*Curriculum Vitae*

# Jeremy M. DeSilva

Boston University
Department of Anthropology
232 Bay State Road
Boston, MA 02215

Phone: (617) 353-5026
Email: jdesilva@bu.edu

## CURRENT POSITION

**Assistant Professor. Department of Anthropology. Boston University.**

## PAST POSITIONS

Assistant Professor. Biology Department. Worcester State College. 2008-2009.
Adjunct Instructor of Biology at Northwest State Community College, Ohio. 2007-2008.
Exhibit Content Developer for Human Evolution Exhibit. Boston Museum of Science. 2004
Life Science Interpretation Coordinator. Boston Museum of Science. 2000-2003
Education Fellow. Boston Museum of Science. 1999-2000
High School Biology Teacher. Somerset High School, MA. 1998-1999

## EDUCATION HISTORY

University of Michigan. Biological Anthropology. Ph.D. 2008.
Thesis: VERTICAL CLIMBING ADAPTATIONS IN THE ANTHROPOID ANKLE AND MIDFOOT: IMPLICATIONS FOR LOCOMOTION IN MIOCENE CATARRHINES AND PLIO-PLEISTOCENE HOMININS.
Thesis available online at: http://www.paleoanthro.org/dissertation_list.htm
Dissertation committee: Laura MacLatchy (Chair), D. Fisher, J. Mitani, W. Sanders, M. Wolpoff
Boston University. Doctoral pre-candidate Biological Anthropology. 2003-2004
Cornell University. B.A. Biology (Physiology). 1994-1998

## AFFILIATIONS & OTHER RESPONSIBILITIES

- Associate Editor. *Journal of Human Evolution*. 2013-present.
- Research scientist. *Evolutionary Sciences Institute*. University of Witwatersrand, South Africa. 2011-present.
- Affiliated research scientist. Orthopaedics Biomechanics Laboratory. Beth Israel Deaconess Medical Center, Boston, MA. 2010-present.
- Content Advisor. Boston Museum of Science *Hall of Human Life*. Scheduled to open November, 2014.
- Affiliated faculty member of African Studies Center, Boston University. 2009-present.

## FELLOWSHIPS, GRANTS, AND AWARDS

2013. Pending: NSF "CAREER: The retrieval and study of *Australopithecus sediba* fossils from Malapa cave, South Africa." **$408,967**
Boston University Grants for Undergraduate Teaching and Scholarship Program (GUTS). "3D printer for the biological anthropology laboratory." **$1,299**
2013. Nominated for Metcalf Award for Excellence in Teaching, Boston University.
2012. The Leakey Foundation. "The midtarsal break and locomotor diversity in early hominins." **$17,000**
Winner of the Boston University Templeton Prize for Excellence in Student Advising
2011. Corporate sponsorship from Clarks shoe company (Newton, MA) to collect plantar pressure data on children at the Boston Museum of Science. **$15,000**
The Leakey Foundation. "Multidisciplinary laboratory research on the DIK-1-1 (Selam) skeleton at the National Museum of Ethiopia, Addis Ababa." P.I. Zeresenay Alemseged.
2008. National Science Foundation Dissertation Improvement Grant. "Functional Morphology of the Talocrural Joint in Hominoids and Hominins- a Study of the Internal Structure of the Talus." **$4,113**.
The Leakey Foundation. "Functional Morphology of the Talocrural Joint in Hominoids and Hominins." June 2007-May 2008. **$13,500**.
2006. International Institute Individual Fellowship. University of Michigan. Summer 2006. **$2,000**.
Helen McKaig Spuhler Fellowship. University of Michigan. March 2006. **$2,000**.
Rackham Graduate Student Research Grant. University of Michigan. February 2006. **$1,500.**
Travel grants from Rackham School of Graduate Studies. October 2004-January 2006. **$1,200**
2005. Outstanding Graduate Student Instructor Award. University of Michigan. 2005.
National Science Foundation Graduate Fellow. 2005-2008.
Presidential Fellowship. Boston University. 2003-2004.

## FULL LENGTH PEER-REVIEWED PUBLICATIONS

**In preparation**

Traniello, J., Claxton, A., **DeSilva, J**. Collective intelligence, social selection, and brain evolution. In preparation for submission to *TREE*.

**DeSilva, J.,** Gill, C., Bredella, M., Alemseged, Z. The ontogeny and evolution of the *Australopithecus afarensis* foot. In preparation for submission to *Nature*.

Cofran, Z. **DeSilva, J**. A neonatal perspective indicates low rates of brain growth in *Australopithecus* but high, human-like rates in fossil *Homo*. In preparation for submission to *Proceedings of the National Academy of Sciences*.

Claxton, A., Romano, J., Hammond, A., Oleinik, E., **DeSilva, J.** Virtual reconstruction of an *Australopithecus* female pelvis (Sts 65) and the difficulty of birth in early hominins. In preparation for submission to *Journal of Human Evolution*.

**Accepted**

Gill, C., Taneja, A., Bredella, M., Torriani, M., **DeSilva, J.** Osteogenic relationship between the lateral plantar process and the peroneal tubercle in the human calcaneus. Submitted to *Journal of Anatomy*.

**In press**

Venkataraman, V.V., Kraft, T.S., **DeSilva, J.**M., Dominy, N.J. 2013. Phenotypic plasticity of climbing-related traits in the ankle joint of great apes and rainforest hunter-gatherers. *Human Biology*.

**Published online**

**DeSilva, J.**, Steininger, C., Patel, B. 2013. Cercopithecoid primate postcranial fossils from Cooper's D, South Africa. Accepted for publication in *Geobios*.

**Published**

Kuo, S., **DeSilva, J.**, Devlin, M., McDonald, G., Morgan, E. 2013. The effect of the Achilles tendon on trabecular structure in the primate calcaneus. *The Anatomical Record*. 296: 1509-1517.

O'Connell, C.O., **DeSilva, J.** 2013. Mojokerto Revisited: Evidence for a unique pattern of brain growth in *Homo erectus*. *Journal of Human Evolution*. 65: 156-161.

**DeSilva, J.**, Gill, S. 2013. Brief Communication: A midtarsal (midfoot) break in the human foot. *American Journal of Physical Anthropology*. 151: 495-499.

**DeSilva, J.**, Holt, K., Churchill, S., Carlson, K., Walker, C., Zipfel, B., Berger, L. 2013. The lower limb and walking mechanics in *Australopithecus sediba*. *Science*. 340: 1232999-1-1232999-5.

Fajardo, R.J., **DeSilva, J.**, Manoharan, R.K., Knittel, J.M., MacLatchy, L.M., Bouxsein, M.L. 2013. Lumbar vertebral body bone microstructural scaling in small to medium-sized strepsirhines. *The Anatomical Record*. 296: 210-226.

Wells, J., **DeSilva, J.**, Stock, J. 2012. The obstetric dilemma: an ancient game of Russian Roulette, or a variable dilemma sensitive to ecology? *Yearbook of Physical Anthropology*. 149: 40-71.

**DeSilva, J.**, Devlin, M. 2012. A comparative study of the trabecular bony architecture of the talus in humans, non-human primates, and *Australopithecus*. *Journal of Human Evolution*. 63: 536-551.

**DeSilva, J.**, Proctor, D., Zipfel, B. 2012. A complete second metatarsal (StW 89) from Sterkfontein Member 4, South Africa. *Journal of Human Evolution*. 63: 487-496.

Weiss, E., **DeSilva, J.**, Zipfel, B. 2012. Brief Communication. Radiographic study of metatarsal one basal epiphyseal fusion: A note of caution on age determination. *American Journal of Physical Anthropology*. 147: 489-492.

**DeSilva, J.**, Papakyrikos, A. 2011. A case of valgus ankle in an early Pleistocene hominin. *International Journal of Osteoarchaeology*. 21: 732-742.

Zipfel, B., **DeSilva, J.**, Kidd, R., Carlson, K., Churchill, S., Berger, L. 2011. The foot and ankle of *Australopithecus sediba*. *Science*. 333: 1417-1420.

**DeSilva, J.** 2011. A shift toward birthing relatively large infants early in human evolution. *Proceedings of the National Academy of Sciences*. 108: 1022-1027.

MacLatchy, L., **DeSilva, J.**, Wood, B., Sanders, W. 2010. Hominins. In Sanders WJ and Werdelin L (eds.) *Cenozoic Mammals of Africa*. Berkeley: University of California Press.

**DeSilva, J.**, Throckmorton, Z. 2010. Lucy's Flat Feet: The relationship between the ankle and rearfoot arching in early hominins. *PLoS One*. 5: e14432.

**DeSilva, J.**, Tocheri, M., Zipfel, B., Van Arsdale, A. 2010. The OH 8 foot. Adult or subadult? *Journal of Human Evolution*. 58: 418-423.

**DeSilva, J.**, Morgan, M.E., Barry, J.C., Pilbeam, D. 2010. A hominoid distal tibia from the Middle Miocene of Pakistan. *Journal of Human Evolution*. 58: 147-154.

**DeSilva, J.** 2010. Revisiting the "midtarsal break". *American Journal of Physical Anthropology*. 141: 245-258.

Zipfel, B., **DeSilva, J.**M, Kidd, R.S. 2009. Earliest complete hominin fifth metatarsal- implications for the evolution of the lateral column of the foot. *American Journal of Physical Anthropology*. 140: 532-545.

**DeSilva, J.** 2009. Functional morphology of the ankle and the likelihood of climbing in early hominins. *Proceedings of the National Academy of Sciences*. 106: 6567-6572.

Fajardo, R., Cory, E., Patel, N., Nazarian, A., Laib, A., Manoharan, R., Schmitz, J., **DeSilva, J.**, MacLatchy, L., Snyder, B., Bouxsein, M. 2009. Specimen size and porosity can introduce error into μCT-based tissue mineral density measurements. *Bone*. 44: 176-184.

**DeSilva, J.**, Lesnik, J. 2008. Brain size at birth throughout human evolution. A new method for estimating neonatal brain size in human ancestors. *Journal of Human Evolution*. 55: 1064-1074.

Pobiner, B., **DeSilva, J.**, Sanders, W., Mitani, J. 2007. Taphonomic analysis of skeletal remains from chimpanzee hunts at Ngogo, Kibale National Park, Uganda. *Journal of Human Evolution*. 52: 614-636.

**DeSilva, J.**, Lesnik, J. 2006. Chimpanzee neonatal brain size: Implications for brain growth in *Homo erectus*. *Journal of Human Evolution*. 51: 207-212.

**DeSilva, J.**, Shoreman, E., MacLatchy, L. 2006. A fossil hominoid proximal femur from Kikorongo crater, southwestern Uganda. *Journal of Human Evolution*. 50: 687-695.

**DeSilva, J.** 2003. Interpreting evidence. An approach to teaching human evolution in the classroom. *The American Biology Teacher*. 66: 257-267.

## BOOK REVIEWS

**DeSilva, J.** 2013. African Genesis: Perspectives on Hominin Evolution. *American Journal of Human Biology*. 25, 138-139.

**DeSilva, J.** 2012. Missing Links. The African and American Worlds of R.L. Garner, Primate Collector by J. Rich. *International Journal of African Historical Studies*. 45, 335-336.

**DeSilva, J.** 2009. Lucy's Legacy. The Quest for Human Origins by D. Johanson & K. Wong. *Paleoanthropology*. 2009: 176-178.

## ABSTRACTS FOR PAPERS & POSTERS PRESENTED AT PROFESSIONAL CONFERENCES

2014

**DeSilva, J.**, Bonne-Annee, R., Gill, C., Swanson, Z., Gill, S. 2014. Reconstructing foot function in early hominins using modern human models. Submitted for presentation in a special session From the Ground Up: Integrative Research in Primate Locomotion at the American Association of Physical Anthropologists annual meeting.

Harcourt-Smith, W., Thomas, O., **DeSilva, J.,** Frost, S., Patel, B., Orr, C. 2014. The Kromdraai "hominin"

cuboid KB 3133. A new assignation based on comparative anatomical techniques and 3D geometric morphometrics. Submitted for presentation at the American Association of Physical Anthropologists annual meeting.

2013

Gill, S., **DeSilva, J.**, Kelty-Stephen, D., Keimig, S. 2013. The medial longitudinal arch as an adaptation to increase step length in children. Submitted for presentation at the International Society for Developmental Psychobiology annual meeting.

Patel, B., **DeSilva, J.**, Steininger, C. 2013. New cercopithecoid primate postcranial fossils from Cooper's D, South Africa. Accepted for presentation at the Society for Vertebrate Paleontologists.

Cofran, Z., **DeSilva, J.** 2013. Early postnatal brain growth in *Homo erectus*: Incorporating uncertainties. Presented at the American Association of Physical Anthropologists.

Kuo, S., Devlin, M.J., **DeSilva, J.** 2013. The effect of the Achilles tendon on trabecular structure in the primate calcaneus. Presented at the American Association of Physical Anthropologists.

Romano, J., Claxton, A., **DeSilva, J.** 2013. A reconstruction of the Sts 65 *Australopithecus africanus* pelvis with implications for birth in early hominins. Presented at the American Association of Physical Anthropologists.

**DeSilva, J.** 2013. Starting off on the wrong foot. How our ape ancestry predisposes us to foot and ankle maladies. Presented at the American Association for the Advancement of Science (AAAS).

2012

**DeSilva, J.**, Zipfel, B., Kidd, R., Carlson, K., Churchill, S., Berger, L. 2012. The primitive aspects of the foot and ankle of *Australopithecus sediba*. Presented at the American Association of Physical Anthropologists.

O'Connell, C., **DeSilva, J.** 2012. Mojokerto revisited: Assessing brain growth patterns in *Homo erectus*. Presented at the American Association of Physical Anthropologists.

Agoada, D., **DeSilva, J.** 2012. The application of the geometric mean in forensic analysis as demonstrated using the talus and calcaneus. Presented at the American Association of Physical Anthropologists.

O'Connell, C., **DeSilva, J.** 2012. Mojokerto revisited: Assessing brain growth patterns in *Homo erectus*. Presented at the Sigma Xi conference.

2011

**DeSilva, J.** 2011. Starting off on the wrong foot. How our ape ancestry predisposes us to foot and ankle maladies. Presented at the American Anthropology Association meeting.

Keimig, S., **DeSilva, J.** 2011. The evolution of the longitudinal arch. Presented at Boston University Undergraduate Research Symposium.

Berger, L., Carlson K., Churchill S., de Klerk B., de Ruiter D., **DeSilva J.**, Gurche J., Holliday T., Kibii J., Kidd R., Kivell T., Schmid P., Zipfel B. 2011. New remains of *Australopithecus sediba* from the Malapa site, South Africa. *American Journal of Physical Anthropology*. Supplement S52: 88.

Throckmorton, Z., **DeSilva, J.** 2011. A new bent on hominin ankle evolution. *American Journal of Physical Anthropology*. Supplement S52: 294.

2010

**DeSilva, J.**, Papakyrikos, A. 2010. A case of valgus ankle in an early Pleistocene hominin. *American Journal of Physical Anthropology*. Supplement S50: 93-94.

Fajardo, R., **DeSilva, J.**, MacLatchy. L. 2010. Does the amount of bone dictate the trabecular bone structure in strepsirhine lumbar vertebrae? *American Journal of Physical Anthropology*. Supplement S50: 102.

2009

**DeSilva, J.**, Tocheri, M., Zipfel, B., van Arsdale, A. 2009. Is the OH 8 hominin a sub-adult? Implications for the holotype of *Homo habilis*. *Journal of Vertebrate Paleontology*. 29: 87A.

MacLatchy, L., **DeSilva, J.** 2009. The postcranial anatomy of *Proconsul major*. *Journal of Vertebrate Paleontology*. 29: 139A.

**DeSilva, J.** 2009. Why we sprain our ankles. *American Journal of Physical Anthropology*. Supplement 48: 118.

Zipfel, B., **DeSilva, J.**M., Kidd, R.S.. 2008. Evolution of the lateral column of the hominin foot: evidence from the StW 114/115 fifth metatarsal. Presented at the Paleoanthropology Society of South Africa Meetings, Matjiesfontein, South Africa.

2008

**DeSilva, J.** 2008. Ankle morphology in the earliest hominins. Romer Prize Candidate. *Journal of Vertebrate Paleontology*. 28:

**DeSilva, J.**, MacLatchy, L. 2008. Revisiting the midtarsal break. *American Journal of Physical Anthropology*. Supplement 46: 89.

2007

Caspari, R., Meganck, J., **DeSilva, J.**, Radovcic, J., Goldstein, S.A. 2007. Assessing adult age at death in Neandertal dental remains: Preliminary applications of a new approach using three dimensional micro computed tomography. *PaleoAnthropology*. 2007: A6.

**DeSilva, J.** 2007. Foot dorsiflexion and vertical climbing in wild chimpanzees. *American Journal of Physical Anthropology*. Supplement 44: 97.

Pobiner, B., **DeSilva, J.**, Sanders, W., Mitani, J. 2007. Taphonomic analysis of skeletal remains from chimpanzee hunts at Ngogo, Kibale National Park, Uganda. *American Journal of Physical Anthropology*. Supplement 44: 190.

2006

**DeSilva, J.**, Strassmann, B. 2006. Relationship between neonatal brain and body mass and menstrual bleeding in primates. *American Journal of Physical Anthropology*. Supplement 42: 83.

2005

Wood, A., **DeSilva, J.**, Eiting, T., Rountrey, A., Whitlock, J., Zelditch, M. 2005. Multivariate tests of evolutionary mode in *Ectocion* teeth. *Journal of Vertebrate Paleontology*. 25: 132A.

Fajardo, R., **DeSilva, J.**, MacLatchy, L., Bouxsein, M. 2005. Relationships between body weight and vertebral bone architecture in primates that exhibit a 48-fold range in body weight. *Bone*. Supplement 36: S380.

**DeSilva, J.**, MacLatchy, L., Bouxsein, M., Fajardo, R. 2005. Vertebral body bone mineral density decreases as a function of body weight in strepsirhine primates. *American Journal of Physical Anthropology*. Supplement 40: 94.

**DeSilva, J.**, Shoreman, E., MacLatchy, L. 2005. A fossil hominoid proximal femur from Kikorongo crater, Southwestern Uganda. *PaleoAnthropology*. 2005: A24.

2004

**DeSilva, J.**, Shoreman, E., MacLatchy, L. 2004. A fossil *Pan* proximal femur from the ?Plio-Pleistocene of Southwestern Uganda. *Journal of Vertebrate Paleontology*. 24: 52A.

Quibria, N., Fajardo, R., **DeSilva, J.**, Alexander, J.M. 2004. Transgenic expression of constitutively active mutant estrogen receptor-alpha (CAMERA) in osteoblasts leads to increased trabecular bone mass. *Journal of Bone and Mineral Research*. 19: S74.

**DeSilva, J.**, Shoreman, E. 2004. A hominoid proximal femur from the ?Plio-Pleistocene of southwestern Uganda. New England Biological Anthropology Symposium.

## CONTRIBUTIONS TO EDITED VOLUMES AND TEXTBOOKS

Created Powerpoints on Instructor's Resource Disc for Larsen *Our Origins*, 3rd ed. 2013.

Created Powerpoints on Instructor's Resource Disc for Larsen *Essentials of Physical Anthropology*, 2nd ed. 2012.

Created Powerpoints on Instructor's Resource Disc for Boyd & Silk *How Humans Evolved*, 6th ed. 2011.

Contributing editor for *Blackwell's Encyclopedia of Human Evolution*, Primary Editor: Bernard Wood.

## PROFESSIONAL SOCIETIES

CARTA. 2011-present
American Association of Physical Anthropologists. 2004-present
Paleoanthropology Society. 2005-present. Intermittent.
Society of Vertebrate Paleontologists. 2004-present. Intermittent.

## PEER REVIEW

Reviewer for *How Humans Evolved*, 5th ed. Boyd & Silk.
Reviewer for *Biological Anthropology*, 6th ed. Park.
National Science Foundation Grant Proposals (x1)
Leakey Foundation Grant Proposals (x5)
*American Journal of Human Biology* (x1)
*American Journal of Physical Anthropology* (x4)
*Anatomical Record* (x6)
*Anatomy Research International* (x1)
*Clinical Anatomy* (x1)
*International Journal of Osteoarchaeology* (x2)
*Journal of Human Evolution* (x13). As associate editor, handled manuscripts (x7)
*Journal of Anatomy* (x5)
*Nature Education* (x1)
*PLoS One* (x5)
*Proceedings of the National Academy of Sciences* (x8); Guest editor for paper submitted to *PNAS* (x1).
*Proceedings of the Royal Society B* (x1)
*Seminars in Cell and Developmental Biology* (x1)

## INVITED TALKS AT ACADEMIC INSTITUTIONS

2013

**Locomotor adaptations of early *Australopithecus*.** Invited talk for the public symposium *On the Trail of Lucy: A Collaborative Exploration of* Australopithecus, and the next day workshop: *The Paleobiology, Taxonomy, and Paleoecology of Early Australopithecus: A Collaborative Approach to Synthesizing the Evidence* hosted by the Cleveland Museum of Natural History (September)

**Walk like a *sediba*: Locomotor variation in the australopiths.** Talk presented at the *Function and Evolution of the Human Foot* workshop organized by the Center for the Advanced Study of Hominid Paleobiology (CASHP) at The George Washington University. (April).

**Human Evolution: A 2-million-year-old surprise from South Africa**. Talk presented to Mercyhurst College (March)

2012

***Australopithecus sediba*: A 2-million-year-old surprise from South Africa**. Talk presented to the Anthropology Department, Boston University (November)

**The surprising foot and ankle of *Australopithecus sediba*.** Talk presented to Anthropology Department at Dartmouth University. (May)

**The surprising foot and ankle of *Australopithecus sediba*.** Talk presented to Anthropology Department at Yale University. (February)

**The surprising foot and ankle of *Australopithecus sediba*.** Talk presented to Anthropology Department at the University at Albany- SUNY. (January)

2011

**Foot and ankle diversity in *Australopithecus***. CARTA Symposium "The Upright Ape: Bipedalism and Human Origins." La Jolla, California (December)

**The surprising foot of *Australopithecus sediba*.** Talk presented to Anthropology Department at Penn State University (November)

**Recently discovered foot fossils from South Africa and the evolution of upright walking.** Talk presented to Sargent College, Boston University (September)

***Australopithecus*: A new look at an old ancestor.** Talk presented at Stonehill College. Easton, MA. (March)

***Australopithecus* babies and the origins of human alloparenting.** Talk presented for the interdisciplinary seminar series on the evolution and development of human behavior at Harvard University. (March)

**Human Evolution 140 Years After "The Descent of Man".** Talk presented at 32nd annual Salem State University Darwin Festival. (February)

2010

**Grounded: How anatomical and behavioral changes forced our ancestors out of the trees**. Tufts University Department of Biomedical Engineering.

2009

**Ankles, arches, australopiths, and arboreality**. Talk presented at Harvard University Human Evolutionary Biology Department, Cambridge, MA.

***Ardipithecus*. Human Evolution Takes a Step Back**. Talk presented at Wellesley College Anthropology Department, Wellesley, MA.

**Ankles, arches, australopiths, and arboreality.** Talk presented at Biology Department, Holy Cross College, Worcester, MA.

2008

**Brain size at birth throughout human evolution: a method for estimating neonatal brain size in hominins**. Talk presented at the Anthropology Institute and Museum, University of Zürich-Irchel, Zürich, Switzerland.

## FIELD & MUSEUM (FOSSIL) EXPERIENCE

2012. **South Africa.** Studied *Australopithecus sediba* lower limb fossils at Institute for Human Evolution, University of Witwatersrand, Johannesburg.
**South Africa.** Studied *Australopithecus* foot bones from Sterkfontein at Department of Anatomy, University of Witwatersrand, Johannesburg.
**South Africa.** Studied *Australopithecus* lower limb and pelvic material at Ditsong Museum, Pretoria.
**Chicago.** Studied pelvis and foot bones of Magdalenian Girl from Le Cap Blanc, France at Chicago Field Museum.

2011. **Ethiopia.** Studied *Australopithecus afarensis* fossils from Dikika and Hadar at the National Museum in Addis Ababa.
**South Africa.** Studied *Australopithecus sediba* foot fossils at Institute for Human Evolution, University of Witwatersrand, Johannesburg.
**South Africa.** Visited Malapa Cave and Cooper's Cave.
**South Africa.** Studied *Australopithecus* foot bones from Sterkfontein at Department of Anatomy, University of Witwatersrand, Johannesburg.
**Cleveland**. Studied casts of *Ardipithecus ramidus* foot bones at Cleveland Museum of Natural History.

2009. **Uganda**. Studied Early Miocene ape fossils at Uganda National Museum.
**South Africa.** Studied *Australopithecus* lower limb and pelvic bones from Sterkfontein at Department of Anatomy, University of Witwatersrand, Johannesburg.
**South Africa.** Studied *Australopithecus* lower limb and pelvic material at Transvaal Museum, Pretoria.
**South Africa.** Visited Sterkfontein and Swartkrans Cave localities.
**Cambridge, MA.** Studied Skhul lower limb material at the Harvard Peabody Museum.

2007. **Uganda.** Studied Early Miocene ape fossils at Uganda National Museum.
**Uganda.** Wild chimpanzee observations at Ngogo study site, Kibale National Park.
**Kenya**. Studied Early Miocene ape and Plio-Pleistocene hominin foot bones at Kenya National Museum.
**Tanzania.** Studied Plio-Pleistocene hominin foot and lower limb bones at Tanzania National Museum.
**South Africa.** Studied *Australopithecus* foot bones from Sterkfontein at Department of Anatomy, University of Witwatersrand, Johannesburg.
**South Africa.** Studied *Australopithecus* foot bones at Transvaal Museum, Pretoria.

2006. **Uganda.** Exploration and excavation of Pliocene and Pleistocene hominoid and hominid fossil sites in Queen Elizabeth National Park, P.I. Laura MacLatchy.
**Uganda.** Wild chimpanzee observations at Ngogo study site, Kibale National Park
**Uganda.** Exploration and excavation of Early Miocene hominoid fossil sites of Moroto and Napak, P.I. Laura MacLatchy.

2005. **Kenya.** Participant in Olorgesailie Microstratigraphy and Taphonomy Field Course. Smithsonian Institution and the Kenya National Museum.

2002. **South Dakota.** Exploration and excavation of Oligocene "Brian Maebius site". Badlands National Park. South Dakota School of Mines and Technology.

2000. **New York State.** Mastodon excavation. Hyde Park, NY. Paleontological Research Institute (Ithaca, NY) and Boston Museum of Science.

## COLLEGE CLASSROOM TEACHING EXPERIENCE

*Boston University* (2004; 2009-present)

**Human Biology, Behavior & Evolution. AN 102**
Summer 2004; Spring 2010-2012; Summer II 2013

**Human Origins. AN 331**

Spring 2013
**The Ape Within. AN 335**
Fall 2009
**The Oldest Women: Lucy & Ardi. AN 338**
Fall 2010-2013
**Primate Biomechanics. AN 339**
Spring 2011; Fall 2012
**The Human Skeleton. AN 550**
Fall 2010
**Primate Evolution and Anatomy. AN 552**
Spring 2010-2011; 2013
**Methods in Biological Anthropology. AN 595**
Fall 2011
**Special Topics in Biological Anthropology: *Australopithecus sediba*. AN 597**
Fall 2013
**Special Topics in Biological Anthropology: Bipedalism. AN 598**
Spring 2012

*Worcester State College* (2008-2009)
**Organismal Biology. BI 140**
Fall 2008
**Human Anatomy & Physiology I & II. BI 161 & 162**
Fall 2008, Spring 2009
**Human Origins and Evolution. BI 401**
Spring 2009

*University of Michigan* (2005-2008)
**Topics in Biological Anthropology: Mysteries of Ancient Bones. AN 297**
Summer 2008
**Evolution of Genus *Homo*. AN 565. Laboratory Instructor (Lecturer: M. Wolpoff)**
Winter 2005

*Northwest State Community College- Ohio* (2008)
**Principles of Biology. BI 101**
Winter 2008

*Northeastern University* (2003)
**Introduction to Paleontology**
Fall 2003

## ADVANCING THE PUBLIC UNDERSTANDING OF SCIENCE

### *BOSTON MUSEUM OF SCIENCE AND OTHER PUBLIC PRESENTATIONS*

2013. **A 2 million-year-old surprise from South Africa.** Talk presented to students at Cambridge Ridge & Latin High School. June

Discussed *Australopithecus sediba* fossils in a Boston Museum of Science podcast. May. http://legacy.mos.org/educators/student_resources/podcasts&d=5832

**Almost Human.** Science on Screen (*Edward Scissorhands*) at the Coolidge Corner Theater, Cambridge, MA. February

**The life of a fossil: A tale of discovery.** Talk on the discovery and study of *Australopithecus sediba* delivered at Family Science Day at the meeting of the American Association for the Advancement of Science. February.

**A 2 million-year-old surprise from South Africa.** Talk on *Australopithecus sediba* delivered to Boston Museum of Science high-school lecture series. January.

2012. **The role of technology in an old science**. The use of technology in the discovery & study of the Malapa skeletons. Presented to the Boston Museum of Science Annual Meeting of the Board of Trustees and Overseers. June.

**A new discovery of a human ancestor from South Africa.** Talk presented to students at Cambridge Ridge & Latin High School. May

***Australopithecus sediba*: a new kind of ancient human**. Presented to High School teachers for Professional Development session at Boston Museum of Science. March.

**Human evolution 140 years after "The Descent of Man"** given as Keynote address on Darwin Day at meeting of the Worcester Humanists Society. February.

2011. Discussed *Australopithecus sediba* fossils in a Boston Museum of Science podcast. October. http://www.mos.org/events_activities/podcasts&d=5225

Featured in Boston Museum of Science fundraising video "Stars Among Us" April.

***Australopithecus* babies and the origins of the family.** Discussed recent publication on *Australopithecus* infants and the origins of human alloparenting in a Boston Museum of Science Current Science and Technology presentation. February.

2010. Scientific, educational, and exhibit consultant and contributor to the Smithsonian National Museum of Natural History human evolution exhibit *What does it mean to be human*?

**Our growing family tree.** Discussed *Australopithecus sediba* fossils in a Current Science and Technology presentation at the Boston Museum of Science. May. Podcast of follow-up discussion at http://www.mos.org/events_activities/podcasts&d=4497

2009. ***Ardi:* Our newest, oldest ancestor.** Discussed implications of *Ardipithecus* hominid discovery in a Current Science and Technology presentation at the Boston Museum of Science. October. Podcast of follow-up discussion at: http://www.mos.org/events_activities/podcasts&d=4021

Keynote talk: **Apes, bones, and genes. The science of human origins**. for the annual meeting of the Worcester Humanists Society. October. http://vimeo.com/11344985

Thoughts on science, and being a scientist featured in Boston Museum of Science exhibit *Investigate*. Fall-present.

**Ancient fossils and modern apes.** Discussed how scientists reconstruct the locomotion of extinct human ancestors and relatives in a Current Science and Technology presentation at the Boston Museum of Science. May. Podcast of follow-up discussion at: http://www.mos.org/events_activities/podcasts&d=3781

**New discoveries of "the hobbit" from Flores.** Discussed the Flores hobbit foot in a Current Science and Technology presentation at the Boston Museum of Science. May.

2008. **Brains, birth, and bipedalism.** Discussed the Gona *Homo erectus* pelvis in a Current Science and Technology presentation at the Boston Museum of Science. November. Podcast of follow-up discussion at http://www.mos.org/events_activities/podcasts&d=3024

**Brains, birth, and bipedalism**. Discussed the Mesmaiskaya Neandertal infant in a Current Science and Technology presentation at the Boston Museum of Science. November.

2007. Discussed current chimpanzee research with staff, volunteers, and visitors at the Boston Museum of Science to supplement their traveling exhibit "Discovering Chimpanzees: The Remarkable World of Jane Goodall." May. Podcast of discussion at: http://www.mos.org/events_activities/podcasts&d=1832

**Evolution 150 years after Darwin.** Keynote speaker for Boston Museum of Science volunteer training for traveling exhibit "Darwin." January.

2002. Educational and content advisor for IMAX film *Jane Goodall's Wild Chimpanzees*.

Developed website for Boston Museum of Science on hominid evolution. www..mos.edu/evolution

## ***MEDIA APPEARANCES***

2013. July. Interviewed on Voice America radio show "Indiana Jones: Myth, Reality and 21st Century Archaeology" on early hominin evolution.

May/June. Research on midtarsal break in human foot appeared in *New Scientist*, *Runner's World*, *Discovery News*, *The Telegraph* (UK) and *The Daily Mail* (UK).
Radio interview on *As it Happens* with Carol Off:
http://www.cbc.ca/asithappens/popupaudio.html?clipIds=2389496637,2389497153,2389497191
National Geographic story:
http://news.nationalgeographic.com/news/2013/06/130606-feet-primates-science-research-anthropology-study-apes-humans/
Boston Globe story:
http://www.boston.com/news/science/blogs/science-in-mind/2013/05/31/percent-people-found-have-feet-with-chimp-like-flexibility/scHU6fjSqgDPGOegEXM0rK/blog.html

April. Research on walking in *Australopithecus sediba* appeared in the *Economist*, *New Scientist*, *Nature,* CNN, BBC, NPR, varies news agencies that carried the Associated Press story.
Boston Globe story:
http://www.bostonglobe.com/news/science/2013/04/11/early-human-ancestor-had-distinctive-gait-fossil-study-suggests/NWW1Vs1BgXmrOmBdGGM6VK/story.html
*Science* magazine podcast:
http://www.sciencemag.org/content/340/6129/1232999/suppl/DC2

February. Participation in "Scars of Human Evolution" symposium at AAAS conference:
Science magazine:
http://news.sciencemag.org/sciencenow/2013/02/human-evolution-gain-came-with-p.html?ref=hp
Podcast with Bruce Latimer and Ann Gibbons:
http://news.sciencemag.org/sciencenow/2013/02/podcast-the-birth-pangs-of-human.html?ref=hp

BBC radio:
http://www.bbc.co.uk/news/science-environment-21475539

February. Quoted extensively in *Scientific American* piece by K. Harmon on early hominin diversity.

January. Quoted in *National Geographic* online article on tree climbing in modern human populations: http://phenomena.nationalgeographic.com/2012/12/31/what-tree-climbing-pygmies-tell-us-about-foot-evolution/

2012. December. Quoted in *Science News* article on locomotor diversity in early hominins: http://www.sciencenews.org/view/feature/id/347035/description/Out_on_a_limb

October. Quoted on Scientific American blog on how bipedalism leaves us susceptible to injuries: http://blogs.scientificamerican.com/guest-blog/2012/10/16/the-hazards-of-being-an-athletic-ape/

September. Interviewed by Peter Tyson for NOVA online article "Our improbable ability to walk": www.pbs.org/wgbh/nova/body/our-ability-to-walk.html

May. AAPA presentation on *Australopithecus sediba* locomotion featured in *Science*. (Ann Gibbons, "For early hominins in Africa, many ways to take a walk").

April. AAPA presentation on *Australopithecus sediba* locomotion featured in *Science News*, and in *Scientific American* podcast: http://www.scientificamerican.com/podcast/episode.cfm?id=killer-chimps-and-funny-feet-report-12-04-27

March. Comments on Burtele, Ethiopia foot quoted in *Science*.

February. Appeared on National Geographic channel: ***The Two Million-Year-Old Boy***, an hour-long documentary on the *Australopithecus sediba* fossils.

January. Comments on paper on birth scars in ancient pelves appear in *New Scientist*: http://www.newscientist.com/article/mg21328465.200-birth-trauma-etched-in-ancient-female-pelvis.html

2011. November. Research on arch of the foot featured in BU Today. Article can be found here: http://www.bu.edu/today/2011/arch-support/

October. Research on *Australopithecus* locomotion featured in BBC documentary ***Origins of Us***

Fall. Research on arch of the foot featured in InsideSargent, the magazine of Sargent College, Boston University.

April. Featured in The Quad: Boston University's online newspaper. Interview can be found here: http://buquad.com/2011/04/17/bu-stories-footloose-with-jeremy-desilva/

February. Quoted in *Nature* ("The Con of Convergence") regarding homoplasy in early hominin fossils.

February. Thoughts on recent *Australopithecus afarensis* foot fossils quoted in *Science*, *Nature*, and LiveScience.com.

January. Research on *Australopithecus* infants covered on NPR, *Time*, *Scientific American*,

MSNBC. NPR interview can be found here: http://www.npr.org/2011/01/10/132745952/big-babies-helped-shape-early-human-societies

2010. August. Interviewed by Earth magazine for story on earliest human foot bone discovered in the Philippines.

July. Featured in Bostonia- the Boston University alumni magazine for research on early human locomotion. http://www.bu.edu/bostonia/summer10/desilva/

June. Interviewed by Cleveland Plain Dealer regarding new *Australopithecus* skeleton.

March. Interviewed for Nature Education "Simply Science" webcast on the fossil evidence for human evolution. Interview appears online at following address: http://www.nature.com/scitable/blog/simply-science/episode_10_missing_link_misunderstood

2009. May. Research featured in May 27, 2009 *Worcester Telegram*. "Searching for Early Man. Ankles Kept us Grounded"

May. Thoughts on Flores hobbit foot noted in *Nature* (R. Dalton, "'Hobbit' was a dwarf with large feet".)

April. Research on climbing in early hominins noted in *Science* (Michael Balter, "Our ancestors were no swingers"), *Discover*, MSNBC, and FoxNews.

2008. December. Featured in Boston Museum of Science quarterly magazine. "The education of Jerry DeSilva."

November. Research of brain development in juvenile hominins noted in *Science* (Ann Gibbons, "The Birth of Childhood").

Fall. Research on the "midtarsal break" noted in *Evolutionary Anthropology*.

2007. Letter to editor "DNA scientist's troubling words" published in The Boston Globe. http://www.boston.com/news/globe/editorial_opinion/letters/articles/2007/10/25/dna_scientists_troubling_words/

2006. Fall. Research on ape evolution in East Africa featured in *The Journal of the International Institute*.

2004. November. Work on Kikorongo femur reported in *The New Scientist*.

## ***PANEL DISCUSSANT AND/OR CLASSROOM VISITS***

2013. November. Presented information on *Australopithecus sediba* to Middle School aged-children in Mansfield, MA

October. Guest speaker in BI 224: Seminar in Behavioral Biology. Presented research on reconstructing locomotion *Australopithecus sediba*.

July. Gave seminar on human evolution to K-12 teachers at Professional Development workshop on teaching evolution at Northeastern University.

June. "The evolution of a scientist" presented to Boston University Undergraduate Research Opportunity Program (UROP) participants.

May. Panel discussant for 7th Boston University "Dialogues in Biological Anthropology", a discussion on the origins of fire with J. Shea, F. Berna, and M. Cartmill. http://www.bu.edu/anthrop/dialogues/prometheus/

February. Participant for 6th Boston University "Dialogues in Biological Anthropology", a discussion on Unintelligent Design with R. Caspari, K. Rosenberg, B. Latimer, A. Mann, M. Wolpoff, and M. Cartmill. http://www.bu.edu/anthrop/dialogues/unintelligentdesign/

February. Guest speaker at Harvard University Human Evolutionary Biology 1377- Birth. Presented research on *Australopithecus* infants and the evolution of birth and shared parental care.

2012. September. Guest speaker in AN 335 on Miocene ape evolution.

April. Moderator for 5th Boston University "Dialogues in Biological Anthropology", a discussion on human sexual dimorphism with J. Michael Plavcan, Phil Reno, Cheryl Knott, and Matt Cartmill. http://www.bu.edu/anthrop/dialogues/does_size_matter/

March. Guest speaker in BI 224: Seminar in Behavioral Biology. Presented research on reconstructing locomotion *Australopithecus sediba*.

2011. October. Participant in 4th Boston University "Dialogues in Biological Anthropology", a discussion on the evolution of the human pelvis with Steve Churchill, Karen Rosenberg, Cheryl Knott, and Matt Cartmill. http://www.bu.edu/anthrop/dialogues/getting-hip/

September. Guest speaker at Harvard University Human Evolutionary Biology 1377- Birth. Presented research on *Australopithecus* infants and the evolution of birth and shared parental care.

April. Guest speaker in BI 224: Seminar in Behavioral Biology. Presented research on reconstructing locomotion and infant care in *Australopithecus*.

April. Moderator for 3rd Boston University "Dialogues in Biological Anthropology", a discussion on the origins of genus *Homo* with Lee Berger, Adam van Arsdale, and Matt Cartmill. http://www.bu.edu/anthrop/dialogues/genus-homo/

2010. May. Appeared in 4 classrooms (K-4) in Amherst and Mansfield, MA public school classrooms to discuss bones and fossils.

April. Moderator for 1st Boston University "Dialogues in Biological Anthropology", a discussion on the "hobbit" *Homo floresiensis* with Robert Martin, Fred Smith, and Matt Cartmill. http://www.bu.edu/anthrop/dialogues/hobbits/

2009. August. Taught high school and middle school teacher professional development session on Forensic Anthropology. Worcester, MA.

May. Taught human evolution and paleontology to elementary school children. Mansfield, MA

February. "Climate Change and Human Evolution" given as panel discussant at Worcester State College for National Teach-In on Global Warming Solutions.

2008. May. Worcester State College. Guest lecture on chimpanzee behavior and current chimpanzee research in Biology 111. Social Biology.

February. Established collaboration with Rudolf Steiner School of Ann Arbor, MI and taught human evolution to high school classes.

2006. Taught human evolution and paleontology to elementary school children. Amherst, MA.

Fall. University of Michigan. Guest lecturer for Biological Anthropology 564: Hominid Origins on the dentition of the earliest purported hominins.

2004-2005. University of Michigan. Guest lecturer for Introduction to African Studies on the African hominid fossil record.

2003. November. Panel discussant in session "Evolution and Public Perception" at American Science and Technology Center (ASTC) conference.

## STUDENTS ADVISED

**Ph.D. Students**: Primary advisor for Alex Claxton (3rd year); Natalie Laudicina (1st year), Ellie McNutt (1st year)

Outside reader for Naoki Morimoto. University of Zürich. 2012. "*Comparative Morphometric Analysis of Long Bone Ontogeny in Hominoid Primates"*

Outside reader for Jacqueline Smilg. University of the Witwatersrand. 2013. "*Application of CT imaging technologies to fossil-bearing rocks from South African early hominin sites"*

Second reader for Lara Saipe Durgavich, Boston University. 2013. "*Ovarian function and reproductive behaviors across the female orangutan life cycle.*"

**Masters Students**: Reader for Tyler Dunn (Forensic Anthropology). 2014.

Outside reader for David Agoada (Forensic Anthropology)- "*The significance of tarsal variation: sex determination using the talus and calcaneus*"

Outside reader for Aviva Cormier qualifying exams (Archaeology)

Primary advisor for Rami Salem. 2013.

**Undergraduates**: UROP: Sara Keimig (2011), Sharon Kuo (2011), Jeanelle Uy (2012), Meagan Sobel (2012), Corey Gill (2013), Zane Swanson (2013), Rachel Bonne-Annee (2013 x2), Frankee Rodriguez (2013)

Honors Thesis: Zane Swanson (2014), Corey Gill (2014)

Julia Romano (2012)- "*A reconstruction of the Sts 65 Australopithecus africanus pelvis with implications for birth in early hominins*" Primary Advisor

Kathleen Downey (2011)- "*Excavating and Recording Human*

*Burials of Early Bronze Age Sites in the Northwestern Region of the Euphrates Valley in Syria*" Outside reader

**High School:** Boston University Academy student Nathan Hyde (2013): *"The relationship between tooth size and brain enlargement during human evolution."*

## COMMITTEE MEMBERSHIP

**University Wide:**

Admissions committee for Boston University 7-year BA/MD program (2012-2014)

**Department of Anthropology:**

Search committee for new biological anthropology faculty hire. 2010-2011; 2012-2013; 2013-2014
Honors committee for Boston University Anthropology Department (2011)
Development committee for Boston University BA/MS program in Forensic Anthropology (2011-2013)
BU Anthropology Department curriculum development committee (2009-2013)
Inquiry committee for new Anthropology Department chair (with Parker Shipton). (2012)
Advisor for Anthropology in the Works undergraduate club (2013)