

Robin Miriam Bernstein
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EDUCATION

- 2004 PhD, Anthropology, University of Illinois, Urbana, IL
- 1997 BA, Anthropology, Rutgers University, New Brunswick, NJ

PROFESSIONAL POSITIONS

- 2021-23 Program Director (Rotator), Biological Anthropology Program, Division of Behavioral and Cognitive Sciences, Social, Behavioral and Economic Sciences Directorate, National Science Foundation
- 2020-21 Faculty Director, Office of Faculty Affairs, University of Colorado Boulder
- 2013- Associate Professor, Department of Anthropology, University of Colorado Boulder
- 2004-13 Assistant Professor, Department of Anthropology, George Washington University

OTHER APPOINTMENTS

- 2017-18 Fellow, Research and Innovation Office (RIO) Faculty Fellows Program, University of Colorado Boulder
- 2015- Faculty Associate, Health and Society Program, Institute of Behavioral Science, University of Colorado Boulder
- 2013- Faculty Affiliate, Center for Global Health, Colorado School of Public Health
- 2012-13 Policy Research Scholar, Institute for Public Policy, George Washington University
- 2011-21 Research Associate, Department of Anthropology, University of Illinois at Urbana
- 2005-13 Research Collaborator, National Museum of Natural History, Smithsonian Institution
- 2004-13 Assistant Professor, Department of Anatomy and Regenerative Biology, George Washington University School of Medicine

RESEARCH

Interests: growth and development; developmental origins of health and disease; maternal and child health; evolutionary medicine; endocrinology; mentoring and professional development

Peer-reviewed publications (student co-authors underlined)

45. Li S, Spitz N, Ghantous A, Abrishamcar S, Reimann B, Marques I, Silver MJ, Aguilar-Lacasaña S, Kitaba N, Rezwan FI, Röder S, Sirignano L, Tuhkanen J, Mancano G, Sharp GC, Metayer C, Morimoto L, Stein DJ, Zar HJ, Alfano R, Nawrot T, Wang C, Kajantie E, Keikkala E, Mustaniemi S, Ronkainen J, Sebert S, Silva W, Väärasmäki M, Jaddoe VWV, Bernstein RM, Prentice AM, Cosin-Tomas M, Dwyer T, Eldevik Håberg S, Herceg Z, Magnus MC, Cheng Munthe-Kaas M, Page CM, Völker M, Gilles M, Send T, Witt S, Zillich L, Gagliardi L, Richiardi L, Czamara D, Räikkönen K, Chatzi L, Vafeiadi M, Hasan Archad S, Ewart S, Plusquin M, Felix JF, Moore SE, Vrijheid M, Holloway JW, Karmaus W, Herberth G, Zenclussen A, Streit F, Lahti J, Hüls A, Hoang TT, London SJ, Wiemels JL. 2024. A Pregnancy And Childhood Epigenetics consortium (PACE) meta-analysis highlights potential [relationships between birth order and neonatal blood DNA methylation](#). Communications Biology 7: 66.
44. Perumal N, Wang D, Darling AM, Liu E, Wang M, Ahmed T, Christian P, Dewey KG, Kac G, Kennedy SH, Fawzi WW, and members of the GWG Pooling Project Consortium. 2023. [Suboptimal gestational weight gain and neonatal outcomes in low- and middle-income countries: an individual-level participant meta-analysis](#). BMJ 382: e072249
43. Darling AM, Wang D, Perumal N, Liu E, Wang M, Ahmed T, Bhandari N, Christian P, Dewey KG, Kac G, Kennedy S, Fawzi WW, and members of the GWG Pooling Project Consortium. 2023. [Risk factors for inadequate and excessive gestational weight gain in 24 low- and middle-income countries: an individual-level participant meta-analysis](#). PLOS Medicine 20: e1004236.
42. Washabaugh JR, Moore SE, Doel AM, Drammeh S, Ong KK, Dunger DB, Prentice AM, Bernstein RM. 2023. [Patterns and determinants of breastfeeding and complementary feeding practices over the first year of life in a rural Gambian population](#). Gates Open Research 7: 103.
41. Bolter D, Cameron N, Hawks J, Churchill SE, Berger L, Bernstein RM, Boughner JC, Elton S, Leece A, Mahoney P, Molopayne K, Monson TA, Pruett J, Schell L, Stull KE, Wolfe CA. 2023. [Addressing the expanding fossil record of sub-adult hominins by reaching across disciplines](#). Evolutionary Anthropology 32: 180-184.
40. Barffour MA, Bernstein RM, Hinnouho G-M, Wessells KR, Arnold CD, Kounnavong S, Hess SJ. 2023. [Insulin-like growth factor 1 \(IGF1\), IGF binding protein-3 \(IGFBP3\) and growth response to daily zinc supplementation: A randomized trial in rural Laotian children](#). Nutrients 15: 2590.
39. Vinjamuri A, Davis JCC, Totten SM, Wu LD, Klein LD, Martin M, Quinn EA, Scelza B, Breakey A, Gurven M, Jaszienska G, Kaplan H, Vallengia C, Hinde K, Smilowitz JT, Bernstein RM, Zivkovic AM, Barratt MJ, Gordon JI, Underwood MA, Mills DA, German JB, Lebrilla CB. 2022. [Human milk oligosaccharide compositions illustrate global variations in early nutrition](#). The Journal of Nutrition 152: 1239-1253.
38. Nabwera HM, Espinoza JL, Worwui A, Betts M, Okoi C, Sesay AK, Bancroft R, Agbla SC, Jarju S, Bradbury RS, Colley M, Jallow AT, Liu J, Houpt ER, Prentice AM, Antonio M, Bernstein RM, Dupont CL, Kwambana-Adams BA. 2021. [Interactions between fecal gut microbiome, enteric pathogens, and energy regulating hormones among acutely malnourished rural Gambian children](#). EBioMedicine 73: 103644.

37. Quilter CR, Harvey KM, Bauer J, Skinner BM, Gomez M, Shrivastava M, Doel AM, Drammeh S, Dunger DB, Moore SE, Ong KK, Prentice AM, Bernstein RM, Sargent CA, Affara NA. 2021. [Identification of methylation changes associated with positive and negative growth deviance in Gambian infants using a targeted methyl sequencing approach of genomic DNA](#). FASEB BioAdvances 3: 205-230.
36. Naumenko DJ, Dykes J, O'Connor GK, Stanley Z, Affara NA, Drammeh S, Dunger DB, Faal A, Ong KK, Sosseh F, Prentice AM, Moore SE, Bernstein RM. 2021. [A novel method for the identification and quantification of weight faltering](#). American Journal of Physical Anthropology 175: 282-291.
35. Schinkel E, Nelson E, Young B, Bernstein RM, Taylor S, Hay W, Brown L, Brown K, Prenni J. 2021. [Concentrating human milk: an innovative point-of-care device for NICU human milk feeding](#). Journal of Perinatology 41: 582-589.
34. Bowland GB, Bernstein RM, Koster J, Fiorello C, Brenn-White M, Liu J, Schwartz L, Campbell A, von Stade D, Beagley J, Pomerantz J, González A, Quick M, McKinnon K, Aghaian A, Sparks C, Gross JB. 2020. [Fur color and nutritional status predict hair cortisol concentrations of dogs in Nicaragua](#). Frontiers in Veterinary Science 7: 702
33. Maidwell-Smith AA, Doel AM, Bernstein RM, Moore SE. 2020. [Prevalence estimates of diabetes in pregnancy in a rural, sub-Saharan population](#). Diabetes Research and Clinical Practice 169: 108455.
32. Bernstein RM, O'Connor GK, Vance EA, Affara N, Drammeh S, Dunger DB, Faal A, Ong KK, Prentice AM, Sosseh F, Moore SE. 2020. [Timing of the infancy-childhood transition in rural Gambia](#). Frontiers in Endocrinology 11: 142.
31. Moore SE, Doel AM, Ong KK, Dunger DB, Affara NA, Prentice AM, Bernstein RM, and the HERO-G Working Group. 2020. [Identification of nutritionally modifiable hormonal and epigenetic drivers of positive and negative growth deviance in rural African fetuses and infants: Project protocol and cohort description](#). Gates Open Research 4: 25.
30. Hinnouho G-M, Bernstein RM, Barffour MA, Arnold CD, Wessels KR, Ratsavong K, Bounheuang B, Kounnavong S, Hess SY. 2019. [Impact of two forms of daily preventive zinc or therapeutic zinc supplementation for diarrhea on hair cortisol concentrations among rural Laotian children: a randomized controlled trial](#). Nutrients 11: 47.
29. Bernstein RM, Bogin BA. 2019. Growth and development. In: Brüne M, Schiefenhövel W, eds. Oxford Handbook of Evolutionary Medicine. Oxford University Press.
28. Washabaugh JR, Olaniyan O, Secka A, Jeng M, Bernstein RM. 2019. Milk hygiene and consumption practices in The Gambia. Food Control 98: 303-311.
27. Wessells KR, Brown KH, Kounnavong S, Barffour MA, Hinnouho G-M, Sayasone S, Stephensen CB, Ratsavong K, Larson CP, Arnold CD, Harding KB, Reinhart GA, Lertmemongkolchai G, Fucharoen S, Bernstein RM, Hess SY. 2018. [Comparison of two forms of daily preventive zinc supplementation versus therapeutic zinc supplementation for diarrhea on young children's physical growth and risk of infection: study design and rationale for a randomized controlled trial](#). BMC Nutrition 4: 39.
26. Watson S, Moore SE, Darboe MK, Chen G, Tu, Y-K, Huang Y-T, Eriksen KG, Bernstein RM, Prentice AM, Wild CP, Xu Y, Routledge MN, Gong YY. 2018. [Impaired growth in rural Gambian infants exposed to aflatoxin: a prospective cohort study](#). BMC Public Health 18: 1247.

25. Turner TR, Bernstein RM, Taylor A, [Asangba A](#), Bekelman T, Danzy Cramer J, Elton S, Harvati K, Williams-Hatala EM, Kauffman L, Middleton E, Richtsmeier J, Szathmáry E, Torres-Rouff C, Thayer Z, [Villaseñor A](#), Vogel E. 2018. [Participation, representation and shared experiences of women scholars in biological anthropology](#). Yearbook of Physical Anthropology 165: 126-157.
24. [Fardi S](#), Sauter ML, Cuzzo FP, Jacky IAY, Bernstein RM. 2018. The effect of extreme weather events on hair cortisol and body weight in a wild ring-tailed lemur population (*Lemur catta*) in Southwestern Madagascar. American Journal of Primatology 80: e22731.
23. [Helfrecht C](#), Hagen EH, DeAvila D, Bernstein RM, Dira SJ, Meehan CL. 2018. DHEAS patterning across childhood in three sub-Saharan populations: associations with age, sex, ethnicity, and cortisol. American Journal of Human Biology 30: e23090.
22. [Nabwera HM](#), Bernstein RM, Agbla SC, Moore SE, Darboe MK, Colley M, Jallow AT, Bradbury R, Karafin J, Fulford AJ, Prentice AM. 2017. [Hormonal correlates and predictors of nutritional recovery in malnourished African children](#). Journal of Tropical Pediatrics 64: 364-372.
21. Bernstein RM. 2017. Hormones, human and nonhuman primate growth. Hormone Research in Paediatrics 88: 15-21.
20. [Davis JCC](#), Lewis ZT, Krishnan S, Bernstein RM, Moore SE, Prentice AM, Mills DA, Lebrilla CB, Zivkovic AM. 2017. Growth and morbidity of Gambian infants are influenced by maternal milk oligosaccharides and infant gut microbiota. Scientific Reports 7, 40466.
19. Bernstein RM. 2016. Comparative endocrinology of childhood growth. In: Meehan C, Crittenden A, eds. Multiple Perspectives on the Evolution of Childhood. SAR/University of New Mexico Press.
18. Power ML, Schulkin J, Drought H, Milligan L, [Murtough KL](#), Bernstein RM. 2016. Patterns of milk macronutrients and several bioactive molecules across lactation in a western lowland gorilla (*Gorilla gorilla*) and a Sumatran orangutan (*Pongo abelii*). American Journal of Primatology 79: 1-11.
17. Bernstein RM, Hinde K. 2016. Bioactive factors in milk across lactation: maternal effects and influence on infant growth in rhesus macaques (*Macaca mulatta*). American Journal of Primatology 78: 838-850.
16. [Fourie NH](#), Brown JL, Jolly CJ, Phillips-Conroy JE, Rogers J, Bernstein RM. 2016. Sources of variation in hair cortisol in wild and captive non-human primates. Zoology 119: 119-125.
15. [Fourie NH](#), Turner TR, Brown JL, Grobler PJ, Lorenz JG, Bernstein RM. 2015. Variation in vervet (*Chlorocebus aethiops*) hair cortisol concentrations reflects ecological disturbance by humans. Primates 56: 365-373.
14. [Fourie NH](#), Jolly CJ, Phillips-Conroy JE, Brown JL, Bernstein RM. 2015. Variation in hair cortisol concentrations in wild populations of two baboon species (*Papio anubis*, *P. hamadryas*) and a population of their natural hybrids. Primates 56: 259-272.
13. Bernstein RM, Dominy NJ. 2013. Mount Pinatubo, inflammatory cytokines, and the immunological ecology of Aeta hunter-gatherers. Human Biology 85: 231-250.

12. Bernstein RM, Drought H, Phillips-Conroy JE, Jolly CJ. 2013. Hormonal correlates of divergent growth trajectories in wild male anubis (*Papio anubis*) and hamadryas (*Papio hamadryas*) baboons in the Awash River Valley, Ethiopia. *International Journal of Primatology* 34: 732-751.
11. Alesbury H, Ubelaker D, Bernstein RM. 2013. Age-at-death estimation using the frontonasal suture in human crania. *Journal of Forensic Sciences* 58: 104-108.
10. Bernstein RM, Setchell J, Verrier D, Knapp L. 2012. Maternal effects and the endocrine regulation of mandrill growth. *American Journal of Primatology* 74: 890-900.
9. Conley A, Bernstein RM, Nguyen A. 2012. The evidence for, and the need to re-define, adrenarche in nonhuman primates. *Journal of Endocrinology* 214: 121-131.
8. Bernstein RM, Sterner K, Wildman D. 2012. Adrenal androgen production in catarrhine primates and the evolution of adrenarche. *American Journal of Physical Anthropology* 147: 389-400.
7. Fourie N, Bernstein RM. 2011. Hair cortisol levels track phylogenetic and age-related differences in hypothalamic-pituitary-adrenal (HPA) axis activity in non-human primates. *General and Comparative Endocrinology* 174: 150-155.
6. Bernstein RM. 2010. The big and small of it: how body size evolves. *Yearbook of Physical Anthropology* 143: 46-62.
5. Bernstein RM, Nadler T, Brown J, Fourie N. 2009. Variation in fecal glucocorticoid concentrations in captive red-shanked douc langurs (*Pygathrix nemaeus*). *Vietnamese Journal of Primatology* 3: 65-74.
4. Stinespring Harris A, Bernstein RM, Kuhle B. 2009. Predicting age at onset of menopause: testing the “adaptive onset” hypothesis. *Maturitas* 64: 193-195.
3. Bernstein RM, Leigh SR, Donovan S, Monaco M. 2008. Hormonal correlates of ontogeny in baboons (*Papio hamadryas anubis*) and mangabeys (*Cercocebus atys*). *American Journal of Physical Anthropology* 136: 156-168.
2. Bernstein RM, Leigh SR, Donovan S, Monaco M. 2007. Hormones and body size evolution in papionin primates. *American Journal of Physical Anthropology* 132: 247-260.
1. Leigh SR, Bernstein RM. 2006. Ontogeny, life history, and maternal investment in baboons. In: *Reproduction and Fitness in Baboons* (S. Leigh and L. Swedell, editors), Kluwer Academic/Plenum Publishers: New York.

Encyclopedia entries, book reviews, introductions, comments

8. Bernstein RM. 2018. Models of growth for humans and nonhuman primates. In: Trevathan W, ed. *The International Encyclopedia of Biological Anthropology*. John Wiley and Sons, Inc.
7. Bernstein RM. 2018. Evolution of human growth. In: Trevathan W, ed. *The International Encyclopedia of Biological Anthropology*. John Wiley and Sons, Inc.
6. Bernstein RM, Dufour DL. 2017. Worldwide Variation in Human Growth: 40 years later (Introduction to Special Section). *American Journal of Human Biology* 29: e22984.

5. Bernstein RM. 2017. Growth rates. In: Fuentes A, ed. International Encyclopedia of Primatology. John Wiley & Sons, Inc.
4. Bernstein RM. 2015. Comment on ‘Children as a reserve labor force’, by David Lancy. Current Anthropology 56: 554-555.
3. Bernstein RM. 2013. Review of Building Babies: Primate Development in Proximate and Ultimate Perspective (K.B.H. Clancy, K. Hinde, and J.N. Rutherford, editors). International Journal of Primatology 34: 641-643.
2. Bernstein RM. 2011. Topic Editor and Author, Growth and Development section. In: Wood BA, ed. Wiley-Blackwell Encyclopedia of Human Evolution. Wiley-Blackwell.
1. Bernstein RM. 2011. Topic Editor and Author, Life History section. In: Wood BA, ed. Wiley-Blackwell Encyclopedia of Human Evolution. Wiley-Blackwell.

External grant support

2018-20 (Mentor) Effects of zinc alone versus multiple micronutrients on IGFBP3, IGF1 and growth in Laotian children; Thrasher Research Fund (\$26,749)

2015-18 (co-PI) Action through organization: supporting mentoring and networking for early career women scientists through the AAPA Women’s Initiative; The Elsevier Foundation New Scholars Award (\$48,000)

2012-20 (PI) Identification of nutritionally modifiable hormonal and epigenetic drivers of positive and negative growth deviance; Bill and Melinda Gates Foundation (\$2,032,852)

2012-13 (co-PI) A physiological perspective on bone strength; Wenner-Gren Foundation (\$25,000)

2011-13 (PI) Breast milk bioactives and the defense of gut and growth; Bill and Melinda Gates Foundation (\$100,000)

2010-13 (co-PI) Collaborative Research: A multidisciplinary, field based study of the little-known Kinda baboon (*Papio cynocephalus kindae*); National Science Foundation (\$22,658)

2009-11 (PI) Endocrine correlates of growth and development in the Awash baboons; National Science Foundation (\$222,399)

2008-09 (PI) Hormonal correlates of divergent growth trajectories in male baboons; International Primatological Society (\$1,500)

Internal grant support

2016 Milk: nutrition and health shaped by cultural practices and the environment; University of Colorado Population Center (\$9,000)

2012-13 Making room for change: tracking policy creation and compliance for support of breastfeeding mothers in colleges and universities in the DC metro area; George Washington Institute for Public Policy Research Scholar Fellowship (\$10,000)

2012-13 Endocrine signaling via milk in primates: effects on infant growth, development, and the implications for the developmental origins of adult disease; The George Washington University – Smithsonian Institution Opportunity Fund (\$40,000)

2011-12 Breast milk, maternal signaling, and environmental change; The George Washington University Facilitating Fund (\$25,132)

2009-10 Hormones and divergent growth trajectories in male Awash baboons; The George Washington University Facilitating Fund (\$16,078)

2007-08 Genetic and hormonal correlates of growth and aging in great apes; The George Washington University Dilthey Faculty Fellowship (\$22,003)

2006-07 Stress and captivity in the red-shanked douc langur; The George Washington University Facilitating Fund (\$14,038)

Published conference abstracts

2020

Leigh SR, Naumenko DJ, Affara N, Dunger DB, Ong KK, Prentice AM, Moore SE, Bernstein RM. Allometric correlates of infant mass growth rate variation. *American Journal of Physical Anthropology* 171: 158.

Naumenko DJ, Affara N, Dunger DB, Ong KK, Prentice AM, Moore SE, Bernstein RM. Short-term wasting, linear faltering, and Type X Collagen. *American Journal of Physical Anthropology* 171: 196.

Washabaugh JR, Moore SE, Affara N, Dunger DB, Ong KK, Prentice AM, Bernstein RM. Milk macronutrient composition over the first year of lactation in a rural Gambian population and its effect on infant growth and health outcomes. *American Journal of Human Biology* 32.

2019

Bernstein RM, Stanley Z, Affara N, Dunger DB, Ong KK, Prentice AM, Moore SE. Integration of growth in head circumference, body length, and body weight in rural Gambian infants during the first year of life. *American Journal of Physical Anthropology* Suppl 168: 19.

Bowland GB, Van Gerven D, Bernstein RM. Analysis of cortisol levels from archaeological hair from the Medieval Nubian population of Kulubnarti. *American Journal of Physical Anthropology* Suppl 168: 26.

Dykes J, Cummings JA, Naumenko DJ, O'Connor GK, Stanley Z, Affara N, Dunger DB, Ong KK, Prentice AM, Moore SE, Bernstein RM. Quantifying growth pulses across the first year of life in rural Gambian infants. *American Journal of Physical Anthropology* Suppl 168: 65.

Maidwell-Smith A, Doel A, Bernstein RM, Moore SE. Hyperglycaemia first detected in pregnancy in sub-Saharan Africa: an estimate of the prevalence in rural Gambia and the diagnostic ability of capillary versus venous sampling. *BJOG: An International Journal of Obstetrics and Gynaecology* 126: 77.

Naumenko DJ, Dykes J, O'Connor GK, Stanley Z, Affara N, Dunger DB, Ong KK, Prentice AM, Moore SE, Bernstein RM. Quantifying growth faltering across the first year of life in rural Gambian infants. American Journal of Physical Anthropology Suppl 168: 173-174.

Naumenko DJ, Affara N, Dunger DB, Moore SE, Ong KK., Prentice AM, Bernstein RM. 2019, March. Head circumference growth trajectories from prenatal to postnatal life in rural Gambian infants: influences and implications. American Journal of Human Biology 31: 2.

O'Connor GK, Stanley Z, Dykes J, Naumenko DJ, Affara N, Dunger DB, Ong KK, Prentice AM, Moore SE, Bernstein RM. The infancy-childhood transition in rural Gambian infants. American Journal of Physical Anthropology Suppl 168: 179-180.

Stanley Z, Dykes J, Naumenko DJ, O'Connor GK, Affara N, Dunger DB, Ong KK, Prentice AM., Moore SE, Bernstein RM. Influence of sex, season of birth, and gestational age at delivery on growth in rural Gambian infants from birth to one year. American Journal of Physical Anthropology Suppl 168: 237.

Stanley Z, Dykes J, Naumenko DJ, O'Connor GK, Affara N, Dunger DB, Ong KK., Prentice AM, Moore SE, Bernstein RM. Predictive accuracy of short-term measurements for longer-term growth rates in rural Gambian infants. American Journal of Human Biology 31: 2.

Washabaugh J, Moore SE, Affara N, Dunger DB, Ong KK, Prentice AM, Bernstein RM. Breastfeeding and complementary feeding patterns in a rural Gambian population. American Journal of Physical Anthropology Suppl 168: 263.

2018

Bernstein RM, Naumenko DJ, Washabaugh J, Hinnouho G-M, Barffour MA, Wessells KR, Ratsavong K, Kounnavong S, Hess SY. 2018. Infant hair cortisol in central Lao PDR. American Journal of Human Biology 30: 2.

2017

Bernstein RM, Davis JCC, Lewis ZT, Krishnan S, Moore SE, Prentice AM, Mills DA, Lebrilla CB, Zivkovic A. 2017. Mother's milk oligosaccharides and infant gut microbiota: seasonality and infant outcomes in rural Gambia. American Journal of Physical Anthropology Suppl 162: 119.

Fardi S, Drammeh S, Doel A, Prentice AM, Moore SE, Bernstein RM. 2017. Neonatal hair cortisol in rural Gambian infants. American Journal of Physical Anthropology Suppl 162: 177.

Gruca M, Moore SE, Darboe MK, Prentice AM, Bernstein RM. 2017. Breast milk macronutrient content in rural West African mothers is impacted by season of infant birth and maternal energy balance. American Journal of Physical Anthropology Suppl 162: 202.

Waller MT, Skinner S, Fardi S, Bernstein RM, Young H. 2017. The effects of human surrogacy on hair cortisol levels in orphaned baboons (*Papio ursinus*). American Journal of Physical Anthropology Suppl 162: 401.

Washabaugh J, Bernstein RM, Secka A, Jeng M, Olaniyan O. 2017. Milking and market hygiene practices: quality of cow's milk in The Gambia. American Journal of Human Biology 29: 2.

2016

Fardi S, Bernstein R. 2016. Maternal environment, prenatal stress, and offspring cortisol reactivity: a meta-analysis. American Journal of Physical Anthropology Suppl 159: 141.

Gruca M, Moore S, Darboe M, Bernstein R. 2016. Prenatal supplementation, breast milk composition, and infant growth in rural Gambia. *American Journal of Physical Anthropology* Suppl 159: 163.

Washabaugh J, Moore S, Darboe M, Bernstein R. 2016. Predictors of skin infection in rural Gambian infants. *Breastfeeding Medicine* 11: A47.

2015

Fardi S, Bernstein R, Sauter M. 2015. Hair cortisol, climatic events, and age in wild ring-tailed lemur (*Lemur catta*) troops from the Beza Mahafaly Special Reserve, Southwestern Madagascar. *American Journal of Physical Anthropology* Suppl 156: 130.

Nabwera H, Bernstein R, Jallow A, Jallow M, Prentice AM. 2015. Evaluating growth regulating hormones in rural Gambian children. *The FASEB Journal* Suppl 29: 579.3.

2014

Bernstein R, Moore S, Prentice A. 2014. To every thing there is a season: breast milk, infant growth, and birth seasonality in rural Gambia. *American Journal of Physical Anthropology* Suppl 153: 77.

Zivkovic A, Bernstein R, Huang A, Totten S, Lewis Z, Mills D, Prentice A, Moore S, Lebrilla C. 2014. Milk glycan composition mediates gut microbiota, growth, and morbidity outcomes in Gambian infants. *The FASEB Journal* Suppl 28: 38.4.

2013

Bernstein R, Drought H, Wechsler M, Hinde K. 2013. Bioactive factors in macaque milk: relationships with maternal physiology and infant growth. *American Journal of Physical Anthropology* Suppl 152: 79.

Copes L, Drought H, Patel T, Bernstein R. 2013. Hormonal contributions to sex differences in baboon skeletal robusticity. *American Journal of Physical Anthropology* Suppl 52: 102.

Drought H, Phillips-Conroy J, Jolly C, Bernstein R. 2013. Exploring hormonal correlates of small body size in the Kinda baboon (*Papio kindae*). *American Journal of Physical Anthropology* Suppl 52: 115.

Fourie N, Bernstein R, Porter L, Garber P. 2013. Hair cortisol concentrations in wild saddle back tamarins (*Saguinus fuscicollis weddelli*). *American Journal of Physical Anthropology* Suppl 52: 124.

Hinde K, Drought H, Wechsler M, Bernstein R. 2013. Bioactive factors in the milk of a non-human primate biomedical model. *The FASEB Journal* Suppl 27: 629.14.

Milligan LA, Bernstein R, Wright L, Drought H, Lewis C, Murtough K, Power M. 2013. Longitudinal changes in macronutrient and hormone concentration in orangutan milk during peak lactation. *American Journal of Physical Anthropology* Suppl 152: 199.

Payette C, Copes L, Patel T, Bernstein R. 2013. The effects of locomotor category and sex on the ontogeny of skeletal robusticity in two strepsirrhine species (*Lemur catta* and *Propithecus verreauxi*). *American Journal of Physical Anthropology* Suppl 52: 146.

Power M, Schulkin J, Drought H, Hinde K, Bernstein R. 2013. Bioactive factors in milk: comparison across nonhuman primates and humans. *American Journal of Physical Anthropology* Suppl 52: 224.

2012

Copes L, Tommasini S, Patel T, Leigh S, Bernstein R. 2012. Biological co-adaptation of morphological and composition traits in weight-bearing and non-weight bearing bones of baboons. *J Bone Miner Res* 27 (Suppl 1).

Fourie N, Bernstein R, Phillips-Conroy J, Jolly C, Brown J. 2012. Variation in hair cortisol in wild anubis and hamadryas baboons and their hybrids. *American Journal of Physical Anthropology* Suppl 52: 146.

2011

Bernstein R, Drought H, Phillips-Conroy J, Jolly C. 2011. Hormonal correlates of divergent growth trajectories in male anubis, hamadryas, and hybrid baboons. *Am J Phys Anthropology* Suppl 52: 89.

Fourie N, Bernstein R. 2011. Quantification of cortisol in wild and captive nonhuman primate hair: methodological considerations and biological validation. *Am J Phys Anthropology* Suppl 52: 137.

Sterner K, Church S, Wildman D, Bernstein R. 2011. Evolution of adrenarche in *Homo* and *Pan*. *Am J Phys Anthropology* Suppl 52: 285

2010-2000

Bernstein R, Chirchir H, Fourie N. 2010. Lemurs, hormones, and the pace of life histories: IGF-I and somatic growth in Lemur, Eulemur, Propithecus and Varecia. *American Journal of Physical Anthropology* Suppl 50: 66.

Stinespring Harris A, Bernstein R, Kuhle B. 2010. Is the age at onset of menopause adaptive?: putting the “adaptive onset” hypothesis to the test. *American Journal of Physical Anthropology* Suppl 50: 223.

Leigh S, Bernstein R, Konigsberg L. 2009. Dental eruption, age estimation, and life histories in papionin primates. *American Journal of Physical Anthropology* Suppl 48: 174.

Stinespring A, Bernstein R. 2009. Are capuchins good models for the “grandmother” hypothesis?: What socio-spatial behavior of females with dependent infants can tell us. *American Journal of Physical Anthropology* Suppl 48: 248.

Bernstein R, Leigh S, Setchell J. 2008. Allometry and physiology: hormones, mass, and length. *Primate Eye* 96 (IPS 22nd Congress Proceedings): 158.

Bernstein R. 2007. The hormonal regulation of ontogeny in *Papio* and *Cercocebus*. *American Journal of Physical Anthropology* Suppl 44: 73.

Bernstein R. 2006. Hormones and growth in papionin primates. *American Journal of Physical Anthropology* Suppl 42: 64.

Bernstein R. 2005. Growth related hormones in great apes. *American Journal of Physical Anthropology* Suppl 40: 134.

Leigh S, Bernstein R. 2004. Evolution of primate life histories. *American Journal of Physical Anthropology* Suppl 38: 134.

Bernstein R, Leigh S, Donovan S, Monaco M. 2003. Integration among hormonal parameters of growth in baboons: implications for patterns of maturation and reproduction. *American Journal of Physical Anthropology* Suppl 36: 65.

Leigh S, Bernstein R. 2003. Ontogeny, life history, and maternal reproductive strategies in baboons. *American Journal of Physical Anthropology Suppl* 36: 138.

Bernstein R, Leigh S, Siegel M, Donovan S. 2002. IGF-I bioavailability and patterns of body size variation in *Papio* and *Cercocebus*. *American Journal of Physical Anthropology Suppl* 34: 44.

Bernstein R. 2001. Somatomedin secretion and patterns of growth in *Papio* and *Cercocebus*. *American Journal of Physical Anthropology Suppl* 32: 39.

Bernstein R, Rowan K, Leigh S. 2000. New dental age standards for baboons (*Papio hamadryas anubis*) and mangabeys (*Cercocebus atys*). *American Journal of Physical Anthropology Suppl* 30:107.

Invited talks

- 2022 Social and Behavioral Research, National Institute on Aging, National Institutes of Health (Washington, DC)
- 2021 Division of Social, Behavioral and Economic Sciences, National Science Foundation (Washington, DC)
- 2021 Department of Anthropology, University of Alabama (Tuscaloosa, AL)
- 2019 Lembersky Conference in Human Evolutionary Studies, Rutgers University: Advances in Primate Nutritional Ecology, Health, and Energetics (New Brunswick, NJ)
- 2019 Evolutionary Medicine: The Biocultural Perspective, Senckenberg Research Institute and Natural History Museum (Frankfurt, Germany)
- 2019 Bill & Melinda Gates Foundation: Modelling Physical Growth Above the Neck (Seattle, WA)
- 2018 Boise State University: Northwest Evolution, Ecology, Human Behavior Symposium (Boise, ID)
- 2017 Chatham University, Department of Biology: Lecture Series (Pittsburgh, PA)
- 2017 University of Las Vegas, Department of Anthropology: Colloquium Series (Las Vegas, NV)
- 2016 Rutgers University: 'A Day of Revolutionary Thinking', 250th Anniversary (New Brunswick, NJ)
- 2016 Grand Challenges Annual Meeting (London, England)
- 2016 18th International Society for Research in Human Milk and Lactation Conference (Stellenbosch, South Africa)
- 2016 International Primatological Society/American Society of Primatologists Joint Congress (Chicago, IL)
- 2015 Plenary session, 40th Annual Meeting of the Human Biology Association (St. Louis, MO)
- 2015 Anthropology Lecture Series, Rutgers University (New Brunswick, NJ)

- 2014 Evolution and Human Adaptation Series, University of Michigan (Ann Arbor, MI)
- 2013 Department of Anthropology, Southern Illinois University (Carbondale, IL)
- 2013 Department of Anthropology, University of Arkansas (Fayetteville, AR)
- 2013 Department of Biology, George Washington University (Washington, DC)
- 2012 Department of Anthropology, University of Manitoba (Winnipeg, MB)
- 2011 Paleoanthropology Lecture Series, Human Origins Program, Smithsonian Institution (Washington, DC)
- 2008 New York Consortium in Evolutionary Primatology (NYCEP) Regional Primatology Colloquium (New York, NY)

Conference presentations

Lemmers S, Setchell J, Schwartz G, Reid D, Bernstein R, Leigh S, Ngoubangoye B, Herbert A, Dirks W. 2017. Histological analysis of dental development in *Mandrillus sphinx*. Primate Society of Great Britain Winter Meeting (Durham, England).

Fardi S, Porter LM, Erb WM, Di Fiore A, Bernstein R. 2016. Hair cortisol in wild saddleback tamarins (*Leontocebus weddelli*). International Primatological Society/American Society of Primatologists Joint Meeting (Chicago, IL)

Lemmers S, Setchell J, Schwartz G, Reid D, Bernstein R, Leigh S, Ngoubangoye B, Herbert A, Dirks W. 2016. Comparative study of dental development in African papionins. International Primatological Society/American Society of Primatologists Joint Meeting (Chicago, IL)

Bernstein R, Zivkovic A, Huang J, Totten S, Lewis Z, Mills D, Prentice A, Moore S, Lebrilla C. 2014. Milk, morbidity, and infant growth. 17th International Society for Research in Human Milk and Lactation Conference (Kiawah Island, SC)

Bernstein R, Zivkovic A, Huang J, Totten S, Lewis Z, Mills D, Prentice A, Moore S, Lebrilla C. 2014. Milk, morbidity, and infant growth. 10th Annual Grand Challenges Meeting (Seattle, WA)

Fardi S, Bernstein R, Sauter M. 2014. Climatic events and hair cortisol in two wild ring-tailed lemur (*Lemur catta*) troops from Beza Mahafaly Special Reserve, Southwestern Madagascar. 83rd Annual Meeting of the American Association of Physical Anthropologists: Undergraduate Research Symposium (Calgary, AB).

Bernstein R, Moore S, Prentice A. 2013. Breast milk, infant growth, and intestinal health in rural Gambia. 6th Annual Global Health Symposium: Colorado School of Public Health (Aurora, CO)

Bernstein R, Moore S, Prentice A. 2013. Seasonality, breast milk bioactives, and infant growth. 112th Annual Meeting of the American Anthropological Association (Chicago, IL)

Bernstein R, Drought H, Prentice AM, Moore SE. 2013. Breast milk bioactive factors in rural Gambian women and infant health and growth. Bill and Melinda Gates Foundation (Seattle, WA)

Bernstein R. 2012. Healthy growth: patterns and processes. 8th Annual Grand Challenges Meeting (Ottawa, ON)

Power M, Schulkin J, Drought H, Bernstein R. 2012. Growth factors and metabolic hormones in primate milk. 9th Biennial Symposium of the Comparative Nutrition Society (Pacific Grove, CA)

Fourie N, Bernstein R. 2010. Hair as a retrospective calendar of cortisol in wild and captive primates. 47th Annual Meeting of the Animal Behavior Society (Williamsburg, VA)

Fourie N, Bernstein R. 2009. Quantifying steroid hormones from the hair of wild primates. 8th Annual Meeting of the Primate Ecology and Genetics Group (Pretoria, South Africa)

TEACHING

University of Colorado, Boulder CO (2013-)

Undergraduate

ANTH 2020: Human Biological Variation and Adaptation

ANTH 2040: Laboratory in Human Biological Variation and Adaptation

ANTH 3100: The Human Animal

Undergraduate/Graduate

ANTH 4120/5120: Advanced Topics in Biological Anthropology

Topics courses include: Hormones and Behavior, Evolutionary Medicine, Maternal and Child Nutrition

Graduate

ANTH 7020: Growth and Development

ANTH 7620: Bridging Seminar: Race (co-Instructor)

Federal Bureau of Investigation, Quantico VA (2006-2012)

Forensic Audio, Video, & Image Analysis Unit: Surface and Developmental Anatomy

George Washington University, Washington DC (2004-2013)

Undergraduate

ANTH 1001: Introduction to Biological Anthropology

ANTH 1005: Biological Bases of Human Behavior

ANTH 8001: Hormones and Behavior (Freshman seminar)

Undergraduate/Graduate

ANTH 3405/6405: Human Growth and Development

Graduate

ANAT 6210: Medical Gross Anatomy (GWU Medical School)

ANTH 6102: Master's Proseminar in Biological Anthropology

ANTH 6404: Primate Life Histories

HOMP 8301: Problem-Based Learning Seminar (Topic: Body size evolution)

University of Illinois, Urbana IL (2000-2004)

MCB 244: Human Anatomy and Physiology
ANTH 102: Human Origins and Culture

MENTORINGDoctoral Dissertations (¹Primary advisor, ²Committee member)

2022 ¹Jennifer Washabaugh, University of Colorado Boulder. First foods, intestinal ecology, and early life health and growth outcomes.

2022 ²Adenife Modile, University of Colorado Boulder. Pathways to anemia in Nigeria: socioeconomic resources, regional context, and health-related influences.

2022 ²Bailey Duhé, University of Colorado Boulder. Fluid: Louisiana Creole identity and racial mixture in the United States.

2020 ²Richard Bender, University of Colorado Boulder. Do protein content and protein quality influence human food intake? Testing the protein leverage hypothesis.

2017 ²Andie Ang, University of Colorado Boulder. Genetic variability, diet metabarcoding, and conservation of Colobine primates in Vietnam.

2016 ²Erica Tennenhouse, University of Toronto. Unique lemur traits: proximate and ultimate perspectives.

2015 ²Courtney Helfrecht, Washington State University. Effects of stress on onset of middle childhood among Sidama agropastoralists.

2012 ¹Nicolaas Fourie, George Washington University. Hair cortisol in wild and captive primates: environmental effects and behavioral phenotypes.

2012 ²Felicia Gomez, George Washington University. Patterns of genetic diversity and signatures of natural selection at the intercellular adhesion molecule-1 (ICAM-1) and CD36 loci in humans.

2010 ²David Green, George Washington University. Shoulder functional anatomy and development: implications for interpreting early hominin evolution.

2008 ²Lisa Nevell, George Washington University. Hominin cranial base evolution and genes implicated in basioccipital development: role of Pax7, Fgfr3 and Displ1 in basioccipital development and integration.

Masters Theses (¹Primary advisor, ²Committee member)

2017 ¹Sara Fardi, University of Colorado Boulder. Neonatal hair cortisol in relation to maternal environment, sociodemographic factors, and infant birth and growth outcomes in rural Gambia

2017 ¹Margaret Gruca, University of Colorado Boulder. Impact of maternal physiology and environment on breast milk macronutrient content and infant growth in rural West Africa.

2017 ¹Jennifer Washabaugh, University of Colorado Boulder. Milk hygiene and consumption practices in The Gambia.

2017 ²Brandice Evans, University of Georgia. Psychosocial stress, race, and social support among breastfeeding mothers in the American South.

2008 ¹Diana Durand, George Washington University. Examining the relationship between chin size and facial prognathism in humans.

2007 ¹Rhonda Coolidge, George Washington University. A biocultural analysis of fracture patterns in the Terry Collection.

Senior Honors Theses (¹Primary advisor, ²Committee member)

University of Colorado Boulder

2019 ¹Grace Bowland, Exploration of hair cortisol concentrations and implications of stress in hunting dogs in the Bosawas Biosphere Reserve, Nicaragua

2018 ²Emily Martin, The art of dealing with the gods: Balinese women and ritual labor

2017 ²Sydney Martin, Applications of near-infrared spectroscopy in physical anthropology and primate ecology

2016 ²Ian Harryman, Ecological problem solving: a comparative study of primate conservation

2014 ²Layne Bronson, Fertility and agency: reproductive decisions in modern day Rome

2014 ²Megan Barrie, Nepali youth in America: a contemporary look at cultural identity, community, and ties to 'home'

2013 ²Logan Singletary, Habitat use and ranging behavior of *Saimiri oerstedii oerstedii* on the Peninsula de Osa, Costa Rica, and implications for conservation

George Washington University

2013 ¹Alexandria Gregory, Testing the metabolic crossover hypothesis as an explanation of modern human gestation length

2010 ¹Helen Alesbury, Age at death estimation using the frontonasal suture in human skeletal remains

2008 ¹Lance Levenson, The ontogeny of primate canine dimorphism as related to sexual selection and intrasexual competition: a comparison of canine dimorphism in the permanent and deciduous dentitions

2008 ¹Erica Parris, Assessing the effects of locomotor behavior on limb morphology and accuracy of body mass estimations in Strepsirhines

2008 ¹Lia Schwartz, Sex differences in aggressive and affiliative behavior of orphaned Chacma baboons

2006 ¹Michaela Huffman, Sex identification in the pelvis: a reexamination of base-wing measurements, sacral anterior curvatures, and os pubis ventral arc

SERVICE

Professional service

- 2019 co-Organizer: 'Mentoring the Mentor: A mentor training workshop', American Association of Physical Anthropologists annual meeting (Cleveland, OH)
- 2019 Judge: Student prize committee, American Association of Physical Anthropologists annual meeting (Cleveland, OH)
- 2018 co-Facilitator: Open discussion on development of an association-based mentoring program (AAPA annual conference, Austin, TX)
- 2017-20 Panelist: National Science Foundation
- 2017 co-Editor: Special section of American Journal of Human Biology ("Worldwide variation in human growth: 40 years later")
- 2017 Facilitator: Workshop for Women Primatologists and Biological Anthropologists (Durham, UK)
- 2016 Organizer: Workshop for Women Biological Anthropologists (Boulder, CO)
- 2016 co-Organizer: Human Biology Association Annual Meeting Plenary Session: Worldwide Variation in Human Growth – 40 Years Later (Atlanta, GA)
- 2016 co-Chair: Committee on Diversity Women's Initiative Graduate Student Professional Development Workshop (Atlanta, GA)
- 2015 co-Chair: Committee on Diversity Women's Initiative Early-Career Women's Professional Development Workshop (St. Louis, MO)
- 2015 Member: Ad-hoc subcommittee of Ethics Committee, co-author of the American Association of Physical Anthropologists statement on sexual harassment and assault
- 2014 co-Chair: Committee on Diversity Women's Initiative Mid-Career Women's Professional Development Workshop (Calgary, Canada)
- 2013-17 Associate Editor: Yearbook of Physical Anthropology
- 2013-19 co-Chair: Women's Initiative, Committee on Diversity, American Association of Physical Anthropologists
- 2013-14 Chair: Childcare Committee, American Association of Physical Anthropologists

- 2011 Presenter: The scientist is in. Hall of Human Origins, National Museum of Natural History, Smithsonian Institution (Washington, DC)
- 2008- Ad hoc grant review: National Science Foundation; The Leakey Foundation; Wenner-Gren Foundation; The Canada Foundation for Innovation; PRESTIGE Marie Curie Program; India Alliance/DBT Wellcome Trust; University of Nebraska
- 2008 Symposium organizer: Primate body size: a multiple-level perspective. 22nd Congress of the International Primatological Society (Edinburgh, Scotland)
- 2005- Book review: Oxford University Press, Cambridge University Press
- 2004- Manuscript review: American Journal of Human Biology; American Journal of Biological Anthropology; American Journal of Primatology; Current Anthropology; Developmental Cognitive Neuroscience; Human Nature; International Journal of Primatology; Journal of Anatomy; Journal of Endocrinology; Journal of Human Evolution; Journal of Medical Primatology; Journal of Pediatric Gastroenterology & Nutrition; Maternal and Child Nutrition; Pediatrics; Peer J; Proceedings of the Royal Society B: Biological Sciences; Psychoneuroendocrinology

University Service

University of Colorado, Boulder

- 2023-24 Member, Social Sciences Divisional Council
- 2023-24 Member, Executive Committee, Department of Anthropology
- 2020-21 Creator and coordinator, Across CU Faculty Mentoring ([ACUMent](#)) Program, Office of Faculty Affairs
- 2020-21 Co-coordinator, [Faculty Leadership Institute](#), Office of Faculty Affairs
- 2020 Facilitator, Workshop on 'Work-Life Satisfaction', Office of Faculty Affairs and Center for Teaching and Learning
- 2020 Facilitator, Workshop on 'Fostering Wellbeing in Your Graduate Student Mentees', Office of Faculty Affairs
- 2018-19 ARPAC Internal Review Committee Member (Department of Integrative Physiology)
- 2018-19 Facilitator, Faculty Teaching Excellence Program Symposium ('Teaching Large Classes')
- 2017-19 Chair, Climate Committee, Department of Anthropology
- 2017- 21 Faculty Advisor, Biological Anthropology Graduate Student Registered Student Organization
- 2016-17 Climate Survey Analysis Committee, Department of Anthropology
- 2016-18 Advisory Board Member, Center to Advance Research and Training in Social Sciences

2016-17 Arts and Sciences Member, Administrator Evaluation Committee

2014-16 Anthropology Representative, Boulder Faculty Assembly

2013-16 Graduate Program Committee, Department of Anthropology

2013-16 Honors Council, University of Colorado Honors Program

2013-16 ASSETT Advisory Committee, College of Arts & Sciences

George Washington University

2011-12 Steering Committee, Breastfeeding Friendly University Project

2011 Anthropology Department Search Committee

2010-11 Columbian College - GPAC Science Subcommittee

2004-11 Hominid Paleobiology Admissions and Steering Committees

2008-10 Colonial Inauguration Advising

2008-09 Anthropology Department Curriculum Committee

2007-09 Anthropology Department Website Committee

2006-12 Head undergraduate advisor, Department of Anthropology

2005-09 Anthropology Department Graduation & Commencement

2005-08 Cotlow Student Research Awards Committee

2005 Anthropology & Psychology Department Search Committees

2004-12 Major advisor, Biological Anthropology

2004-05 Anthropology Department Bylaws Revision Committee

PROFESSIONAL MEMBERSHIPS

American Association of Biological Anthropologists

Human Biology Association

International Primatological Society