

Jason M. Organ, PhD

Assistant Professor
Department of Anatomy and Cell Biology
Indiana University School of Medicine (IUSM)

635 Barnhill Drive, MS 5035
Indiana University School of Medicine
Indianapolis, IN 46202
317-278-2404
jorgan@iupui.edu

Education

Johns Hopkins University School of Medicine PhD, Functional Anatomy & Evolution	2002-2007
University of Missouri, Columbia MA, Anthropology	1999-2002
University of Missouri, Columbia BA, Anthropology	1995-1999

Academic Appointments

Director, Clinical Anatomy MS Degree Program Department of Anatomy and Cell Biology, Indiana University School of Medicine	2018-present
Co-Editor and Writer Public Library of Science (PLOS) Science Communication Blog blogs.plos.org/scicomm	2017-present
Adjunct Assistant Professor Department of Communication Studies, Indiana University – Purdue University Indianapolis (IUPUI)	2017-present
Adjunct Assistant Professor Department of Anthropology, IUPUI	2017-present
Adjunct Assistant Professor Department of Biomedical Engineering, IUPUI	2016-present
Assistant Professor (tenure track) Department of Anatomy and Cell Biology, Indiana University School of Medicine	2012-present
Research Collaborator Division of Mammals, Smithsonian National Museum of Natural History, Washington, DC	2010-2013
Assistant Professor of Anatomy (non-tenure track) Department of Surgery, Saint Louis University School of Medicine	2008-2012
Postdoctoral Research Fellow Department of Physical Medicine and Rehabilitation, Kennedy Krieger Institute and Johns Hopkins University School of Medicine	2007-2008

Honors

Basmajian Award, American Association of Anatomists (AAA)	2018
Prestigious External Award Recognition, IUPUI	2018
Trustees' Teaching Award, Indiana University School of Medicine	2018
Short-Term Visiting Scholarship, AAA	2013

Keith & Marion Moore Young Anatomist's Publication Award, AAA	2011
Young Faculty Participation Award, AAA	2011
National Institutes of Health Loan Repayment Program Recipient	2008-2010
Ruth Kirschstein National Research Service Award Postdoctoral Fellowship	2007-2008
Student Travel Award, AAA	2006
Mildred Trotter Prize, American Association for Physical Anthropologists	2006

Grants and Awards

Active Grants:

American Association of Anatomists 2018-2020
Innovations Program – AAA Science Communication Bootcamp
(\$50,000; PI; K Hoffmann-Longtin, Co-PI)

Pending Grants:

American Association of Anatomists 2019-2022
Innovations Program – Anatomy Content and Media Exchange (ACME): a peer-reviewed repository for educational resource sharing
(\$100,000; Co-PI; J Wisco, PI)

Completed Grants:

Indiana Center for Musculoskeletal Health 2017-2018
Pannexin 1 in bone and muscle crosstalk (\$50,000; Co-I; L Plotkin, A Bruzzaniti, T Zimmers, Co-PIs)

National Institutes of Health 2015-2017
Muscle progenitor cell-based implants for dynamic laryngeal muscle reconstruction
(R01DC014070; \$244,121 subcontract; Co-I; S Halum, PI)

Indiana University Collaborative Research Grants 2016-2017
Modulating the cellular and structural mechanisms underlying craniofacial development in Osteogenesis Imperfecta (\$72,500; PI; R Menegaz, Co-PI)

IUPUI Center for Teaching and Learning 2016-2017
Curriculum enhancement grant: graduate minor in communicating science (\$30,000; Co-PI; K Hoffmann-Longtin, M Wininger, Co-PIs)

Ralph W. and Grace M. Showalter Research Trust Fund 2015-2016
Enhancing skeletal mechanical properties in Osteogenesis Imperfecta (\$60,000; PI)

National Skeletal Muscle Research Center 2014-2015
Hindlimb muscle function and quality in a rat model of progressive kidney disease
(\$25,000; PI)

National Institutes of Health 2012-2014
Enhancing bone strength using combination drug therapy (R01AR062002; \$2,287,110; Co-I; M Allen, PI)

IUPUI Biomechanics and Biomaterials Research Center 2014
Biomechanical effects of low-intensity, multi-directional loading on bone and muscle growth (\$10,000; PI; J Wallace, Co-PI)

Saint Louis University President's Research Fund 2010-2011
Dental and skeletal analysis of archaeological remains in the medieval British Isles
(\$25,000; PI; T Finan, Co-PI)

National Science Foundation 2006-2007
Doctoral dissertation improvement: the functional anatomy of prehensile and nonprehensile tails: internal architecture of caudal vertebrae and musculature (\$11,992; Co-PI; M Teaford, PI)

Refereed Publications

Scholarship in Education:

1. In review. Byram J, **Organ JM**, Yard M, Schmalz N. Investigating student perceptions of a dissection-based undergraduate gross anatomy course using Q methodology. Submitted to Anatomical Sciences Education on 9/4/18.
2. In review. **Organ JM**, Byram J. Osteology: morphology and applications to forensic science. In: Shook B, Aguilera K, Nelson K, Braff L, editors. *Explorations: An Open Invitation to Biological Anthropology* (an open access biological anthropology textbook published by the American Anthropological Association). Submitted 8/17/18.
3. In revision. Byram J, Schmalz N, Lloyd C, Yard M, Jones K, **Organ JM**. Undergraduate cadaveric human anatomy course, block 1: thorax and abdomen. Submitted to MedEdPortal on 3/15/18.
4. Hoffmann-Longtin K, **Organ JM**, Helphenstine JV, Reinoso DR, Morgan ZS, Weinstein E. 2018. Teaching advocacy communication to pediatric residents: the efficacy of applied improvisation as a training tool. *Commun Educ* 67:438-459.
5. **Organ JM**. 2017. Ankle and foot. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
6. **Organ JM**. 2017. Anterior compartment of leg. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
7. **Organ JM**. 2017. Anterior compartment of thigh and femoral triangle. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
8. **Organ JM**. 2017. Arteries: lower limb. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
9. **Organ JM**. 2017. Deep back muscles. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
10. **Organ JM**. 2017. Foot muscles. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
11. **Organ JM**. 2017. Gait. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
12. **Organ JM**. 2017. Hip Joint. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
13. **Organ JM**. 2017. Hip muscles. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
14. **Organ JM**. 2017. Knee joint and popliteal fossa. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
15. **Organ JM**. 2017. Lateral compartment of leg. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
16. **Organ JM**. 2017. Leg muscles. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
17. **Organ JM**. 2017. Medial compartment of thigh. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
18. **Organ JM**. 2017. Posterior compartment of leg and tarsal tunnel. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
19. **Organ JM**. 2017. Posterior compartment of thigh. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
20. **Organ JM**. 2017. Spinal nerve anatomy. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
21. **Organ JM**. 2017. Superficial back muscles. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
22. **Organ JM**. 2017. Superficial structures of lower limb. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.

23. **Organ JM.** 2017. Thigh muscles. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
24. **Organ JM.** 2017. Veins: lower limb. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
25. **Organ JM.** 2017. Vertebral column. Amirsys Anatomy Reference Center, Elsevier: Salt Lake City, UT.
26. **Organ JM.** 2012. Anterior compartment of leg. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT. (anatomyone.com)
27. **Organ JM.** 2012. Anterior compartment of thigh and femoral triangle. In: Morton D, editor. AnatomyOne, Amirsys: Salt Lake City, UT.
28. **Organ JM.** 2012. Arteries: lower limb. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
29. **Organ JM.** 2012. Deep back muscles. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
30. **Organ JM.** 2012. Foot. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
31. **Organ JM.** 2012. Foot muscles. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
32. **Organ JM.** 2012. Gait. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
33. **Organ JM.** 2012. Hip joint. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
34. **Organ JM.** 2012. Hip muscles. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
35. **Organ JM.** 2012. Knee joint and popliteal fossa. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
36. **Organ JM.** 2012. Lateral compartment of leg. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
37. **Organ JM.** 2012. Leg muscles. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
38. **Organ JM.** 2012. Lower limb. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
39. **Organ JM.** 2012. Lower limb muscles. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
40. **Organ JM.** 2012. Medial compartment of thigh. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
41. **Organ JM.** 2012. Posterior compartment of leg and tarsal tunnel. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
42. **Organ JM.** 2012. Posterior compartment of thigh. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
43. **Organ JM.** 2012. Spinal nerve anatomy. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
44. **Organ JM.** 2012. Superficial back muscles. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
45. **Organ JM.** 2012. Superficial structures of lower limb. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
46. **Organ JM.** 2012. Thigh muscles. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.

47. **Organ JM**. 2012. Veins: lower limb. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.
48. **Organ JM**. 2012. Vertebral column. In: Morton D, editor. AnatomyOne, Amirsys/Elsevier: Salt Lake City, UT.

Journal Articles in Research:

1. **Organ JM**, Allen MR, Myers-White A, Elkhatib W, O'Neill KD, Chen NX, Moe SM, Avin KG. 2018. Effects of treadmill running in a rat model of chronic kidney disease. *Biochem Biophys Res Commun* 500:19-23.
2. Rupert JE, Joll JE, Elkhatib W, **Organ JM**. 2018. Mouse hind limb skeletal muscle functional adaptation in a simulated fine branch arboreal habitat. *Anat Rec* 301:434-440.
3. Patel BA, **Organ JM**, Jashashvili T, Bui SH, Dunsworth HM. 2018. Ontogeny of hallux metatarsal rigidity and shape in the rhesus monkey (*Macaca mulatta*) and chimpanzee (*Pan troglodytes*). *J Anat* 232:39-53.
4. Allen MR, McNerny E, Aref M, **Organ JM**, Newman CL, McGowan B, Jang T, Burr DB, Brown DM, Hammond M, Territo PR, Lin C, Persohn S, Jiang L, Riley AA, McCarthy BP, Hutchins GD, Wallace JM. 2017. Effects of combination treatment with Alendronate and Raloxifene on skeletal properties in a beagle dog model. *PLoS ONE* 12(8): e0181750.
5. Sato AY, Richardson D, Cregor M, Davis HM, Au ED, McAndrews K, Zimmers TA, **Organ JM**, Peacock M, Plotkin LI, Bellido T. 2017. Glucocorticoids induce bone and muscle atrophy by tissue-specific mechanisms upstream of E3 ubiquitin ligases. *Endocrinology* 158:664-677. PMID: 28359087
6. Baum R, Sharma S, **Organ JM**, Jakobs C, Hornung V, Burr DB, Marshak-Rothstein A, Fitzgerald KA, Gravelle EM. 2016. STING regulates abnormal bone formation induced by deficiency of DNase II. *Arthritis Rheumatol* 69:460-471. PMID: 27274600
7. McNerny E, **Organ JM**, Wallace JM, Newman CL, Brown DM, Allen MR. 2016. Assessing the inter- and intra-animal variability of in vivo OsteoProbe skeletal measures in untreated dogs. *Bone Rep* 5:192-198. PMID: 27274600
8. Avin KG, Chen NX, **Organ JM**, Zarse Z, O'Neill K, Conway RG, Konrad RJ, Bacallao RL, Allen MR, Moe SM. 2016. Skeletal muscle regeneration and oxidative stress are altered in Chronic Kidney Disease. *PLoS ONE* 11(8):e0159411. PMID: 27274600
9. Krege JB, Aref MW, McNerny E, Wallace JM, **Organ JM**, Allen MR. 2016. Reference point indentation is insufficient for detecting alterations in traditional mechanical properties of bone under common experimental conditions. *Bone* 87:97-101. PMID: 27274600
10. **Organ JM**, Srisuwananukorn A, Price P, Joll JE, Biro KC, Rupert JE, Chen NX, Avin KG, Moe SM, Allen MR. 2016. Reduced skeletal muscle function is associated with decreased fiber cross-sectional area in the Cy/+ rat model of progressive kidney disease. *Nephrol Dial Transplant* 31:223-230. PMID: 27274600
11. Srisuwananukorn A, Allen MR, Brown DM, Wallace JM, **Organ JM**. 2015. *In vivo* reference point indentation measurement variability in skeletally mature inbred mice. *BoneKey Reports* 4(712):1-5. PMID: 27274600
12. Rupert JE, Rose JA, **Organ JM**, Butcher MT. 2015. Forelimb muscle architecture and myosin isoform composition in the groundhog (*Marmota monax*). *J Exp Biol* 218:194-205. PMID: 25452499.
13. Allen MR, McNerny EMB, **Organ JM**, Wallace JM. 2015. True gold or pyrite: a review of reference point indentation for assessing bone mechanical properties *in vivo*. *J Bone Miner Res* 30:1539-1550. PMID: 25452499
14. Allen MR, McNerny EMB, **Organ JM**, Wallace JM. 2015. Reply to letter to the editor: true gold or pyrite: a review of reference point indentation for assessing bone mechanical properties *in vivo*. *J Bone Miner Res* 30:2327. PMID: 26332616

15. Lee DY, Wetzsteon RJ, Zemel BS, Shults J, **Organ JM**, Foster BJ, Herskovitz RM, Foerster DL, Leonard MB. 2015. Muscle torque relative to cross-sectional area and the functional muscle-bone unit in children and adolescents with chronic disease. *J Bone Miner Res* 30:575-583. PMID: PMC4532328.
16. Moe SM, Chen NX, Newman CL, **Organ JM**, Kneissel M, Kramer I, Gattone II VH, Allen MR. 2015. Anti-sclerostin antibody treatment in a rat model of progressive renal osteodystrophy. *J Bone Miner Res* 30:499-509. PMID: PMC4333005. <http://hdl.handle.net/1805/5544>.
17. Deane AS, Russo GA, Muchlinski MN, **Organ JM**. 2014. Caudal vertebral body articular surface morphology correlates with functional tail use in anthropoid primates. *J Morphol* 275:1300-1311. PMID: 24916635. <http://hdl.handle.net/1805/4533>.
18. Allen MR, Newman CL, Smith E, Brown DM, **Organ JM**. 2014. Variability of *in vivo* reference point indentation in skeletally mature inbred rats. *J Biomech* 47:2504-2507. PMID: PMC4096655. <http://hdl.handle.net/1805/4299>.
19. Moe SM, Chen NX, Newman CL, Gattone II VH, **Organ JM**, Chen X, Allen MR. 2014. A comparison of calcium to zoledronic acid for improvement of cortical bone in an animal model of CKD. *J Bone Miner Res* 29:902-910. PMID: PMC3940692. <http://hdl.handle.net/1805/3644>.
20. Aref M, Gallant MA, **Organ JM**, Wallace JM, Newman CL, Burr DB, Brown DM, Allen MR. 2013. *In vivo* reference point indentation reveals positive effects of raloxifene on mechanical properties following 6 months of treatment in skeletally mature beagle dogs. *Bone* 56:449-453. PMID: PMC3873633. <http://hdl.handle.net/1805/3375>.
21. Patel BA, Ruff CB, Simons ELR, **Organ JM**. 2013. Humeral cross-sectional shape in suspensory primates and sloths. *Anat Rec* 296:545-556. PMID: 23408647.
22. Gallant MA, Brown DB, **Organ JM**, Allen MR, Burr DB. 2013. Reference-point indentation correlates with bone toughness assessed using whole-bone traditional mechanical testing. *Bone* 53:301-305. PMID: PMC3563255. <http://hdl.handle.net/1805/4624>.
23. **Organ JM**, Lemelin P. 2011. Tail architecture and function of *Cebupitheciasarmientoi*, a Middle Miocene platyrrhine from La Venta, Colombia. *Anat Rec* 294:2013-2023. PMID: 22042718.
24. **Organ JM**, Muchlinski MN, Deane AS. 2011. Mechanoreceptivity of prehensile tail skin varies between ateline and cebine primates. *Anat Rec* 294:2064-2072. PMID: 22042733.
25. **Organ JM**. 2010. Structure and function of platyrrhine caudal vertebrae. *Anat Rec* 293:730-745. PMID: 20235328.
26. **Organ JM**, DeLeon VB, Wang Q, Smith TD. 2010. From head to tail: new models and approaches in primate functional anatomy and biomechanics. *Anat Rec* 293:544-548. PMID: 20235310.
27. Sylvester AD, **Organ JM**. 2010. Curvature scaling in the medial tibial condyle of large bodied hominoids. *Anat Rec* 293:671-679. PMID: 20235323.
28. **Organ JM**, Teaforde MF, Taylor AB. 2009. Functional correlates of fiber architecture of the lateral caudal musculature in prehensile and nonprehensile tails of the Platyrrhini (Primates) and Procyonidae (Carnivora). *Anat Rec* 292:827-841. PMID: 19402068
29. **Organ JM**, Ward CV. 2006. Contours of the hominoid lateral tibial condyle with implications for *Australopithecus*. *J Hum Evol* 51:113-127. PMID: 16563467.
30. **Organ JM**, Ruff CB, Teaforde MF, Nisbett RA. 2006. Do mandibular cross-sectional properties and dental microwear give similar dietary signals? *Am J Phys Anthropol* 130:501-507. PMID: 16425187.
31. **Organ JM**, Teaforde MF, Larsen CS. 2005. Dietary inferences from dental occlusal microwear at Mission San Luis de Apalachee. *Am J Phys Anthropol* 128:801-811. PMID: 16134151.

Refereed Book Chapters:

1. Burr DB, **Organ JM**. 2017. Postcranial skeletal development and its evolutionary implications. In: CJ Percival and JT Richtsmeier, eds. *Building Bones: Studies of Bone Growth in Anthropology*. Cambridge: Cambridge University Press, pp 148-174.
2. **Organ JM**. 2017. Tail anatomy. In: A Fuentes, editor. *The International Encyclopedia of Primatology*. New York: Wiley-Blackwell, pp 1-2.
3. **Organ JM**. 2017. Dermatoglyphics. In: A Fuentes, editor. *The International Encyclopedia of Primatology*. New York: Wiley-Blackwell, pp 1-3.
4. Burrows AM, **Organ JM**. 2017. Prosimian locomotion. In: J Vonk, T Shackelford, editors. *Encyclopedia of Animal Cognition and Behavior*. New York: Springer, pp 1-9.

Refereed Book Reviews:

1. **Organ JM**. 2016. Book Review, *Primate Comparative Anatomy*. *Am J Phys Anthropol* 160:361-362.
2. **Organ JM**. 2010. Book Review, *Andreas Vesalius: The Making, The Madman, and The Myth*. *JAMA* 304:215-216.
3. **Organ JM**. 2009. Book Review, *Lippincott Williams & Wilkins Atlas of Anatomy*. *JAMA* 301:1828-1829.
4. **Organ JM**. 2008. Book Review, *Thieme Atlas of Anatomy: General Anatomy and Musculoskeletal System, and Thieme Atlas of Anatomy: Neck and Internal Organs*. *JAMA* 299:224-225.

Social Media Science Communication and Outreach

- Giz asks: Why do we have butts?** *Gizmodo.com* 2018
<https://gizmodo.com/why-do-we-have-butts-1826004199>
- Guest on Anatomy Education Podcast**, *University of Leeds, United Kingdom* 2018
<http://anatomypodcast.co.uk/episodes/dr-jason-organ/>
- Guest on SciComm Monday Podcast** 2017
<https://www.pscp.tv/w/1ypKdNmLjPgJW>
- Science has a Communication Problem – Together We Can Solve It**, *Anatomy Now* 2017
<http://amasan.informz.net/admin31/content/template.asp?sid=47830&ptid=1463&brandid=3960&uid=884750249&mi=6300885&ps=47830>
- Interview about Science Communication Workshop**, *Experimental Biology TV, EB2017* 2017
<https://www.youtube.com/watch?v=ji2Am1SKQbY>

Professional Societies

- American Association for the Advancement of Science 2016-present
- Society for Integrative and Comparative Biology 2011-present
- Sigma Xi Research Society 2005-present
- American Association of Anatomists 2004-present
- American Association of Physical Anthropologists 2000-present
- American Society of Biomechanics 2014-2015
- American Society for Bone and Mineral Research 2013-2015
- American Association of Clinical Anatomists 2009-2011

Grant and Manuscript Reviews

- National Science Foundation
- LSB Leakey Foundation
- American Association of Anatomists
- Research Foundation – Flanders
- Anatomical Record
- Anatomical Sciences Education
- Clinical Anatomy
- American Journal of Physical Anthropology
- Journal of Human Evolution
- Anatomy Research International
- Primates
- Bone
- Journal of Applied Physiology
- Journal of Musculoskeletal and Neuronal Interactions
- PLOS One
- American Journal of Physiology – Cell Physiology
- Osteoporosis International
- Anthropological Science
- Calcified Tissue International
- Bone Reports
- Journal of Experimental Biology
- Neuroscience Letters
- Journal of Visualized Experiments (JoVE)
- Journal of Osteoporosis

Classroom/Laboratory Teaching Experience

- Advanced Regional Gross Anatomy for 4th Year Medical Students, IUSM (team taught) 2017-present
- Graduate Research Communications, IUSM (team taught) 2017-present
- Gross Anatomy for Physician Assistant Students, IUSM (team taught) 2013-present
- Human Structure/Medical Human Anatomy, IUSM (team taught) 2012-present
- Gross Anatomy for Doctor of Physical Therapy Students, IUSM (team taught) 2012-present
- Gross Anatomy for Physical/Occupational Therapy & Physician Asst Students (team taught) 2018
- Functional Human Anatomy for Graduate Students, IUSM (course director & instructor) 2018
- Undergraduate Cadaveric Human Anatomy, IUSM (course director & instructor) 2018
- Improvisation for Scientists: Communicating Science (course director & instructor), IUPUI 2017
- Distilling Your Message: Communicating Science (team taught), IUPUI 2017
- Science Writing for Public Readers (team taught), IUPUI 2017
- Gross Anatomy for Allied Health Professionals (team taught), Saint Louis University (SLU) 2008-2012
- Phase I Medical Human Anatomy Module (team taught), SLU 2008-2012
- Phase I Molecular Biology and Genetics Tutorial (small group problem-based learning), SLU 2012
- Phase II Skin, Bone and Joint Module (team taught), SLU 2012
- Basic Human Systemic Anatomy, SLU 2011-2012
- Medical Human Anatomy, Johns Hopkins University School of Medicine (team taught) 2003-2005
- Summer Institute in Anatomy, Johns Hopkins University School of Medicine (team taught) 2003-2004
- Gross Human Anatomy, University of Missouri 2001-2002

Mentoring

Faculty mentoring committees:

- Jose Mas, DVM Asst Prof of Clinical Anatomy, IU-Northwest, committee chair 2018-present

Graduate Academic Advising:

- Clay Schnell IUSM Clinical Anatomy MS, academic advisor 2018-2019
- Katelyn Pickerell IUSM Clinical Anatomy MS, academic advisor 2018-2019
- Joanna Loniewska IUSM Clinical Anatomy MS, academic advisor 2018-2019
- Humza Syed IUSM Clinical Anatomy MS, academic advisor 2018-2019
- Brielle Warnock IUSM Clinical Anatomy MS, academic advisor 2018-2019

Rebecca Wisner	IUSM Clinical Anatomy MS, academic advisor	2018-2019
Nicholas Edwards	IUSM Clinical Anatomy MS, academic advisor	2018-2019
Courtney Mitchell	IUSM Clinical Anatomy MS, academic advisor	2018-2019
Breena Miller	IUSM Clinical Anatomy MS, academic advisor	2018
Samantha Houston	IUSM Clinical Anatomy MS, academic advisor	2018

Thesis committees:

Naomi Schmalz	IUSM Anatomy Education PhD, committee chair	2017-present
Mohammad Aref	IUSM MD/PhD research committee member	2016-present
Naomi Schmalz	Saint Louis University School of Medicine, MS advisor	2010-2012
Colleen Steinkoenig	Saint Louis University School of Medicine, MS co-advisor	2008-2010
Allyson Johnston	Saint Louis University School of Medicine, MS advisor	2008-2011
Mark Humphrey	Saint Louis University School of Medicine, MS advisor	2008-2010

Laboratory research rotations:

Isabel Weber	Indianapolis Project STEM for high school students	2018
Breena Miller	IUSM Clinical Anatomy MS student	2018
Samantha Houston	IUSM Clinical Anatomy MS student	2018
Karolina Perschbacher	IUPUI undergraduate anatomy student	2018
Arielle Payne	IUPUI undergraduate biology student	2018
Tasnim Elmamoun	Life-Health Sciences Internship for IUPUI undergraduates	2017-2018
Wiaam Elkhatib	Med Student Summer Research Program in Academic Medicine	2017
Mary Kozlowski	Cardinal Ritter High School Biomedical Science Internship	2017
Jared Emenhiser	Life-Health Sciences Internship for IUPUI undergraduates	2016-2017
Morgan McLuckey ¹	Med Student Summer Research Program in Academic Medicine	2016
Lexy Chavez	Indianapolis Project SEED program for high school students	2015-2016
Gregory Monnin	Life-Health Sciences Internship for IUPUI undergraduates	2015-2016
Andrew Guitierrez	Indianapolis Project STEM program for high school students	2015
Adam Myers-White ¹	Med Student Summer Research Program in Academic Medicine	2015
Cayli Meizel-Lambert	IUSM Indiana Biomedical Gateway graduate program	2015
Joseph Rupert	IUSM Indiana Biomedical Gateway graduate program	2014
Benjamin Vickery	Life-Health Sciences Internship for IUPUI undergraduates	2014-2015
Wiaam Elkhatib	Life-Health Sciences Internship for IUPUI undergraduates	2014-2015
Paige Price	Indianapolis Project SEED program for high school students	2014
Andrew Srisuwananukorn ²	Med Student Summer Research Program in Academic Medicine	2014
Jeremy Mihajlovich	Life-Health Sciences Internship for IUPUI undergraduates	2013-2014
Jeffery Joll ³	Life-Health Sciences Internship for IUPUI undergraduates	2013-2014
Chetna Sethi	Saint Louis University Forensics program for undergraduates	2010-2012

¹Funded through the Comprehensive Musculoskeletal Training Program at IUSM (NIH T32AR065971; D Burr, A Robling, Co-PIs)

²Andrew was awarded 3rd Prize in the Medical Student Summer Research Program in Academic Medicine Oral Presentation Competition.

³Jeffery was awarded an IUPUI Undergraduate Research Opportunity Program (UROP) grant in April 2014, "Effects of multidirectional, off-axis loading exercises on musculoskeletal biomechanical properties". This small grant supported his travel to EB2015 to present the results of this project in a poster presentation.

Invited Presentations

Invited Presentations in Science Communication and Outreach:

GenCon, Science of Science Fiction Panel, organized by Indiana Sciences	2018
Indy PopCon, Scientist AMA (Ask Me Anything), organized by Indiana Sciences	2018
Allisonville Elementary, Indianapolis, IN, 5 th Grade, Skype a Scientist	2018
Indiana State Museum, March for Science Indianapolis, Day for Science	2018
Marian University College of Osteopathic Medicine, Biomedical Masters Program	2018
Indiana Physiological Society, Invited Workshop, Taylor University	2018
University of Tennessee, Knoxville, Department of Anthropology – Special Topics in Anatomy	2018
Center for Inquiry, Indianapolis	2017
Indiana University – Purdue University Indianapolis, Graduate School	2017
Towne Meadow Elementary, Carmel, IN, 4 th Grade	2017
Women’s Global Health Institute/Nutrition Science Corporate Affiliates, Purdue University	2017
Indiana University School of Medicine, Department of Anatomy and Cell Biology Education Series	2017
Indiana Humanities Council/March for Science-Indianapolis/Central Indiana Science Outreach	2017
Allisonville Elementary, Indianapolis, IN, 5 th Grade, Skype a Scientist	2017
American Association of Anatomists, Invited Symposium	2017
Indiana State Museum, Indianapolis	2017
Louisiana State University Health Sciences Center	2017
Pint of Science – Indianapolis, Central Indiana Science Outreach	2016

Invited Presentations in Research:

University of Tennessee, Knoxville, Department of Anthropology – Special Topics in Anatomy	2016
Indiana University – Purdue University Indianapolis, Department of Biomedical Engineering	2015
Indiana University – Purdue University Indianapolis, Department of Biology	2015
Indiana University School of Medicine, Laboratory Animal Resource Center	2015
Indiana University School of Medicine, Department of Surgery	2014
American Association of Physical Anthropologists, Invited Symposium	2014
University of Tennessee, Knoxville, Department of Anthropology – Special Topics in Anatomy	2014
Indiana University School of Medicine Statewide Anatomy Retreat	2013
University of Kentucky College of Medicine, Department of Anatomy and Neurobiology	2013
Washington University in St. Louis, Department of Anthropology	2012
University of Tennessee, Knoxville, Department of Anthropology – Special Topics in Anatomy	2012
Midwestern University, Chicago College of Osteopathic Medicine, Department of Anatomy	2011
Indiana University School of Medicine, Department of Anatomy and Cell Biology	2011
Ohio State University College of Medicine, Division of Anatomy	2010
Washington University School of Medicine	2010
Saint Louis University, Department of Biology	2010
Washington University School of Medicine, Program in Physical Therapy	2010
American Association of Anatomists, Invited Symposium	2010
University of Tennessee, Knoxville, Department of Anthropology – Special Topics in Anatomy	2010
Southern Illinois University School of Dental Medicine, Dept of Development, Growth & Structure	2009
Kennedy Krieger Research Institute, Research in Brain Injury Group	2008
Saint Louis University School of Medicine, Center for Anatomical Science & Education	2008
University of Minnesota-Twin Cities, Department of Anthropology	2007
American Association of Anatomists, Invited Symposium at Annual Meeting	2006

Professional Service – Off Campus

American Association of Anatomists:

Elected Member, Board of Directors	2016-2019
Chair, Awards Portfolio Task Force	2018-present
Member, Diversity and Inclusion Task Force	2016-present
Editorial Board, Anatomical Record	2012-present
Participant, Strategic Planning Retreat	2017
Symposium Organizer, Annual Meeting at Experimental Biology	2017
Reviewer, Innovations Grant Program Review Panel	2016
Member, Online Community Task Force	2014
Participant, Strategic Planning Retreat	2013
Member, Strategic Planning Task Force	2013
Member, Scientific Affairs Committee	2011-2014
Member, 125 th Anniversary Task Force	2010-2013
Member, Public Affairs Committee	2010-2016
Guest Editor, Special Issue of Anatomical Record, April Issue	2010
Symposium Organizer, Annual Meeting at Experimental Biology	2010
Chair, Advisory Committee for Young Anatomists	2008-2010
Symposium Organizer, Annual Meeting at Experimental Biology	2008
Member, Advisory Committee for Young Anatomists	2006-2008

National:

Co-Editor and Writer, PLOS Science Communication Blog (blogs.plos.org/scicomm)	2017-present
FASEB Publications and Communications Committee	2016-present
Early Career Reviewer, Center for Scientific Review, National Institutes of Health	2014
American Assoc of Physical Anthropologists Anatomical Science Student Award Committee	2012-2013
Reviewer for American Physiological Society Archive of Teaching Resources, LifeSciTRC.org	2011-2013
Scientific Program Committee, American Association of Physical Anthropologists	2008-2010

Local:

Missouri State Anatomical Board	2009-2012
St. Louis Anatomical Board	2009-2012

Professional Service – On Campus

Member, Indiana Center for Musculoskeletal Health Education Committee, IUSM	2017-present
Member, Steering Committee, IU Affiliate of Alan Alda Center for Communicating Science	2016-present
Member, Laboratory Animal Resource Center Advisory Committee	2016-present
Member, IUPUI Research Affairs Committee	2014-present
Research Mentor, IUSM Indianapolis Project SEED/STEM	2014-present
Research Mentor, IUSM Summer Research Program in Academic Medicine	2014-present
Research Mentor, IUPUI Life-Health Sciences Internship Program	2013-present
Member, Department of Anatomy & Cell Biology (ACB) Faculty Mentoring Task Force	2013-present
Faculty Advisor, IUSM Science Outreach Community (ISOC) Student Interest Group	2018
Chair, Networking and Communications Committee, IUPUI Jewish Faculty-Staff Council	2018
IUPUI Curriculum Enhancement Grants Review Panel, Center for Teaching and Learning	2018
Member, ACB Anatomy Instructor Faculty Search Committee	2018

Member, ACB Anatomy Education Postdoctoral Fellow Search Committee 2018
Member, ACB Shellhamer Teaching Award Committee 2017
Chair, ACB Shellhamer Teaching Award Committee 2016
Member, Faculty Affairs Committee, Saint Louis University (SLU) School of Medicine 2011-2012
Member, Curriculum Management Committee, SLU School of Medicine 2010-2012
Member, Graduate Admissions Committee, SLU Center for Anatomical Science & Education 2009-2010
Member, Admissions Committee, SLU Post Baccalaureate Certificate in Anatomical Sciences 2009-2010