

Thomas Cody Prang
Curriculum Vitae

Department of Anthropology
Washington University in St. Louis
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St. Louis, MO 63130

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EDUCATION

New York University, New York, NY

Ph.D., Biological Anthropology, 2019

Dissertation: “The Origin and Evolution of Human Bipedalism as Revealed by Foot Morphology”

Committee: Scott Williams, Terry Harrison, Susan Antón, Shara Bailey, Jeremy DeSilva

New York University, New York, NY

M.A., Biological Anthropology, 2014

Thesis: “Calcaneal Robusticity in Plio-Pleistocene Hominins: Implications for Locomotor Diversity and Phylogeny”

Committee: Scott Williams, Terry Harrison

University of Delaware, Newark, DE

B.A., Anthropology, 2012.

Thesis: “Locomotor diversity and midfoot mobility in gorillas”

Committee: Karen Rosenberg, Matt Tocheri

PROFESSIONAL APPOINTMENTS

- | | |
|-------------------|--|
| 07/2022 – Present | Assistant Professor , Department of Anthropology, Washington University in St. Louis |
| 08/2020 – 05/2022 | Assistant Professor , Department of Anthropology, Texas A&M University. |
| 08/2019 – 05/2020 | Visiting Assistant Professor , Department of Anthropology, University at Albany, State University of New York (SUNY). |
| 01/2019 – 07/2019 | Adjunct Instructor , Department of Anthropology, Hunter College, City University of New York (CUNY). |
| 06/2018 – 07/2019 | Adjunct Instructor , Department of Anthropology, Brooklyn College, City University of New York (CUNY). |

PUBLICATIONS

Manuscripts Accepted

Prang, T.C., Tocheri, M.W. Ecological divergence and calcaneal-cuboid morphology in gorillas. *American Journal of Biological Anthropology*.

Refereed Journal Articles

Williams, S.A., Zeng, I., Paton, G.J., Yelverton, C., Dunham, C., Ostrofsky, K.R., Shukman, S., Avilez, M., Eyre, J., Loewen, T., **Prang, T.C.**, Meyer, M.R. 2022. Inferring lumber lordosis in Neandertals and other hominins. *PNAS Nexus* 1, 1-10.

Prang, T.C. 2022. New analyses of the *Ardipithecus ramidus* foot provide additional evidence of its African ape-like affinities: A reply to Chaney et al. (2021). *Journal of Human Evolution* 164, 103135.

Williams, S.A., **Prang, T.C.**, Meyer, M.R., Nalley, T.K., Van Der Merwe, R., Yelverton, C., Garcia-Martinez, D., Russo, G.A., Ostrofsky, K.R., Spear, J.S., Eyre, J., Grabowski, M., Nalla, S., Bastir, M., Schmid, P., Churchill, S.E., Berger, L.R. 2021. New fossils of *Australopithecus sediba* reveal a nearly complete lower back. *eLife* 10, e70447.

Prabhat, A.J., Miller, C.K., **Prang, T.C.**, Spear, J., Williams, S.A., DeSilva, J.M. 2021. Homoplasy in the evolution of modern human-like joint proportions in *Australopithecus afarensis*. *eLife* 10, e65897.

Prang, T.C., Ramirez, K., Grabowski, M., Williams, S.A. 2021. *Ardipithecus* hand provides evidence that humans and chimpanzees evolved from an ancestor with suspensory adaptations. *Science Advances* 7, eabf2474.

Williams, S.A., **Prang, T.C.**, Meyer, M.R., Russo, G.A., Shapiro, L.J. 2020. Reevaluating bipedalism in *Danuvius*. *Nature* 586, E1-E3.

Prang, T.C. 2019. The African ape-like foot of *Ardipithecus ramidus* and its implications for the origin of bipedalism. *eLife* 8, e44433.

Williams, S.A., Meyer, M.R., Nalla, S., Garcia-Martinez, D., Nalley, T.K., Eyre, J., **Prang, T.C.**, Bastir, M., Schmid, P., Churchill, S.E., Berger, L.R. 2018. The vertebrae, ribs, and sternum of *Australopithecus sediba*. *PaleoAnthropology* 2018, 156-233.

DeSilva, J.M., Gill, C.M., **Prang, T.C.**, Bredella, M.A., Alemseged, Z. 2018. A nearly complete foot from Dikika, Ethiopia and its implications for the ontogeny and function of *Australopithecus afarensis*. *Science Advances* 4, eaar7723.

Pickering, T.R., Heaton, J.L., Throckmorton, Z.J., **Prang, T.C.**, Brain, C.K. 2017. A burned primate cuboid from Swartkrans Cave, South Africa. *Annals of the Ditsong National Museum of Natural History* 7.

Prang, T.C. 2016. Reevaluating the functional implications of *Australopithecus afarensis* navicular morphology. *Journal of Human Evolution* 97, 73-85.

Prang, T.C. 2016. Conarticular congruence of the hominoid subtalar joint complex with implications for joint function in Plio-Pleistocene hominins. *American Journal of Physical Anthropology* 160, 446-457.

Prang, T.C. 2016. The subtalar joint complex of *Australopithecus sediba*. *Journal of Human Evolution* 90, 105-119.

Prang, T.C. 2015. Rearfoot posture of *Australopithecus sediba* and the evolution of the hominin longitudinal arch. *Scientific Reports* 5, 17677.

Prang, T.C. 2015. Calcaneal robusticity in Plio-Pleistocene hominins: Implications for locomotor diversity and phylogeny. *Journal of Human Evolution* 80, 135-146.

Published abstracts

Prang, T.C. Contingency, adaptation, and the evolution of heel strike plantigrady. Submitted abstract for the 92nd Annual Meeting of the American Association of Biological Anthropologists.

Russo, G.A., Prang, T.C., McGeachie, F.R., Kuo, S., Ward, C.V. Additional ape postcranial material from Napudet (Middle Miocene, Kenya) and its bearing on hominoid locomotor evolution. Submitted abstract for the 92nd Annual Meeting of the American Association of Biological Anthropologists.

Prang, T.C. Capitate morphometrics and evolutionary modeling with implications for the knuckle-walking hypothesis. Accepted abstract for the 91st Annual Meeting of the American Association of Biological Anthropologists.

Anderson, M., Prang, T.C. Ankle joint functional morphology in the *Paracolobus mutiwa* specimen KNM-WT 16827. Accepted abstract for the 91st Annual Meeting of the American Association of Biological Anthropologists.

Prang, T.C., Williams, S.A. Multivariate analysis of talar morphology in *Ardipithecus ramidus*. *American Journal of Physical Anthropology*, Volume 174, 86-87.

Prang, T.C. Morphometric affinities of the Burtele hallux with implications for inferring hominin pedal grasping capabilities. 2019. *American Journal of Physical Anthropology*, Volume 168, Issue S68, 194-195.

Williams, S.A., **Prang, T.C.**, Meyer, M.R., Ostrofsky, K.R., Nalley, T.K., Garcia-Martinez, D., Bastir, M., Schmid, P., Churchill, S.E., Berger, L.R. 2019. A nearly complete lower back of *Australopithecus sediba*. *American Journal of Physical Anthropology*, Volume 168, Issue S68, 269-270.

Prang, T.C. 2018. Multivariate analysis of foot proportions in *Ardipithecus ramidus*. *American Journal of Physical Anthropology*, Volume 165, Issue S66, 213.

Williams, S.A., **Prang, T.C.**, Grabowski, M.W., Meyer, M.R., Schmid, P., Churchill, S.E., Berger, L.R. 2018. Relative size and scaling of the lumbo-sacral joint in fossil hominins: Implications for function and phylogeny. *American Journal of Physical Anthropology*, Volume 165, Issue S66, 301.

Ramirez, K.R., **Prang, T.C.** 2018. Manual joint size contributes to flexor muscle performance in suspensory taxa. *American Journal of Physical Anthropology*, Volume 165, Issue S66, 219.

Prang, T.C. 2017. Functional and evolutionary implications of *Homo naledi* rearfoot morphology. *American Journal of Physical Anthropology*, Supplement 64, 320.

Throckmorton, Z., Harcourt-Smith, W.E.H., Congdon, K., Zipfel, B., Desilva, J., Vansickle, C., Williams, S., Meyer, M., **Prang, T.C.**, Walker, C., Marchi, D., Garcia-Martinez, D., Churchill, S., Hawks, J., Berger, L. 2016. *Homo naledi* strides again: preliminary reconstructions of an extinct hominin's gait. *American Journal of Physical Anthropology*, Supplement 62, 314.

Prang, T.C., 2014. A three-dimensional quantitative analysis of subtalar and talonavicular joint morphology in Plio-Pleistocene hominins. *American Journal of Physical Anthropology*, Supplement 58, 210-211.

Prang, T.C., Tocheri, M.W., 2013. Locomotor diversity and midfoot mobility in gorillas. *American Journal of Physical Anthropology*, Supplement 53, 224-225.

PRESENTATIONS

* Student presentation

Conference presentations

2022 Prang, T.C. Capitate morphometrics and evolutionary modeling with implications for the knuckle-walking hypothesis. Poster presentation at the 91st Annual Meeting of the American Association of Biological Anthropologists.

2021 Prang, T.C., Williams, S.A. Multivariate analysis of talar morphology in *Ardipithecus ramidus*. Virtual podium presentation at the 90th Annual Meeting of the American Association of Biological Anthropologists.

Franklin-Garza, J*, **Prang, T.C.** Two-dimensional analysis of phalangeal shape in humans, apes, and fossil hominins. Virtual poster presentation at the 11th Vaughn M. Bryant Memorial Anthropology Conference.

2020 Prang, T.C., Ramirez, K., Grabowski, M., Williams, S.A. *Ardipithecus ramidus* hand provides support for an African ape-like ancestor of humans and chimpanzees. Virtual podium presentation at the 89th Annual Meeting of the American Association of Biological Anthropologists.

2019 Prang, T.C. Morphometric affinities of the Burtele hallux with implications for inferring hominin pedal grasping capabilities. 2019. Podium presentation at the 88th Annual Meeting of the American Association of Biological Anthropologists.

Williams, S.A., **Prang, T.C.**, Meyer, M.R., Ostrofsky, K.R., Nalley, T.K., Garcia-Martinez, D., Bastir, M., Schmid, P., Churchill, S.E., Berger, L.R. 2019. A nearly complete lower back

- of *Australopithecus sediba*. Podium presentation at the 88th Annual Meeting of the American Association of Biological Anthropologists.
- 2018 Prang, T.C. 2018. Multivariate analysis of foot proportions in *Ardipithecus ramidus*. Podium presentation at the 87th Annual Meeting of the American Association of Biological Anthropologists.
- Williams, S.A., **Prang, T.C.**, Grabowski, M.W., Meyer, M.R., Schmid, P., Churchill, S.E., Berger, L.R. 2018. Relative size and scaling of the lumbo-sacral joint in fossil hominins: Podium presentation at the 87th Annual Meeting of the American Association of Biological Anthropologists.
- Ramirez, K.R., **Prang, T.C.** 2018. Manual joint size contributes to flexor muscle performance in suspensory taxa. Podium presentation at the 87th Annual Meeting of the American Association of Biological Anthropologists.
- 2017 Prang, T.C. 2017. Functional and evolutionary implications of *Homo naledi* rearfoot morphology. Podium presentation at the 87th Annual Meeting of the American Association of Biological Anthropologists.
- 2016 Throckmorton, Z., Harcourt-Smith, W.E.H., Congdon, K., Zipfel, B., Desilva, J., Vansickle, C., Williams, S., Meyer, M., **Prang, T.C.**, Walker, C., Marchi, D., Garcia-Martinez, D., Churchill, S., Hawks, J., Berger, L. 2016. Podium presentation at the 86th Annual Meeting of the American Association of Biological Anthropologists.
- 2014 Prang, T.C., 2014. A three-dimensional quantitative analysis of subtalar and talonavicular joint morphology in Plio-Pleistocene hominins. Poster presentation at the 84th Annual Meeting of the American Association of Biological Anthropologists.
- 2013 Prang, T.C., Tocheri, M.W., 2013. Locomotor diversity and midfoot mobility in gorillas. Podium presentation at the 83rd Annual Meeting of the American Association of Biological Anthropologists.

Invited Presentations

- 2022 Department of Evolutionary Anthropology, Duke University. “New insights on the emergence of human upright walking.”
- Department of Anthropology, Washington University in St. Louis. “New insights on the emergence of human upright walking.”
- 2021 Department of Organismal Biology and Anatomy, University of Chicago. “New insights on the emergence of human upright walking.”
- 2020 Department of Anthropology, Stony Brook University. “New insights on the foot of the human-chimpanzee last common ancestor and the evolution of bipedalism.”

Department of Anthropology, Texas A&M University. “New insights on the functional morphology and evolution of human bipedalism.”

GRANTS AND FELLOWSHIPS

- 2022 American Association of Biological Anthropologists Cobb Professional Development Grant – Revisiting the knuckle-walking hypothesis: Integrative evolutionary analysis of three-dimensional carpal shape (\$7,500).
- 2017 Dean’s Dissertation Writing Fellowship, New York University (\$26,855).
- 2016 **Wenner-Gren Foundation** – Dissertation Fieldwork Grant – Functional morphology and evolution of the hominin hallux and forefoot (\$13,553).

TEACHING EXPERIENCE

Texas A&M University

Undergraduate courses

Introduction to Biological Anthropology (Fall 2020)
Fossil Evidence of Human Evolution (Spring 2021)
Evolution of Human Walking and Running (Fall 2021)

Graduate courses

Research Design in Anthropology (Quantitative Methods in R course, Spring 2021)
Evolutionary Theory (Fall 2022)

University at Albany (SUNY)

Undergraduate courses

Human Biomechanics (Fall 2019, Spring 2020)
Anatomy and Physiology Laboratory (with rabbit dissection; Fall 2019)
Human Evolution (Spring, 2020)

Hunter College (CUNY)

Undergraduate courses

The Human Species (Summer 2019)
Human Anatomy (with anatomical models; Spring 2019)

Brooklyn College (CUNY)

Undergraduate courses

Human Origins (Fall 2018, Winter 2018, Summer 2019)
Studies in Forensic Science (Summer 2018)

New York University

Undergraduate courses

Human Evolution (Summer 2017)

Teaching Assistant, Human Evolution (Fall 2014, Spring 2015, Fall 2015, Fall 2018)

Graduate courses

Teaching Assistant, Interpreting Human Skeletal Morphology (Spring 2016, Spring 2019)

MENTORSHIP EXPERIENCE

07/2019 – 08/2019 Applied Research Innovations in Science and Engineering (ARISE) Program,
New York University

07/2018 – 08/2018 Applied Research Innovations in Science and Engineering (ARISE) Program,
New York University

07/2017 – 08/2017 Applied Research Innovations in Science and Engineering (ARISE) Program,
New York University

SERVICE

Service to Profession

Reviewer, Leakey Foundation

Reviewer, *Proceedings of the National Academy of Sciences*

Reviewer, *Journal of Human Evolution*

Reviewer, *American Journal of Biological Anthropology*

Reviewer, *Anatomical Record*

Reviewer, *South African Journal of Science*

Reviewer, *Paleoanthropology*

American Association of Biological Anthropologists

2023 Symposium Co-Organizer – A century of Sir Arthur Keith’s stages of hominoid evolution (with Scott Williams). Symposium accepted for the 92nd Annual Meeting.

2022 Workshop Co-Leader – Tree Time: Phylogenetic Comparative Methods in Biological Anthropology (with Mark Grabowski). Submitted workshop for the 91st Annual Meeting.

2021 Session Chair – Paleoanthropology: Far from Pedestrian – Legs, Feet, and Locomotion. 90th Annual Meeting in Baltimore, MD in April, 2021 (rescheduled to be virtual).

Service to Department

2020 – 2021 Anthropology Undergraduate Committee, Texas A&M University

2021 – Present Ad Hoc Hiring Procedures Committee, Texas A&M University

2021 – Present Climate and Inclusion Committee, Texas A&M University
2021 – Present Nautical Archaeology Faculty Hiring Committee, Texas A&M University

FIELD AND MUSEUM EXPERIENCE

2022. **Switzerland.** I plan to study the postcranial fossils of *Oreopithecus bambolii* at Naturhistorisches Museum Basel (pending travel disruptions due to the COVID-19 pandemic).

2017. **Ethiopia.** Studied postcranial fossils of *Australopithecus afarensis* from Hadar, *Ardipithecus ramidus* from Aramis, and the BRT-VP-2/73 partial foot from Woranso-Mille at the National Museum of Ethiopia.

2015. **South Africa.** Studied postcranial fossils of *Australopithecus sediba*, *Australopithecus africanus*, and *Homo naledi* at the Evolutionary Studies Institute at the University of the Witwatersrand in Johannesburg. Studied postcranial fossils of *Australopithecus* and *Paranthropus* at the Ditsong National Museum in Pretoria.

2014. **Tanzania.** Surveyed for fossils at Laetoli for 4 weeks with Terry Harrison. Catalogued specimens at the National Museum of Tanzania in Dar es Salaam.

PROFESSIONAL DEVELOPMENT

2021 National Science Foundation CAREER Workshop. Texas A&M University, Division of Research (November 23, 2021).

Writing Successful Proposals Workshop. Texas A&M University, Division of Research (October 20, 2021).

Finite Element Analysis Applied to Life Sciences. Transmitting Science virtual workshop (June 9 – 21, 2021).

Tenure Roadmap Workshop. Texas A&M University (May 24 – 25, 2021).

MEDIA COVERAGE

2022 The Independent, "[Neanderthal spine study sheds light on back pain and related ailments in humans.](#)"

2021 CNN, "[Ancient relative walked like a human but climbed like an ape, new fossils suggest.](#)"

2021 Gizmodo, "[What a fossilized hand says about the last common ancestor between humans and chimpanzees.](#)"

2021 NewScientist, "[Earliest human ancestors may have swung on branches like chimps.](#)"

- 2021 TheScientist, "[Questions Raised About How an Ancient Hominin Moved.](#)"
- 2021 Science News, "[Ardi may have been more chimplike than initially thought—or not.](#)"
- 2018 NBC News, "[Baby feet: Toddler bones show pre-human kids scampered up trees.](#)"
- 2018 National Geographic, "[Foot of 'World's Oldest Child' Shows How Our Ancestors Moved.](#)"
- 2018 USA Today, "[Ape-like toddlers climbed trees 3.3 million years ago, fossil suggests.](#)"
- 2018 Discover Magazine, "[The Toddler Who Climbed: Hominin Foot Unique in Evolution.](#)"
- 2018 Newsweek, "[Our Ancestors' Children Scaled Trees, Three Million Year Old 'Dikika Toddler' Foot Reveals](#)"

REFERENCES

Scott Williams, Associate Professor
Department of Anthropology
New York University
New York, NY 10003
E-mail: sawilliams@nyu.edu

Terry Harrison, Silver Professor
Department of Anthropology
New York University
New York, NY 10003
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Karen Rosenberg, Professor
Department of Anthropology
University of Delaware,
Newark, DE 19711
E-mail: krr@udel.edu