Lisa A. Mangiamele

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EDUCATION

- Ph.D. 2010 Dept of Biology, Program in Evolution, Ecology, and Organismal Biology University of North Carolina, Chapel Hill, NC Dissertation: Neural mechanisms of species recognition and female mate preferences in the túngara frog
- B.A. 2001 Neuroscience Colgate University, Hamilton, NY

AWARDS AND HONORS

| 2015 | Sigma Xi Scientific Research Society, Full Member |
|------|---|
| 2009 | Dissertation Completion Fellowship, University of North Carolina, Chapel Hill |
| 2009 | Graduate Student Mentor Award, University of North Carolina, Chapel Hill |
| 2006 | H.V. Wilson Award for Research, University of North Carolina, Chapel Hill |
| 2001 | Beta Beta Beta Biological Honor Society, Upsilon Phi Chapter |
| 2000 | Dean's Award for Community Service, Colgate University |

EMPLOYMENT HISTORY

| 2014-present | Assistant Professor, Smith College, Dept of Biological Sciences, Northampton, MA |
|---------------|--|
| · | Participating Faculty in Neuroscience Program |
| 2013-2014 | Lecturer, SUNY College at Plattsburgh, Plattsburgh, NY |
| 2013 (spring) | Visiting Assistant Professor, Middlebury College, Dept of Biology, Middlebury, VT |
| 2010-2013 | Postdoctoral Fellow, Bowdoin College, Brunswick, ME |
| 2007 | Visiting Researcher, Smithsonian Tropical Research Institute, Gamboa, Panamá |
| 2008-2009 | Writing Tutor, The Writing Center, University of North Carolina at Chapel Hill |
| 2003-2008 | Teaching Assistant, Department of Biology, University of North Carolina at Chapel Hill |
| 2001-2003 | Research Technician, Boston University School of Medicine, Boston, MA |
| 2000, 2001 | Research Assistant, Marine Biological Laboratory, Woods Hole, MA |

GRANTS RECEIVED

| National Science Foundation, International Research Experiences for Students |
|--|
| Neurobiology and evolution of frog dance displays in Austria and India |
| Smith subaward \$58,000, Co-PI: Dr. M.J. Fuxjager, Brown University |
| National Science Foundation, Div. Integrative Organismal Systems (\$279,600) |
| RUI: Collaborative Research: Neuroendocrine basis of gestural display evolution |
| Co-PI: Dr. M. J. Fuxjager, Wake Forest University (now Brown University) |
| Smith College is the lead institution on this grant |
| Jean Picker Fellowship, Smith College (\$9,500 seed grant for genome sequencing) |
| Jean Picker Fellowship, Smith College (course release) |
| Konishi Research Award, International Society for Neuroethology (\$2,500) |
| Andrew W. Mellon Foundation Grant (\$16,094) |
| Colby-Bates-Bowdoin Collaborative Faculty Enhancement Grant |
| Co-PI: Dr. C.R. Bevier, Colby College |
| PADI Foundation Research Grant (\$2,500) |
| |

Grant Applications, Not Funded:

2019 National Science Foundation, Division of Animal Behavior (\$886,590) CAREER: Communication in a world in flux: linking endocrine mechanisms to multimodal display evolution

PUBLICATIONS

^U Undergraduate student co-author

^{SU} Smith student co-author

** These authors contributed equally to this work

Research in my field is highly integrative, often with multiple senior authors who contribute essential expertise and without whom the research would not be possible. In peer-reviewed publications, authors serving as principle investigators (PIs) are generally listed last on the manuscript or are indicated as corresponding authors. First authors also serve a leading role in conceptualizing the research, designing and conducting experiments, analyzing data, mentoring student co-authors, and writing the manuscript. They may or may not be PIs. Middle authors contribute to developing the research, collecting data, and writing the manuscript, but with a more minor contribution compared to first and last authors. In all publications that result from research done primarily or exclusively in my laboratory, I am listed as either first or last author.

Peer-Reviewed Articles:

[P1] **Mangiamele, L.A.** and Fuxjager, M.J. 2018. Insight into the neuroendocrine basis of signal evolution: a case study in foot-flagging frogs. *Journal of Comparative Physiology A* 204:61-70 [*Invited Review*]

[P2] Thompson, R.R. and **Mangiamele, L.A.** 2018. Rapid sex steroid effects on reproductive responses in male goldfish: Sensory and motor mechanisms. *Hormones and Behavior* 104:52-62 [*Invited Review. This review includes new, previously unpublished data.*]

[P3] **Mangiamele, L.A.,** Gomez, J.R.^U, Curtis, N.J., and Thompson, R.R. 2017. GPR30/GPER, a membrane estrogen receptor, is expressed in the brain and retina of a social fish (*Carassius auratus*) and co-localizes with isotocin. *Journal of Comparative Neurology* 525(2): 252-270

[P4] **Mangiamele, L.A.****, Fuxjager, M.J.**, Schuppe, E.R., <u>Taylor, R.S.</u>^{SU}, Hödl, W. and Preininger, D. 2016. Increased androgenic sensitivity in the hind limb muscular system marks the evolution of a derived gestural display. *Proceedings of the National Academy of Sciences* 11 (20):5664-5669

[P5] Fuxjager, M.J., Davidoff, K.R., **Mangiamele, L.A.** and Lohmann, K.J. 2014. The geomagnetic environment in which sea turtle eggs incubate affects subsequent magnetic navigation behavior of hatchlings. *Proceedings of the Royal Society B* 281:20141218

[P6] **Mangiamele, L.A.,** Keeney, A.D.T.^U, D'Agostino, E.N.^U, and Thompson, R.R. 2013. Pheromones influence preoptic vasotocin gene expression and decrease social approach behavior in response to rivals, but not mates. *Brian, Behavior and Evolution* 81:194-202

[P7] **Mangiamele, L.A.** and Thompson, R.R. 2012. Testosterone rapidly increases ejaculate volume and sperm density in competitively breeding goldfish through an estrogenic membrane receptor mechanism. *Hormones and Behavior* 62: 107-112 [*Cover Photo*]

[P8] **Mangiamele, L.A.** and Burmeister, S.S. 2011. Auditory selectivity for acoustic features that confer species recognition in the túngara frog. *Journal of Experimental Biology* 214:2911-2918. [*Featured research article in "Inside JEB"*]

[P9] Chakraborty, M.**, **Mangiamele, L.A.****, and Burmeister, S.S. 2010. Neural activity patterns in response to interspecific and intraspecific variation in mating calls in the túngara frog. *PLoS ONE* 5(9):e12898

[P10] **Mangiamele, L.A.,** Thomson, C.J.^U, Lebonville, C.L. and Burmeister, S.S. 2010. Characterization of the plasticity-related gene, *Arc*, in the frog brain. *Developmental Neurobiology* 70(12):813-825

[P11] **Mangiamele, L.A.** and Burmeister, S.S. 2008. Acoustically-evoked immediate-early gene expression in the pallium of the túngara frog. *Brain, Behavior, and Evolution* 72: 239-250

[P12] Burmeister, S.S., **Mangiamele, L.A.**, and Lebonville, C.L. 2008. Acoustic modulation of immediate-early gene expression in the auditory midbrain of female túngara frogs. *Brain Research* 1190:105-114

[P13] Chang, Y.M., Rosene, D.L., Killiany, R.J., **Mangiamele, L.A.,** and Luebke, J.I. 2005. Increased action potential firing rates of layer 2/3 pyramidal cells in the prefrontal cortex are significantly related to cognitive performance in aged monkeys. *Cerebral Cortex* 15(4):409-418

[P14] Edds-Walton, P.L., **Mangiamele, L.A.**, and Rome, L.C. 2002. Boatwhistles from oyster toadfish (Opsanus tau) around Waquoit Bay, Massachusetts. *Bioacoustics* 13:153-173

[P15] Tierney, A.J. and **Mangiamele, L.A**. 2001. Effects of serotonin and serotonin analogs on posture and agonistic behavior in crayfish. *Journal of Comparative Physiology A* 187(10): 757-67

Peer-Reviewed Book Chapters:

[P16] Thompson, R.R. and **Mangiamele, L.A.** 2012. Rapid effects of estradiol on behavioral and physiological responses related to reproduction in male goldfish. In *Brain Aromatase, Estrogens, and Behavior*. Balthazart, J. and Ball, G.F. (Eds.) Oxford: Oxford University Press. pp. 483-497

WORKS IN PROGRESS

In review / in revision:

[UR1] Anderson, N.K., Schuppe, E.R., Gururaja, K.V., Hebbar, P., **Mangiamele, L.A.**, Martinez, J.C.C., von May, R., Preininger, D., and Fuxjager, M.J. A common endocrine signature marks convergent evolution of an elaborate dance display in frogs. *In revision at American Naturalist.*

[UR2] <u>Eigerman, A.R.^{SU}</u> and **Mangiamele, L.A.** Mechanisms of multimodality: Androgenic hormones and the evolution of multimodal communication in fluctuating environments. <u>In review at Animal</u> <u>Behaviour.</u> [Invited submission. This review includes new, previously unpublished data.]

Manuscripts in preparation:

[M1] <u>Smith, S.^{SU}, LeCure, K.M.^{SU}, Eigerman, A.^{SU}, Privett-Mendoza, A. G. ^{SU}, Kironde, E.^{SU},</u> Fuxjager, M.J., Preininger, D. and **Mangiamele, L.A.** Androgen receptor modulates multimodal displays in a tropical frog. <u>*Targeting submission to Ethology.*</u>

[<u>M2</u>] <u>LeCure, K.M.^{SU}, Mantica, G.E.^{SU}, Racicot, R., Fuxjager, M.J., Preininger, D., and **Mangiamele**, **L.A.** Androgen receptor partitioning and neuron density differ in the spinal cord of frogs with a novel hind limb display. <u>*Targeting submission to Brain, Behavior, and Evolution.*</u></u>

[M3] Schuppe, E.R, **Mangiamele, L.A.,** <u>Kim, J.S.^{SU}</u>, Preininger, D., and Fuxjager, M.J. Evidence that muscular androgen receptor regulates spinal cord phenotype associated with elaborate 'dance' behavior in Bornean rock frogs. <u>*Targeting submission to Integrative Organismal Biology.*</u>

[M4] Cook, C.N., Freeman, A.R., Liao, J.C., and **Mangiamele, L.A.** Defining the boundaries of individual plasticity in behavior: Understudied mechanisms of evolution in varied contexts. *In manuscript form. For special issue of Integrative and Comparative Biology.*

SCHOLARLY LECTURES AND PROFESSIONAL PRESENTATIONS

Invited Lectures at Scientific Conferences:

- 2021 Symposium on Sending and Receiving Signals: Endocrine Modulation of Social Communication. Society for Integrative and Comparative Biology Annual Meeting [Virtual Meeting due to COVID-19]
- 2019 Presidential Symposium, Animal Behavior Society Meeting, Chicago, IL
- 2016 Symposium on Multimodal Communication in Multimodal Environments European Conference on Behavioural Biology, Vienna, Austria.
- 2010 Symposium on Acoustic Communication: Integrating Physiology, Environment and Behavior. Joint Meeting of Ichthyologists and Herpetologists. Providence, RI.
- 2009 Symposium on the Neural, Metabolic, and Genomic Underpinnings of Behavior. Canadian Society of Zoologists Annual Meeting, Toronto, Canada.

Other Invited Scholarly Lectures:

- 2020 Reed College, Dept of Biology
- 2019 Trinity College, Dept of Biology
- 2019 Mount Holyoke College, Dept of Biology
- 2016 Holy Cross College, Dept of Biology
- 2016 University of Massachusetts, Amherst, Center for Neuroendocrine Studies
- 2013 Skidmore College, Dept of Biology

- 2013 Providence College, Dept of Biology
- 2012 Colgate University, Dept of Biology
- 2011 The College of New Jersey, Dept of Biology
- 2011 University of Richmond, Dept of Biology
- 2010 University of Wisconsin, Madison, Dept of Zoology
- 2010 Colby College, Dept of Biology
- 2010 Vassar College, Dept of Biology

Contributed Oral and Poster Presentations:

^U Undergraduate student co-author ^{SU} Smith undergraduate co-author *First author is presenting author, unless otherwise noted*

Mangiamele, L.A., <u>Smith, S.M.^{SU}</u>, <u>LeCure, K.M.^{SU}</u>, Fuxjager, M.J., Preininger, D. 2019. Peripheral androgen action modulates foot-flagging in multimodal display of the frog *Staurois parvus*. Society for Integrative and Comparative Biology Annual Meeting.

Mangiamele, L.A., Fuxjager, M.J., Preininger, D. 2019. How new communication signals evolve: Androgens as modifiers of neuromotor structure and function. Gordon Conference in Neuroethology: Behavior, Evolution, and Neurobiology, Mt. Snow, VT

Preininger, D., Wampula, T., Weissenbacher, A., <u>Smith, S.M.</u>^{SU}, **Mangiamele, L.A.**, and Fuxjager, M. 2017. A research and captive breeding program of foot-flagging frogs in the Vienna Zoo. Amphibian Conservation Research Symposium, University of Kent, Canterbury, UK

Mangiamele, L.A. and Thompson, R.R. 2015. Estrogen receptor GPR30/GPER colocalizes with isotocin in the preoptic area of a social fish. Society for Neuroscience Annual Meeting.

Thompson, R.R., **Mangiamele, L.A.**, Chen, M.^U, Michaud, D.^U, Nicholson, T.^U, Ampatey, N.^U, and Yue, S*. 2015. Non-nuclear patterns of estrogen receptor immunoreactivity in goldfish brains. Society for Behavioral Neuroendocrinology Annual Meeting.

Thompson, R.R., **Mangiamele, L.A.**, Nicholson, T.^U, Michaud, D.^U, Chen, M.^U, Gomez, J.^U and Darden, D.* 2014. Non-nuclear distribution patterns of estrogen receptors in the brains of goldfish. Society for Neuroscience Annual Meeting.

Mangiamele, L.A., Keeney, A.D.T.^U, D'Agostino, E.N.^U, and Thompson, R.R. 2013. Pheromone exposure increases preoptic arginine vasotocin gene expression and inhibits social approach behavior towards rivals, but not potential mates. Gordon Conference in Neuroethology: Behavior, Evolution, and Neurobiology, Mt. Snow, VT

Mangiamele, L.A., Keeney, A.D.T.^U, D'Agostino, E.N.^U, and Thompson, R.R. 2013. Pheromone exposure influences preoptic arginine vasotocin gene expression and inhibits social approach behavior. Society for Integrative and Comparative Biology Annual Meeting

Curtis, N.J., Thompson, R.R., Horch, H.W. and **Mangiamele, L.A.** 2012. Proof of concept: Using novel PCR experiments to teach fundamental techniques in an undergraduate neuroscience laboratory course. Society for Neuroscience Annual Meeting.

Mangiamele, L.A., Bevier, C.R., Carol, H.A.^U, King, K.R.^U 2012. Stress response correlates with reduced calling capacity in spring peepers (*Pseudacris crucifer*). Society for Integrative and Comparative Biology Annual Meeting.

Mangiamele, L.A. and Thompson, R.R. 2012. Testosterone rapidly increases milt release and sperm cell density in goldfish via activation of membrane estrogen receptors. Society for Behavioral Neuroendocrinology Annual Meeting.

Mangiamele, L.A., Curtis, N.J., Johnson, T.E.^U, and Thompson, R.R. 2011. Expression of GPR30/GPER, a membrane estrogen receptor, in the visual system of seasonally breeding male goldfish. Society for Neuroscience Annual Meeting.

Thompson, R.R., Cedars, B.^U, **Mangiamele, L.A.,** Kennedy, M.^U, Hoffbuhr, K., Berg, B.^U, and McNeil, K.^U 2011. An alternative 3' truncated version of a vasotocin V1a-like receptor gene is expressed in the brains of goldfish. Society for Neuroscience Annual Meeting.

Mangiamele, L.A. and Thompson, R.R. 2011. Testosterone rapidly increases milt output in male goldfish. North American Society for Comparative Endocrinology. *[Abstract Published in Frontiers in Endocrinology]*

Mangiamele, L.A., Glaeser, R.M.^U, Eberly, L.^U, and Burmeister, S.S. 2010. Habituation and recovery of the genomic response to mating calls in the auditory midbrain of túngara frogs. Society for Neuroscience Annual Meeting.

Mangiamele, L.A. and Burmeister, S.S. 2009. Neural coding of conspecific signals in female túngara frogs (*Physalaemus pustulosus*). J.B. Johnston Club. Satellite Meeting to the Society for Neuroscience Annual Meeting, Chicago, IL.

Mangiamele, L.A. and Burmeister, S.S. 2008. Activity-regulated cytoskeletal-associated protein (*Arc*) mRNA in the brain of túngara frogs. Society for Neuroscience Annual Meeting.

Mangiamele, L.A. and Burmeister, S.S. 2007. Acoustically-evoked immediate-early gene expression in the pallium of the túngara frog is spatially distributed. Frog Hearing and Acoustic Communication. Satellite Meeting to the 8th International Congress of Neuroethology, Vancouver, Canada.

Mangiamele, L.A. and Burmeister, S.S. 2007. Acoustically-evoked immediate-early gene expression in the pallium of the túngara frog. Society for Integrative and Comparative Biology Annual Meeting, Phoenix, AZ.

Mangiamele, L.A. and Burmeister, S.S. 2006. Temporal and spatial patterns of immediate-early gene expression in the auditory midbrain of female tungara frogs. Society for Neuroscience Annual Meeting.

Fuxjager, M.J., **Mangiamele, L.A.**, Davidoff, K.R.B*, and Lohmann, K.J. 2006. Effects of the magnetic environment of sea turtle nests on magnetic orientation behavior in hatchlings. Society for Integrative and Comparative Biology Annual Meeting.

Chang, Y.M., Rosene, D.L., Killiany, R.J., **Mangiamele, L.A.**, and Luebke, J.I. 2004. Increased action potential firing rates of layer 2/3 pyramidal cells in the prefrontal cortex are significantly related to cognitive performance in aged monkeys. Society for Neuroscience Annual Meeting.

Rosene, D.L., Luebke, J.I., **Mangiamele, L.A**., Sandell, J.H., and Peters, A. 2003. Anatomical and physiological properties of the corpus callosum in the aged rhesus monkey. Society for Neuroscience Annual Meeting.

Luebke, J.I., **Mangiamele, L.A.**, and Rosene, D.L. 2002. Effects of aging on the electrophysiological properties of layer 2/3 pyramidal cells in the prefrontal cortex of Rhesus monkeys. Society for Neuroscience Annual Meeting.

Tierney, A.J., **Mangiamele, L.A.**, Blanck, J.K., Moll, S.F. and Thysen, J.A. 2000. Effects of serotonin receptor agonists on posture and aggressive behavior in crayfish. Society for Neuroscience Annual Meeting.

Posters Presented by Student Authors:

^{SU} Smith undergraduate author *First author is presenting author, unless otherwise noted*

<u>Kironde, E, ^{SU}, Furlan, F. ^U, Fuxjager, M.J., Preininger, D., and **Mangiamele, L.A**. 2020. Androgens modulate dynamic changes in multimodal display structure in the Bornean rock frog (*Staurois parvus*). Society for Integrative and Comparative Biology Annual Meeting.</u>

<u>Eigerman, A. ^{SU}, Privett-Mendoza, A.G.</u> ^{SU}, Preininger, D., Fuxjager, M.J., and **Mangiamele, L.A**. 2019. Androgens modulate multimodal display bouts and behavior sequences in the frog *Staurois parvus*. UMass Center for Neuroendocrine Studies 19th Annual Symposium.

<u>Eigerman, A.</u>[†] ^{SU}, <u>Privett-Mendoza, A.G.</u>[†] ^{SU}, Preininger, D., Fuxjager, M.J., and **Mangiamele, L.A**. 2019. Androgens modulate multimodal display bouts and behavior sequences in the frog *Staurois parvus*. Animal Behavior Society Annual Meeting. † *Indicates co-presenting student authors*

<u>LeCure, K.M.</u>^{SU}, Preininger, D., Fuxjager, M.J., and **Mangiamele, LA**. 2019. Androgen receptor does not affect temporal or spectral properties of calls in foot-flagging frogs. Animal Behavior Society Annual Meeting.

<u>Smith, S.M.</u>^{SU}, <u>LeCure, K.M.</u>^{SU}, <u>Eigerman, A.R.</u>^{SU}, Fuxjager, M.J., Preininger, D., and **Mangiamele**, **L.A.** 2018. Androgens modulate foot-flagging, but not vocalizations, in the multimodal display of the frog *Staurois parvus*. Animal Behavior Society Annual Meeting.

Netoskie, E.^U, <u>Smith, S.M.</u>^{SU}, **Mangiamele, L.A.**, Fuxjager, M., and Preininger, D. 2018. Individual variation in visual signals of the foot-flagging frog *Staurois parvus*. Animal Behavior Society Annual Meeting.

<u>Taylor, R.S.</u>^{SU}, <u>Keane, J.</u>^{SU}, <u>Mantica, G.E.</u>^{SU}, Fuxjager, M.J., Preininger, D., Hödl, W., and **Mangiamele, L.A.** 2015. Testosterone affects multimodal signaling behavior in the foot-flagging frog, *Staurois parvus*. UMass Center for Neuroendocrine Studies 15th Annual Symposium.

Smith College – Scholarly Lectures:

Sigma Xi Lunch presentation, Oct 4, 2016: "Androgens and the Evolution of a New Communication Signal in Bornean Frogs."

Smith College – 'Celebrating Collaborations' Student Poster Presentations:

| Year 2015 2016 | Students Rebecca Taylor '16, Jazmyne Keane '16 Gina Mantica '16 | Title Does testosterone affect foot-flagging behavior in <i>Staurois</i> <i>parvus</i> frogs? The Evolution of Androgen Receptor Distribution in the Spinal Cord to Support Specialized Sexual Displays: A Comparative Analysis Using <i>Staurois parvus</i> |
|-----------------------------|---|--|
| | Elizabeth Besozzi '16 | Bottom-up and Top-down Controls on Red-backed Salamander (<i>Plethodon cinereus</i>) Distribution: A "Landscape of Fear" on the Forest Floor? |
| | Mariana Villalobos-Ortiz '16 | Investigating the Neuroprotective Effects of Acetaminophen in a <i>C. Elegans</i> Animal Model of Parkinson's Disease |
| 2017 | Zoe Kohler-Boland '17 | Effects of G1 Administration on Social Proximity and c- Fos/Isotocin Colocalization in the Preoptic Area in Male Goldfish |
| | Aditi Balasubramanian '18 | Analysis of Androgen Receptor Characterization in Spinal Cords of Foot-Flagging Frogs |
| 2018 | Sarah Smith '18, Kerry LeCure '20 and Amelia Eigerman '21 | Androgenic Modulation of Foot-Flagging Behavior in the Bornean Rock Frog (<i>Staurios parvus</i>) |
| 2019 | Natalie Bourdon '19, Eliza Day '20, Emily Halstead '19 and Rebecca Schaffer '19 | The Impact of Androgen Antagonists on the Morphology of Frog Motoneurons Controlling Hind Limb Movements |
| | Lauren Bondi '19, Julia Donovan '20, Seri Park '20 and Maddie Ryan '20 | Effects of Androgen Receptor Antagonist Flutamide on Jump Performance in Frogs |
| | Delphine Zhu '19, Emily Connolly '19 and Andrea Botello '20 | Does blocking androgen receptor activation influence BDNF in spinal cord motoneurons? |
| | Selina Husain '19 | Characterizing Hindlimb Motoneuron Morphology in Frog Spinal Cord Tissue to Understand the Evolution of Neural Circuits in Behavior |

STUDENT RESEARCH MENTORING

Undergraduate Student Research Mentoring, Smith College

29 individual Smith College students: 4 AEMES, 2 STRIDE, 1 POSSE, 19 special studies courses, 6 honors theses (plus 2 co-advised)

52% students mentored were students of color, 24% were first generation college students

Graduate Thesis Committees

Nigel Anderson, Ph.D. Candidate, Program in Ecology and Evolutionary Biology, Brown University Jennifer Christensen, M.S. in Biological Sciences, Smith College Nicholas Hathaway, M.S. in Biological Sciences, Smith College Gariel Grant, M.S. in Biological Sciences, Smith College

OTHER PROFESSIONAL ACTIVITIES

Secretary, Division of Neurobiology, Society for Integrative and Comparative Biology (2012-present) Ad Hoc Manuscript Reviewer, *Journal of Experimental Biology*, *PLoS One*,

Physiology & Behavior, Journal of Comparative Physiology A, Hormones and Behavior Ad Hoc Grant Reviewer, National Science Foundation

Invited Participant, National Science Foundation Reintegrating Biology Jumpstart Invited Participant, Workshop on Spatiotemporal Dynamics in Animal Communication, SICB 2020

PROFESSIONAL MEMBERSHIPS

Animal Behavior Society Faculty for Undergraduate Neuroscience J.B. Johnston Club for Evolutionary Neuroscience Sigma Xi Scientific Research Society Society for Integrative and Comparative Biology Society for Neuroscience

COLLEGE OR DEPARTMENTAL COMMITTEES AND OTHER COLLEGE SERVICE

Department of Biological Sciences:

| 2019-2020 | Executive Committee |
|--------------|--|
| 2019-present | Spinelli Center Liasion |
| 2018-present | Council for Undergraduate Research (CUR) Curriculum Transformation Project |
| 2018-2019 | Space Committee |
| 2016-2017 | Chair, Life Sciences Colloquium Committee |
| 2014-2016 | Graduate Program Committee |
| 2014-2015 | Safety Committee |

Program in Neuroscience:

2014-present Neuroscience Program Committee

Other Smith College Service:

| 2020-present | Board of Pre-health Advisors |
|--------------|--|
| 2019-present | AEMES/McKinley Fellowship Committee |
| 2019 | Faculty Host/Lecturer, Smith College Alumnae Travel, Galapagos Islands |
| 2015-2020 | Science Center Committee on Diversity |

<u>Advising:</u>

Academic Advising

| Year | BIO Majors | NSC Majors | Liberal Arts | Total |
|---------|------------|------------|--------------|-------|
| 2020-21 | 9 | 14 | 0 | 23 |
| 2019-20 | 9 | 14 | 3 | 26 |
| 2018-19 | 3 | 5 | 8 | 16 |
| 2017-18 | 0 | 5 | 0 | 5 |
| 2016-17 | 0 | 9 | 5 | 14 |
| 2015-16 | 0 | 2 | 8 | 10 |

Fulbright Fellowship Advising

| Year | Student | Outcome |
|------|-------------------|----------|
| 2017 | Zoe Kohler-Boland | Awarded |
| 2016 | Gina Mantica | Declined |

TEACHING

Courses Taught, Smith College:

BIO 200/201: Animal Physiology & Lab NSC 230: Experimental Methods in Neuroscience NSC 302: Brains, Behavior, and Evolution: Panamá Field Course (J-term) NSC 313: Seminar in Organismal Neuroscience: Neuroethology NSC 318: Systems Neurobiology NSC 328: Research in Systems Neurobiology

Courses Taught, Other Institutions:

Communicating Biology (writing seminar), SUNY Plattsburgh Molecular Neuroscience & Lab, SUNY Plattsburgh General Biology I Laboratory, SUNY Plattsburgh Animal Physiology & Lab, Middlebury College First Year Seminar: Introduction to Brain and Behavior, Bowdoin College Seminar in Neuroethology, Bowdoin College

TEACHING DEVELOPMENT AND SHERRERD CENTER INVOLVEMENT

| 2018 | Participant, Faculty Teaching and Learning Seminar, Smith College |
|-----------|---|
| 2016-2017 | Participant, Teaching Course-Based Research Experiences, Smith College |
| 2015 | Participant, Student Laboratory Techniques for Physiology Educators, Texas A&M |
| 2015-2016 | Participant, Teaching Large Classes Teaching Circle, Sherrerd Center, Smith College |
| 2012 | Panelist, Digital Storytelling Workshop, Bowdoin College |
| 2012 | Participant, Teaching Quantitative Skills Workshop, Bates College |
| 2011 | Participant, 'How Learning Works' Teaching Workshop, Bowdoin College |
| 2009 | Workshop Leader, Effective Visualization of Scientific Data, UNC-CH |

PUBLIC ENGAGEMENT AND COMMUNITY SERVICE

| 2019-present | Skype A Scientist |
|--------------|---|
| 2013 | Panelist, Task Force on Young Women & the Economy, Montpelier, VT |
| 2013-2014 | STEM Curriculum Consultant, Rosie's Girls Camp, Essex, VT |
| 2012 | Volunteer, Brain Awareness Day, Bowdoin College |
| 2009-2010 | Member, Girls in Science Working Group, Carolina Women's Center, UNC-CH |
| 2009 | Volunteer Judge, Orange County Science Fair, Hillsborough, NC |
| 2007 | Project Volunteer, "DNA Day" Science Outreach UNC-CH and the National Human |
| | Genome Research Institute |