**KEVIN G. HATALA**
*Department of Biology, Chatham University*
*Website: hatalalab.com*

## PROFESSIONAL APPOINTMENTS

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|---|---|
| 2023-present | Associate Professor of Biology, Chatham University, Pittsburgh, PA, USA |
| 2016-23 | Assistant Professor of Biology, Chatham University, Pittsburgh, PA, USA |
| 2023-present | Associated Researcher, Department of Human Origins, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany |
| 2018-present | Research Affiliate, Turkana Basin Institute, Nairobi, Kenya |
| 2018-present | Research Affiliate, Department of Earth Sciences, National Museums of Kenya, Nairobi, Kenya |
| 2014-16 | NSF SBE Interdisciplinary Postdoctoral Research Fellow, Center for the Advanced Study of Human Paleobiology, Department of Anthropology, The George Washington University, Washington, DC, USA |
| 2014-16 | Junior Scientist, Department of Human Evolution, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany |

## EDUCATION

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| 2014 | Ph.D., Hominid Paleobiology, George Washington University, Washington, DC, USA |
| 2009 | B.S., Biological Anthropology and Anatomy, Chemistry (minor), Duke University, Durham, NC, USA |

## EXTRAMURAL RESEARCH GRANTS AND FELLOWSHIPS

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|---|---|
| 2025-27 | Role: PI (co-PIs: AK Behrensmeyer, R Kinyanjui, NT Roach); 'Synthesizing tracks, skeletal fossils, and plant fossils to understand the environments and behaviors of early Pleistocene hominins.' Turkana Basin Institute Ape and Human Evolution Research Fund ($75,060) |
| 2024-29 | Role: PI; 'CAREER: Tracking the evolution of human locomotion through field, experimental, and computational analyses of fossil footprints.' National Science Foundation ($592,960) |
| 2023-26 | Role: co-PI (PI: P Kiura, co-PIs: DR Braun, E Donouvossi, JWK Harris, S Kyalo, E Ndiema, D Olago, C Omuombo, NT Roach); '*In situ* preservation of 1.5 million-year-old fossil footprints at Ileret, northern Kenya: evidence of early hominin foot morphology and ecological setting.' British Council Cultural Protection Fund (£ GBP 366,241; $487,022) |
| 2024-25 | Role: PI (co-PIs: D Schmitt, A Zeininger); 'CT-based analyses of bone kinematics in the primate foot.' RTNN Kickstarter Program (NSF ECCS-2025064) ($1,500) |
| 2022-24 | Role: PI (co-PIs: AK Behrensmeyer, PN Gathogo, FK Manthi, NT Roach); 'Geological and ecological variation in the Turkana Basin at ~1.5 Ma.' Turkana Basin Institute Ape and Human Evolution Research Fund ($25,000) |
| 2018-23 | Role: PI (co-PIs: SM Gatesy, PL Falkingham); 'Collaborative Research: X-rays, 3D animation and human locomotion.' National Science Foundation (Total: $276,157; Hatala: $125,157) |
| 2018-19 | Role: PI (co-PIs: NT Roach, AK Behrensmeyer); 'Paleoecological investigation of 1.5 Ma footprint sites near Nariokotome, Kenya.' The Leakey Foundation ($20,361) |

2014-16 Role: PI (co-PIs: SM Gatesy, BG Richmond, G Sibley); 'Computer science meets anthropology: a novel approach to reconstructing locomotion from fossil hominin footprints'; National Science Foundation, SBE Interdisciplinary Postdoctoral Research Fellowship ($202,470)

2012-14 Role: co-PI (PI: BG Richmond); 'Fossil footprints and the dynamics of footprint formation: Implications for the evolution of human gait'; National Science Foundation, Doctoral Dissertation Improvement Grant ($14,925)

2012-14 Role: PI (co-PI: BG Richmond); 'A novel experimentally-based investigation of Plio-Pleistocene fossil hominin footprints'; Wenner-Gren Foundation, Dissertation Fieldwork Grant ($9,142)

2012-14 Role: co-PI (PI: BG Richmond) 'Fossil hominin footprints and the dynamics of footprint formation.' The Leakey Foundation, Dissertation Research Grant ($9,000)

2012 Role: PI; 'A snapshot of the anatomy, locomotion, and social behavior of early modern humans as evidenced by fossil footprints at Engare Sero, Tanzania.' Evolving Earth Foundation ($2,457)

2009-14 National Science Foundation Integrative Graduate Education and Research Traineeship (IGERT), Fellowship for Graduate Studies. ($120,000; 5 year graduate stipend, not including full tuition)

2008 National Science Foundation Research Experiences for Undergraduates (REU) Fellowship in Biocultural Anthropology ($3,000)

## JOURNAL ARTICLES

(underline indicates student co-author)

**2024** **Hatala KG**, Roach NT, Behrensmeyer AK, Falkingham PL, Gatesy SM, Williams-Hatala EM, Feibel CS, Dalacha I, Kirinya M, Linga E, Loki R, Longaye AA, Longaye M, Lonyericho E, Loyapan I, Nakudo N, Nyete C, Leakey LN. Footprint evidence for locomotor diversity and shared habitats among early Pleistocene hominins. *Science* 386, 1004-1010.

- *Media*: New York Times, Washington Post, Scientific American, Reuters, CNN, AP, NPR, CBC, The Guardian, New Scientist, Nature

**Hatala KG**, Falkingham PL, Manafzadeh, AR, Lusardi EM, Gatesy SM**.** A volumetric method for measuring the longitudinal arch of human tracks and feet. *American Journal of Biological Anthropology* 183, e24897.

Miller CK, McCann RA, **Hatala KG**, Musiba C, DeSilva JM. Early hominin movement patterns at Laetoli, northern Tanzania. *PaleoAnthropology* 2024, 139-147.

**2023** **Hatala KG**, Gatesy SM, Falkingham PL. Arched footprints preserve the motions of fossil hominin feet. *Nature Ecology & Evolution* 7, 32-41.

**Hatala KG**, Roach NT, Behrensmeyer AK. Fossil footprints and what they mean for hominin paleobiology. *Evolutionary Anthropology* 32, 39-53.

**2021** McNutt EJ, **Hatala KG**, Miller C, Adams J, Casana J, Deane AS, Dominy NJ, Fabian K, Fannin LD, Gill SV, Gurtu J, Gustafson E, Hill AC, Johnson C, Kallindo S, Kilham B, Kilham P, Kim E, Liutkus-Pierce C, Maley B, Prabhat A, Reader J, Rubin S, Thompson NE, Thornburg R, Williams-Hatala EM, Zimmer B, Musiba C,

DeSilva JM. Footprint evidence of early hominin locomotor diversity at Laetoli, Tanzania. *Nature* 600, 468-471.

- *Media*: New York Times, NPR, National Geographic, Associated Press, CNN, Science News, New Scientist

**Hatala KG**, Gatesy SM, Falkingham PL. Integration of biplanar X-ray, 3-D animation, and particle simulation reveals details of human 'track ontogeny'. *Interface Focus* 11, 20200075.

Ruff CB, Wunderlich RE, **Hatala KG**, Tuttle RH, Hilton CE, D'Août K, Webb DM, Hallgrimsson B, Musiba C, Baksh M. Body mass estimation from footprint size in hominins. *Journal of Human Evolution* 156, 102997.

**2020**

**Hatala KG**, Harcourt-Smith WEH, Gordon AD, Zimmer BW, Richmond BG, Pobiner BL, Green DJ, Metallo A, Rossi V, Liutkus-Pierce CM. Snapshots of human anatomy, locomotion, and behavior from Late Pleistocene footprints at Engare Sero, Tanzania. *Scientific Reports* 10, 7740.

- *Media*: USA Today, CNN, Science News, The Independent, Agence France-Presse, BBC Science Focus, Smithsonian Magazine, CBS This Morning

Williams-Hatala EM, **Hatala KG**, Key A, Dunmore CJ, Kasper M, Gordon M, Kivell TL. Kinetics of stone tool production among novice and expert tool makers. *American Journal of Physical Anthropology* 174, 714-727.

Wiseman ALA, Stringer C, Ashton N, Bennett MR, **Hatala KG**, Duffy S, O'Brien T, De Groote I. The morphological affinity of the early Pleistocene footprints from Happisburgh, England with other tracks of Pliocene, late Pleistocene and Holocene age. *Journal of Human Evolution* 144, 102776.

**2019**

Villmoare BA, **Hatala KG**, Jungers WL. Sexual dimorphism in *Homo erectus* inferred from 1.5 Ma footprints near Ileret, Kenya. *Scientific Reports* 9, 7687.

**2018**

**Hatala KG**, Perry DA, Gatesy SM. A biplanar X-ray approach for studying the 3-D dynamics of human track formation. *Journal of Human Evolution* 121, 104-118.

Grabowski MW, **Hatala KG**, Jungers WL. Body size estimates of the earliest possible hominins and implications for the last common ancestor. *Journal of Human Evolution* 122, 84-92.

Williams-Hatala EM, **Hatala KG**, Gordon M, Key A, Kasper M, Kivell TL. The manual pressures of stone tool behaviors and their implications for the evolution of the human hand. *Journal of Human Evolution* 119, 14-26.

- *Media*: Smithsonian Magazine

Du A, Zipkin AM, **Hatala KG**, Renner E, Baker JL, Bianchi S, Bernal KH, Wood BA. Pattern and process in hominin brain size evolution are scale-dependent. *Proceedings of the Royal Society B* 285, 20172738.

- *Media*: Science Daily

Roach NT, Du A, **Hatala KG**, Ostrofsky K, Reeves J, Braun DR, Harris JWK, Behrensmeyer AK, Richmond BG. Pleistocene animal communities at a 1.5 million-year-old lake margin grassland and their relationship to *Homo erectus* paleoecology. *Journal of Human Evolution* 122, 70-83.

Zimmer B, Liutkus-Pierce C, Marshall S, **Hatala KG**, Metallo A, Rossi V. Using Structure-from-Motion photogrammetry to assess erosion at the Engare Sero Footprint Site, Tanzania. *Quaternary Science Reviews* 198, 226-241.

- *Media*: National Geographic

Falkingham PL, Bates KT, Avanzini M, Bennett M, Bordy E, Breithaupt BH, Castanera D, Citton P, Díaz-Martínez I, Farlow JO, Fiorillo AR, Gatesy SM, Getty P, **Hatala KG**, Hornung JJ, Hyatt JA, Klein H, Lallensack JN, Martin AJ, Marty D, Matthews NA, Meyer CA, Milàn J, Minter NJ, Razzolini NL, Romilio A, Salisbury SW, Sciscio L, Tanaka I, Wiseman ALA, Xing L, Belvedere M. A standard protocol for documenting modern and fossil ichnological data. *Palaeontology* 61, 469-480.

**2017**

**Hatala KG**, Roach NT, Ostrofsky KR, Wunderlich RE, Dingwall HL, Villmoare BA, Green DJ, Braun DR, Harris JWK, Behrensmeyer AK, Richmond BG. Hominin track assemblages from Okote Member deposits near Ileret, Kenya and their implications for understanding fossil hominin paleobiology at 1.5 Ma. *Journal of Human Evolution* 112, 93-104.

Key AJM, Dunmore CJ, **Hatala KG**, Williams-Hatala EM. Flake morphology as a record of manual pressure during stone tool production. *Journal of Archaeological Science: Reports* 12, 43-53.

**2016**

**Hatala KG**, Demes B, Richmond BG. Laetoli footprints reveal bipedal gait biomechanics different from those of modern humans and chimpanzees. *Proceedings of the Royal Society B* 283, 20160235.

- *Media*: International Business Times

**Hatala KG**, Roach NT, Ostrofsky K, Wunderlich RE, Dingwall HL, Villmoare BA, Green DJ, Harris JWK, Braun DR, Richmond BG. Footprints preserve direct evidence of group behavior and locomotion in *Homo erectus*. *Scientific Reports* 6, 28766.

- *Media*: The Academic Minute, LiveScience, El País, Der Spiegel

**Hatala KG**, Wunderlich RE, Dingwall HL, Richmond BG. Interpreting locomotor biomechanics from the morphology of human footprints. *Journal of Human Evolution* 90, 38-48.

Roach NT, **Hatala KG**, Ostrofsky K, Villmoare BA, Reeves JS, Du A, Braun DR, Harris JWK, Behrensmeyer AK, Richmond BG. Pleistocene footprints show intensive use of lake margin habitats by *Homo erectus* groups. *Scientific Reports* 6, 26374.

Williams-Hatala EM, **Hatala KG**, Hiles S, Rabey KN. Morphology of muscle attachment sites in the modern human hand does not reflect muscle architecture. *Scientific Reports* 6, 28353.

Jungers WL, Grabowski MW, **Hatala KG**, Richmond BG. The evolution of body size and shape in the human career. *Philosophical Transactions of the Royal Society B* 371, 20150247.

Liutkus-Pierce CM, Zimmer BW, Carmichael SK, McIntosh W, Deino A, Hewitt SM, McGinnis KJ, Brett J, Mana S, Deocampo D, Richmond BG, **Hatala KG**, Harcourt-Smith WEH, Pobiner BL, Metallo A, Rossi V. Radioisotopic age, formation, and preservation of late Pleistocene *Homo sapiens* footprints at Engare Sero, Tanzania. *Palaeogeography, Palaeoclimatology, Palaeoecology* 463, 68-82.

- *Media*: National Geographic, Washington Post, Forbes

**2015** Grabowski MW, **Hatala KG**, Jungers WL, Richmond BG. Body mass estimates of hominin fossils and the evolution of human body size. *Journal of Human Evolution* 85, 75-93.

**2013** **Hatala KG**, Dingwall HL, Wunderlich RE, Richmond BG. The relationship between plantar pressure and footprint shape. *Journal of Human Evolution* 65, 21-28.

**Hatala KG**, Dingwall HL, Wunderlich RE, Richmond BG. Variation in foot strike patterns during running among habitually barefoot populations. *PLoS One* 8(1), e52548.

- *Media*: New York Times, Washington Post, Runner's World, Scientific American

Dingwall HL, **Hatala KG**, Wunderlich RE, Richmond BG. Hominin stature, body mass, and walking speed estimates based on 1.5 million-year-old fossil footprints at Ileret, Kenya. *Journal of Human Evolution* 64, 556-568.

- *Media*: Nature

## BOOKS

**2022** Zeininger A, **Hatala KG**, Wunderlich RE, Schmitt D (eds.). The Evolution of the Primate Foot: Anatomical, Functional, and Paleontological Evidence. Springer International Publishing.

## BOOK CHAPTERS

**2022** **Hatala KG**, Boyle EK. The feet of fossil *Homo*. In: *The Evolution of the Primate Foot: Anatomical, Functional, and Paleontological Evidence*, Zeininger AD, **Hatala KG**, Wunderlich RE, Schmitt DO (eds.), Springer.

**Hatala KG**, Zeininger A, Schmitt D, Wunderlich RE. Recent developments and future directions for the study of primate feet. In: *The Evolution of the Primate Foot: Anatomical, Functional, and Paleontological Evidence*, Zeininger A, **Hatala KG**, Wunderlich RE, Schmitt D (eds.), Springer.

Zeininger A, **Hatala KG**, Wunderlich RE, Schmitt D. Introduction. In: *The Evolution of the Primate Foot: Anatomical, Functional, and Paleontological Evidence*, Zeininger A, **Hatala KG**, Wunderlich RE, Schmitt D (eds.), Springer.

**2016** London MR, **Hatala KG**. Non-experimental research in anthropology. In: *Forensic Science Research and Evaluation Workshop: A discussion on the fundamentals of research design and an evaluation of available literature*, Bartick EG, Floyd MA (eds.), US Department of Justice, National Institute of Justice. pp. 23-28.

**2013** Richmond BG, **Hatala KG**. Origin and evolution of human postcranial anatomy. In: *A Companion to Paleoanthropology*, Begun D (ed.), Wiley-Blackwell. pp. 183-202.

**OTHER BOOK CONTRIBUTIONS**

**2015** **Editorial Assistant**, Wiley-Blackwell Student Dictionary of Human Evolution, Bernard Wood (Ed.). Oxford: Wiley-Blackwell.

**DELIVERED PAPERS/REFEREED ABSTRACTS**
(underline indicates student co-author)

**2025** **Hatala KG**, Roach NT, Behrensmeyer AK, Falkingham PL, Gatesy SM, Williams-Hatala EM, Feibel CS, Dalacha I, Kirinya M, Linga E, Loki R, Longaye AA, Longaye M, Lonyericho E, Loyapan I, Nakudo N, Nyete C, Leakey LN. Fossil footprint sites provide new windows to early Pleistocene hominin paleobiology at East Turkana, Kenya. *American Journal of Biological Anthropology* 186 (S79), 70.

Behrensmeyer AK, **Hatala KG,** Roach NT. Outcrop records of Pleistocene trackway surfaces in the Turkana Basin, Kenya, provide insights on shoreline dynamics of paleolake Lorenyang. Geological Society of America Connects 2025, San Antonio, TX, USA.

Schmitt D, Wunderlich RE, **Hatala KG**, Kivell TL, Larson SG, Zeininger A. Limb kinematics in orangutans during terrestrial quadrupedalism and the origins of bipedalism. *American Journal of Biological Anthropology* 186 (S79), 146-147.

Zeininger A, Wunderlich RE, **Hatala KG**, Kivell TL, Larson SG, Schmitt D. Ontogeny of heel-strike plantigrady and fist walking in orangutans. *American Journal of Biological Anthropology* 186 (S79), 185.

Rutledge A, Collyer MC, **Hatala KG**. A geometric morphometric approach to estimating group size from footprint assemblages. Committee on Diversity Undergraduate Research Symposium, Annual Meeting of the American Association of Biological Anthropologists, Baltimore, MD, USA.

**2024** **Hatala KG**, Roach NT, Harris JWK, Ndiema EK, Kipkebut D, Longaye A, Sale H, Sila B, Behrensmeyer AK. Expanding assemblages of early Pleistocene hominin footprints at Koobi Fora, Kenya. *American Journal of Biological Anthropology* 183 (S77), 69.

Behrensmeyer AK, **Hatala KG**, Roach NT. Body fossils versus footprints – Contrasting records of a Pleistocene vertebrate community in the Turkana Basin, Kenya. Annual Meeting of the Society of Vertebrate Paleontology, Minneapolis, MN, USA.

Palmisano KG, **Hatala KG**, Roach NT, Williams-Hatala EM, Holowka NB. Grip force and the role of the digits in human throwing. *American Journal of Biological Anthropology* 183 (S77), 132.

Rutledge A, Collyer MC, **Hatala KG**, Tavares Naief L, Rabey KN, Williams-Hatala EM. A new method for measuring the rugosity of human and non-human primate entheses. Committee on Diversity Undergraduate Research Symposium, Annual Meeting of the American Association of Biological Anthropologists, Los Angeles, CA, USA.

Tavares Naief L, Rutledge A, **Hatala KG**, Collyer MC, Rabey KN, Williams-Hatala EM. Osteological signals of flexor pollicis longus morphology in great apes. Committee on Diversity Undergraduate Research Symposium, Annual Meeting of the American Association of Biological Anthropologists, Los Angeles, CA, USA.

**2023** **Hatala KG**, Roach NT, Nyete C, Longaye AA, Leakey LN. A new, early Pleistocene hominin footprint site from Koobi Fora, Kenya. *American Journal of Biological Anthropology* 180 (S75), 72.
Zeininger A, **Hatala KG**, Schmitt D, Pontzer H, Raichlen D, Wunderlich RE. Ontogeny of impact loading in quadrupedal chimpanzees and gorillas. *American Journal of Biological Anthropology* 180 (S75), 200.

Schmitt D, Wunderlich RE, **Hatala KG**, Zeininger A. How has Keith's multi-stage model performed in the light of experimental data on locomotor mechanics in monkeys and apes?. *American Journal of Biological Anthropology* 180 (S75), 157.

Brown B, Nevius K, Dyar H, **Hatala KG**. Bringing the past to the future: experiencing fossil footprint sites through virtual reality. Committee on Diversity Undergraduate Research Symposium, Annual Meeting of the American Association of Biological Anthropologists, Reno, NV, USA.

**2022** **Hatala KG**, Falkingham PL, Gatesy SM. Arched footprints reveal bipedal kinematics, not arched foot anatomy, of fossil hominins. *American Journal of Biological Anthropology* 177 (S73), 80-81.

Lusardi EM, Gatesy SM, Falkingham PL, **Hatala KG**. 3-D Dynamic arch measurements during walking on different substrates. Committee on Diversity Undergraduate Research Symposium, Annual Meeting of the American Association of Biological Anthropologists, Denver, CO, USA.

Mydrrin K, Short S, **Hatala KG**, Lawryk B, Lewis L, Rabey KN, Collyer ML, Orr C, Zeininger A, Williams-Hatala EM. Committee on Diversity Undergraduate Research Symposium, Annual Meeting of the American Association of Biological Anthropologists, Denver, CO, USA.

Short S, Mydrrin K, **Hatala KG**, Lawryk B, Lewis L, Rabey KN, Collyer ML, Orr C, Zeininger A, Williams-Hatala EM. Searching for a signal of behavior and anatomy in patterns of entheses in non-human great apes. Committee on Diversity Undergraduate Research Symposium, Annual Meeting of the American Association of Biological Anthropologists, Denver, CO, USA.

Zimmer B, Pobiner B, Liutkus-Pierce C, Marshall S, **Hatala KG**, Rossi V, Metallo A. Quantifying erosion at footprint sites using structure-from-motion: applications and implications. Biennial Meeting of the East African Association of Palaeoanthropology and Palaeontology, Arusha, Tanzania.

**2021** **Hatala KG**, Falkingham PL, Gatesy SM. A new ontogenetic framework for analyzing fossil hominin tracks. *American Journal of Physical Anthropology* 174 (S71), 45.

**2020** **Hatala KG**, Falkingham PL, Megherhi S, Perry DA, Cheleden S, Novotny J, Laidlaw DH, Gatesy SM. Merging biplanar X-ray, 3-D animation, particle simulation, and virtual reality to understand 3-D foot dynamics on deformable substrates. *American Journal of Physical Anthropology* 171 (S69), 117.

Williams-Hatala EM, **Hatala KG**, Key A, Dunmore CJ, Kivell T. Kinetics of stone tool production in novice and expert toolmakers. *American Journal of Physical Anthropology* 171 (S69), 308-309.

Ruff CB, Wunderlich RE, **Hatala KG**, Tuttle RH, Hilton CE, Webb DM, Hallgrimsson B, Musiba C, Baksh M. Body mass estimation from footprint size in early hominins. *American Journal of Physical Anthropology* 171 (S69), 240-241.

DeSilva JM, Miller C, Deane A, Fabian K, Fannin L, Gurtu J, Gustafson E, **Hatala KG**, Hill C, Kallindo S, Maley B, McNutt E, Prabhat A, Rubin S, Thornburg R, Musiba C. Rediscovery of original site A bipedal footprints at Laetoli, Tanzania. *American Journal of Physical Anthropology* 171 (S69), 70-71.

Lawryk B, **Hatala KG**, Lewis LR, Rabey KN, Orr C, Zeininger A, Williams-Hatala EM. Entheseal patterns in non-human great apes. Committee on Diversity Undergraduate Research Symposium. Annual Meeting of the American Association of Physical Anthropologists, Los Angeles, CA, USA.

**2019** **Hatala KG**, Megherhi S, Perry DA, Gatesy SM. Deforming feet, deforming substrates: 3D dynamics of the human foot during footprint formation revealed through biplanar X-ray methods. *American Journal of Physical Anthropology* 168 (S68), 99.

**Hatala KG**, Roach NT, Behrensmeyer AK, Manthi FK. Combining ichnological and skeletal fossil data from East and West Turkana to increase understanding of Turkana Basin mammal communities at ~1.5 Ma. Biennial Meeting of the East African Association of Palaeoanthropology and Palaeontology, Nairobi, Kenya.

Megherhi S, **Hatala KG**, Perry DA, Gatesy SM. Effects of substrate compliance on deformation of the human foot revealed by biplanar X-ray. Committee on

Diversity Undergraduate Research Symposium. Annual Meeting of the American Association of Physical Anthropologists, Cleveland, OH, USA.

Rabey KN, **Hatala KG**, Williams-Hatala EM. Can muscle activity be predicted from surface and internal entheseal morphology? *American Journal of Physical Anthropology* 168 (S68), 197.

Williams-Hatala EM, **Hatala KG**, Collyer M, Megherhi S, Fiske KL, Ciroli O, Rabey KN. A photogrammetric method for quantifying entheseal shape and rugosity. *American Journal of Physical Anthropology* 168 (S68), 270.

Gatesy SM, Perry DA, Megherhi S, **Hatala KG**. Foot morphology in, print morphology out: a biplanar X-ray approach for studying the 3-D dynamics of human track formation. International Congress on Vertebrate Morphology. Prague, Czech Republic.

**2018** **Hatala KG**, Perry DA, Gatesy SM. A biplanar X-ray approach for studying the 3-D dynamics of human track formation, and its implications for interpreting anatomy and motion from fossil hominin tracks. *American Journal of Physical Anthropology* 165 (S66), 114.

Grabowski M, **Hatala KG**, Hansen TF, Jungers WL. Body size estimates of Miocene fossil apes and predicting mass across phylogenetic time. *American Journal of Physical Anthropology* 165 (S66), 104.

Grabowski M, **Hatala KG**, Hansen TF, Jungers WL. Body size estimates of Miocene fossil apes and predicting mass across deep time. Annual Meeting of the European Society for the study Human Evolution, Faro, Portugal.

Holowka NB, **Hatala KG**, Demes B, Thompson NE, Wunderlich RE. Chimpanzee plantar pressure distributions and the origins of bipedal plantigrady. *American Journal of Physical Anthropology* 165 (S66), 124.

Gatesy SM, Perry DA, **Hatala KG**. A biplanar X-ray approach for studying the 3-D dynamics of human track formation and for interpreting fossil hominin tracks. Annual Meeting of the Society of Vertebrate Paleontology, Albuquerque, NM, USA.

McNutt E, Kilham B, Casana J, **Hatala KG**, Hill AC, Johnson C, Kilham P, Reader J, Thompson N, DeSilva J. Reassessing the ursid hypothesis for the Laetoli “A” bipedal trackway. *Paleoanthropology* 2018, A20.

**2017** **Hatala KG**, Williams-Hatala EM, Scibilia T, Hiles S, Rabey KN. Problems in predicting anatomy and inferring behavior from the gross morphology of the flexor pollicis longus insertion site. *American Journal of Physical Anthropology* 162 (S64), 212.

Brown P, **Hatala KG**, Dingwall HL, Richmond BG, Wunderlich RE. Foot structure and function in habitually unshod children. Annual Meeting of the American Association of Physical Anthropologists, Undergraduate Research Symposium, New Orleans, LA, USA.

Rabey KN, **Hatala KG**, Williams-Hatala EM. Understanding the relationship between macroscopic morphology and microstructural design of entheses. Annual Meeting of the Canadian Association of Physical Anthropologists, Edmonton, Alberta, Canada.

Williams-Hatala EM, **Hatala KG**, Gordon M, Kasper M, Kivell TL. The biomechanics of stone tool behaviors and implications for the evolution of the human hand. *American Journal of Physical Anthropology* 162 (S64), 411.

Du A, Zipkin AM, **Hatala KG**, Renner E, Baker JL, Bianchi S, Bernal KH, Wood BA. A taxonomic scale-explicit analysis of brain size evolution in the hominin clade. *American Journal of Physical Anthropology* 162 (S64), 166.

Rabey KN, Moskal R, **Hatala KG**, Williams-Hatala EM. The relationship between the soft pink things and the hard white things. *American Journal of Physical Anthropology* 162 (S64), 324.

Wiseman ALA, Stringer C, Ashton N, **Hatala KG**, Duffy S, O'Brien T, De Groote I. A 2D geometric morphometric approach to analysing the functional morphology of the hominin foot from the Pliocene to the Holocene. Annual Conference of the British Association for Biological Anthropology and Osteoarchaeology, Liverpool, UK.

Wiseman ALA, Stringer C, Ashton N, **Hatala KG**, Duffy S, O'Brien T, De Groote I. Functional morphology of the hominin foot based upon the early Pleistocene footprints from Happisburgh, England. Annual Meeting of the European Society for the study of Human Evolution, Leiden, Netherlands.

**2016** **Hatala KG**, Perry D, Gatesy SM. Wading, and seeing, through mud: A biplanar x-ray study of human foot motion and footprint formation within deformable substrates. *American Journal of Physical Anthropology* 159 (S62), 169-170.

Perry D, **Hatala KG**, Gatesy SM. Paleoanthropology in motion: Using x-rays to study subsurface foot motion during human footprint formation. Annual Meeting of the American Association of Physical Anthropologists, Undergraduate Research Symposium, Atlanta, GA, USA.

Roach NT, **Hatala KG**, Ostrofsky K, Villmoare B, Reeves J, Du A, Braun DR, Harris JWK, Behrensmeyer AK, Richmond BG. *Homo erectus* paleoecology and behavior based on 1.5 million year old footprints from northwestern Kenya. *American Journal of Physical Anthropology* 159 (S62), 270.

Williams-Hatala EM, Key A, Stephens NB, **Hatala KG**, Kivell T. Predictions for an osteological signature of stone tool behaviors in hard tissue anatomy. Annual Meeting of the American Association of Physical Anthropologists, Atlanta, GA, USA.

Behrensmeyer AK, Du A, Villasenor A, Patterson D, **Hatala KG**, Roach NT, Richmond BG, Bobe R. Body fossils, trackways and stable isotopes: synthesizing Pleistocene paleoecology in the Okote Member, Koobi Fora Fm., northern

Kenya. Annual Meeting of the Society of Vertebrate Paleontology, Salt Lake City, UT, USA.

Behrensmeyer AK, Du A, Villasenor A, Patterson D, Richmond BG, **Hatala KG**, Roach NT. Hominins in context – paleogeography and ecology of the Okote Member, Koobi Fora Formation, East Turkana. *PaleoAnthropology* 2016, A3-A4.

**2015** **Hatala KG**, Richmond BG. Earliest direct evidence of modern human-like foot function from 1.5 Ma hominin footprints at Ileret, Kenya. *American Journal of Physical Anthropology* 156 (S60), 160.

Grabowski MW, **Hatala KG**, Jungers WL, Richmond BG. Did an increase in body size play a role in the origin of *Homo*? *American Journal of Physical Anthropology* 156 (S60), 150.

Roach NT, **Hatala KG**, Ostrofsky KR, Behrensmeyer AK, Reeves J, Richmond BG. Hominin paleoecology and land use based on 1.5 Ma footprint surfaces at Ileret, Kenya. *PaleoAnthropology* 2015, A28.

- *Media*: Nature

Richmond BG, Roach NT, **Hatala KG**, Ostrofsky K, Behrensmeyer AK, Bobe R, Braun DR, Reeves J, Kiura P, Villmoare BA. What can footprint assemblages tell us about early hominin habitat preferences and social behavior? *American Journal of Physical Anthropology* 156 (S60), 266-267.

- *Media*: ScienceNews

Richmond BG, Roach NT, **Hatala KG**, Ostrofsky K, Behrensmeyer AK, Reeves J, Bobe R, Kiura P, Harris JWK, Braun DR. Hominin paleoecology and use of lake margin environments in the early Pleistocene. Annual Meeting of the European Society for the study of Human Evolution, London, UK.

Villmoare BA, Grabowski MW, Roach NT, **Hatala KG**, Williams-Hatala EM. Facing the facts: Foods versus fists. A test of the Carrier and Morgan adaptive model for early hominin cranial structure. *American Journal of Physical Anthropology* 156 (S60), 313-314.

Williams-Hatala EM, Hiles S, **Hatala KG**, Rabey KN. Relationships between muscle architectural anatomy and the morphology of entheses in the thenar and hypothenar regions of modern humans. *American Journal of Physical Anthropology* 156 (S60), 326.

Behrensmeyer AK, Du A, Villasenor A, Patterson D, Richmond BG, **Hatala KG**, Roach NT. Evidence for shifting base levels and climatic vs. tectonic controls on the fossil record of the Okote Member, Koobi Fora Formation, East Turkana. Geological Society of America Abstracts with Programs 47, 288.

**2014** **Hatala KG.** An experimental functional analysis of the Laetoli hominin footprints. *American Journal of Physical Anthropology* 153 (S58), 138.

- *Media*: Discover, ScienceNews

**Hatala KG**, Richmond BG. Functional analysis of 1.5 Ma hominin footprints from site FwJj14E near Ileret, Kenya. The African Human Fossil Record Symposium, Toulouse, France.

Richmond BG, **Hatala KG**, Behrensmeyer AK, Bobe R, Braun DR, Dingwall HL, Green DJ, Kiura P, Ostrofsky K, Roach NT, Villmoare BA, Wunderlich RE, Harris JWK. Hominin size, behavior and ecology based on 1.5-million-year-old footprint assemblages from Ileret, Kenya. *American Journal of Physical Anthropology* 153 (S58), 221.

Richmond BG, **Hatala KG**, Behrensmeyer AK, Bobe R, Braun DR, Green DJ, Kiura P, Ostrofsky K, Roach NT, Villmoare BA, Wunderlich RE, Harris JWK. Hominin ecology and behavior based on 1.5-million-year-old footprint assemblages from Ileret, Kenya. Annual Meeting of the European Society for the study of Human Evolution, Florence, Italy.

Du A, Zipkin AM, **Hatala KG**, Baker J, Bianchi S, Renner E, Bernal K, Wood BA. Quantifying the tempo and mode of hominin cranial capacity evolution taking into account dating and measurement error. *PaleoAnthropology* 2014, A7.

**2013**

**Hatala KG**, Lieberman DE, Dingwall HL, Castillo ER, Wunderlich RE, Okutoyi P, Sigei T, Anjila A, Pitsiladis Y, Richmond BG. Variation in running foot strike patterns in two habitually unshod Kenyan populations. *American Journal of Physical Anthropology* 150 (S56), 144.

**Hatala KG**, Wunderlich RE, Dingwall HL, Richmond BG. What can we learn from fossil footprints? Multivariate predictive models for inferring anatomical and functional variables from fossil hominin footprint morphologies. *PaleoAnthropology* 2013, A16-17.

- *Media*: Science

Richmond BG, **Hatala KG**, Behrensmeyer AK, Bobe R, Braun DR, Dingwall HL, Green DJ, Kiura P, Villmoare B, Wunderlich RE, Harris JWK. Hominin size, stature, and behavior based on 1.5-million-year-old footprints from Ileret, Kenya. *PaleoAnthropology* 2013, A32.

- *Media*: Science

Ferry M, **Hatala KG**, Dingwall HL, Wunderlich RE, Richmond BG. Foot strike patterns vary with running speed in the habitually unshod Daasanach of Ileret, Kenya. Annual Meeting of the American Association of Physical Anthropologists, Undergraduate Research Symposium, Knoxville, TN, USA.

**2012**

**Hatala KG**, Richmond BG, Harcourt-Smith WEH, Liutkus CM, Zimmer B. A snapshot of the anatomy, locomotion, and social behavior of early modern humans as evidenced by fossil footprints at Engare Sero, Tanzania. *Journal of Vertebrate Paleontology* 32 (S2), 107.

**Hatala KG**, Dingwall HL, Wunderlich RE, Richmond BG. An experimentally-based interpretation of 1.5 million-year-old fossil hominin footprints: Implications for the evolution of human foot function. *American Journal of Physical Anthropology* 147 (S54), 161.

- *Media*: ScienceNews

Dingwall HL, **Hatala KG**, Wunderlich RE, Richmond BG. Stature and speed estimates for 1.5 million-year-old fossil footprints at Ileret, Kenya based on gait analyses of unshod Daasanach. *American Journal of Physical Anthropology* 147 (S54), 132.

Richmond BG, **Hatala KG**, Dingwall HL, Wunderlich RE. Using modern taxa to understand biomechanical variables: Interpreting function from fossil footprints. *American Journal of Physical Anthropology* 147 (S54), 249.

Wunderlich RE, **Hatala KG**, Dingwall HL, Richmond BG. Variation in plantar pressure distribution in habitually unshod humans. *American Journal of Physical Anthropology* 147 (S54), 307.

Zimmer BW, Liutkus CM, Carmichael SK, Richmond BG, Hewitt SM, **Hatala KG**, Harcourt-Smith WEH, Gordon AD, Mana S, Brett J, Pobiner BL, Green DJ, Metallo A, Rossi V, McGinnis KJ. A snapshot in time: Determining the age, environment, and social structures of early *Homo sapiens* using trace fossils in volcaniclastic rocks at the Engare Sero footprint site, Lake Natron, Tanzania. *Geological Society of America Abstracts with Programs* 44, 3.

**2011**

**Hatala KG**, Richmond BG, Harcourt-Smith WEH, Rossi V, Metallo A, Liutkus CM, Pobiner BL, Dingwall H, Olle Moita G, Brett J. Early modern human footprints from Engare Sero, Tanzania. *American Journal of Physical Anthropology* 144 (S52), 158.

Richmond BG, **Hatala KG**, Harcourt-Smith WEH, Rossi V, Metallo A, Liutkus CM, Pobiner BL, Gordon A, Dingwall H, Green D, Zimmer B, Olle Moita G, Brett J. Early modern human footprint assemblage from Engare Sero, Tanzania. *PaleoAnthropology* 2011, A31.

- *Media*: Science

Richmond BG, **Hatala KG**, Green DJ, Harris JWK, Braun DR, Kiura P, Mbua E. Investigating the evolution of foot anatomy and biomechanics from fossil footprints. *The FASEB Journal* 25 (S1), 178.3.

Dingwall H, **Hatala KG**, Richmond BG. Making tracks into the Pleistocene: Gait analyses of unshod Daasanach provide stature and speed estimates for fossil footprints. *PaleoAnthropology* 2011, A9.

**2010**

**Hatala KG**, Churchill SE, Ullinger J, Sheridan SG. Activity-related changes in geometry of the proximal femur: A study of two Near Eastern samples. *American Journal of Physical Anthropology* 141 (S50), 124.

**Hatala KG**, Brooks AS, Yellen JE. Variation in production and use of scrapers during the Middle Stone Age: Evidence from Olorgesailie, Kenya and Aduma, Ethiopia. *PaleoAnthropology* 2010, A13.

## RESEARCH EXPERIENCE AND COLLABORATIONS

| | |
|---|---|
| 2022-present | Excavation and analysis of early Pleistocene hominin footprints at East Turkana, Kenya. Collaborators: Kay Behrensmeyer, David Braun, Rahab Kinyanjui, Purity Kiura, Louise Leakey, Emmanuel Ndiema, Neil Roach |
| 2021-present | Development and applications of XROMM (X-ray Reconstruction of Moving Morphology) methods for investigating form and function in extant hominoid feet. Collaborators: Steve Gatesy, Armita Manafzadeh, Daniel Schmitt, Roshna Wunderlich, Angel Zeininger |
| 2014-present | Development and applications of biplanar X-ray, 3D animation, and computer simulation approaches for studying the mechanics of footprint formation, W.M. Keck XROMM Facility, Brown University. Collaborators: Steve Gatesy, Peter Falkingham |
| 2018-20 | Excavation and survey of Pleistocene hominin fossil and footprint sites in West Turkana, Kenya. Collaborators: Kay Behrensmeyer, Fredrick K. Manthi, Neil Roach |
| 2010-16 | Excavation and analysis of early Pleistocene hominin fossil and footprint sites at Ileret, Kenya (In collaboration with National Museums of Kenya/George Washington University Koobi Fora Field School). Collaborators: Kay Behrensmeyer, Rene Bobe, David Braun, Jack Harris, Purity Kiura, Emmanuel Ndiema, Brian Richmond |
| 2014 | Paleontological survey for Pliocene hominin fossil and footprint sites near Kanapoi, Kenya. Collaborators: Craig Feibel, Fredrick K. Manthi, Mike Plavcan, Carol Ward |
| 2012-14 | Chimpanzee biomechanical experiments, Primate Locomotion Lab, Stony Brook University. Collaborators: Brigitte Demes, Nick Holowka, Susan Larson |
| 2010-14 | Biomechanical experiments with habitually unshod Daasanach population at Ileret, Kenya. Collaborators: Roshna Wunderlich |
| 2010-12 | Excavation and analysis of Late Pleistocene hominin footprint site at Engare Sero, Tanzania. Collaborators: Will Harcourt-Smith, Donatius Kamamba, Cynthia Liutkus, Godfrey Olle Moita, Briana Pobiner, Brian Richmond, Brian Zimmer |
| 2008-09 | Honors Thesis, Duke University. 'Activity-related changes in geometry of the proximal femur: A study of two Near Eastern samples.' Advisor: Steven Churchill |
| 2008 | NSF-REU Fellowship, University of Notre Dame Biocultural Anthropology program. Project Title: 'Cross-sectional geometric analysis of the subtrochanteric femur in a skeletal sample from Bab edh-Dhra'.' Director: Susan Sheridan |

## TEACHING EXPERIENCE

| | |
|---|---|
| 2017-24 (14x) | BIO 201/201L: Human Gross Anatomy (with cadaver-based laboratory), Chatham University |
| 2017-23 (7x) | BIO 502L: Gross Anatomy Lab (Doctor of Physical Therapy program), Chatham University |
| 2019-25 (7x) | IND350W: Scientific Research Methods, Chatham University |
| 2020-21 (2x) | BIO490: Integrative Capstone, Department of Biology, Chatham University |
| 2016-17 (2x) | BIO 623: Methods of Biological Research (MS Biology program), Chatham University |
| 2025 | IND200W: Introduction to Scientific Research, Chatham University |
| 2017 | BIO 116: Anatomy & Physiology I, Chatham University |
| 2016 | BIO 135/135L: Applied Human Biology (with lab), Chatham University |

2013-22 (10x) Guest lecturer, BIO 502: Anatomy (Doctor of Physical Therapy program), Chatham University
2010-25 (6x) Instructor, National Museums of Kenya/George Washington University Koobi Fora Field School, Koobi Fora, Kenya
2013 ANTH 3491/6491: Research Methods in Biological Anthropology, Human Origins Program, NMNH, Smithsonian Institution; Dept. of Anthropology, The George Washington University (Instructional Assistant)
2011 ANAT 6210: Human Gross Anatomy (medical school), George Washington University Medical Center (Laboratory Instructor)
2011 ANAT 2181: Human Gross Anatomy (undergraduate level), George Washington University Medical Center (Laboratory Instructor)
2010 ANTH 1001: Introduction to Biological Anthropology, George Washington University (Instructional Assistant)
2009 BAA 134L: Human Osteology, Duke University (Teaching Assistant)
2007-08 CHEM 21L/22L: General Chemistry, Duke University (Laboratory Teaching Assistant)

## MENTORING EXPERIENCE

Master's theses and independent studies:

Rosemary Garcia (2021) Fiber type ratios in intrinsic and extrinsic hand muscles of the great apes. Department of Biology, Chatham University. Thesis committee member.

Victoria Turnbill (2019) Sexual dimorphism in North American *Cyprinodon*. Department of Biology, Chatham University. Thesis committee member.

Janelle Gleim (2018) Using geometric morphometrics for juvenile dental age estimation: a preliminary study. Department of Biology, Chatham University. Primary advisor.

David Perry (2017) Paleoanthropology in motion: Using X-rays to study subsurface foot motion during human footprint formation. Department of Ecology and Evolutionary Biology, Brown University. External advisor.

Undergraduate honors theses and independent studies:

Marwa Rahim (2025-present) Tracking the evolution of human locomotion through field, experimental, and computational analyses of fossil footprints (independent study). Department of Biology, Chatham University. Primary advisor.

Allie Rutledge (2023-25) A geometric morphometric approach for estimating group size from fossil footprint assemblages. Department of Biology, Chatham University. Primary advisor.

Lucas Tavares Naief (2023-24) Osteological signals of flexor pollicis longus morphology in great apes. Department of Biology, Chatham University. Co-advisor.

Makoto Kobayashi (2022-24) Slipping and sliding: Variations on human footprint formation in soft mud. Department of Ecology and Evolutionary Biology, Brown University. External advisor.

Ben Brown (2022-23) Bringing the past to the future: experiencing fossil footprint sites through virtual reality. Department of Biology, Chatham University. Primary advisor.

Amy Jarvis (2022) X-rays, 3D animation and human locomotion (independent study). Department of Biology, Chatham University. Primary advisor.

Elizabeth Lusardi (2021-22) 3D dynamic arch measurements during walking on different substrates. Department of Biology, Chatham University. Primary advisor.

Mahima Sangtani (2020-21) X-rays, 3D animation and human locomotion (independent study). Department of Biology, Chatham University. Primary advisor.

Riley Drusbasky (2020) The skeleton in the closet: a forensic anthropological skeletal analysis. Department of Biology, Chatham University. Primary advisor.
Melaina Esola (2020) X-rays, 3D animation and human locomotion (independent study). Department of Biology, Chatham University. Primary advisor.
Brandon Lawryk (2019-20) Deciphering human foot biomechanics using biplanar X-ray. Department of Biology, Chatham University. Primary advisor.
Kyra Tani Little (2019) X-rays, 3D animation and human locomotion (independent study). Department of Biology, Chatham University. Primary advisor.
Kay Fiske (2019) X-rays, 3D animation and human locomotion (independent study). Department of Biology, Chatham University. Primary advisor.
Sabreen Megherhi (2017-19) Effects of substrate compliance on deformation of the human foot revealed by biplanar X-ray. Department of Biology, Chatham University. Primary advisor.
David Perry (2016) Paleoanthropology in motion: Using X-rays to study subsurface foot motion during human footprint formation. Department of Ecology and Evolutionary Biology, Brown University. External advisor.
Margaret Kasper (2016) Manual force and pressure analysis during the manufacture and use of Paleolithic stone tools. Department of Biology, Chatham University. Thesis committee member.
Theresa Scibilia (2016) Predicting aspects of flexor pollicis longus morphology from the volar insertion site in the Primate order. Department of Biology, Chatham University. Thesis committee member.
Aaron Poliak (2015) Is there a right way to run? The influence of ground stiffness and speed on habitual barefoot running form. Department of Anthropology, The George Washington University. Thesis committee member.
Shannon Hiles (2015) An investigation into the relationship between muscle anatomy and enthesis morphology. Department of Biology, Chatham University. Thesis committee member.
Matt Ferry (2013) Foot strike patterns vary with running speed in the habitually unshod Daasanach of Ileret, Kenya. Department of Anthropology, The George Washington University. Thesis committee member.
Heather Dingwall (2012) Hominin stature, body mass, and walking speed estimates based on 1.5 million-year-old fossil footprints at Ileret, Kenya. Department of Anthropology, The George Washington University. Thesis committee member.

## PROFESSIONAL SERVICE

| | |
|---|---|
| 2024-27 | Chair of Student Programs, Executive Committee Member, American Association of Biological Anthropologists |
| 2023-24 | Associate Chair, Program Committee, American Association of Biological Anthropologists |
| 2022-23 | Chair of Paleoanthropology Subcommittee, Program Committee, American Association of Biological Anthropologists |
| 2021-23 | Member, Program Committee, American Association of Biological Anthropologists |
| 2019-20 | Early Career Liaison to the Executive Committee, American Association of Biological Anthropologists |

Journal reviewer for:
*American Journal of Biological Anthropology*
*eLife*
*Evolutionary Anthropology*

*Gait & Posture*
*Ichnos*
*Journal of Archaeological Science: Reports*
*Journal of Human Evolution*
*Nature*
*Nature Ecology and Evolution*
*PeerJ*
*PLoS One*
*Proceedings of the Royal Society B*
*Quaternary International*
*Quaternary Science Reviews*
*Rivista Italiana di Paleontologia e Stratigrafia*
*Science Advances*
*Scientific Reports*
*South African Journal of Science*
*Yearbook of Physical Anthropology*

Grant reviewer for:
European Research Council [1x]
The Leakey Foundation [5x]
Leverhulme Trust [1x]
National Science Foundation (ad hoc reviewer [4x] and panelist [7x])
Natural Sciences and Engineering Research Council of Canada (NSERC) [1x]

**UNIVERSITY SERVICE**

| | |
|---|---|
| 2022-25 | Member, University Committee, Chatham University |
| 2022-present | Search Advocate, Department of Human Resources, Chatham University (independent search committee member to advocate for equitable search practices in faculty/staff hiring) |
| 2016-present | Affiliated faculty, Chatham University Women's Institute |
| 2020-24 | co-Founder and Member, Committee on Diversity, Equity, and Inclusion in the Sciences, Chatham University |
| 2017-22 | co-Founder and Advisory Board Member, Chatham Masculinities Project (Women's Institute program, training male students/faculty/staff as effective allies for gender equity initiatives on campus and in the community) |
| 2017-20 | IRB Committee Member, Chatham University |

**INTRAMURAL FUNDING COMPETITIONS**

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|---|---|
| 2023-24 | PI; 'Functions of morphology in the hominid foot.' Chatham University Research and Sabbatical Committee ($2,500) |
| 2022-24 | co-PI (PI: EM Williams-Hatala, co-PI: J Sierra Fonseca); 'Evaluating behavioral signals in primate thenar and hypothenar entheses.' Chatham University Mary S. and John Kostalos, Jr. Fund ($10,000) |
| 2021-22 | PI; 'Paleoecology of the Turkana Basin at ~1.5 Ma: A multi-proxy time slice approach.' Chatham University Research and Sabbatical Committee ($3,000) |
| 2019-20 | PI; 'Paleoecological investigation of 1.5 Ma footprint sites near Nariokotome, Kenya.' Chatham University Research and Sabbatical Committee ($2,500) |
| 2017-18 | PI; 'X-rays, 3D animation and the evolution of human locomotion.' Chatham University Research and Sabbatical Committee ($4,840) |

2016-17 PI; 'Development and application of a novel biplanar x-ray method for analyzing human foot function on deformable substrates.' Chatham University Research and Sabbatical Committee ($4,700)

2010 PI; 'Excavation and analysis of fossil hominin footprints at Ileret, Kenya.' Lewis N. Cotlow Field Research Fund, Department of Anthropology, The George Washington University ($200)

2008 PI (co-PI: SE Churchill); Trinity College Research Fund, Duke University ($900)

2008 PI (co-PI: SE Churchill); Undergraduate Research Support Grant, Duke University ($800)

## PUBLIC OUTREACH

2025 Webinar speaker, 'The Story of Us', World of Paleoanthropology

2021 Webinar speaker, 'Lunch Break Science', The Leakey Foundation

2020 Webinar speaker, 'HOT Topics: Fossilized footprints reveal a snapshot of early human life', Human Origins Program, National Museum of Natural History, Smithsonian Institution

2019-20 Content expert/consultant, "Becoming Human" exhibit, Carnegie Museum of Natural History

2015 Volunteer Judge, TERC/NSF Innovate to Mitigate Challenge

2013 National Science Foundation IGERT Poster and Video Competition, 'What can fossil footprints teach us about our evolution?'

2012 USA Science and Engineering Festival, National Science Foundation booth

2012 Public Understanding of Science internship with Ann Gibbons, Contributing Correspondent for *Science*

2012 Assisted with production of History Channel special focused on feet and shoes in human evolution (*Modern Marvels: Shoes*. Air date: 2/6/2012)

2011-13 Invited lectures (4) at Smithsonian Institution's National Museum of Natural History, Human Origins Program: 'The Scientist is In'

2011-13 Invited lectures (3) at Smithsonian Institution's National Museum of Natural History, Human Origins Program: 'HOT (Human Origins Today) Topics'

## INVITED LECTURES

2025 'Fossils, footprints, and the evolution of human locomotion', Department of Anthropology, Penn State University

2025 'Fossils, footprints, and the evolution of human locomotion', Department of Integrative Biology, UC Berkeley

2025 'Snapshots of our past: what can fossil footprints tell us about human evolution?' Pittsburgh Geological Society

2024 'Snapshots of our past: what can fossil footprints tell us about human evolution?' Max Planck Institute for Evolutionary Anthropology

2024 'Prehistoric motion capture: understanding hominin locomotion from fossil footprints', 'Human Movement: from Origins to Olympics' symposium, Collège de France

2024 'Reevaluating classic hypotheses through new lenses: how technology is clarifying our biomechanical past', Carnegie Science Center

2024 'Reevaluating classic hypotheses through new lenses: how technology is clarifying our biomechanical past', Center for Human Evolutionary Studies, Rutgers University

2021 'What can footprints tell us about human evolution?', Human Evolutionary Biology MSc Program, Turkana University College

2021 'Fossils, footprints, and the evolution of human locomotion', Dept. of Biology, Marshall University

2019 'Decoding snapshots of our past: what can fossil footprints tell us about human evolution?' Dept. of Ecology and Evolutionary Biology, Brown University

2019 'A matter of scale: synthesizing data to investigate human origins', Dept. of Biology, Duquesne University

2016 'Fossils in motion: Integrating paleontology and experimental biology to study the evolution of human locomotion', Dept. of Anthropology, University at Albany

2016 'The life and times of *Homo erectus*: Adaptive strategies and defining the genus *Homo'*, Dept. of Anthropology, Boston University

2016 'Fossils in motion: Integrating paleontology and experimental biology to study the evolution of human locomotion', Dept. of Anthropology, Boston University

2015 'Non-experimental research in the sciences', NSF/GWU Forensic Science Research Evaluation Workshop, American Association for the Advancement of Science, Washington, DC, USA

2013 'Fossil footprints and the evolution of human locomotion', Computer Graphics Lab, Robotics Institute, Dept. of Computer Science, Carnegie Mellon University

2012-13 'Collecting and analyzing 3-dimensional data', Guest lecture, Analytical Methods graduate course, The George Washington University

2011-12 'Photogrammetry and the capture and analysis of 3-dimensional morphology', Guest lecture, Research Methods graduate seminar, The George Washington University

**MEDIA INTERVIEWS/CONSULTATIONS**

- New species of human ancestor discovered from ancient teeth, *The Wall Street Journal*, 5 Sep 2025
- The riddle of coexistence, *Science*, 24 Jul 2025
- What trait sets humans apart? Hint: It's not our thumbs, *The Wall Street Journal*, 29 May 2025
- Scientists chance upon 90,000-year-old human footprints on Moroccan beach, *Forbes*, 1 Feb 2024
- Ancient human and animal footprints offer a path to past interactions, *PNAS News*, 26 May 2023
- Unexpected discovery could make story of very early humans 'more real,' scientists say, *CNN*, 5 Aug 2022
- Lost footprints of our ancestors (cover story), *New Scientist*, 9 April 2022
- Ancient footprints show children splashed in puddles 11,500 years ago, *New Scientist*, 6 April 2022
- Ancient footprints yield surprising new clues about the first Americans, *The Wall Street Journal*, 23 Sep 2021
- Human footprints near ice age lake suggest surprisingly early arrival in the Americas, *Science*, 23 Sep 2021
- Oldest footprints in Saudi Arabia reveal intriguing step in early human migration, *National Geographic*, 17 Sep 2020
- These 120,000-year-old footprints offer early evidence for humans in Arabia, *Science*, 17 Sep 2020

- 120,000-year-old human footprints mark possible migration route through Arabian Peninsula, *Gizmodo*, 18 Sep 2020
- Oldest human footprint in Americas may be this 15,600-year-old mark in Chile, *Live Science*, 1 May 2019
- Tales from the field: Excavating ancient prints in the shadow of a volcano, *Popular Science*, 1 Feb 2019
- Running for Science: Science for Running podcast interview, 20 Dec 2018
- Oldest human footprints in North America discovered: here's what they reveal, *Live Science*, 28 Mar 2018
- Tanzanian volcano blast could destroy ancient hominin footprints, *New Scientist*, 18 Jul 2017
- New footprint finds suggest range of body sizes for Lucy's species, *ScienceNews*, 16 Dec 2016
- Oldest early human footprints suggest males had several 'wives', *New Scientist*, 14 Dec 2016
- The real reasons why we walk on two legs, and not four, *BBC Earth*, 12 Dec 2016

## SYNERGISTIC ACTIVITIES

| | |
|---|---|
| 2021-23 | Scientific Advisory Committee, Anthroengineering Research Centre, London South Bank University |
| 2020 | Workshop co-organizer and moderator, "Navigating the international job market in biological anthropology", Annual Meeting of the American Association of Physical Anthropologists, Los Angeles, CA, USA |
| 2020 | Workshop co-organizer, "The system is broken and you can't fail at a broken system: Tips for success on the job market", Annual Meeting of the American Association of Physical Anthropologists, Los Angeles, CA, USA |
| 2019 | Panel discussant, Student/Early Career Meet and Greet, Annual Meeting of the American Association of Physical Anthropologists, Cleveland, OH, USA |
| 2016 | Discussion moderator, 'Gender and violence: Connecting interdisciplinary scholarship and the community', Chatham University Women's Institute |
| 2015 | Invited speaker and workshop participant, NSF/GWU Forensic Science Research Evaluation Workshop, American Association for the Advancement of Science, Washington, DC, USA |
| 2013 | Co-organizer, GWU NSF-IGERT Workshop, 'Evolution and function of the human foot' |

## ACADEMIC AWARDS

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|---|---|
| 2025 | Buhl Professorship, Chatham University<br>• Awarded to a "member of the faculty who has most distinguished [oneself] in teaching, creative effort, or otherwise…to recognize and encourage accomplishment of a high order" |
| 2019 | Chatham University School of Arts, Science & Business Faculty Scholarship and Research Achievement Award |
| 2014 | George Washington University nominee, CGS/ProQuest Distinguished Dissertation Award |
| 2014 | Honorable Mention for Student Presentation Prize, Annual Meeting of the American Association of Physical Anthropologists |
| 2013 | Judges' Choice prize, NSF IGERT Poster and Video Competition |
| 2011 | National Science Foundation Graduate Research Fellowship, Honorable Mention |

2010 National Science Foundation Graduate Research Fellowship, Honorable Mention

**PROFESSIONAL SOCIETIES**

American Association of Biological Anthropologists
Eastern African Association of Palaeoanthropology and Palaeontology