

Aidan A. Ruth, Ph.D.

Curriculum Vitæ

Center for Anatomical Sciences and Education

Department of Surgery

Saint Louis University School of Medicine

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AidanRuth.com

Professional Appointments

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| 2019-present | Assistant Professor , Center for Anatomical Sciences and Education, Saint Louis University School of Medicine |
| 2016-2019 | Lecturer , Department of Pathology and Anatomical Sciences, University of Missouri School of Medicine |

Education

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|------|---------------------------------------------------------------------------------------|
| 2017 | Ph.D. Biomedical Sciences, Biological Anthropology, Kent State University, Kent, Ohio |
| 2010 | M.A. Anthropology, Kent State University, Kent, Ohio |
| 2008 | B.A. Anthropology, The Ohio State University, Columbus, Ohio |

Research Interests

Skeletal biology, locomotion, bone histology, ligaments, the knee, basicranial morphological diversity, comparative anatomy, evolutionary anthropology

Teaching Interests

Biological Anthropology, Human Evolution, Human Biology, Dissection-based gross anatomy, Neuroanatomy, Embryology, Histology

Fellowships and Awards

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| 2019 | AAA Platform Award Finalist Travel Award: \$250 |
| 2010-2016 | Graduate Teaching Assistantship: \$22,000 annually
Kent State University School of Biomedical Sciences |
| 2015 | Research Award: \$375
Kent State Graduate Student Senate |
| 2010 | Graduate Research Assistantship: \$750, summer 2010
Kent State University Department of Anthropology |
| 2010 | William S. Pollitzer Student Travel Award: \$500
American Association of Physical Anthropologists |
| 2010-2016 | Domestic Travel Award- 4 Awards- 2010, 2013, 2015, 2016: \$350 each
Kent State Graduate Student Senate |
| 2008-2010 | Graduate Teaching Assistantship: \$8,000 annually
Kent State University Department of Anthropology |

Refereed Journal Articles

- 2016 **AA Ruth**, RS Meindl, MA Raghanti, and CO Lovejoy (2016). Locomotor pattern fails to predict foramen magnum angle in marsupials, rodents, and strepsirrhine primates. *Journal of Human Evolution*, 94: 45-52.

Peer-reviewed Clinical Abstracts

- 2015 **A Ruth**, M Linde-Rosen, FH Fu, CO Lovejoy. The human anterior cruciate ligament's caliber is similar to those of other mammals. *Pittsburgh Orthopaedic Journal*. Volume 26.
- 2014 **A Ruth**, CO Lovejoy, S Ingham, MA Raghanti, FH Fu. Comparative Histological Examination of the Mammalian Anterior Cruciate Ligament (ACL). *Pittsburgh Orthopaedic Journal*. Volume 25.

Conference Presentations

Podium Presentations

- 2019 **A Ruth**. Determinants of Enthesal Anatomy: Body size, activity level, or developmental vestige? American Association of Anatomists. Orlando. *Platform Award Finalist*.
- 2018 **A. Ruth**. Mineralized Fibrocartilage Thickness at Ligament Insertion Sites. Society of Integrative and Comparative Biologists Division of Vertebrate Morphology/Division of Comparative Biomechanics Regional Meeting. Columbia
- A. Ruth**, MA Raghanti, CO Lovejoy. Foramen magnum position and angle reflect neural organization. Podium. American Association of Physical Anthropologists. Austin.
- 2016 **A. Ruth**, TL Hieronymus, CO Lovejoy. Differences in Anterior Cruciate Ligament Fiber Orientation Between Digitigrade and Palmigrade Animals. American Association of Anatomists. San Diego.

Poster Presentations

- 2019 **A. Ruth**, Kevin Middleton. Mechanical stimulus vs. selection in determining enthesal morphology in mice. American Association of Physical Anthropologists. Cleveland. **Invited.**
- 2017 **A. Ruth**, MA Raghanti, CO Lovejoy. Comparative Anatomy of the Anterior Cruciate Ligament Insertions in Primates. American Association of Anatomists. Chicago.
- A. Ruth**. Knee rotation and lateral meniscus shape and attachments in hominoids. American Association of Physical Anthropologists. New Orleans.
- 2015 **A Ruth**, MA Raghanti, CO Lovejoy. Bundle Number, Body Mass, and Bipedality: Probing the Comparative Anatomy of the Anterior Cruciate Ligament. American Association of Physical Anthropologists. St. Louis
- 2014 **A Ruth**, CO Lovejoy, S Ingham, FH Fu. Bundle Number and Bipedality: Probing the Comparative Anatomy of the Anterior Cruciate Ligament. Midwest Primate Interest Group. Madison.
- 2010 **A. Ruth**, MA Raghanti, RS Meindl, and CO Lovejoy. Foramen magnum position is influenced by neocortex size but not posture. American Association of Physical Anthropology, Albuquerque.

2008 JK McKee, A Kolatrolowicz, L Reitsema, **A Ruth**, S Schlecht, O. Ulvi, T Weston. Backpedaling in human evolution- adaptive values of bipedalism in reverse. American Association of Physical Anthropology. Columbus.

Published Teaching Materials

2014 Issues in Human Evolution Lab Manual. *Kent State University*. M. Norconk, M. Sumner, **A. Ruth**, and E. Henthorn. Kendall Hunt. Dubuque IA, United States.
2008-2013 Lab Manual: Issues in Human Evolution. *Kent State University*. M. Norconk and **A. Ruth**.

Enduring Electronic Teaching Materials

2012 *How to sex a pelvis*- Online video tutorial for students of *Issues of Human Evolution*, a biological anthropology laboratory course at Kent State University.
Distance Learning Modules: The following modules consist of written "primers," activity worksheets and digital materials, journal prompts, and quizzes designed for a distance learning biological anthropology laboratory offered at Kent State University and are still in use.

1. *Forensic Anthropology*
2. *Primate and Human Locomotion*
3. *Adventures in Dental Anatomy*
4. *Primate Origins and Evolution*
5. *Early Hominids*
6. *Early Homo and Homo erectus*

University Teaching Experience

Anatomy

2016- **Instructor** - Clinically Oriented Human Gross Anatomy (University of Missouri School of Medicine)
2016- **Instructor and Course Coordinator** - Human Gross Anatomy (Undergraduate Anatomy Lab) (University of Missouri)
2016 **Coordinator** – Seminar in Pathology and Anatomical Sciences (Undergraduate Anatomy Internship Program) (University of Missouri)
2011-2013 **Instructor** – Human Gross Anatomy (Kent State College of Podiatric Medicine)
Instructor - Anatomy of the Lower Extremity (KSU College of Podiatric Medicine)

Biological Anthropology/Evolutionary Biology

2016, 2018 Evolutionary Biology (team taught) (University of Missouri, Department of Pathology and Anatomical Sciences)
2017 Evolutionary Morphology (team taught) (University of Missouri, Department of Pathology and Anatomical Sciences)
2014-2016 **Instructor**- Human Evolution (Kent State University)
2012 **Course Planner and Content Developer:** Issues in Human Evolution Online Laboratory Course (KSU)
2011-2012 **Course Coordinator:** Issues in Human Evolution (KSU)
2008-2012 **Instructor** - Issues in Human Evolution (KSU).

Invited Intramural Lectures

- 2019 *Ligaments, Tendons, and their Insertions: Insights from Comparative and Experimental Anatomy*. Grand Rounds, Department of Pathology and Anatomical Sciences, University of Missouri. March 19th.
- 2017-18 *Functional Morphology of the Knee*. Guest lectures in Human Functional Morphology, Department of Anthropology, University of Missouri. Dr. Libby Cowgill.
- 2009 *Darwin and Human Evolution*. Darwin Day Symposium, Kent, OH. February 10.

Professional Development

- 2019 Amira-Avizo Software for Physical Anthropology- Thermo Fisher Scientific for the American Association of Physical Anthropologists. Alex Hall.
- 2018 Online Teaching Foundations- Educational Technologies at University of Missouri
- 2018 Transforming Learning Through Inclusive Teaching- Teaching Academy at the University of Missouri; Astrid Villamil, Ph.D.
- 2017 Active Learning Workshop; Cheryl Hill, Ph.D.

Research Assistantships

- 2009 Research Assistant; Dr. Chi-hua Chiu's Evolutionary Genetics Lab, Department of Anthropology, KSU.

Field Experience

- 2007 Slavia Field School in Mortuary Archaeology, Giecz, Poland (Summer)

Service to the Profession

Manuscript Reviews

- 2019 *Journal of the American Podiatric Medical Association*
- 2018 *Scientific Reports*
- 2016- *Journal of Human Evolution*
- 2017 *The Foot*
- 2016 *Anatomical Sciences International*

Committee Service

- 2016 President's Award Committee, 31st Annual Graduate Research Symposium, KSU
- 2012 Research Award Committee, Graduate Student Senate, KSU, Kent Ohio
- 2011 Local Arrangements Committee, 8th annual conference of the Midwest Primate Interest Group, Kent, Ohio
- 2008 Local Arrangements Committee, American Association of Physical Anthropology 77th annual meeting, Columbus, Ohio.

Public Outreach and Exhibits

- 2016- University of Missouri Human Anatomy Lab Outreach Sessions
- 2017-2018 Dinosaurs and Cavemen Science Expo, Columbia, Missouri.
- 2016 STEM Project Fair Judge and Speed Mentor, Northeast Ohio STEM Alliance, Kent Ohio.

- 2016 "Collagen Fiber Orientation in the ACL of a Bonobo." *Beauty of Data* exhibit. Kent State University MuseLab. Kent Ohio.
- 2011 Brain Awareness Days, Northeast Ohio Chapter of Society for Neuroscience. Rootstown Ohio.
- 2008 Girls Explore Archaeology, Central Ohio Center for Science and Industry, Columbus Ohio.
- 2007-2008 Science Mentor, Wonders of Our World, OSU, Columbus Ohio.

Media Attention

Spring 2016: Story on *Beauty of Data* exhibit featuring my *Collagen Fiber Orientation of the ACL* in Kent State Magazine. (<https://www.kent.edu/magazine/spring-2016>)

Spring 2016: Online coverage of *A Ruth, RS Meindl, MA Raghanti, and CO Lovejoy, Locomotor pattern fails to predict foramen magnum angle in marsupials, rodents, and strepsirrhine primates*, including *Inside Science* (<http://tinyurl.com/z5ksykb>)

Professional Memberships

American Association of Anatomists

American Association of Physical Anthropologists