

ANNA J. RAGNI
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OVERVIEW

My research uses skeletal anatomy and biomechanics to investigate ontogenetic and evolutionary transitions in locomotion

EDUCATION

- Ph.D., Comparative Biology** 2019
Richard Gilder Graduate School, American Museum of Natural History | New York, NY
Department of Vertebrate Paleontology
- M.A., Anthropology** 2014
University of Arkansas | Fayetteville, AR
Department of Anthropology
- B.A., Anthropology** 2012
Hendrix College | Conway, AR
Department of Sociology/Anthropology

PROFESSIONAL APPOINTMENTS

- California State University, Los Angeles** | Los Angeles, CA Fall 2021-Current
Lecturer, Department of Biological Sciences
- California State University, Los Angeles** | Los Angeles, CA 2020-Current
NSF Postdoctoral Researcher, Department of Biological Sciences
- National Museum of Natural History** | Washington, DC 2019-2020
Peter Buck Postdoctoral Fellow, Department of Anthropology

PEER-REVIEWED PUBLICATIONS

Ragni, A. J. 2020. Trabecular architecture of the capitate and third metacarpal through ontogeny in chimpanzees (*Pan troglodytes*) and gorillas (*Gorilla gorilla*). *Journal of Human Evolution* 128:e102702. <https://doi.org/10.1016/j.jhevol.2019.102702>

Ragni, A. J., Teaford, M., Ungar, P.S. 2017. A comparative study of pitheciid dental microwear. *American Journal of Primatology* 79(12):e22697. <https://doi.org/10.1002/ajp.22697>

MANUSCRIPTS IN PREPARATION OR REVIEW

Ragni, A. J. *In Review*. Trabecular ontogeny of the hand and foot in a primate sample. *Journal of Anatomy*.

Ragni, A. J. *In Prep*. The ontogeny of shape and integration in primate hands and feet. To be submitted to the *American Journal of Physical Anthropology*.

Ragni, A. J. *In Prep*. Trabecular bone and shape analysis of the *Homo naledi* third metatarsal. To be submitted to the *Journal of Human Evolution*.

GRANTS, HONORS, & AWARDS

NSF SBE Postdoctoral Research Fellowship, “Musculoskeletal modeling and simulation of hominin bipedal locomotion” \$138,000	2020
Peter Buck Postdoctoral Fellowship, “Life history and environmental correlates to mammalian trabecular bone” \$100,800	2019
AABA Anatomy in Anthropology Prize for Exemplary Student Research, \$250	2019
NSF DDRIG Fellowship, “Ontogenetic changes in primate manual and pedal trabecular architecture” \$19,432	2018
Richard Gilder Graduate School Sydney Anderson Travel Grant	2018
Richard Gilder Graduate School Graduate Fellowship	2015
RGGS NSF Integrative Graduate Education and Research Traineeship Fellowship	2015-2017
University of Arkansas Graduate Fellowship	2012
Hendrix College Dean’s List	2008-2012

PUBLISHED ABSTRACTS

- Ragni, A. J.** 2020. The ontogeny of shape and integration in the hands and feet of catarrhine primates. *American Journal of Physical Anthropology* 171:S69.
- Ragni, A. J.** 2019. Locomotor ontogeny and trabecular architecture within the hands and feet of great apes. *American Journal of Physical Anthropology* 166:S68.
- Kasl, C., **Ragni, A. J.**, Harcourt-Smith, W. E.H. 2019. An analysis of the trabecular morphology of the *Homo naledi* talus, and its inferred functional implications. *American Journal of Physical Anthropology* 166:S68.
- Palmer, J. E., **Ragni, A. J.**, Chirchir, H. 2019. Effect of volume of interest placement and size in trabecular bone quantification. *Federation of American Societies for Experimental Biology* 33:1.
- Ragni, A. J.** 2018. Chimpanzee (*Pan troglodytes*) and gorilla (*Gorilla gorilla*) manual trabecular architecture over ontogeny. *American Journal of Physical Anthropology* 165:S66.
- Ragni, A. J.**, Webb, N. M., Harcourt-Smith, W.E.H. 2017. Ontogenetic changes in trabecular architecture: A pilot study of chimpanzee (*Pan troglodytes*) manual and pedal elements. *American Journal of Physical Anthropology* 162:S64.
- Ragni, A. J.**, Teaford, M., Ungar, P. S. A molar microwear texture analysis of pitheciid primates. 2014. *American Journal of Physical Anthropology* 153:S58.
- Ungar, P. S., **Ragni, A. J.**, DeSantis, L.. 2014. Comparability of dental microwear texture data between studies. *Journal of Vertebrate Paleontology, Program and Abstracts* 2014: 244.

PRESENTATIONS:

- Ragni, A. J.** (2020, March) The ontogeny of shape and integration in the hands and feet of catarrhine primates. Podium presentation at the American Association of Physical Anthropology meeting, Virtual. https://www.youtube.com/watch?v=m9yGRm8_u6c&t=2s
- Ragni, A. J.** (2019, March) Locomotor ontogeny and trabecular architecture within the hands and feet of great apes. Podium presentation at the American Association of Physical Anthropology meeting, Cleveland, OH.
- Ragni, A. J.** (2018, March) The evolution of hominin bipedalism. Podium presentation at the New York Paleontological Society, New York, NY.
- Ragni, A. J.** (2016, February) Dental microwear texture analysis: A method for understanding primate paleodiet. Podium presentation at the Metropolitan Society of Natural Historians, New York, NY.

Ungar, P. S, **Ragni, A. J.**, DeSantis, L. (2014, November) Comparability of dental microwear texture data between studies. Podium presentation at the Society of Vertebrate Paleontology Annual Meeting, Berlin, Germany.

Ragni, A. J., Ungar, P. S., DeSantis, L., Armand, S. (2014, October) Dental microwear texture analysis and issues of instrumentation. Podium presentation at the American Society of Mechanical Engineers meetings, Gaithersburg, MD.

TEACHING EXPERIENCE:

Lecturer, California State University, Los Angeles Fall 2021
Anatomy and Physiology

Instructor, Youth Initiatives Program, American Museum of Natural History Spring 2018
Walk This Way – Science visualization course on hominin bipedalism

Teaching Assistant, Icahn School of Medicine, Mt. Sinai Fall 2017
Human Structures – Gross Anatomy

Teaching Assistant, University of Arkansas | Fayetteville, AR 2012-14
Introduction to Biological Anthropology

RELEVANT TRAINING:

μCT Data Workshop, University of Texas Summer 2017
Led by Dr. Jessie Maisano

Wind River Basin 2016 Fieldwork Expedition, American Museum of Natural History Summer 2016
Led by Dr. Steven Chester and Dr. Chris Gilbert

Program Assistant, Smithsonian Institution National Museum of Natural History 2014-15
Mentor: Dr. Briana Pobiner

SYNERGISTIC ACTIVITIES:

- Guest lectured undergraduate Human Evolution course with presentation, “Australopith locomotion and biomechanics – CSULA research on *Australopithecus afarensis*” – California State University, Los Angeles May 2021
- Presented a lecture entitled, “The evolution of human locomotion: explorations in the primate skeleton” to the CSULA Anthropology Club for Academic Success – California State University, Los Angeles March 2021
- Shared my research and current understanding of human evolution with visitors in the Hall of Human Origins – Scientist Is In Program, National Museum of Natural History March 2020
- Co-taught an eight-week course on data visualization techniques in biological anthropology to underrepresented city youth – Youth Initiatives Program, American Museum of Natural History January-April 2018
- Spoke to young students about how scientists study bones and fossil trackways – Adventures in Science program, American Museum of Natural History August 2018

MENTORSHIP

Sarah Elston, Columbia University Summer 2018-Spring 2019
Tessa Garces, Tufts University Summer 2018
Emma Bates, Stanford University Spring 2016-Fall 2017

COMMITTEE SERVICE

Leila Hatier, Biology Honors Senior Thesis, California State University Los Angeles	2021-22
Jeremiah Cabrera, Biology Honors Senior Thesis, California State University Los Angeles	2021-22

MEMBERSHIPS & ORGANIZATIONS:

New York Consortium in Evolutionary Primatology
American Association of Anatomists
Anthropological Honor Society
American Anthropological Association
American Association of Physical Anthropologists
Association for Women in Science
Phi Beta Kappa

PROGRAMS AND APPLICATIONS

Volume Graphics StudioMax
FIJI/ImageJ
R
OpenSim
SIMM
Maya
Geomagic
MorphoJ