response in social-insect colonies. *Journal of Mathematical Biology*. 87.

Ostwald MM, Tretter S, Buellesbach J, Calixto JM*, Fewell JH, Gadau J, Baudier KM (2023) Body mass and cuticular hydrocarbon profiles, but not queen number, underlie worker desiccation resistance in a facultatively polygynous harvester ant (*Pogonomyrmex californicus*). *Journal of Comparative Physiology B*. 193:261–269.

Baudier KM & Pavlic TP (2022) Multi-level instrumentation of bivouac thermoregulation: current methods and future directions. *Artificial Life and Robotics*. 27:308-315.

Baudier KM, Ostwald MM, Haney BR, Calixto JM*, Cossio FJ**, Fewell JH (2022) Social factors in heat survival: Multi-queen desert ant colonies have higher and more uniform heat tolerance. *Physiological and biochemical zoology*. 95(5):379-389.

Baudier KM, Bennett MM, Barrett M, Cossio FJ*, Wu RD**, O'Donnell S, Pavlic TP, Fewell JH (2022) Soldier neural architecture is temporarily modality specialized but poorly predicted by repertoire size in the stingless bee *Tetragonisca angustula. Journal of Comparative Neurology*. 530(4):672-682.

Bennett MM & Baudier KM (2021) The night shift: Nest closure and guarding behaviors in the stingless bee, *Tetragonisca angustula*. *Journal of Insect Behavior*. 34(4):162-172.

2017-2020 (Postdoctoral Scholar at ASU):

Baudier KM, Bennett MM, Ostwald MM, Hart S**, Pavlic TP, Fewell JH (2020) Age-based changes in kairomone response mediate task partitioning in stingless bee soldiers (*Tetragonisca angustula*). *Behavioral Ecology and Sociobiology*. 74:1-9.

Baudier KM & Pavlic TP (2020) Incidental interactions among Neotropical army-ant colonies are met with self-organized walls of ants (Hymenoptera: Formicidae). *Myrmecological News*, 30.

Welch L**, Baudier KM, Harrison J (2020) Warmer mid-day temperatures increase leaf intake by increasing forager speed and success in *Atta colombica* during the rainy season. *Insectes Sociaux.* 67:213-219.

Baudier KM, O'Donnell S. (2020) Rain shadow effects predict population differences in thermal tolerance of leaf-cutting ant workers (*Atta cephalotes*). *Biotropica,* 52(1):113-119.

Baudier KM, Ostwald MM, Grüter C, Segers FH, Roubik DW, Pavlic TP, Pratt SC, Fewell JH (2019) Changing of the guard: mixed specialization and flexibility in nest defense (*Tetragonisca angustula*). *Behavioral Ecology*, 30:1041-1049.

Baudier KM, D'Amelio CL**, Sulger E**, O'Connor MP O'Donnell S (2019) Plastic collective endothermy in a complex animal society (army ant bivouacs: *Eciton burchellii parvispinum*). *Ecography.* 42:730-739.

Baudier KM, S O'Donnell (2018) Complex body size differences in thermal tolerance among army ant workers (*Eciton burchellii parvispinum*). *Journal of Thermal Biology*. 78:277-280.

Ostwald MM, Ruzi SA, Baudier KM (2018) Ambush predation of stingless bees (*Tetragonisca angustula*) by the solitary-foraging ant *Ectatomma tuberculatum. Journal of Insect Behavior*. 31:503-509.

Baudier KM, D'Amelio CL**, Malhotra R**, O'Connor MP, O'Donnell S (2018) Extreme insolation: climatic variation shapes the evolution of thermal tolerance at multiple scales. *The American Naturalist.* 192:347-359.

O'Donnell S, Baudier KM, Fioca K, Marenda DR (2018) Erythritol ingestion impairs adult reproduction and causes larval mortality in *Drosophila melanogaster* fruit flies (Diptera: Drosophilidae). *Journal of applied entomology*. 142:37-42.

2012-2017 (Graduate Student at Drexel):

Baudier KM, O'Donnell S (2017) Weak links: How colonies counter the social costs of individual variation in thermal physiology. *Current Opinion in Insect Science*. 22:85-91.

Baudier KM, O'Donnell S (2016) Structure and thermal biology of subterranean army ant bivouacs in a tropical montane forest. *Insectes Sociaux*. 63(3):467-476.

O'Donnell S, Baudier KM, Marenda DR (2016) Non-nutritive polyol sweeteners differ in insecticidal activity when ingested by adult *Drosophila melanogaster*. *Journal of Insect Science.* 16:1-3.

Baudier KM, Mudd AE**, Erickson SC**, O'Donnell S (2015) Microhabitat and body size effects on heat tolerance: implications for responses to climate change (army ants: Formicidae, Ecitoninae). *Journal of Animal Ecology.* 84:1322-1330.

Baudier KM, Kaschock-Marenda SD, Patel N**, Diangelus KL**, O'Donnell S, Marenda DR (2014) Erythritol, a non-nutritive sugar alcohol sweetener and the main component of Truvia®, is a palatable ingested insecticide. *PLoS ONE.* 9(6):e98949.

Peer-reviewed Conference Proceedings

Strickland LG, Baudier KM, Bowers KP, Pavlic TP, Pippin CP (2019) Bio-inspired role allocation of heterogeneous teams in a site defense task, *Distributed Autonomous Robotic Systems*, 9:139-151.

Book Chapters

Baudier KM (2019). Brood Stimulation Hypothesis. In *Encyclopedia of Social Insects*, ed. Starr CK. Cham, Switzerland: Springer International.

Manuscripts Currently in-Review

Lynch C, Barrett M, Baudier KM, Cuff JP, Lee KP, Lihoreau M, Monchanin C, Montgomery D, Ponton F, Zanco B, Morimoto J. (*In review*) The third phase for the Geometric Framework for Nutrition: dimensional shifts in theory and practice. *Ecology Letters*.

Robinson KM*, Uy FMK, Baudier KM. (*In review*) Division of labor and low temperatures predict geographic variation in thermal tolerance of a North American paper wasp (*Mischocyttarus mexicanus cubicola*). *Journal of Biogeography*. (Pre-print: https://doi.org/10.64898/2026.09.01.748716)

Guo X, Azizi A, Baudier KM, Kang Y, Pavlic TP, Fewell JH. (*In review*) Behavioral heterogeneity and contact-network structure damp false-alarm cascades in ant colonies. *Proceedings of the National Academy of Sciences*.

MacGown J, Baudier KM, Portugal JS. Updated Records and Confirmed Colonies of Asian Needle Ants (Hymenoptera: Formicidae: *Brachyponera chinensis*) in Mississippi. *Midsouth Entomologist*.

Received Research Support

External Funding:

2026-present (Associate Professor at USM):

2026-2030 **Non-Assistance Cooperative Agreement – PI – $40,031**
Ant identification in logged timberland of the Gulf Coastal Plain, USA Department of Agriculture, Agricultural Research Station

2021-2025 (Assistant Professor at USM):

2025-2026 **Formula State Wildlife Grant – PI – $40,242**
Non-target effects of Red Imported Fire Ant (Solenopsis invicta) control baits on the imperiled Florida Harvester Ant (Pogonomyrmex badius) in Mississippi, U.S. Fish and Wildlife Service / MDWFP,

2025 **Contract specimen identification – PI – $2500**
Ant identification from burned and unburned pine forest in Escambia County, FL
USA Department of Agriculture, Agricultural Research Station

2025-2027 **Beckman Scholars Program – Senior Personnel – $156,000**
Recognizing Outstanding Undergraduate Research in Chemistry and Biological Sciences at USM,
The Arnold and Mabel Beckman Foundation

2024-2025 **Formula State Wildlife Grant – PI – $34,044**
A modeling-informed survey of the imperiled Florida Harvester Ant (Pogonomyrmex badius) in Mississippi, U.S. Fish and Wildlife Service / MDWFP,

2024-2027 **National Science Foundation REU SITE – *CO-PI* – $422,391**
REU Site: Gulf Coastal Plain Ecology
National Science Foundation

2022-2023 **Rethink Priorities Invertebrate Research Award – *CO-PI* – $29,607**
Investigation of Cricket Welfare
Rethink Priorities, San Francisco, CA

2017-2020 (Postdoctoral Scholar at ASU):

2018-2021 **DARPA W31P4Q-18-C-0054 (Phase I & II) – Senior Personnel / CO-PI – $990,792**
Autonomous System Control via Social Insect Models (ASC-SIM)
USA Defense Advanced Research Projects Agency

2017-2018 **US Air Force/Eglin AFB/FL A8651-17-F-1013 – Senior Personnel – $368,079**
Bio-Inspired Swarming (BioSwarm) Seedling project
USA Defense Advanced Research Projects Agency

2012-2017 (Graduate Student at Drexel):

2014 **Christiane and Christopher Tyson Research Fellowship – PI – $3,482**
Ecological and physiological factors in Neotropical army ant thermal tolerance
Organization for Tropical Studies

Internal funding

2026-present (Associate Professor at USM):

2026-2027 **Gold Leaf Award for Newly Tenured Faculty – PI – $1178**
Pilot funding to support the expansion of the macrophysiological / evolutionary thrust of my post-tenure research program. Gold Leaf Society, USM

2021-2025 (Assistant Professor at USM):

2025-2026 **Lucas Endowment for Faculty Excellence – PI – $5000**
Revealing how social insects create living structures using advanced scanning technology and artificial intelligence. Office of the provost, USM

2024 **College of Arts & Sciences Faculty Research Award – PI – $2000**
Documenting and developing monitoring methodology for a new pest ant species (the two-spined trap-jaw ant, Odontomachus haematodus*) in the Hattiesburg area*

College of Arts & Sciences, USM

2017-2020 (Postdoctoral Scholar at ASU):

2018-2019 **Innovative Post-Doctoral Research Award – PI – $5,790**
Modalities of task specialization in the stingless bee Tetragonisca angustula
School of Life Sciences, Arizona State University

2012-2017 (Graduate Student at Drexel):

2016-2017 **Claudio Elia Environmental Science & Engineering Fellowship – PI – $7,500**
Using ants to model thermal physiology along tropical temperature gradients
Drexel University

2016 **McLean Fellowship for Environmental Science & Ornithology – PI – $12,500**
Multilevel thermal adaptation in Neotropical army ants
Academy of Natural Sciences of Drexel University

Teaching experience

*Service-learning course, †Writing intensive course, ‡Research intensive course

Instructor

Classroom-based courses

2023, 2025 *Animal Behavior†‡, BSC 455/L (BSC 555/L) – USM*
2022-2026 *Comparative Animal Physiology, BSC 450 (550) – USM*
2021-2025 *General Zoology*, BSC 201/L – USM*
2024 *Senior Practicum†, BSC 497– USM*

Field-Based Courses

2026 *Tropical Field Biology (Study Abroad - Belize), BSC 404 (BSC 504) – USM (co-instructed)*
2018 *Tropical Biology (Study Abroad - Panama), BIO 494 – ASU (co-instructed)*

Research/Mentorship courses

2026-2027 *Seminar Coordinator, BSC 790 – USM*
2025-2026 *Dissertation, BSC 898 – USM*
2021-2026 *Special Problems I, II, III (Undergraduate Research), BSC 492 (BSC 492H - honors) – USM*
2021-2026 *Research (Graduate), BSC 691 / 791 – USM*

Teaching Assistant

2016 *General Ecology, ENVS 230* – Drexel
2013&2015 *Evolution and Organismal Diversity Lab, BIO 124* – Drexel
2014 *Drosophila Methods, BIO 480* – Drexel
2014 *Function and Evolution of Vertebrates, BIO 224* – Drexel
2013 *Discoveries in Animal Behavior, ENVS 226* – Drexel
2013 *Watershed Approach, ENVS 203* – Drexel
2013 *Physiology & Ecology Lab, BIO 126* – Drexel
2012 *Community Ecology Lab, ENVS 287* – Drexel

Mentorship

*published research, †AAUW Fellow, ‡IUSSI research grant, [1]Beckman Scholar, [2]Goldwater Fellow, [3]USM SPUR

Advised and chaired graduate theses / dissertations

2026-present	Ashley Pell	MS Biological Sciences – USM	*Pre-qualification exam*
2021-present	Karen Robles López*‡	PhD Biological Sciences – USM	*PhD candidate (ABD)*
2021-2026	Kristin Robinson*†‡	PhD Biological Sciences – USM	*Successful defense 2026*

Graduate students on whose committees I serve(d)

2025-present	Cassie Urquhart	PhD Biological Sciences – USM	*Pre-qualification exam*
2024-2025	Emilee Holderness	MS Biological Sciences – USM	*Successful defense 2025*
2022-2023	Noah Daun	MS Biological Sciences – USM	*Successful defense 2023*
2021-2024	Caroline Sorey	PhD STEM Education – USM	*Successful defense 2024*
2020-present	Juliana Calixto*	PhD Biological Sciences – ASU	*PhD candidate*

Directly supervised undergraduate honors theses

2025-present	Vinny Halsey*[1]	BS Biological Sciences – USM	*in process*
2024-2026	Noah Williamson[13] (co-advised)	BS Biological Sciences – USM	*Graduated w. honors 2026*
2024-2026	Aaron Morgan (co-advised)	BS Biological Sciences – USM	*Graduated w. honors 2026*
2023-2025	Joseph Serio[23] (co-advised)	BS Biological Sciences – USM	*Graduated w. honors 2025*
2022-2023	Taylor (Nikki) Guild	BS Biological Sciences – USM	*Graduated w. honors 2023*
2018-2020	Catherine Prendergast* (co-advised)	BS Biological Sciences – ASU	*Graduated w. honors 2020*

Other undergraduate researchers mentored

Conducted research in my lab at USM

2026-present	Diego Casapino Cucho	2023-2025	Gabriella Cipriani*
2024-2026	Juno Fulgham	2023-2025	Alex Nguyen*
2025-2026	Jacob Barnes	2023-2024	Haley Schonekas*
2025	Leila Pasalo-Pichon	2023-2024	Nadia Gillespie
2025	Maddie Fernandez	2023-2024	Zoe Mabry*‡
2024-2025	Lila Blackburn*	2022-2026	Apollo Marley*‡
2024	Kelly James	2022-2023	Alycia Johnson*

Conducted research directly supervised by me during my postdoc at ASU

2019-2020	Robert Wu*	2018	Rebecca Hockenberry
2018-2020	Frank Cossio*	2017-2018	Zachary Roland
2019	Sarah Hart*	2017	Jordan Erhardt
2018	Lauren Welch*	2017	Abdullah Almartah

Conducted research directly supervised by me during my graduate studies at Drexel

2017	Kelsey Capobianco	2015-2016	Vishakha Hariawala
2016-2017	Iris Nagai	2015	Sharon Stein
2015-2016	Elisabeth Sulger*	2013-2014	Katherine Diangelus*
2014-2015	Catherine D'Amelio*	2013-2014	Nirali Patel*
2014	Rumaan Malhotra*	2012-2013	Abigail Mudd*
2012-2013	Shayna Erickson*		

Service

University level (USM)

2026	Dinner with the Deans, *table host*
2025	USM Honors College, *honors thesis review*
2024	Benjamin Franklin High School Career Day, *guest speaker / recruiter*
2024	USM Graduate Student Research Symposium 2024, *faculty judge*
2023	Undergraduate Symposium on Research and Creative Activity, *faculty judge*
2023	"Rejection in Academia: Rewrite Your Story", at USM Prism Center, *guest speaker*
2022-present	USM "Chop to the Top" Karate Club, *faculty advisor, class instructor, team coach*

College of Arts & Sciences (USM)

2025, 2026	Mississippi Science Olympiad, *entomology event supervisor*
2024	STEMonDemand Research Process and Methodology Series, *video instructor*

School of Biological, Environmental and Earth Sciences (USM)

2024-present	REU SITES: Gulf Coastal Plain, *co-organizer*
2024-present	BEES Safety Committee, *2024 member / 2025-present chair*
2024-2026	New Faculty Dr. Nikki Camlin, *peer mentor*
2024-2025	BEES Microbiology Faculty Search Committee, *committee member*
2023-present	BEES Scholarship Committee, *committee member*
2022-present	Undergraduate advising, *faculty advisor*
2023-2024	Darwin Day, Donuts with Darwin, *faculty volunteer*
2023-2025	BEES Honors Thesis Internal Review, *faculty honors thesis reviewer*
2022-present	USM Black and Gold Day, *faculty recruiter*
2022-2023	BEES Ambassador Program, *co-advisor*

Professional

2024-2026	IUSSI-North American Section DEIJ committee*, 2024-2025 member / 2026-present chair*
2025-present	Mississippi Association of Entomologists, Nematologists, and Plant Pathologists, Board of Directors
2024	Entomological Society of America Southeastern Branch Meeting, *student competition judge*
2021-2022	IUSSI 2022 International Meeting, *Organizing committee member*
2020	Annual Meeting of the Animal Behavior Society, Virtual Mentoring Sessions, *mentor*
2020	ASU Social Insect Research Group - Diversity Equity & Inclusion, *committee member*
2020	ASU SoLS in-coming student virtual coffee chats, *out-of-classroom personality*
2019	Entomology 2019 (annual meeting of ESA), *undergraduate student competition judge*
2019	56th Annual Conference of the Animal Behavior Society, *"social behavior" moderator*
2019	Workshop on insect inspired models for social behavior, *organizing committee chair*
2018-2021	IUSSI-NAS Awards committee, *2018-2019 member / 2020-2021 co-chair*

2017	Entomology 2017 (annual meeting of ESA), *student competition judge*
2016	Frances Velay Fellowship Program, Drexel/Temple, *mentor*
2013-2015	Biology Graduate Student Association, Drexel University, *community chair*

Manuscript review for the following academic journals

American Naturalist
Animal Behaviour
Behavioral Ecology
Behavioral Ecology & Sociobiology
Biological Reviews
Biology
Biotropica
Climate Change Ecology
Conservation Physiology
Current Zoology
Diversity & Distribution
Ecology
Ecology & Evolution
Ecology Letters
Ecosphere
Environmental Physiology
Functional Ecology
Global Ecology & Biogeography
Heredity
Insect Conservation and Diversity
Insect Science
Journal of Animal Ecology
Journal of Biogeography
Journal of Comparative Physiology B
Journal of Insect Science
The Journal of Parasitology
Myrmecological News
Nature Communications
Nature Ecology & Evolution
Neotropical Entomology
Oecologia
Oikos
Philosophical Transactions of the Royal Society B
Physiological Entomology
Proceedings of the Royal Society B
PLoS ONE
Revista de Biología Tropical
The Science of Nature
The Southwestern Naturalist
Trans. of the American Entomological Society

Grant review

2025	National Science Foundation (panelist)
2022	National Science Foundation (ad hoc)
2021	Israel Science Foundation

Editorial board service

2020-present *Neotropical Naturalist*

Public Outreach

2025-2026	NOLA BugFest, *guest presenter*
2023	“Her Stem Journey” by Oak Grove High School Student, *interviewee*
2023	Pine Woods Audubon Society, Hattiesburg, MS, USA, *guest speaker*
2022-2025	Teachers Conservation Workshop, Lake Thoreau Environmental Center, *guest speaker*
2022, 2025	Osher Lifelong Learning Institute (OLLI), *guest speaker*
2022	Pinebelt Beekeepers’ Association, *guest seminar speaker*
2021, 2024-6	Bug Fest, The Crosby Arboretum, *guest entomologist*
2019	Gamboa Discovery School, Gamboa, Panama (K-4), *guest speaker*
2018	Smithsonian Tropical Research Institute, Ant Day, *meet-and-greet scientist*
2018	Phoenix March for Science (all ages), *meet-and-greet scientist*
2016	Women in Natural Sciences (9-12), Academy of Natural Sciences, *mentor*
2014-2015	Philadelphia Science Festival (K-12 + families), *guest exhibitor*
2013-2016	Drexel Students Tackling Advanced Research (STAR), *mentor*
2013-2015	George Washington Carver Science Fair (grades 4-12), *guest judge*
2010-2012	Interactive talks at Orleans Parish Public schools via KIDsmART, *guest entomologist*

Presentations

*Graduate mentee **Undergraduate mentee

Conference Talks

2026-present (USM Associate Professor years):

Baudier KM, Robles Lopez KY*, Stan KD, "Army ant nest site selection as a function of rainfall in a tropical dry forest," Entomology 2026, Annual Meeting of the Entomological Society of America, Columbus, OH, USA. 9 November 2026.

McGlynn T, Baudier KM, Barkdul M, Penick C, Shultz A, "Infrared thermal ecology and evolution of ants and their prospects of climate resilience," , XX. International Congress of the) International Union for the Study of Social Insects (IUSSI 2026), Messe Freiburg, Freiburg, Germany. 17 August 2026.

Williamson N**, Robinson KM*, Stan KD, Baudier KM, "Developing a Range Prediction for the Imperiled Florida Harvester Ant (*Pogonomyrmex badius*) using Species Distribution Modeling," USM Undergraduate Symposium on Research and Creative Activity, Hattiesburg, MS, USA. 18 April 2026.

Williamson N**, Robinson KM*, Stan KD, Baudier KM, "Developing a Range Prediction for the Imperiled Florida Harvester Ant (*Pogonomyrmex badius*) using Species Distribution Modeling," 2026 ASPRS Mid-South Region

Conference, The American Society for Photogrammetry and Remote Sensing (ASPRS), Oak Ridge, USA. 30 March 2026.

Williamson N**, Robinson KM*, Stan KD, Baudier KM, "Developing a Range Prediction for the Imperiled Florida Harvester Ant (*Pogonomyrmex badius*) using Species Distribution Modeling," 87th Annual Meeting of the Association of Southeastern Biologists, Mobile, AL, USA. 25 March 2026.

2021-2025 (USM Assistant Professor years):

Baudier KM, Robinson KM*, "Within-colony variation in thermal performance among eusocial Hymenoptera: Lessons from ants, bees, and paper wasps," Entomology 2025, Annual Meeting of the Entomological Society of America, Portland, OR, USA. 12 November 2025.

Robinson KM*, Baudier KM, "Ant threat detection and defense specialization in a stingless bee, *Tetragonisca angustula*," Entomology 2025, Annual Meeting of the Entomological Society of America, Portland, OR, USA. 10 November 2025.

Robles Lopez KY*, Baudier KM, "Desiccation adaptations in army ants: How worker subcaste and rain shadows influence desiccation resistance," Entomology 2025, Annual Meeting of the Entomological Society of America, Portland, OR, USA. 10 November 2025.

Stan KD, Robles Lopez KY*, Baudier KM, "Revealing how social insects create living structures using advanced scanning technology and artificial intelligence," Entomology 2025, Annual Meeting of the Entomological Society of America, Portland, OR, USA. 9 November 2025.

Baudier KM, Williamson N**, Stan KD, "Distribution & status of the Florida Harvester Ant (*Pogonomyrmex badius*) in Mississippi," 71st Annual Meeting of the Mississippi Association of Entomologists, Nematologists, and Plant Pathologists, Starkville, MS, USA. 28 October 2025.

Marley C**, Baudier KM, "Tree size and species as factors in nest site choice of trap-jaw ant *Odontomachus haematodus*," USM Undergraduate Symposium on Research and Creative Activity, Hattiesburg, MS, USA. 8 April 2025.

Robles Lopez KY*, Baudier KM, "Worker subcaste and rain shadow effects on desiccation resistance in army ants," Entomology 2024, Annual Meeting of the Entomological Society of America, Phoenix Convention Center, Phoenix, AZ, USA. 10 November 2024.

Robinson KM*, Baudier KM*, "Within-colony variation in desiccation resistance of a tropical stingless bee," Entomology 2024, Annual Meeting of the Entomological Society of America, Phoenix Convention Center, Phoenix, AZ, USA. 10 November 2024.

Baudier KM, Robinson KM*, Johnson A**, Guild T**, Gillespie N**, Uy FMK, "Thermal adaptations of the paper wasp *Mischocyttarus mexicanus*: a study of the interplay between behavioral and physiological strategies," ESA SEB 2024, Annual meeting of the Southeastern Branch of the Entomological Society of America, Augusta, GA, USA. 20 March 2024.

Baudier KM, Robinson KM*, Johnson A**, Guild T**, Gillespie N**, Uy FMK, "Social macrophysiology of the subtropical paper wasp *Mischocyttarus mexicanus cubicola*," Entomology 2023, Annual Meeting of the Entomological Society of America, National Harbor, MD, USA. 6 November 2023.

Robles Lopez KY*, Baudier KM, "Desiccation resistance adaptations in army ants: How do rain shadows shape tropical insect functional traits?," Entomology 2023, Annual Meeting of the Entomological Society of America, National Harbor, MD, USA. 6 November 2023.

Robinson KM*, Baudier KM, "The interplay of division of labor and thermal tolerance in a stingless bee species," Entomology 2023, Annual Meeting of the Entomological Society of America, National Harbor, MD, United States. 6 November 2023.

Baudier KM. "Distributed defenses of insect societies against biotic and abiotic threats." Biological Distributed Algorithms. Orlando, FL, USA, 23 June 2023. (Invited)

Serio J**, Robinson KM*, Baudier KM. "Flight willingness behavior within the soldier Ccaste of *Tetragonisca angustula*." USM Undergraduate Symposium on Research and Creative Activity. Hattiesburg, MS, USA. 22 April 2023.

Baudier KM, Bennett MM, Ostwald MM, Fewell JH, Harrison JF. "Inter-caste metabolic scaling in workers of the stingless bee *Tetragonisca angustula*," IUSSI 2022, XIX International Congress of the International Union for the Study of Social Insects, San Diego, CA, USA. 4 July 2022.

Robinson KM*, Johnson A**, Mora-Kepfer Uy F, Baudier KM. "Biogeography of thermal performance in the subtropical paper wasp, *Mischocyttarus mexicanus cubicola*." IUSSI 2022, XIX International Congress of the International Union for the Study of Social Insects, San Diego, CA, USA. 4 July 2022.

Calixto* JM, Baudier KM, Fewell JH."Is reproductive caste associated with critical thermal limits in desert seed-harvester ants?" IUSSI 2022, XIX International Congress of the International Union for the Study of Social Insects, San Diego, CA, USA. 4 July 2022.

Navas Zuloaga MG, Baudier KM, Fewell JH, Ben-Asher N, Pavlic TP, Kang Y, "A Mathematical Model for Flexible Collective Defense: Crisis Response in Social-Insect Colonies," Joint Mathematical Meetings, American Mathematical Society (Virtual Conference) 6 April 2022.

Baudier KM, Robinson K*, Mora-Kepfer Uy F. “Thermal adaptations of the Mexican paper wasp (*Mischocyttarus mexicanus*) in the Southeastern USA.” 67th Annual Meeting of the Mississippi Association of Entomologists, Nematologists, and Plant Pathologists. Starkville, MS. 9 November 2021.

Baudier KM. “New Faculty Showcase.” 67th Annual Meeting of the Mississippi Association of Entomologists, Nematologists, and Plant Pathologists, Mississippi State University, Starkville, MS, USA. 9 November 2021

Baudier KM, Pavlic TP. “Multi-level instrumentation of bivouac thermoregulation: current methods and future directions.” The 15th International Symposium on Distributed Autonomous Robotic Systems & The 4th International Symposium on Swarm Behavior and Bio-Inspired Robotics. Kyoto, Japan. 5 January 2021.

2017-2020 (ASU Postdoctoral years):

Baudier KM, Ostwald MM, Calixto JM*, Cossio FJ*, Fewell JH. “Thermal benefits of polygyny? Multi-queen desert ant colonies have higher and more uniform heat tolerance.” Entomology 2018, Annual meeting of the Entomological Society of America. 11 November 2020.

Baudier KM. “Living walls: An emergent defensive subroutine of army ant raids.” Behavior 2020, 57th Annual Meeting of the Animal Behavior Society. (Virtual Conference) 28 July 2020.

Baudier KM, Barrett M, Bennett MM, Fewell JH, Pavlic TP. “Neural and physiological underpinnings of defense specialization in soldiers of the stingless bee *Tetragonisca angustula*.” Entomology 2019, Annual Meeting of the Entomological Society of America. St. Louis, MO. 20 November 2019.

Baudier KM, Bennett MM, Fewell JH, Pratt SC, Pavlic TP. “Ageing modulates defensive tasks performed by soldiers of the stingless bee *Tetragonisca angustula*.” Behavior 2019, 56th Annual Meeting of the Animal Behavior Society. Chicago, IL. 27 July 2019.

Baudier KM, Fewell JH, Pavlic TP, Pratt SC. “Changing of the guard: Task dynamics of stingless bee nest defense in cleptoparasitic environments.” IUSSI 2018, XVIII International Congress of the International Union for the Study of Social Insects. Guarujá, Brazil. 5 August 2018.

Baudier KM, O’Donnell S. “Interacting climate scales of army ant thermal tolerance.” IUSSI 2018, XVIII International Congress of the International Union for the Study of Social Insects. Guarujá, Brazil. 5 August 2018.

2012-2017 (Drexel University Graduate School years):

Baudier KM, O’Donnell S. “Weak links: Behavioral and physiological implications of thermal tolerance variation within insect societies.” Entomology 2017, Annual Meeting of the Entomological Society of America. Denver, CO. 8 November 2017.

Baudier KM, O'Donnell S. “Elevation, site choice, & brood age factors in army ant bivouac thermoregulation.” Social Insects in the North-East Regions Meeting. Washington, DC. 10 December 2016.

Baudier KM. “Social thermoregulation along elevational clines: lessons from a Neotropical army ant.” Philadelphia Evolution Group. Philadelphia, PA. 10 October 2016.

Baudier KM, O'Donnell S. “Microhabitat, elevation and body size effects on thermal tolerance among Neotropical army ants.” IUSSI-NAS 2016, Breakout Meeting of the North American Section of the International Union for the Study of Social Insects. Orlando, FL. 24 September 2016.

Baudier KM, O'Donnell S. “Thermoregulatory responses to thermal clines: Bivouac function across the wide elevational range of a Neotropical army ant (Formicidae: Dorylinae: *Eciton burchellii parvispinum*).” XXV International Congress of Entomology. Orlando, FL. 27 September 2016.

Baudier KM, O’Donnell S. “Geographic patterns of thermoregulation: homeostasis in surface & below-ground bivouacking army ants.” Social Insects in the North-East Regions Meeting. Scranton, PA. 10 December 2015.

Baudier KM, O'Donnell S. “Social thermal physiology: How superorganismal homeostasis confronts elevational thermal clines (Formicidae: Ecitoninae: *Eciton burchellii parvispinum*).” Entomology 2015, Annual Meeting of the Entomological Society of America. Minneapolis, MN. 16 November 2015.

Baudier KM, O'Donnell S. “Microclimate and body size affect thermal tolerance among Neotropical army ants (Ecitoninae).” Entomology 2014, Annual Meeting of the Entomological Society of America. Portland, OR. 18 November 2014.

Baudier KM, Austero M, Schauer C, O’Donnell D. “Evolution of larval adhesive structures in the ant subfamily Ponerinae.” Entomology 2013, Annual Meeting of the Entomological Society of America. Austin, TX. 12 November 2013.

Baudier KM, Austero M, Schauer C, O’Donnell S. “The Evolution of Sticky Tubercles in Ponerine Larvae.” Social Insects in the North-East Regions Meeting. Newark, NJ. 24 May 2013.

2006-2008 (LSU undergraduate research years):

Strecker R, Baudier KM, Hooper-Bui L. “Effects of a d-Limonine product on leaf-cutting ant *Atta texana.*” Entomology 2008, Annual meeting of the Entomological Society of America. Reno, NV. 17 November 2008.

Hooper-Bui L, Wiltz B, Baudier KM. “Effect of hurricanes Katrina and Rita on the ant fauna of South Louisiana.” XXIII International Congress of Entomology. Durban, South Africa. 6 July 2008.

Hooper-Bui L, Wiltz B, Baudier KM, Strecker R. “Post-Katrina pest ants in south Louisiana.” National Conference for Urban Entomology. Tulsa, OK. 17 May 2008.

Conference Posters

2026-present (USM Associate Professor years):

Pell A* (Presenter), Ulrich A**, Robles Lopez KY*, Baudier KM, "Non-target effects of Red Imported Fire Ant (Solenopsis invicta) control baits on the imperiled Florida Harvester Ant (Pogonomyrmex badius) in Mississippi," Entomology 2026, Annual meeting of the Entomological Society of America, Columbus, OH, USA. 9 November 2026.

Halsey V**, Marley CM**, Blackburn L**, Williamson N**, Baudier KM, "Are two-spined trap-jaw ants (Odontomachus haematodus) invasive in North America?," Entomology 2026, Annual meeting of the Entomological Society of America, Columbus, OH, USA. 9 November 2026.

Baudier KM, Stan KD. “Climate change risk as a function of soil stratum: Are epigeic or hypogeic ants more negatively affected?” IUSSI 2026, XX International Congress of the International Union for the Study of Social Insects, Freiburg, Germany, 19 August 2026.

Robles López KY*, Baudier KM, "Are we occasional colleagues? Exploring relationship between Eciton burchellii parvispinus and Azteca velox beyond the role of predator-prey," XX International Congress of the International Union for the Study of Social Insects (IUSSI 2026), Messe Freiburg, Freiburg, Germany. 19 August 2026.

Barnes J**, Ortega A, Bennett C, McGlynn T, Baudier KM, "Near-Infrared reflectance as a function of body size in the army ant *Eciton burchelli parvispinum*," USM Undergraduate Symposium on Research and Creative Activity, Hattiesburg, MS, USA. 18 April 2026.

Fulgham J**, Robinson KM*, Pasalo-Pichon L**, Fernandez M**, Baudier KM, "Do stingless bees (*Tetragonisca angustula*) use visual stimuli to detect ant intruders (*Ectatomma ruidum*)?" USM Undergraduate Symposium on Research and Creative Activity, Hattiesburg, MS, USA. 18 April 2026.

Marley C**, Baudier KM, "Tree size and species as factors in nest site choice of trap-jaw ant *Odontomachus haematodus*," USM Undergraduate Symposium on Research and Creative Activity, Hattiesburg, MS, USA. 18 April 2026.

Williamson N**, Robinson KM*, Stan KD, Baudier KM, Beckman Symposium, "Developing a range prediction for the imperilled Florida Harvester Ant (*Pogonomyrmex badius*) using species distribution modeling," The Beckman Foundation, Hyatt Regency, Irvine, CA, USA. 30 July 2026.

2021-2025 (USM Assistant Professor years):

Williamson N**, Stan KD, Robinson KM*, Baudier KM, "Developing a Species Distribution Model for the Southeastern Range of the Florida Harvester Ant (*Pogonomyrmex badius*).," 80th Annual Meeting of the Southeastern Division of the AAG, American Association of Geographers. 23 November 2025.

Williamson N**, Stan KD, Robinson KM, Baudier KM, "Developing a Species Distribution Model for the Southeastern Range of the Florida Harvester Ant (*Pogonomyrmex badius*)," Entomology 2025, Annual Meeting of the Entomological Society of America, Portland, OR, USA. 10 November 2025.

Halsey V**, Blackburn L**, Marley C**, Baudier KM, "Are exotic two-spined trap-jaw ants (*Odontomachus haematodus*) invasive?," 71st Annual Meeting of the Mississippi Association of Entomologists, Nematologists, and Plant Pathologists, Starkville, MS, USA. 28 October 2025.

Marley C**, Baudier KM, "Tree size and species as factors in nest site choice of the trap-jaw ant *Odontomachus haematodus*," 71st Annual Meeting of the Mississippi Association of Entomologists, Nematologists, and Plant Pathologists, Starkville, MS, USA. 28 October 2025.

Baudier KM, Marley C**, Blackburn L**, "New records and recommended methods for detecting the introduced two-spined trap-jaw ant (*Odontomachus haematodus*) in the Southeastern USA," Entomology 2024, Annual Meeting of the Entomological Society of America, Phoenix, AZ, USA. 12 November 2024.

Serio J**, Robinson KM*, Baudier KM, "Division of labor in flight behavior of stingless bee (*Tetragonisca angustula*) soldiers," USM Undergraduate Symposium on Research and Creative Activity, Hattiesburg, MS, USA. 20 April 2024.

Schonekas H**, Marby Z**, Robinson KM*, Robles López KY*, Johnson A**, Cipriani G**, Nguyen A**, Ziemke CH, Baudier KM, "Does disturbance stridulation in the passalid beetle *Odontotaenius disjunctus* function as a form of social communication?," USM Undergraduate Symposium on Research and Creative Activity, Hattiesburg, MS, USA. 20 April 2024.

Marley C**, Baudier KM, "Exploring how microclimates shape the relationship between body size and thermal tolerance in a tropical ant community," USM Undergraduate Symposium on Research and Creative Activity, Hattiesburg, MS, USA. 20 April 2024.

Serio J**, Robinson KM*, Baudier KM, "Aging on Division of Labor in Stingless Bee (*Tetragonisca angustula*) Soldiers," ESA SEB 2024, Annual meeting of the Southeastern Branch of the Entomological Society of America, Augusta, GA, USA. 18 March 2024.

Schonekas H**, Mabry Z**, Robinson K*, Robles López KY*, Johnson A**, Cipriani G**, Nguyen A**, Ziemke CH, Baudier KM, "Does disturbance stridulation in the passalid beetle *Odontotaenius disjunctus* function as a form of social communication?," ESA SEB 2024, Annual meeting of the Southeastern Branch of the Entomological Society of America, Augusta, GA, USA. 18 March 2024.

Wallace MFG, Baudier KM, Sorey C, Barbier S, Cumpton J, "Haikus and So Much More: Stories of Integrating Community-Engaged Learning Experiences into Undergraduate Biology Education," Southern Regional Faculty & Instructional Development Consortium, Long Beach, MS, USA. 14 March 2024.

Serio J**, Robinson KM*, Baudier KM, "Division of labor in flight behavior of stingless bee (*Tetragonisca angustula*) soldiers," Annual Meeting of the Mississippi Academy of Sciences, Hattiesburg, MS, USA. 29 February 2024.

Schonekas H**, Marby Z**, Robinson KM*, Robles López KY*, Johnson A**, Cipriani G**, Nguyen A**, Ziemke CH, Baudier KM, "Does disturbance stridulation in the passalid beetle *Odontotaenius disjunctus* function as a form of social communication?," Annual Meeting of the Mississippi Academy of Sciences, Hattiesburg, MS, USA. 29 February 2024.

Marley C**, Baudier KM, "Exploring how microclimates shape the relationship between body size and thermal tolerance in a tropical ant community," Annual Meeting of the Mississippi Academy of Sciences, Hattiesburg, MS, USA. 29 February 2024.

Gillespie N**, Baudier KM, "Is the paper wasp *Mischocyttarus mexicanus* capable of winter acclimation?," Annual Meeting of the Mississippi Academy of Sciences, Hattiesburg, MS, USA. 29 February 2024.

Baudier KM, Robinson KM*, Marby Z**, Schonekas H**, Robles López KY*, Johnson A**, Cipriani G**, Nguyen A**, Ziemke CH, "Does disturbance stridulation in the passalid beetle *Odontotaenius disjunctus* function as a form of social communication?," Entomology 2023, Annual Meeting of the Entomological Society of America, National Harbor, MD, USA. 7 November 2023.

Robinson KM*, Baudier KM. Behavioral defenses of stingless bees in response to ant invaders. Behavior 2023, Annual Meeting of the Animal Behavior Society. Portland, OR, USA. July 2023.

Johnson A**, Ziemke CH, Yee D, Baudier KM. Notes on the natural history and climatic specializations of a Caribbean endemic paper wasp. USM Undergraduate Symposium on Research and Creative Activity. Hattiesburg, MS, USA. 22 April 2023.

Guild T**, Robinson KM*, Johnson A**, Baudier KM. Exploring the adaptive function of overwintering behavior in the paper wasp *Mischocyttarus mexicanus*. USM Undergraduate Symposium on Research and Creative Activity. Hattiesburg, MS, USA. 22 April 2023.

Marley C**, Ziemke CH, Baudier KM. Thermal Tolerance in Correlation with Body Size in the tropical fire ant *Solenopsis geminata*. USM Undergraduate Symposium on Research and Creative Activity. Hattiesburg, MS, USA. 22 April 2023.

Robles López KY*, Sosa-Calvo J, Zoppas de Albuquerque E, Calixto JM*, Baudier KM. “Hidden treasures in ants’ trash: Army ant middens as temporary resources for other ants’ species.” IUSSI 2022, XIX International Congress of the International Union for the Study of Social Insects, San Diego, CA, USA. 4 July 2022.

2017-2020 (ASU Postdoctoral years):

Cossio F**, Baudier KM. “Caste specific neural investment in guards of the stingless bee *Tetragonisca angustula*.” BioSciences Southwest Symposium. Tempe, AZ. 1 November 2019.

Wu R**, Baudier KM. “Lipid analysis of stingless bee soldiers (*Tetragonisca angustula*).” BioSciences Southwest Symposium. Tempe, AZ. 1 November 2019.

Reitnauer KA**, Betancourt IS, Baudier KM. “Developing a Species Inventory of the Ants [Hymenoptera: Formicidae] of Center City Philadelphia, Pennsylvania Through Fountain Sampling.” Annual meeting of the Entomological Society of Pennsylvania. Millersville, PA. 3 November 2018.

2012-2017 (Drexel University Graduate School years):

Baudier KM, O'Donnell S. “Hot bivouacs: Nest thermoregulation in subterranean army ants (Dorylinae: *Labidus praedator*).” Department of Biodiversity, Earth & Environmental Science Research Day, Philadelphia, PA. 10 March 2016.

Baudier KM. “Bivouac warming in *Labidus praedator*” Social Insects in the North-East Regions Meeting. Scranton, PA. 10 December 2015.

Baudier KM, D’Amelio CL**. “Measuring thermal physiology to predict animal responses to directional climate change.” Drexel Research Day, Philadelphia, PA. 1 May 2015.

Khodak P**, Sluger E**, Baudier KM, Bulova S, O’Donnell S. “Evolutionary ecology of brain structure in army ants (Formicidae: Ecitoninae).” Colonial Academic Alliance Conference, Philadelphia, PA 28 March 2015.

Baudier KM, Mudd A**, Erickson C**, O'Donnell S. “The weakest link: Body size and species differences in heat tolerance among Neotropical army ants.” Drexel research day, Philadelphia, PA. 10 April 2014.

Baudier KM, Mudd A**, Erickson C**, O'Donnell D. “The weakest link: Body size and species differences in heat tolerance among Neotropical army ants.” College of Arts & Sciences Research Day, Philadelphia PA. 18 February 2014

Baudier KM, Austero M, Schauer C, O’Donnell S. “Sticky fingers: Evolution and mechanism of larval adhesive structures in ponerine ants.” Drexel University College of Arts & Sciences Research Day, Philadelphia, PA. 9 April 2013.

Baudier KM, Hooper-Bui L. “Impacts of Flooding on Ant Diversity in Urban and Rural Regions of Southern Louisiana.” Breakout Meeting of the North American Section of the International Union for the Study of Social Insects. Greensboro, NC. 5-7 October 2012.

2006-2008 (LSU undergraduate research years):

Hooper-Bui L, Lee A, Baudier KM. Maximizing student learning through active learning in entomology: service learning, case studies, and wikis. XXIII meeting of the International Conference of Entomology, Durban, South Africa. 6 July 2008.

Invited Seminars

2026-present (USM Associate Professor years):

Baudier, K. M., "The Behavioral Ecology of North American Harvester Ants," **Mississippi Museum of Natural Science**. February 2, 2027.

Baudier KM. “Jills of all temperatures or specialists of some? Social thermal performance strategies of ants, stingless bees, and paper wasps.” Department of Biological Sciences Seminar Series. **Marquette University**. 8 April 2026.

Baudier KM. “Jill of all trades or specialist of some? The form and function of stingless bee collective defense.” Department of Biology Seminar Series. **Indiana University Indianapolis**. 20 February 2026.

2021-2025 (USM Assistant Professor years):

Baudier KM. “Exploring social & thermal functional traits in the context of insect macroecology.” Social Insect Research Group Seminar Series. **Arizona State University**. 29 April 2022.

Baudier KM. “Social thermal adaptation: Using ants to study how climate shapes form and function across spatial scales and levels of biological organization.” Entomology Colloquium. **University of Illinois at Urbana-Champaign**. 15 November 2021.

Baudier KM. “Flexible defense specialization in eusocial insects: From group behavior to soldier physiology.” Evolution, Ecology, Genetics & Genomics Seminar, **University of Rochester**. 23 April 2021.

Baudier KM. “Flexible defense specialization in eusocial insects: From group behavior to soldier physiology.” Ecology and Evolution Seminar, **University of Copenhagen**. 9 April 2021.

2017-2020 (ASU Postdoctoral years):

Baudier KM. “Social heterogeneity in the context of aggression, truce, and battling the elements.” NSF-Simons QBio Center, **Harvard University**. 16 December 2020.

Baudier KM. “Social insect macrophysiology: using ants to study climate adaptation at big scales.” Division of Natural Sciences. Biological Colloquium**, College of Mount Saint Vincent**. 5 November 2020.

Baudier KM. “Social axes of ecological physiology: Individual to group form and function.” **University of Southern Mississippi**. Hattiesburg, MS. 25 February 2020.

Baudier KM. “Social axes of ecological physiology: individual to group form and function.” **San Francisco State University**. San Francisco, CA. 11 December 2019.

Baudier KM. “Social physiology: Discoveries in group function of tropical social insects.” **University of Hawaii at Manoa**. Honolulu, HI. 23 April 2019.

Baudier KM. “Catching more flies with Truvia: Erythritol as a human-safe pesticide.” **Arid Land Agricultural Research Center (USDA-ARC)**. Maricopa, AZ. 3 December 2018.

2012-2017 (Drexel University Graduate School years):

Baudier KM. “La tolerancia térmica y la termorregulación de un grupo de hormigas legionarias neotropicales.” **Reserva Biológica del Bosque Nuboso de Monteverde**. Monteverde, Puntarenas, Costa Rica. 25 April 2016.

Baudier KM. “Thermal tolerance in Neotropical army ants: body size, microhabitat & elevational effects.” American Entomological Society Monthly Meeting. **Academy of Natural Sciences. Philadelphia**, PA. 26 March 2014.

Guest Lectures

Baudier KM. “Social macrophysiology: using ants to study climate adaptation at big scales.” The Community College of Baltimore County. Baltimore, MD. 13 October 2020.

Workshop Presentations

Baudier KM, Klein B. "Communicating Social Insect Science," IUSSI-NAS DEIJ Workshop Series, International Union for the Study of Social Insects - North American Section. (Virtual) 11 December 2025.

Baudier KM. “Insect colony defense strategies as a model for human defense allocation.” Workshop on Insect-Inspired Models for Social Behavior (WIIMSB). Arizona State University. Tempe, AZ. 14 January 2019.

Pippin C, Squires E, Baudier KM. “Swarming in the presence of adversaries.” Workshop: Bio-Inspired Algorithms for Managing Emergent Behavior in Sociotechnical Systems. Arizona State University. Tempe, AZ. 14 November 2017.

Co-organized symposia

Carlesso D, Cook CN, Baudier KM, Joshi CH, Popp S, Charbonneau D. “From simple rules to collective resilience in a changing world” IUSSI 2026, XX International Congress of the International Union for the Study of Social Insects, Freiburg, Germany, 16 August 2026.

Baudier KM, Mora-Kepfer Uy F, Cook C. “Balancing social and ecological information in a changing world”. IUSSI 2022, XIX International Congress of the International Union for the Study of Social Insects, San Diego, CA, USA. 4 July 2022.