CURRICULUM VITAE
Liza J. Shapiro

Department of Anthropology
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Professional Appointments:
2008-present Professor, Department of Anthropology, University of Texas at Austin
2011-2014 Associate Chair, Department of Anthropology, University of Texas at Austin
1997-2008 Associate Professor, Department of Anthropology, University of Texas at Austin
1990-1997 Assistant Professor, Department of Anthropology, University of Texas at Austin

Editorial Appointments:
2005-2010 Associate Editor, *American Journal of Physical Anthropology*
2004-2007 Associate Editor, *Journal of Human Evolution*

Education:
Ph.D. 1991 Anthropology, State University of New York at Stony Brook.
Dissertation: Functional Morphology of the Primate Spine with Special Reference to Orthograde Posture and Bipedal Locomotion.

M.A. 1989 Anthropology, State University of New York at Stony Brook
B.A. 1983 Anthropology/Psychology, State University of New York at Albany, Summa Cum Laude.

Current Research:
Functional morphology and evolution of primate locomotor adaptations
Ontogeny of locomotion in primates
Comparative anatomy and function of the vertebral musculoskeletal system in primates
Kinematics of primate locomotion
Reconstruction of locomotor behavior in fossil primates.

Professional and Honor Society Memberships:
American Association of Physical Anthropologists
Texas Association of Biological Anthropologists
Member, Clinically Applied Rehabilitation Engineering (CARE) Initiative, UT Austin, Cockrell School of Engineering
Phi Beta Kappa

Peer-reviewed publications:

(Under review) Dunham, N.T., McNamara, A., Shapiro, L.J., Hieronymus,, T. and Young J.W. Free-ranging primates largely use diagonal sequence gaits regardless of substrate diameter. *Biology Letters*.

(Under review) Boyer, D.M. Yapuncich G.S., Dunham, N.T., McNamara, A., Shapiro, L.J. Hieronymus,T.L., Young J.W. My branch is your branch: Talar morphology correlates with relative substrate size in platyrrhines at Tiputini Biodiversity Station, Ecuador. *Journal of Human Evolution.*

(Under review) Shapiro, L.J. and Russo, G.A. Vertebral morphology in hominoids II- The lumbar spine. In: Been E, Gómez-Olivencia A, and Kramer PA.(Eds). *Spinal Evolution: Morphology, Function, and Pathology of the Spine in Hominoid Evolution*. Springer.

2019 Shapiro, L.J. and Kemp, A.D. Functional and developmental influences on intraspecific variation in catarrhine vertebrae *American Journal of Physical Anthropology* 168:131-144. DOI: 10.1002/ajpa.23730

2019 Dunham, N.T., McNamara, A., Shapiro, L.J., Phelps, T., Wolfe A. and Young J.W. Locomotor kinematics of tree squirrels (*Sciurus carolinensis*) in free-ranging and laboratory environments: Implications for primate locomotion and evolution. *Journal of Experimental Zoology*. 331:103-119. DOI: 10.1002/jez.2242

2018 Dunham, N.T., McNamara, A., Shapiro, L.J., Hieronymus,, T. and Young J.W. A user's guide for the quantitative analysis of substrate characteristics and locomotor kinematics in free-ranging primates. *American Journal of Physical Anthropology.*167: 569-584. DOI: 10.1002/ajpa.23686

2018 Young, J.W. and Shapiro, L.J. Developments in development: what have we learned from primate locomotor ontogeny? *American Journal of Physical Anthropology.*165:37-71.

2018 Zeininger, A., Schmitt, D., Jensen, J.L., and Shapiro, L.J. Ontogenetic changes in foot strike pattern and calcaneal loading during walking in young children. *Gait and Posture.* 59:18-22.

2017 Zeininger, A., Shapiro, L.J. and Raichlen D. Ontogenetic changes in limb postures and their impact on effective limb length in baboons (*Papio cynocephalus*). *American Journal of Physical Anthropology.* 163:231-241

2017 Shapiro, L.J. and Young, J.W. Biomechanics of primate locomotion. *International Encyclopedia of Primatology*, A. Fuentes, Ed. John Wiley and Sons.

2017 Shapiro, L.J. and Young, J.W. Quadrupedalism. *International Encyclopedia of Primatology*, A. Fuentes, Ed. John Wiley and Sons.

2016 Shapiro, L.J., Kemp, A.D., and Young, J.W. Effects of substrate size and orientation on quadrupedal gait kinematics in mouse lemurs (*Microcebus murinus*). *Journal of Experimental Zoology.* 325A:329-343.

2014 Shapiro, L.J., Cole, W.G., Young, J.W., Raichlen, D.A., Robinson, S.R., and Adolph, K.E. Human quadrupeds, primate quadrupedalism, and Uner Tan Syndrome. PLOS ONE 9 (7): e101758. doi:10.1371/journal.pone.0101758

2014 Shapiro, L.J., Young, J.W. and Vandeberg, J.L. Body size and the small branch niche: Using marsupial ontogeny to model primate locomotor evolution. *Journal of Human Evolution.* 68:14-31.

2013 Raichlen, D.A., Pontzer, H., and Shapiro, L.J. A new look at the Dynamic Similarity Hypothesis: the importance of swing phase. *Biology Open.* 2:1032-1036.

2013 Russo, G.A. and Shapiro, L.J. Reevaluation of the lumbosacral region of *Oreopithecus bambolii*. *Journal of Human Evolution.* 65:253-265

2012 Shapiro, L.J., and Young, J.W. Kinematics of quadrupedal locomotion in sugar gliders (*Petaurus breviceps*): Effects of age and substrate size. *Journal of Experimental Biology.* 215:480-496.

2011 Russo, G.A. and Shapiro, L.J. Morphological correlates of tail length in the catarrhine sacrum. *Journal of Human Evolution*. 61:223-232.

2011 Shapiro, L.J., Young, J.W. and Souther, A. Quadrupedal locomotion of *Saimiri boliviensis*: A comparison of field and lab-based kinematic data. In D'Août, K. and E.E. Vereecke, Eds. *Primate Locomotion: Linking Field and Laboratory Research. Developments in Primatology : Progress and Prospects*. Springer, pp. 335-356.

2010 Shapiro, L.J., and Young, J.W. Is primate-like quadrupedalism necessary for fine-branch locomotion? A test using sugar gliders (*Petaurus breviceps*). *Journal of Human Evolution.* 58: 309-319.

2009 Raichlen, D., Pontzer H., Shapiro, L. and Sockol, M. Understanding hind limb weight support in chimpanzees with implications for the evolution of primate locomotion. *American Journal of Physical Anthropology.* 138: 395-402.

2007 Whitcome K.K, Shapiro L.J, and Lieberman D.E. Fetal load and the evolution of lumbar lordosis in bipedal hominins. *Nature*. 450:1075-1078.

2007 Shapiro, L. and Raichlen, D. Primate gaits and arboreal stability: A Response to Cartmill et al. *American Journal of Physical Anthropology*.133:825-827.

2007 Shapiro L. Morphological and functional differentiation in the lumbar spine of lorisids and galagids. *American Journal of Primatology.*39:86-102.

2006 Godfrey, L.R.,Jungers, W.L., Burney, D.A., Vasey, N, Ramilisonina, Wheeler, W., Lemelin, P., Shapiro, L.J., Schwartz, G.T., King, S.J., Ramarolahy, M.F., Raharivony, L.L., Randria, G.F.N. New discoveries of skeletal elements of *Hadropithecus stenognathus* from Andrahomana Cave, southeastern Madagascar. *Journal of Human Evolution*. 51:395-410.

2006 Shapiro L, and Raichlen D. Limb proportions and the ontogeny of quadrupedal walking in infant baboons (*Papio cynocephalus*). *Journal of Zoology.* 269:191-203.

2005 Shapiro L, Seiffert C, Godfrey L, Jungers W, Simons E, and Randria G. Morphometric analysis of lumbar vertebrae in extinct Malagasy strepsirrhines. *American Journal of Physical Anthropology.* 128:823-839.

2005 Shapiro L, and Raichlen D. Lateral sequence walking in infant *Papio cynocephalus*: Implications for the evolution of diagonal sequence walking in primates. *American Journal of Physical Anthropology.* 126:205-213.

2002 Shapiro L, and Simons C. Functional aspects of strepsirrhine lumbar vertebral bodies and spinous processes. *Journal of Human Evolution*. 42:753-783.

2001 Shapiro L, Demes B, and Cooper J. Lateral bending of the lumbar spine during quadrupedalism in strepsirhines. *Journal of Human Evolution*. 40:231-259.

1998 Johnson S, and Shapiro L. Positional behavior and vertebral morphology in atelines and cebines. *American Journal of Physical Anthropology* 105(3):333-354.

1997 Shapiro L, Anapol F, and Jungers W. Interlimb coordination, gait, and neural control during quadrupedalism in chimpanzees. *American Journal of Physical Anthropology* 102(2):177-186.

1995 Shapiro, L. Functional morphology of indrid lumbar vertebrae. *American Journal of Physical Anthropology* 98(3):323-342.

1994 Shapiro L, and Jungers W. Electromyography of back muscles during quadrupedal and bipedal walking in primates. *American Journal of Physical Anthropology* 93:491-504.

1994 Duncan A, Kappelman J, and Shapiro L. Metatarsophalangeal joint function and positional behavior in *Australopithecus afarensis*. *American Journal of Physical Anthropology* 93(1):67-81.

1993 Shapiro L. Evaluation of "unique" aspects of human vertebral bodies and pedicles with a consideration of *Australopithecus africanus*. *Journal of Human Evolution* 25(6): 433-

470.

1993 Shapiro L. Functional morphology of the vertebral column in primates. In (D. Gebo, ed.): *Postcranial Adaptation in Nonhuman Primates*. Northern Illinois University Press, pp.121-149.

1988 Shapiro L, and Jungers W. Back muscle function during bipedal walking in chimpanzee and gibbon: implications for the evolution of human locomotion. *American Journal of Physical Anthropology* 77(2):201-212.

Book Reviews:

2015 Shapiro L. Book review of *Primate Comparative Anatomy*, D.L. Gebo (2014). Johns Hopkins University Press. *J. Mammalogy* doi: 10.1093/jmammal/gyv086.

1999 Shapiro L. Book Review of *Primate Locomotion: Recent Advances*, E. Strasser, J. Fleagle, A. Rosenberger, and H. McHenry, (eds). (1998). New York: Plenum Press. *American Journal of Physical Anthropology* 109:561-563

1992 Shapiro L. Book Review of: Gravity, Posture and Locomotion in Primates, F.K. Jouffroy, M.H. Stack, and C. Niemitz, (eds) (1990), Il Sedicesimo: Firenze. *American Journal of Primatology*, 26:225-228.

Digital publications:

1998 Kappelman J, Duncan A, Scott R, Shapiro L, Bramblett C, Ryan T, Seiffert E, and Weiner G. Lab 2: Levers and Limbs:Introduction to Primate Functional Morphology. In J Kappelman (ed): Virtual Laboratories in Physical Anthropology on CD ROM. Wadsworth Publishing Co.

1998 Kappelman J, Duncan A, Scott R, Shapiro L, Bramblett C, Ryan T, Seiffert E, and Weiner G. Lab 3: Primates in Motion. In J Kappelman (ed): Virtual Laboratories in Physical Anthropology on CD ROM. Wadsworth Publishing Co.

1998 Kappelman J, Kirk C, Seiffert E, Shapiro L, Bramblett C, Ryan T, Scott R, and Weiner G. Lab 4: Primate Diets and Feeding Behaviors. In J Kappelman (ed): Virtual Laboratories in Physical Anthropology on CD ROM. Wadsworth Publishing Co.

Media coverage of research

2018 Interviewed by NPR on spinal posture and global health for Morning Edition, https://www.npr.org/sections/health-shots/2018/02/26/587735283/lost-art-of-bending-over-how-other-cultures-spare-their-spines

2018 https://arstechnica.com/science/2018/02/science-after-hours-barneys-aquatic-traits-and-how-pregnant-women-stay-upright/

2014 Online coverage of Shapiro et al., Human quadrupeds, primate quadrupedalism, and Uner Tan Syndrome. PLoS ONE 9 (7): e101758 including Washington Post, Science, Nature World News, LiveScience, PhysOrg, Heritage Daily, International Business Times, Science 2.0, Daily Mail, Fox News, Huffington Post, IFL Science, other national and international news media affiliates as well as UT-related coverage (Daily Texan, Alcalde).

2013 Online coverage of Russo GA and Shapiro LJ, Reevaluation of the lumbosacral region of *Oreopithecus bambolii* (Journal of Human Evolution 65 [3], 253-265), including Huffington Post Science, Yahoo News, NBC News, Science Daily, LiveScience, Sciences and Avenir, Discovery News, Nature World News, Heritage Daily, Sci-News and other national and international news media affiliates.

2009 Extensive media coverage as recipient of 2009 "Ig Nobel" prize in physics (award sponsored by the Annals of Improbable Research).

2008 Research featured on UT Austin research websites
http://www.utexas.edu/research/features/story.php?item=2838
http://www.utexas.edu/opa/blogs/research/2008/12/16/getting-started/

2007 Extensive media coverage of Whitcome K.K, Shapiro L.J, and Lieberman D.E. Fetal load and the evolution of lumbar lordosis in bipedal hominins. *Nature*. 450:1075-1078, including NPR/Morning Edition, The New York Times, Associated Press, and numerous other national and international news media affiliates.

2001 My research on primate anatomy and locomotion was highlighted on a PBS documentary entitled "The Great Transformations", one of a 7 part series entitled "Evolution". A Powderhouse Productions film for WGBH-TV and Clear Blue Sky Productions . (Airdate: 9/25/01).

2002 My research was highlighted on the UT Austin website, Support UT: "Monkey Business Adds to Evolutionary Science" (http://www.utexas.edu/supportut/news_pub/ts_monkeys.html)

2006 Interviewed and quoted for article in news@Nature.com (http://www.nature.com/news/2006/060717/full/060717-17.html)

Professional Presentations (listed as published abstracts where available):

2018 McNamara, A., Dunham, N.T., Young J.W., and Shapiro, L.J. Meeting a challenge: Quadrupedal gait kinematics and substrate disruptions in wild *Saimiri sciureus*. American

Society of Primatologists.

2018 Dunham, N.T., McNamara, A., Shapiro, L.J., Phelps, T. and Young J.W. A user's guide for the quantitative analysis of substrate characteristics and locomotor kinematics in free-ranging primates. International Primatological Society Congress, Nairobi, Kenya.

2018 Shapiro, L. Opening remarks. Symposium: The necessity of experimental research in primate functional morphology: an homage to the Stony Brook Primate Locomotion Laboratory. American Association of Physical Anthropology.

2018 Dunham, N.T., McNamara, A., Shapiro, L.J. and Young J.W. Gaits gone wild: spatiotemporal kinematics of tree squirrels (*Sciurus carolinensis*) in laboratory and free-ranging environments. Annual meeting, American Association of Physical Anthropologists. *American Journal of Physical Anthropology* Vol. 165. Supplement S66:73

2018 McNamara, A., Dunham, N.T., Shapiro, L.J. and Young J.W. New techniques for the quantitative analysis of locomotor kinematics in free-ranging primates. Annual meeting, American Association of Physical Anthropologists. *American Journal of Physical Anthropology* Vol. 165. Supplement S66:173

2018 Heard-Booth, A.N., Sanders, W.J. and Shapiro L.J. Morphometric Analysis of the Stw-431 (*Australopithecus africanus*) lumbar vertebral series. Annual meeting, American Association of Physical Anthropologists. *American Journal of Physical Anthropology* Vol. 165. Supplement S66:115

2017 Shapiro, L.J. and Kemp, A.D. Intraspecific variation in strepsirrhine vertebral morphology. Texas Association of Biological Anthropologists. Annual meeting, University of Texas at San Antonio.

2017 McNamara, A., Dunham, N.T., Shapiro, L.J. and Young J.W. Introducing methods for quantifying quadrupedal kinematics in free-ranging primates. Texas Association of Biological Anthropologists. Annual meeting, University of Texas at San Antonio.

2017 Shapiro, L.J., Heard-Booth, A.N. and Young, J.W. Quadrupedal locomotion in the "real" world: how do small mammals adjust limb kinematics in response to substrate variation? IEEE International Workshop on Advanced Robotics and its Social Impacts, Austin, TX

2017 Shapiro, L.J. and Kemp A.D. Intraspecific variation in hominoid vertebral morphology: effects of column position and locomotor adaptation. (Invited paper for 2017 AAPA symposium: The axial skeleton: morphology, function, and pathology of the spine and

thorax in hominoid evolution). *American Journal of Physical Anthropology* Vol. 162. Supplement S64:356.

2016 Shapiro, L.J. and Kemp, A.D. Developmental and biomechanical perspectives on vertebral intraspecific variation in hominoids. Texas Association of Biological Anthropologists. Annual meeting, University of Texas at Austin.

2016 Kemp AD, Shapiro, LJ. Ape locomotor behavior and constraints on intraspecific variation in vertebral morphology. New Directions in Anthropology, UT Austin.

2016 Heard-Booth, A.N. and Shapiro, L.J. The effects of speed and foot shape on foot loading in an ontogenetic and adult human sample. CARE (Clinically Applied Rehabilitation Engineering) First Annual Research Day, University of Texas at Austin.

2016 Shapiro, L.J., Chadwell, B.A., and Young, J.W. Tail kinematics during asymmetrical gaits in mouse lemurs (*Microcebus murinus*). *American Journal of Physical Anthropology*. Vol. 159. Supplement S62: 288-289.

2016 Kemp, A.D. and Shapiro, L.J. Intraspecific variation in hominoid lumbar vertebral morphology. *American Journal of Physical Anthropology.* Vol. 159. Supplement S62:189.

2014 Shapiro, L.J., Kemp, A.D., and Young, J.W. Kinematic adjustments to substrate size and orientation during asymmetrical gaits in mouse lemurs *(Microcebus murinus) American Journal of Physical Anthropology.* Vol. 153. Supplement 58:237.

2013 Barr, W.A., Nachman, B., and Shapiro, L.J. The academic phylogeny of Physical Anthropology. Annual meeting, Texas Association of Biological Anthropologists, Austin, TX.

2013 Sayre, M.K. and Shapiro L.J. The effect of forelimb mass distribution on the function of arm swinging during human bipedalism. Undergraduate Research Symposium, Annual meeting, American Association of Physical Anthropologists.

2013 Chadwell, B.A., Young, J.W., and Shapiro, L.J. A Comparative look at tail movement during narrow branch locomotion. Annual meeting, *Society for Integrative and Comparative Biology.*

2012 Russo, G.A. and Shapiro, L.J. Reevaluation of the lumbosacral region of *Oreopithecus bambolii*. Annual meeting, Texas Association of Biological Anthropologists, Baylor College of Dentistry, Dallas, Texas.

2012 Shapiro, L.J., Young, J.W. and Vandeberg, J.L. The origin and evolution of primate quadrupedalism: insights from marsupials. *American Journal of Physical Anthropology*.

Vol. 147. Supplement 54:268.

2012 Heard-Booth,A.N., Shapiro, L.J. and Young, J.W. Limb excursion patterns of an arboreal marsupial (*Petaurus breviceps*) vary with substrate size and inclination . *American Journal of Physical Anthropology.* Vol. 147. Supplement 54:162-163.

2011 Heard-Booth,A.N., Shapiro, L.J. and Young, J.W. Effects of substrate size and inclination on the limb excursion patterns of an arboreal marsupial (*Petaurus breviceps*). Annual meeting, Texas Association of Biological Anthropologists, Texas State University, San Marcos, Texas.

2011 Young, J.W., Shapiro, L.J., Souther, A. and Sousaris, N. Patterns of gait selection in free-ranging primates in Manu National Park, Peru. Annual meeting, Midwest Primate Interest Group, Kent State University.

2011 Shapiro, L.J. , and Young, J.W. Stride length, stride frequency and ontogeny: are arboreal marsupials dynamically similar to primates? *American Journal of Physical Anthropology.* Vol. 144. Supplement 52:271.

2010 Shapiro, L.J. , and Young, J.W. Using locomotor ontogeny to understand the interaction between small body size and arboreal locomotion: a case study using sugar gliders (*Petaurus breviceps*). (Invited paper for AAPA symposium), *American Journal of Physical Anthropology.* Supplement 50:271-272.

2010 Shapiro, L.J. , and Young, J.W. Making great strides: a marsupial perspective on primate quadrupedalism. Annual meeting, Texas Association of Biological Anthropologists, Baylor University, Waco, Texas.

2010 Russo, G.A. and Shapiro, L.J. Comparative sacrocaudal anatomy in catarrhines. *American Journal of Physical Anthropology.* Supplement 50:255-256.

2009 Russo, G.A. and Shapiro, L.J. Morphological correlates of tail length and mobility in the primate sacrum. Annual meeting, Texas Association of Biological Anthropologists.

2009 Shapiro L.J. and Young J.W. The effects of substrate size on quadrupedal locomotion in a small-bodied arboreal marsupial, *Petaurus breviceps* (sugar glider). *American Journal of Physical Anthropology.* Supplement 48:236.

2009 Russo, G.A. and Shapiro, L.J. Trabecular Morphology of the sacrum in humans and other primates. Annual conference, Anthropology Graduate Students Associaton, University of Texas at Austin.

2009 Zeininger A., Shapiro L.J., and Raichlen D.A. The effects of digitigrade cheiridial postures on speed and gait in infant baboons. *American Journal of Physical Anthropology.* Supplement 48:279.

2009 Heard, A.N. , Shapiro L.J. and Young, J.W. The effects of substrate diameter on the locomotor kinematics of an arboreal marsupial (*Petaurus breviceps*): implications for understanding primate quadrupedalism. Annual meeting, Anthropology Graduate Students Association, University of Texas at Austin, April 17-18, 2009.

2008 Shapiro, L.J., Zeininger, A., and VandeBerg, J.L. The influence of body size and substrate size on quadrupedalism in *Monodelphis domestica*. *American Journal of Physical Anthropology* Supplement 46:190-191.

2008 Zeininger, A., Shapiro, L.J., and Raichlen, D.A. The effects of digitigrade cheiridial postures on speed and gait in infant baboons. Society for Integrative and Comparative Biology, 2008 Annual Meeting.

2008 Whitcome, KW, Shapiro L.J., and Lieberman, D.E. Fetal load adaptations in the axial skeleton of early bipeds: *Australopithecus africanus*. Society for Integrative and Comparative Biology, 2008 Annual Meeting.

2007 Shapiro, L.J., Zeininger, A., and VandeBerg, J.L. Small body size and the evolution of primate quadrupedalism. Texas Biological Anthropologists Consortium, First Annual Conference, University of Texas at Austin.

2007 Raichlen, DA, and Shapiro LJ. The evolution of mammalian locomotor biomechanics: adaptations or spandrels? 8th International Congress of Vertebrate Morphology, Paris.

2007 Shapiro, L.J. and Raichlen, DA. Center of mass position, quadrupedalism, and stability: Where do primates fall? (Invited paper for AAPA symposium) *American Journal of Physical Anthropology* Supplement 44:215.

2007 Zeininger, A., Shapiro, L., and Raichlen ,D. Ontogeny of digitigrade hand and foot postures in infant baboons (*Papio cynocephalus*). *American Journal of Physical Anthropology* Supplement 44:255.

2005 Shapiro, L. Morphological and functional differentiation in the lumbar spine of lorisoids (Invited paper for AAPA symposium). *American Journal of Physical Anthropology* Supplement 40:188-189

2005 Godfrey, L.R., Jungers, W.L., Schwartz, G.T., Lemelin, P., Shapiro, L.J., Burney, D.A., Wheeler, W., Cuozzo, F. and Vasey, N. New discoveries of *Hadropithecus stenognathus*, subfossil lemur of Madagascar. *American Journal of Physical Anthropology* Supplement 40:107.

2003 Shapiro, L, and Raichlen, D. Locomotor development and the uniqueness of primate quadrupedalism. *American Journal of Physical Anthropology*. Supplement 36:189-190.

2002 Raichlen, D and Shapiro, L. Swing phase and the use of diagonal sequence gait in primates. *American Journal of Physical Anthropology*. Supplement 34:128-129.

2001: Shapiro, L, and Raichlen, D. Ontogeny of gait in *Papio cynocephalus*. *American Journal of Physical Anthropology*. Supplement 32:135.

2000: Shapiro L, Demes B, and Cooper J. The role of lateral bending of the spine in prosimian quadrupedalism. *American Journal of Physical Anthropology*. Supplement 30:279.

1999: Shapiro L, and Cooper J. Utilization of video and motion analysis software in the study of primate locomotor kinematics. *American Journal of Primatology*. 49:100-101.

1998: Simons, C and Shapiro L. Lumbar form and function in subfossil lemurs. XVII Congress of the International Primatological Society, University of Antananarivo, Madagascar.

1998: Shapiro L, and Demes B. Size, speed and kinematics in *Loris* and *Nycticebus*. *American Journal of Physical Anthropology* Supplement 26:200-201.

1998: Simons, C and Shapiro L. Functional variation in the vertebral morphology of prosimians. *American Journal of Physical Anthropology* Supplement 26:202.

1997: Johnson S, and Shapiro L. Positional behavior and vertebral morphology in atelines and cebines. *American Journal of Physical Anthropology* Supplement 24:137.

1996 Shapiro L, and Demes B. Spinal kinematics in lorids and cheirogaleids. *American Journal of Physical Anthropology* Supplement 22:213.

1996 Ryan T, Scott R, Duncan A, Kappelman J, Shapiro L, Grant S, Lewis K, and Stearman R. Finite element analysis using a 3D laser scanner. *American Journal of Physical Anthropology* Supplement 22:206.

1995 Kappelman J, Bramblett C, and Shapiro L. A laboratory curriculum for introductory physical anthropology on CD ROM. *American Journal of Physical Anthropology* Supplement 20:122-123.

1994 Shapiro L, Jungers W, Godfrey L, and Simons, E. Vertebral morphology of extinct lemurs. *American Journal of Physical Anthropology* Supplement 18:179-180.

1993 Shapiro L. Functional morphology of indrid vertebrae. *American Journal of Physical Anthropology* Supplement 16:178.

1992 Shapiro L. Evaluation of "unique" functional characteristics of human lumbar vertebrae. *American Journal of Physical Anthropology* Supplement 14:149-150.

1992 Duncan A, Kappelman J, and Shapiro L. Functional morphology of the hominoid metatarsophalangeal joint with reference to Australopithecus afarensis. *American Journal of Physical Anthropology* 88:269.

1991 Shapiro L. Quadrupedalism and back muscle function in hominoids. *American Journal of Physical Anthropology* Supplement 12:160.

1990 Shapiro L. Vertebral morphology in the Hominoidea. *American Journal of Physical Anthropology* 81(2):294.

1989 Shapiro L, and Jungers W. Back muscle function during suspensory behaviors in chimpanzee, orangutan and gibbon. *American Journal of Physical Anthropology* 78(2):300.

1987 Shapiro L, Jungers W, and Stern J. Function of back and trunk muscles during bipedal walking in chimpanzee and gibbon. *American Journal of Physical Anthropology*. 72(2):253.

1984 Wilkinson R, Hodges D, Shapiro L, Smith D, and Ziac D. Chronic stress in a "healthy" prehistoric population. 24th Annual Conference, Northeastern Anthropological Association. *Abstracts with program*: p.52.

External Research Grants:

2016 *Principal Investigator*, National Science Foundation. Collaborative Research: Kinematics of quadrupedal locomotion in free-ranging primates: a comparative functional and phylogenetic analysis. (NEOMED collaborators: Jesse Young, PI; Tobin Hieronymus, Co-PI) ($134,120 to UT Austin, $393,113 total award)

2014 *Principal Investigator*, NSF Doctoral Dissertation Grant: Morphological and Functional Correlates of Variation in the Human Longitudinal Arch. (A. Heard-Booth, Co-PI)

2013 *Co-Principal Investigator*, Leakey Foundation. Morphological and Functional Correlates of Variation in the Human Longitudinal Arch. (PI/Dissertation research: A. Heard-Booth).

2012 *Principal Investigator*, National Science Foundation NSF Doctoral Dissertation Grant: The Functional Morphology of Mammalian Sacra and Caudal Vertebrae: Implications for tail loss and positional behaviors in extinct primates. (G. Russo, Co-PI).

2011 *Co-Principal Investigator*, Leakey Foundation The Functional Morphology of Mammalian Sacra and Caudal Vertebrae: Implications for tail loss and positional behaviors in extinct primates. (PI/ Dissertation research: G. Russo).

2010 *Principal Investigator*, National Science Foundation. NSF Doctoral Dissertation Grant: Ontogeny of Bipedalism: Pedal Mechanics and Trabecular Bone Morphology. (A. Zeininger, Co-PI)

2010 *Co-Principal Investigator*, Leakey Foundation: Ontogeny of Bipedalism: Pedal Mechanics and Trabecular Bone Morphology. (PI/Dissertation research:A. Zeininger)

2007-2011 *Principal Investigator*, National Science Foundation: Locomotor ontogeny in *Microcebus murinus*, *Petaurus brevicep*s and *Monodelphis domestic*a: The influence of very small body size on the evolution of primate quadrupedal locomotion. (E.C. Kirk, Co-PI) ($226, 192).

2008 *Principal Investigator*, National Science Foundation REU Award (Research Experience for Undergraduates): Locomotor ontogeny in *Microcebus murinus*, *Petaurus brevicep*s and *Monodelphis domestic*a: The influence of very small body size on the evolution of primate quadrupedal locomotion. ($3600).

2006 *Principal Investigator* National Science Foundation. NSF Doctoral Dissertation Grant: Ecological and Morphological Correlates of Infraorbital Foramen Size and its Paleoecological Implications. (Magadalena Muchlinski, Co-PI)

2004 *Principal Investigator* National Science Foundation. NSF Doctoral Dissertation Grant: Bipedal Obstetric Load and the Evolution of Human Lumbopelvic Sexual Dimorphism. (K. Whitcome, Co-PI)

2003 *Principal Investigator* National Science Foundation. NSF Doctoral Dissertation Grant:The Relationship Between Limb Shape and Locomotor Mechanics and Energetics. (D. Raichlen, Co-PI)

2003 *Co-Principal Investigator*, Leakey Foundation. Bipedal Obstetric Load and the Evolution of Human Lumbopelvic Sexual Dimorphism. (PI/Dissertation research: K. Whitcome).

2002 *Co-Principal Investigator*, Leakey Foundation. The Relationship Between Limb Shape and Locomotor Mechanics and Energetics. (PI/Dissertation research: D. Raichlen)

2001 *Principal Investigator*, Leakey Foundation: Ontogeny of Primate Quadrupedal Locomotion and the Evolution of Primate Gait. ($12, 304).

1997-1999 *Principal Investigator* National Science Foundation (Co-funded by Physical Anthropology and Ecological and Evolutionary Physiology): Functional Morphology and Kinematics of the Spine in Prosimians. ($50, 562).

1998 *Principal Investigator* National Science Foundation REU Award (Research Experience for Undergraduates: Functional Morphology and Kinematics of the Spine in Prosimians. ($4000).

1989: *Co-Principal Investigator*, National Science Foundation. Doctoral Dissertation Improvement Grant (Anthropology): Functional Morphology of the Hominoid Back. (W. Jungers, PI)

Internal Research Grants and Awards

2016 Faculty Research Assignment award, University of Texas at Austin: Kinematics of Quadrupedal Locomotion in Free-Ranging Primates

2010 Faculty Research Assignment award, University of Texas at Austin: The influence of very small body size on the evolution of primate quadrupedal locomotion.

2010 Undergraduate Research Apprenticeship, College of Liberal Arts, UT Austin. Student: Rebecca Ross. ($2000)

2009 Special Research Grant, University of Texas at Austin. Evaluation of a microscopic quantitative approach for determining taillessness in fossil primates. ($750)

2008 Undergraduate Research Apprenticeship, College of Liberal Arts, UT Austin. Student: Elissa Ludeman. ($2000)

2008 Special Research Grant, University of Texas at Austin: Analysis of trabecular morphology of the sacrum in humans and other primates. ($750)

2005 Faculty Research Assignment award, University of Texas at Austin: Locomotor Ontogeny and the Evolution of Quadrupedalism in Primates and Other Mammals.

1999 Faculty Research Assignment award, University of Texas at Austin: Form, Function, and Evolution of the Spine in Prosimians and Early Fossil Primates.

1994 URI Special Research Grant, University of Texas at Austin: Kinematics of the Spine in Prosimians.

1992 URI Special Research Grant, University of Texas at Austin: Functional Morphology of the Lorisid Spine.

1992 URI Summer Research Award, University of Texas at Austin: Functional Morphology of the Primate Spine.

1992 URI Special Research Grant, University of Texas at Austin: Vertebral Anatomy and Locomotor Behavior in *Propithecus*.

Instructional Technology Grants:

2012-2013 Liberal Arts Information Technology Services University of Texas at Austin Classroom Infrastructure Grant (Anthony Di Fiore, senior PI with Liza Shapiro, Rebecca Lewis, Chris Kirk, and Mariah Hopkins). Technologies for training in behavioral and ethnographic data collection and analysis. ($4,194).

2004-2005 Liberal Arts Instructional Technology Grant, University of Texas at Austin Using Computer Technology To Enhance Teaching And Learning About Primate Anatomy And Evolution ($26,939).

2002-2003 Liberal Arts Instructional Technology Grant, University of Texas at Austin Using Computer Technology To Enhance Teaching And Learning About Primate Anatomy And Evolution ($18,597).

1998-1999 College of Liberal Arts, Vision Plan, University of Texas at Austin: Multimedia Teaching of Primate Anatomy and Evolution ($25,000).

1994-1997 *Co-Principal Investigator*, National Science Foundation (Undergraduate Education): A Laboratory Curriculum for Physical Anthropology on CD ROM (J. Kappelman, PI and C. Bramblett, Co-PI) ($196,898).

1995 *Co-Principal Investigator*, National Science Foundation, Research Experience for Undergraduates: A laboratory curriculum for physical anthropology on CD ROM (J. Kappelman, PI and C. Bramblett, Co-PI) ($5,000).

1991 *Co-Principal Investigator*. Apple Computer and Project Quest, University of Texas at Austin: Physical Anthropology Hypercard Laboratories for the Macintosh (C. Bramblett, J. Kappelman, Co-PIs)

Awards:

2009 “Ig Nobel” prize in physics, Annals of Improbable Research. (with K. Whitcome and D. Lieberman). For “research that first makes you laugh, then makes you think”. Accompanied by extensive media attention.

2004 Innovative Instructional Technology Award, University of Texas at Austin: “Interactive Laboratory Modules: Methodological Approaches to the Study of Primate Anatomy and Locomotion” (with D Raichlen).

1997 Innovative Instructional Technology Award, University of Texas at Austin: Computer-Based Multimedia "Virtual Laboratories and Examinations in Physical Anthropology (with J. Kappelman and C. Bramblett).

Invited Lectures

2018 and 2019 People are primates. Austin Center for Inquiry, Darwin Day event. Austin, Texas.

2018 Why pregnant women don't tip over. Invited lecture for Improbable Research Session, American Association for the Advancement of Science (AAAS) Annual Meeting, Austin, TX.

2016 Primate quadrupedalism and primate origins: Insights from marsupials and mouse lemurs, Department of Evolutionary Anthropology, Duke University.

2016 Primate locomotion and the evolution of human bipedalism. Keynote speaker, Science Expo, Austin Jewish Academy**.**

2016 Function and evolution of primate quadrupedalism. CARE Initiative group meeting, Department of Mechanical Engineering, University of Texas at Austin

2015 Blue Planet Freshman Interest Group (FIG) Seminar: Invited by students to discuss my research and career in Anthropology

2014 What can the study of quadrupedal walking reveal about primate evolution? Invited lecture, Department of Anthropology, Texas A&M University.

2013 The origin and evolution of primate quadrupedalism: insights from marsupials. Invited lecture, Dept. of Anatomy and Neurobiology, Northeast Ohio Medical University.

2012 The origin and evolution of primate quadrupedalism: insights from marsupials. Invited lecture, Paleo Brown Bag, Department of Geological Sciences, University of Texas at Austin.

2012 The origin and evolution of primate quadrupedalism: insights from marsupials. Invited lecture, Section of Integrative Biology, School of Biological Sciences, University of Texas at Austin.

2011 Primate locomotion and the evolution of human bipedalism. Invited lecture, McCraw Departmental Lecture Series, Department of Kinesiology and Health Education, University of Texas at Austin.

2011 The evolution of quadrupedalism in primates: insights from mouse lemurs and other small mammals. Invited lecture for "Mouse Lemur Genetics and Genomics: Emerging Opportunities", Workshop held at the Janelia Farm Research Campus of the Howard Hughes Medical Institute, June 22-24, 2011.

2010 What can the study of quadrupedal walking reveal about primate evolution? Invited lecture, Department of Veterinary Sciences Michale E. Keeling Center for Comparative Medicine and Research UT M. D. Anderson Cancer Center.

2006 Teaching with Technology: Primate anatomy and evolution. Invited lecture, UT Austin Liberal Arts Instructional Technology Services, 3rd Friday Presentations.

2006 Presentation on careers in physical anthropology. Invited lecture for Zilker Elementary School speaker series for 5th and 6th grade girls to promote interest in math and science.

2002 Developmental Transitions and Motion Analysis Technology: What Can Infant Monkeys Tell Us About The Evolution Of Primate Locomotion? Invited lecture: Leakey Foundation Annual Symposium, UT Austin.

2001 Shapiro, L. Kinematics of the lumbar spine during quadrupedalism in strepsirhine primates. Invited lecture for UT Austin Integrative Biology Seminar.

1996 "Functional morphology of primate lumbar vertebrae." Invited lecture: Brown University, Departmental Seminar, Department of Ecology and Evolutionary Biology.

1994 "The evolution of human bipedalism." Invited lecture: University of Texas Anthropological Society, University of Texas at Austin.

1994 "The evolution of human bipedalism." Invited lecture: Dean's Scholars, College of Natural Sciences, University of Texas at Austin.

Graduate students supervised, University of Texas at Austin (Department of Anthropology except where otherwise noted):

M.A. Supervisor:
Cornelia Simons (M.A. 1998)
David Raichlen (M.A. 2000)
Magdalena Muchlinski (Co-Chair) (M.A. 2002)
Angel Zeininger (M.A. 2007)
Amy Hallberg (M.A. 2008)
Allison McNamara (current)
Emma Curtis (current)

Ph.D. Supervisor:
David Raichlen (Ph.D. 2004)
Katherine Whitcome (Ph.D.2006)
Magdalena Muchlinski (Co-supervisor) (Ph.D. 2008)
Gabrielle Russo (Ph.D. 2013)
Angel Zeininger (Ph.D. 2013)
Maria Darr (2013-2016)
Amber Heard-Booth (Ph.D expected 2017)
Madelynne Dudas (current)

Committee member, M.A.
Steig Johnson (M.A. 1995)
Marsha Robbins(M.A. 1995)
Joy Becker, (M.A. 1996)
Naomi Cleghorn(M.A. 1996)
Leah Buhl (M.A. 1997)
Murat Maga (M.A. 2001)
Carrie Veilleux (M.A. 2006)
Matthew Kilberger (M.A 2007)
Addison Kemp (M.A. 2013)
Ingrid Lundeen (M.A. 2017)
Amy Atwater (M.A. 2017)

Committee member, Ph.D.
Linda Brent (Ph.D. 1995)
Elizabeth Erhart (Ph.D. 1996)
Alice Fitch
Alex Duncan (Ph.D. not completed)
Christina Grassi (Ph.D. 2001)
Steig Johnson (Ph.D. 2002)
Robert Scott (Ph.D. 2004)
Joyce Parga (Ph.D. 2006)
Stacet Tecot (Ph.D. 2008)
Laura Alport (Ph.D. 2009)
Carrie Veilleux (Ph.D. 2012)
William Andrew Barr (Ph.D. 2014)
Addison Kemp (current)
Brett Nachman (current)
Chris Davis (current)
Ingrid Lundeen (current)
James Proffitt (current) (UT Austin Dept. of Geological Sciences)
Lauren English (current) (UT Austin Dept. of Geological Sciences)

External committee member or reader, Ph.D.
Xinmin Chen, (Ph.D. 2005, University of Western Australia)
Thierra Nalley, (Ph.D. 2013, Arizona State University
Katrina Jones, (Ph.D. 2014, Johns Hopkins University)
Rebekah Dawson (Ph.D. 2015, University of Western Australia)

Undergraduate Research and Honors Theses Supervised

2015-2017 The physics of snare drumming. **Student: Aundre Wesley.**

2017 Effect of pregnancy on posture and back pain. Bridging Disciplines Program, UT Austin.

Student: Katie Kindle.

2013 The effect of forelimb mass distribution on the function of arm swinging during human bipedalism. (Honors thesis, UT Austin, Department of Anthropology). **Student: Katie Sayre**

2009 The Prevalance of Dystocia in *Saimiri* in Relation to Pelvic Size, Infant Cranial Dimensions, and Reproductive History. (Honors Thesis, UT Austin, Department of Anthropology). **Student: Rachel Sievert**

2002-2003 Undergraduate Research Fellowship award, University of Texas at Austin. Comparative Kinematics of Primate and Chameleon Locomotion and Implications for the Evolution of Primate Quadrupedalism (Honors Thesis, UT Austin Department of Anthropology) **Student: Rachel Dunn**

2002-2003 Undergraduate Research Fellowship award, University of Texas at Austin. Correlating Interspecies Variation in Hylobatid Canine Size and Morphology with Dietary Differences (Honors Thesis, UT Austin Dept. of Anthropology) **Student: Alice Elder**

1990-1991 New Methods for Quantitative Analysis of Primate Phalanges with Special Reference to the Flexor Sheath Ridges of the Hominoidea. (Honors Thesis, UT Austin Department of Anthropology) **Student**: **Martin Cohn**

Advising and Related Student Service:

Graduate Advisor, Department of Anthropology: 4 years (1999-2003)

Faculty mentor, College of Liberal Arts Freshman Year Initiative, 5 years (1997-2002): Mentored students, participated in 8-9 summer orientation sessions per year for 4 years, led Ransom Reading Group, field trip to Austin Zoo.

Panelist, Graduate admissions panel for UT Anthropological Society, an undergraduate organization for anthropology majors. 1996,1997, 2001

Panelist, Panel on non-academic careers in Anthropology, UT Anthropological Society, an undergraduate organization for anthropology majors. 2005.

Participant, Plan I Honors Program, College of Liberal Arts. Invited lectures on anthropology for LAH 102, a Plan I course intended to give incoming honors freshman an overview of disciplines within the College of Liberal Arts, and to help them choose a career path. 1993-1996, 1997, 1999, 2002-2004.

Speaker, UT Austin New Faculty Teaching/Orientation Seminar, 2001 (led session on

"Balancing Teaching and Research")

Committee and other service, University of Texas at Austin:

Committee Service, UT Austin, Department of Anthropology (1990-2017):

Associate Chair of department, 2011-2014
Executive Committee
Extended Budget Council Committee
Graduate Admissions Committee (Committee Chair, 2011, 2012, 2013)
Graduate Studies Steering Committee (Interim Committee Chair, 2011)
Undergraduate Studies Committee (Chair, 2011)
Human Subjects Committee
Physical Anthropology Search Committee (Committee Chair, 2002-2003, 2003-2004, 2005-2006, 2017)
Physical Anthropology Irregular Hiring Committee (Committee Chair, 2015)
Social Anthropology Search Committee
Linguistic Anthropology Search Committee
Colloquia Committee
Film and Video Purchase Committee
Minority Liaison Committee
Computer Committee (Committee Chair, 2005-2006)
SACS Accreditation Committee
Course Planning Committee
Merit Committee
Promotion and Tenure Committee
Anthropology Steering Committee
TracDat Committee (Committee Chair, 2012-2014)
TA Assignment Committee

Committee Service, College of Liberal Arts:
Selection Committee, Dedman Scholarship (1998, 2000-2003, 2005, 2006)
Selection Committee, McReynolds Award in Pre-Medical Studies (2015)
Selection Committee, Eleanor Cruikshank Moore Memorial Endowed Presidential Scholarship in Liberal Arts (2015)

Committee Service, University of Texas at Austin:
FRA/SRA selection committee B (2008)
Unrestricted Endowed Presidential Scholarship committee 2015-2019

Academic-Related Professional Service:

Editorial Appointments:
2004-2007 Associate Editor, Journal of Human Evolution
2005- 2010 Associate Editor, American Journal of Physical Anthropology

American Association of Physical Anthropologists
2016-2017 Program Committee, American Association of Physical Anthropologists
2018 Local Arrangements Committee Co-Chair, American Association of Physical Anthropologists

Grant reviewer:
National Science Foundation, Leakey Foundation, NWO (Netherlands Organization for Scientific Research), Leverhulme Trust (England), NSERC (Natural Sciences and Engineering Research Council), Canada, Sigma Delta Epsilon, Graduate Women in Science, Texas Academy of Sciences

Manuscript reviewer:
American Journal of Physical Anthropology, Journal of Human Evolution, Journal of Experimental Biology, American Journal of Primatology, Journal of Zoology, Journal of Anatomy, Journal of Experimental Zoology, Folia Primatologica, Primates, Zoobiology Comparative Biochemistry and Physiology, PLOS ONE, Biological Journal of the Linnean Society, Clinical Anatomy, Anatomical Record, Paleoanthropology, Biology Open, Behavioural Processes, Evolution, Medicine and Public Health, Evolutionary Anthropology, BMC Evolutionary Biology, Biology Letters

Textbook Reviewer:
Harper Collins College Publishers, Prentice Hall Publishers, McGraw Hill, Blackwell Publishing

Academic-Related Public Outreach:

People are primates. Austin Center for Inquiry, Darwin Day event. Austin, Texas. 2018, 2019

Primate locomotion and the evolution of human bipedalism. Keynote speaker, Science Expo, Austin Jewish Academy**.** 2016

Lecture on careers in physical anthropology, Speaker series for 5th and 6th grade girls to promote interest in math and science, Zilker Elementary School, Austin, Texas, 2006

Presentation on primate comparative anatomy, 1st Grade, Zilker Elementary School, Austin, Texas, 2004

Presentation on fossil primates, Kindergarten, Zilker Elementary School, Austin, Texas, 2003

Tour of UT physical anthropology lab and discussion of primate comparative anatomy and evolution for Hillcrest elementary students, 1996

Co-organizer, Physical anthropology booth, Austin Science Fun Day, Highland Mall, 1995.

Presentation on human skeleton, Kindergarten, Matthews Elementary School, Austin, Texas 1993.