

Andrew W. Best, Ph.D.

email: Andrew.Best@mcla.edu

office phone: (413) 662-5158

website: www.therunningprimate.com

PROFESSIONAL APPOINTMENTS

- 2021- Assistant Professor, Department of Biology, Massachusetts College of Liberal Arts, North Adams, MA
- 2021 Visiting Lecturer in Biological Sciences, Mount Holyoke College, South Hadley, MA.
- 2017-2020 Instructor and co-creator, Anthropology First Year Seminar: The Human Species. University of Massachusetts.
- 2015-2020 Lab Coordinator, Physical Anthropology wing, University of Massachusetts Department of Anthropology.
- 2014-2018 Instructor, Anthropology 103: Human Origins and Variation. Online course through Continuing and Professional Education, University of Massachusetts.
- 2012-2021 High School Biology Teacher, Pioneer Valley Chinese Immersion Charter School, Hadley, MA.
- 2013-2015 Teaching Assistant, Anthropology 103: Human Origins and Variation. University of Massachusetts.
- 2013 High School Biology Teacher, summer school. Amherst Regional High School, Amherst, MA.
- 2013 Test question writer, Pearson Education, Hadley, MA.
- 2010-2012 Biology Teacher, Easthampton High School, Easthampton, MA.
- 2007-2010 Biological Science Teacher, Academy at Swift River, Cummington MA.
- 2006-2007 Biology Teacher and Track Coach, Manchester High School, Manchester CT.

EDUCATION

- 2021 Ph.D., Anthropology, University of Massachusetts
- 2016 M.A., Anthropology, University of Massachusetts
- 2006 M.A., Teaching, Quinnipiac University
- 2004 B.S., Biology, Saint Michael's College

GRANTS AND AWARDS

- 2021 Summer Research Institute Award- faculty advisor; student Marie Balan as recipient, “Basal metabolic rate in ultra-endurance athletes” (\$2,000)
- 2021 Faculty Incentive Award, Massachusetts College of Liberal Arts, “Limits to human sustained energy expenditure” (\$1,500)
- 2019 Wenner-Gren Foundation Dissertation Fieldwork Grant, PI (with Jason Kamilar, University of Massachusetts, Faculty Advisor). “Diversity and evolution of human eccrine sweat gland density” (\$10,524)
- 2019 Leakey Foundation Research Grant, PI (with Jason Kamilar, University of Massachusetts, Faculty Advisor), “Diversity and evolution of human eccrine sweat glands” (\$14,999)
- 2019 University of Massachusetts Graduate School Dissertation Research Grant, PI (with Jason Kamilar, University of Massachusetts, Faculty Advisor), “Evolution and diversity of human eccrine sweat glands” (\$940)
- 2018 University of Massachusetts Department of Anthropology Predissertation Research Award, PI (with Jason Kamilar, University of Massachusetts, Faculty Advisor), “Human eccrine sweat gland activation: Environmental factors and evolutionary context” (\$3,000)
- 2018 Honorable mention, Arnelagos-Swedlund Graduate Research Award. For podium presentation at AAPA annual meeting: Primate Sweat Gland Evolution.
- 2018 University of Massachusetts Graduate School Predissertation Grant, PI (with Jason Kamilar, University of Massachusetts, Faculty Advisor) (\$996)

PEER-REVIEWED ARTICLES

- 2022 In review: Limits of Ultra: Towards an interdisciplinary understanding of ultra-running performance. Berger, N.; Best, R.; Best, A.W.; Lane, A.M.; Millet, G.Y.; Barwood, M.; Marcora, S.; Wilson, P.; & Bearden, S. *Sports Medicine*.
- 2022 In review: Variation in human functional eccrine gland density and its implications for the evolution of human sweating. Best, A.W; Lieberman, D.E.; Gerson, A.R.; Holt, B.M.; & Kamilar, J.M. *American Journal of Biological Anthropology*.
- 2021 Best, A. Why does strength training improve endurance performance? *American Journal of Human Biology*, e23526.
- 2021 Dorshorst, T., Gold, C., & Best, A. The 90th annual meeting of the American Association of Physical Anthropologists. *Evolutionary Anthropology: Issues, News, and*

Reviews, 30(4), 230-232.

- 2019 Best, A.W., Lieberman, D.E., & Kamilar, J.M. Diversity and evolution of human eccrine sweat gland density. *Journal of Thermal Biology*, 84, 331-338.
- 2018 Best, A. & Kamilar, J. The evolution of eccrine sweat glands in human and nonhuman primates. *Journal of Human Evolution*, 117(4), 33-43.
- 2017 Best, A., Holt, B., Troy, K., & Hamill, J. Trabecular bone in the calcaneus of runners. *PloS one*, 12(11), e0188200.
- 2017 Best, A. & Braun, B. Using a novel data resource to explore heart rate during mountain and road running. *Physiological Reports*, 5(8), e13256.
- 2016 Godfrey, L. R., Crowley, B. E., Muldoon, K. M., Kelley, E. A., King, S. J., Best, A. W., & Berthaume, M. A. What did Hadropithecus eat, and why should paleoanthropologists care?. *American Journal of Primatology*, 78(10), 1098-1112.

CONFERENCE PRESENTATIONS AND INVITED APPEARANCES

- Dec 2022 Podcast guest, “Koopcast”. <https://link.ichtbl.com/KoopCast>
- Nov 2022 Ultramarathoners and the limits of human energy expenditure. Invited lecture, University of Massachusetts Amherst Anthropology “Facets of Evolution” Colloquium Series.
- April 2022 The slippery relationship between eccrine gland density, sweat production and heat dissipation in humans. Virtual symposium presentation. American Association of Biological Anthropologists annual meeting.
- Sep 2021 Podcast guest, “Origins Stories”. <https://leakeyfoundation.org/originstories/>
- April 2021 Contemporary variation in human eccrine sweat gland density. Virtual podium presentation. Session Chair, Human Biology: Evolution and Adaptation. American Association of Physical Anthropologists annual meeting.
- Nov 2020 Contemporary variation in human eccrine sweat gland density. Virtual podium presentation, Northeastern Evolutionary Primatologists annual meeting.
- Nov 2020 An evolutionary perspective on strength training for endurance athletes. Poster presentation, American Physiological Society- Integrative Physiology of Exercise meeting, virtual/remote.
- April 2020 Podcast guest, “Let’s Talk About Sweat”. YouTube: https://www.youtube.com/watch?v=Nm8gOdhjlw8&t=352s&ab_channel=Carpe

- March 2020 Beating the heat: How sweating helped make us human. Invited online lecture, Waikato Institute of Technology Centre for Sport Science and Human Performance. YouTube: https://www.youtube.com/watch?v=FMacNahWfdk&t=2646s&ab_channel=RussellBest
- March 2020 Beating the heat: How sweating helped make us human. Invited lecture, Biological Sciences Seminar Series, Mount Holyoke College.
- Nov 2019 Variation in human eccrine sweat gland density and its relationship to heat dissipation. Poster presentation, Northeastern Evolutionary Primatologists annual meeting, Amherst MA.
- Oct 2019 Evolution and diversity of human eccrine sweat gland density. Podium presentation, Engaging Anthropology Conference, Amherst MA.
- April 2018 Primate sweat gland evolution. Podium presentation, American Association of Physical Anthropologists annual meeting, Austin TX.
- Nov 2016 The evolution of endurance running. Invited lecture, Sugarloaf Mountain Athletic Club yearly banquet, Amherst MA.
- April 2015 Trabecular bone in the calcaneus of runners: Implications for interpreting fossil hominin morphology. Poster presentation, Paleoanthropology Society annual meeting, San Francisco CA.

MEDIA COVERAGE

- July 2022 “9 surprising things sweat can reveal about your health.” *The Edge*. <https://honehealth.com/edge/health/benefits-of-sweating/>
- July 2021 "Giving sweat the respect it deserves." *The Scientist*. <https://www.the-scientist.com/reading-frames/giving-sweat-the-respect-it-deserves-68855>
- July 2021 *The Joy of Sweat: The Strange Science of Perspiration* by Sarah Everts. <https://wnorton.com/books/9780393635676>
- Nov 2020 “Rethinking the cross-training paradox”- *Outside Online*. <https://www.outsideonline.com/2419022/rethinking-cross-training-paradox>
- Nov 2019 “Don’t sweat it: an anthropological look at the science of perspiration”- *University of Massachusetts College of Social and Behavioral Sciences*. <https://www.umass.edu/sbs/news/students/don%E2%80%99t-sweat-it-anthropological-look-science-perspiration>
- July 2019 “Cool down with the slick science of sweat”- *PBS Nova*. <https://www.pbs.org/wgbh/nova/article/science-of-sweat/>
- Sept 2018 “This broken gene may have turned our ancestors into marathoners- and helped humans

conquer the world”- *Science Magazine*.

<https://www.sciencemag.org/news/2018/09/broken-gene-may-have-turned-our-ancestors-marathoners-and-helped-humans-conquer-world>

March 2018 “New study from UMass Amherst Anthropologists Examines the Evolution of Mammalian Perspiration”- *UMass Amherst News and Media Relations*.

<https://www.umass.edu/newsoffice/article/new-study-umass-amherst-anthropologist-0>

June 2018 “Gonna make you sweat”- *UMass Magazine*.

https://issuu.com/uofmassachusettsamherst/docs/umassmag_summer2018_optimized