

JAMES R. MONAGHAN

EDUCATION

- 2003-2009 Ph.D., Biology
University of Kentucky, Lexington, KY
- 1997-2001 Bachelor of Arts, Biology
DePauw University, Greencastle, IN

EMPLOYMENT HISTORY

- 2001-2003 Lab Technician, Indiana University Medical School
- 2009-2012 Postdoctoral Fellow University of Florida, Gainesville, FL
- 2012- Assistant Professor, Northeastern University, Boston, MA

PUBLICATIONS

REFEREED ARTICLES

* Northeastern Graduate student. ** Northeastern Undergraduate student

- 1) Voss SR, Murrugarra D, Jensen TB**, **Monaghan JR**. *Transcriptional investigation of positional memory in axolotl limbs*. Comparative Biochemistry and Physiology. Part B: Biochemistry and Molecular Biology. In Press.
- 2) Bryant DM, Sousounis D, Farkas JE*, Rakhimova AS, Thao N, Guzikowski AR, **Monaghan JR**, Levin M, and Whited JL. 2017. *Repeated removal of developing limb buds permanently reduces appendage size in the highly-regenerative axolotl*. Developmental Biology. 424(1):1-9. PMID: 28235582
- 3) Nguyen M**, Singhal P**, Maden M, Piet JW*, Shefelbine SJ, Voss SR, and **Monaghan JR**. 2017. *Retinoic acid receptor regulation of epimorphic and homeostatic regeneration in the axolotl*. Development. 144(4):601-611. PMID: 28087637
- 4) Erler P*, Sweeney A, and **Monaghan JR**. 2017. *Regulation of injury-induced ovarian regeneration by activation of oogonial stem cells*. Stem Cells. 35(1):236-247. PMID:28028909
- 5) Farkas JE*, Freitas PD*, Bryant DM, Whited JL, and **Monaghan JR**. 2016. *Neuregulin-1 signaling is essential for nerve-dependent axolotl limb regeneration*. Development. 143:2724-2731. PMID: 27317805
- 6) Flowers GP, Timberlake AT, Mclean KC, **Monaghan JR**, Crews CM. 2014. *Highly efficient targeted mutagenesis in axolotl using Cas9 RNA-guided nuclease*. Development. 141(10):2165-2171. PMID: 24802774
- 7) Athipopozhy A, Lehrberg J, **Monaghan JR**, Gardiner DM, Voss SR. 2014. *Characterization of in vitro transcriptional responses of dorsal root ganglia cultured in the presence and absence of blastema cells from regenerating salamander limbs*. Regeneration. 1(2):1-10. PMID: 25750744

- 8) Lopez D, Lin L, **Monaghan JR**, Cogle CR, Bova FJ, Maden M, Scott EW. 2014. *Mapping hematopoiesis in a fully regenerative vertebrate: the axolotl*. *Blood*. 124(8):1232-1241. [PMID: 24802774](#)
- 9) **Monaghan JR**, Stier A, Michonneau F, Pasch B, Smith M, Maden M, Seifert AW. 2014. *Experimentally induced metamorphosis in axolotls reduces regenerative rate and fidelity*. *Regeneration*. 1(1):2-14. [PMID: 27499857](#)
- 10) Hui SP, **Monaghan JR**, Voss SR, Ghosh S. 2013. *Expression pattern of Nogo-A, MAG, and NgR in regenerating urodele spinal cord*. *Developmental Dynamics*. 242(7):847-860. [PMID: 23592243](#)
- 11) **Monaghan JR**, Athipposhy A, Seifert AW, Putta S, Stromberg A, Maden M, Gardiner DM, and Voss SR. 2012. *Gene expression patterns specific to the regenerating limb of the Mexican axolotl*. *Biology Open*. 1(10):937-948. [PMID: 23213371](#)
- 12) Zhu W, Pao GM, Satoh A, Cummings G, **Monaghan JR**, Harkins TT, Bryant SV, Randal Voss S, Gardiner DM, Hunter T. 2012. *Activation of germline-specific genes is required for limb regeneration in the Mexican axolotl*. *Developmental Biology*. Oct 1;370(1):42-51. [PMID: 22841627](#)
- 13) **Monaghan JR** and Maden M. 2012. *Visualization of retinoic acid signaling in transgenic axolotls during limb development and regeneration*. *Developmental Biology*. Aug. 368(1):63-75. [PMID: 22627291](#)
- 14) Seifert AW, **Monaghan JR**, Voss SR, Maden M. 2012. *Skin regeneration in adult axolotls: a blueprint for scar-free healing in vertebrates*. *PLoS ONE* 7(4): e32875. [PMID: 22485136](#)
- 15) **Monaghan JR**, Epp L, Putta S, Page RB, Walker JA, Beachy CK, Zhu W, Pao GM, Verma IM, Hunter T, Bryant SV, Gardiner DM, Harkins TT, Voss SR. 2009. *Microarray and cDNA sequence analysis of transcription during nerve-dependent limb regeneration*. *BMC Biology*. [PMID: 19144100](#)
- 16) Page RB, **Monaghan JR**, Walker JA, Voss SR. 2009. *A model of transcriptional and morphological changes during thyroid hormone-induced metamorphosis of the axolotl*. *General and Comparative Endocrinology*. 162(2):219-232. [PMID: 19275901](#)
- 17) Theodosiou M, **Monaghan JR**, Spencer ML, Voss SR, Noonan DJ. 2007. *Isolation and characterization of Axolotl NPDC-1 and its effects on retinoic acid receptor signaling*. *Comparative Biochemistry and Physiology. Part B: Biochemistry and Molecular Biology*. 147(2):260-270. [PMID: 17331771](#)
- 18) **Monaghan JR**, Walker JA, Beachy CK, and Voss SR. 2007. *Early gene expression during natural spinal cord regeneration in the salamander *Ambystoma mexicanum**. *Journal of Neurochemistry*. 101(1):27-40. [PMID: 17241119](#)

19) Page RB, **Monaghan JR**, Samuels AK, Smith JJ, Beachy CK, Voss SR. 2007. *Microarray analysis identifies keratin loci as sensitive biomarkers for thyroid hormone disruption in the salamander *Ambystoma mexicanum**. *Comparative Biochemistry and Physiology. Part C: Toxicology and Pharmacology*. 145(1):15-27. [PMID: 16926121](#)

20) Smith JJ, Putta S, Walker JA, Kump DK, Samuels AK, **Monaghan JR**, Weisrock DW, Staben C, Voss SR. 2005. *Sal-Site: integrating new and existing ambystomatid salamander research and informational resources*. *BMC Genomics*. 16, 6:181. [PMID: 16359543](#)

21) Putta S, Smith JJ, Walker JA, Rondet M, Weisrock DW, **Monaghan JR**, Samuels AK, Kump K, King DC, Maness NJ, Habermann B, Tanaka E, Bryant SV, Gardiner DM, Parichy DM, Voss SR. 2004. *From biomedicine to natural history research: EST resources for ambystomatid salamanders*. *BMC Genomics*. 13(5):54. [PMID: 15310388](#)

BOOK CHAPTERS

22) Maden M, Chambers D, and **Monaghan JR**. 2017. *Retinoic acid and the genetics of positional information*. in *Regenerative Engineering and Developmental Biology: Principles and Applications*, David Gardiner ed., CRC Press, Florida, In Press. [Link](#)

23) Farkas JE* and **Monaghan JR**. 2015. *Housing and maintenance of *Ambystoma mexicanum*, The Mexican axolotl*. *Methods in Molecular Biology*. In *Salamanders in Regeneration Research*. Vol 1290: 27-46. [PMID: 25740475](#)

24) Farkas JE*, Piril E*, Freitas PD*, Sweeney A, and **Monaghan JR**. 2016. *Organ and appendage regeneration in the axolotl*. Book chapter in *Regenerative Medicine – from Protocol to Patient*, 3rd Edition. Springer Publishers. 223-247. [Link](#)

25) **Monaghan JR** and Maden M. 2013. *Cellular plasticity during vertebrate appendage regeneration*. *Current Topics in Microbiology and Immunology*. Vol. 367:53-74. [PMID: 23239234](#)

REVIEW ARTICLES (REVIEWED)

26) Farkas JE* and **Monaghan JR**. 2017. *A brief history of the study of nerve dependent regeneration*. *Neurogenesis*, Apr 10;4(1):e1302216. [PMID: 28459075](#)

27) Erler P* and **Monaghan JR**. 2015. *The link between injury-induced stress and regenerative phenomena: A cellular and genetic synopsis*. *BBA – Gene Regulatory Mechanisms*. Apr;1849(4):454-461. [PMID: 25088176](#)

28) Seifert AW, **Monaghan JR**, Smith DM, Pasch B, Stier AC, Michonneau F, Maden M. 2012. *The influence of fundamental traits on mechanisms controlling limb regeneration*. *Biological Reviews*. 87(2):330-345. [PMID: 21929739](#)

Ph.D. THESIS

29) **Monaghan JR.** 2009. Physiological genomics of spinal cord and limb regeneration in a salamander, The Mexican axolotl. University of Kentucky, Lexington, KY. May 2009.

POSTER ABSTRACTS (2012-present)

Chen T**, Jensen T**, Lovely A*, **Monaghan JR.** Development of multiplexed in situ hybridization mRNA imaging in the regenerating axolotl salamander. ASBMB Northeast Regional Meeting, Boston, MA.

Fox C**, Jensen T**, **Monaghan JR.** Hypertranscription as a hallmark of appendage regeneration. ASBMB Northeast Regional Meeting, Boston, MA.

Jensen T**, Giunta P**, Schulz NG**, Wong H**, Adesina A**, **Monaghan JR.** 2017. *Epidermal growth factor receptor family signaling in the regenerating axolotl lung.* ASBMB and Experimental Biology National Meeting, Chicago, IL.
-Poster Competition Honorable Mention

Jensen T**, Giunta P**, Schulz NG**, Wong H**, Adesina A**, **Monaghan JR.** 2017. *Epidermal growth factor receptor family signaling in the regenerating axolotl lung.* RISE Northeastern. Boston, MA.
-Poster Award Finalist

Jensen T**, Giunta P**, Schulz NG**, Wong H**, Adesina A**, **Monaghan JR.** 2017. *Epidermal growth factor receptor family signaling in the regenerating axolotl lung.* AAAS National Meeting, Boston, MA.
- AAAS Annual Meeting Student Poster Award Winner (Highlighted in *Science Magazine*)

Farkas J* and **Monaghan JR.** 2017. *Peripheral nerves have both a mitogenic and permissive role during axolotl limb regeneration.* AAAS National Meeting, Boston, MA.

Freitas P* and **Monaghan JR.** 2017. *The role of NRG1-ErbB2 signaling pathway in promoting spinal cord regeneration in the Mexican axolotl.* AAAS National Meeting, Boston, MA.

Farkas J* and **Monaghan JR.** 2016. *Peripheral nerves have both a mitogenic and permissive role during axolotl limb regeneration.* Society for Developmental Biology 75th Annual Meeting. Boston, MA.

Freitas P* and **Monaghan JR.** 2016. *The role of NRG1-ErbB2 signaling pathway in promoting spinal cord regeneration in the Mexican axolotl.* Society for Developmental Biology 75th Annual Meeting. Boston, MA.

Jensen T**, Giunta P**, Schulz N**, Erler P*, **Monaghan JR.** 2016. *Compensatory regeneration of the amputated axolotl lung.* Society for Developmental Biology 75th Annual Meeting. Boston, MA.

Meeting.

Erler P*, Sweeney A, **Monaghan JR**. 2016. *Regulation of injury-induced ovarian regeneration by activation of oogonial stem cells*. Society for Developmental Biology 75th Annual Meeting. Boston, MA.

Monaghan JR, Nguyen M*, Singhal P*, Maden M, Voss R. 2016. *Retinoic acid receptor regulation of epimorphic and homeostatic regeneration in the axolotl*. Society for Developmental Biology 75th Annual Meeting. Boston, MA.

Jensen T**, Giunta P**, Schulz N**, Erler P*, **Monaghan JR**. 2016. *Compensatory regeneration of the amputated axolotl lung*. ASBMB Northeast Regional Meeting, Boston, MA.
-Top poster award

Jensen T**, Giunta P**, Schulz N**, Erler P*, **Monaghan JR**. 2016. *Compensatory regeneration of the amputated axolotl lung*. WPI's Next-in-Bio Research Symposium. Worcester, MA.
-Top poster award

Lino B**, Murillo J**, **Monaghan JR**, and Crane J. 2016. *Mechanisms of UV-induced skin repair in a regenerative vertebrate*. NSF Research Experiences for Undergraduates Symposium. Arlington, VA

Erler P*, Sweeney A, **Monaghan JR**. 2016. *Regulation of injury-induced ovarian regeneration by activation of oogonial stem cells*. EMBO The Molecular Basis of Regeneration and Tissue Repair. Salerno, Italy.

Farkas JE* and **Monaghan JR**. 2016. *Peripheral nerves provide both mitogenic and permissive support during nerve-dependent axolotl limb regeneration*. EMBO The Molecular Basis of Regeneration and Tissue Repair. Salerno, Italy.

Farkas J* and **Monaghan JR**. *Neuregulin-1 is an essential promoter of proliferation during nerve-dependent axolotl limb regeneration*. 2015. Northeast Regional Meeting of the Society for Developmental Biology. Woods Hole, MA.

Bystrova P* and **Monaghan JR**. *NRG-1 is required for spinal cord regeneration in the axolotl*. 2015. NE Regional Meeting of the Society for Developmental Biology. Woods Hole, MA.

Nguyen M**, Singhal P**, Voss SR, Maden M, and **Monaghan JR**. 2015. *Molecular encoding of positional information during limb regeneration*. NE Regional Meeting of the Society for Developmental Biology. Woods Hole, MA.

Nguyen M**, Singhal P**, Voss SR, Maden M, and **Monaghan JR**. 2015. *Molecular encoding of positional information during limb regeneration* RISE Northeastern. Boston, MA.

Fachon E** and **Monaghan JR**. 2015. *Salamander Superheros: Imaging the role of nerves in axolotl limb regeneration*, Northeastern Honors Poster Session. Boston, MA.

Feldman O** and **Monaghan JR**. 2015. *Optimizing Crispr/Cas9 protocols for the generation of transgenic axolotls*. RISE Northeastern. Boston, MA.

Nguyen M**, Davis FC, and **Monaghan JR**. 2014. *The circadian control of limb regeneration in the axolotl salamander*. RISE Northeastern. Boston, MA.

Sweeney AE, Balaconis MK, Clark HA, **Monaghan JR**. 2014. *Nanosensors for quantifying bioelectrical signaling during tissue regeneration*. RISE Northeastern. Boston, MA.

Farkas JE* and **Monaghan JR**. 2014. *Neuregulin-1 signaling is essential for nerve-dependent axolotl limb regeneration*. CDB Riken Symposium. Kobe, Japan.

Farkas JE* and **Monaghan JR**. 2014. *Neuregulin-1 signaling is necessary for cell proliferation during nerve dependent axolotl limb regeneration*. EMBO Conference: Molecular and cellular basis of regeneration and tissue repair. Sant Feliu de Guixols, Spain.

Sweeney AE, Erler P*, **Monaghan JR**. 2014. *Identification of germline stem cells in regenerating axolotl ovary*. World Stem Cell Summit. San Antonio, TX

INVITED TALKS (2012-present)

Frontiers in Aging and Regeneration Research Course (FrARR). Morehouse School of Medicine. Atlanta, GA. Invited Faculty Member and Lecturer. 2017. *Comparative study of appendage and organ regeneration in the axolotl salamander*.

Brock University. Department of Biology Seminar Series. Ontario, Canada. 2017. *Functional analysis of salamander limb regeneration*.

8th Annual Aquatic Models of Human Disease Meeting. Invited Speaker. Birmingham, AL. 2017. *Comparative study of appendage and organ regeneration in the axolotl salamander to discover conserved regulatory programs*.

University of Minnesota, Department of Genetics, Cell Biology, and Development Seminar Series. Minneapolis, MN. 2017. *Comparative study of appendage and organ regeneration in the axolotl salamander: There's more than one way to regenerate an organ*.

UMass Lowell, Department of Biological Sciences Seminar Series. Lowell, MA. 2016. *Comparative study of appendage and organ regeneration in the axolotl salamander: There's more than one way to regenerate an organ*.

Frontiers in Stem Cells and Regeneration Course. Lab Instructor and Invited Speaker. Woods Hole, MA. 2016. *Limb regeneration lecture and lab design/instruction*.

75th Annual Society for Developmental Biology Meeting: Instructor for the Boot Camp for New Faculty. Boston, MA. 2016. *Introduction to the axolotl animal model*.

75th Annual Society for Developmental Biology Meeting Satellite Symposium: Evolution of regenerative abilities: Recapitulation of development or novel mechanisms? Invited Speaker. Boston, MA. 2016. *Neural control of limb regeneration*.

Annual Northeast Regional Meeting of the Society for Developmental Biology. Selected Speaker. Woods Hole, MA. 2016. *Retinoic acid regulation of epimorphic and homeostatic regeneration*.

UMass Amherst. MCB Seminar Series. Amherst, MA. 2016. *Molecular regulation of proliferation and patterning of a regenerating salamander limb*.

Schepens Eye and Research Institute. Department of Ophthalmology Seminar Series. Boston, MA. 2016. *Functional analysis of regeneration in the Mexican axolotl salamander*.

Frontiers in Stem Cells and Regeneration Course. MBL, Woods Hole, MA. Invited Speaker. 2015. *Retinoic acid signaling during complex tissue regeneration*.

Frontiers in Aging and Regeneration Research Course. Invited Speaker and Lab Instructor. MBL, Woods Hole, MA. 2015. *Limb regeneration lecture and lab design/instruction*.

DePauw University. Department of Biology Seminar Series. Greencastle, IN. 2015. *Gene regulation of limb regeneration: Insights from the axolotl*.

University of California Irvine. Department of Developmental and Cell Biology, graduate student body invited speaker. Irvine, CA. 2014. *The role of Neuregulin-1 signaling during nerve-dependent axolotl limb regeneration*.

Worcester Polytechnic Institute. Department of Biology Seminar Series. Worcester, MA. 2014. *Deciphering the molecular code of positional information in a regenerating limb*.

Frontiers in Stem Cells and Regeneration Course. Invited Speaker. MBL, Woods Hole, MA. 2014. *Retinoic acid signaling during complex tissue regeneration*.

Frontiers in Stem Cells and Regeneration Course. Invited Speaker. MBL, Woods Hole, MA. 2013. *Retinoic acid signaling during complex tissue regeneration*.

Accelerating Translation Research for Drug Discovery. Invited Speaker. Boston, MA. 2013. *The Axolotl; A rising model of complex tissue regeneration*.

Stem Cells and Cell Signaling. Invited Speaker. Boston, MA. 2013. *The Axolotl; A rising model of complex tissue regeneration*.

FUNDED GRANT PROPOSALS

-External

Project Title: *Optical nanosensors detect neurotransmitter release in the peripheral nervous system* – Co-I (PI: Heather Clark)

Agency: NIH SPARC Program – OT2

Award Period: 09/01/17 – 09/01/19

Project Title: *Mechanobiology of Joint Morphogenesis: Manipulating Salamander Limbs* – Co-PI (PI: Sandra Shefelbine)

Agency: NSF/CMMI

Award Period: 09/01/17 – 08/31/20

Project Title: *Neural control of limb regeneration* - PI

Agency: NSF/IOS

Award Period: 04/01/17 – 03/31/2020

Project Title: *Uncovering Regeneration-Permissive Cues in Lower Vertebrate Retina* - co-PI (PI: Rebecca Carrier)

Agency: NSF/BBE

Award Period: 07/01/2016-06/30/2019

Project Title: *Functional analysis of limb regeneration* – Co-PI (PI: Malcolm Maden)

Agency: NSF/IOS

Award Period: 03/01/16 – 02/28/19

-Internal

Project Title: *Nanosensors for quantifying bioelectrical signaling during tissue regeneration* – PI (Co-PI: Heather Clark)

Agency: Northeastern University, Tier 1 Grant

Award Period: 06/01/13 – 06/01/13

Support: Consumables

TEACHING

NORTHEASTERN UNIVERSITY TEACHING

BIOL 5543 Embryonic Stem Cells - Developed as a new course

Spring 2013 – 20 enrolled

Spring 2016 – 40 enrolled

Spring 2014 – 28 enrolled

Fall 2016 – 40 enrolled

Fall 2014 – 47 enrolled

BIOL 3605 Developmental Neurobiology - Developed as a new course

Spring 2015 – 40 enrolled

Fall 2015 – 40 enrolled

Spring 2017 - 30 enrolled

BIOL5100 Biology Department Colloquium - Organized weekly departmental seminars

Fall 2017 – 10 enrolled to date

Fall 2015 – 12 enrolled

Spring 2017 - 12 enrolled

Spring 2015 – 17 enrolled

Fall 2016 - 15 enrolled

Fall 2014 – 12 enrolled

Spring 2016 - 16 enrolled

MENTORING

DOCTORAL STUDENTS

Piril Erler (2013-2017)

Thesis title: “*Role of adult stem cells and Proto-oncogenes pi3k, her2, Braf and yap1*”

2017 Postdoctoral researcher at Albert Einstein College of Medicine

2016 Northeastern University Graduate Dissertation Research Grant

Johanna Farkas (2012-2017)

Thesis title: “*Exploring the neural control of axolotl limb regeneration*”

2017 Postdoctoral researcher in Shefelbine/Monaghan Lab NEU

2017 Northeastern University Dissertation Completion Fellowship

2016 EMBO Regeneration Conference Travel Award

2016 NE Society of Dev. Biol. Meeting – Selected Speaker

2016 Coll. of Science Dean’s Grad. Award for Teaching

2015 Northeastern University Graduate Dissertation Research Grant

2014 RIKEN CDB Symposium Regeneration Travel Award

Polina Bystrova (2013-)

Alex Lovely (2016-)

Anastasiya Yandulskaya (2016-)

Undergraduate Honors Thesis:

-Matthew Nguyen – *Retinoic acid receptor regulation of homeostatic and epimorphic regeneration in the axolotl*. 2016.

-Tyler Jensen - *Neuregulin-1 exerts molecular control over Axolotl lung regeneration through ErbB Family Receptor*. 2017

Research Co-ops Students:

Panagiotis Katsaros, Eric Rabinowitz, Jason Langshaw, Ori Feldman, Kelsey Christopher, Tyler Jensen

NSF Summer Research Experience for Undergraduates (REU):

Jorge Murillo, Briana Lino, Jordan Bernard, Kelsha Sanchez, Ke'Yona Barton, Andrew Scharf, Georgia Marquez-Grap, Chris Joanis

NIH R25 Frontiers in Aging and Regeneration Research Apprentices:

Carlos Diaz, Maikel Mansour

Directed Study Students:

Oliver Mithoefer, Matthew Nguyen, Pankhuri Singhal, Jerusha Thedsanamoorthy, Erica Silk, Lauren Keogh, Ori Feldman, Dan Humphrey, Alexander Miller, Jen Obrugewitch, Tyler Jensen, Kyra McDonough, Kelsey Christopher, Peter Guinta, Adeleso Adesina, Yaa Kyermateng, Rahgi Abaza, Donna Perruzza, Evan Mun, Natalie Schulz, Hilary Wong

Masters Exchange Students:

Sammi Golla, Lucie Schroder (University of Hanover)

Undergraduate Volunteers: (not including directed study students that started as volunteers)

Evangeline Fachon, Lauren Byrnes, Sarah Neshat, Ben Weaver, Andres Breton, Nicole Ochandarena, Charles Fox, Tommy Chen, Grace Severance

PhD Outside Committee Member:

Alex Stankiewicz (Boston University)

Undergraduate Awards and Grants:

- Pankhuri Singhal
 - Selected Speaker at Northeastern Undergraduate Commencement
 - Jarvis Award
 - Provost Research Award 2x
- Matthew Nguyen
 - Behavioral Neuroscience Major Stravinsky Award
 - Provost Research Award 2x
- Tyler Jensen
 - Huntington 100
 - 2017 NU Talk Selected Speaker
 - Schaffer Co-op Award
- Hilary Wong
 - Provost Research Award
- Ori Feldman
 - Honors Research Award
- Grace N. Schulz
 - Huntington 100

SERVICE

DEPARTMENTAL SERVICE

- 7 PhD Oral Exam Committees
- 15 PhD Written Exam Committees
- 7 PhD Thesis Committees
- 1 Non-advisor Graduated PhD Student Committee

- 2 MS student committees
- BIOL1000 Interviewee for new students 2x per year
- Graduate Affairs Committee (2013-2014)
- Maximizing Student Development Recruitment Day at UMass Boston (2013)
- Graduate Symposium Series Organizer (2014)
- Chair of Biology Department Weekly Colloquium (2014-2017)
- BIOL2309 Course Design Committee (2015)
- Cell and Developmental Biology Search Committee (2015)
- Biology GSA Academic Panel Series (2016)
- Movement Neuroscience Search Committee (2017)

COLLEGE and UNIVERSITY SERVICE

- IACUC Member (2013-)
- Behavioral Neuroscience Major Steering Committee (2014-)
- STEM Diversity Bridge Biology Preview (2015-)
- Futures in Science Panelist (2015)
- Biochemistry Club visiting faculty (2015)
- Cartilage Collaborators Group visiting faculty (2016)
- Biology Club visiting faculty (2016)
- Nu Rho Psi Meet the faculty lunch (2016)
- Graduation Marshall (2016)
- Students to Seniors Club visiting faculty (2017)
- Graduation Faculty Procession (2017)
- Faculty Senator (2017-)
- Institutional Biosafety Committee (2017-)