

Curriculum Vitae

Karen L. Baab

Department of Anatomy
Midwestern University
Glendale, Arizona 85308

Office (623) 572-3737
Fax (623) 572-3679
kbaab@midwestern.edu

Education and Postgraduate Training

Postgraduate Training

2008-2010 Research Instructor, Department of Anatomical Sciences, Stony Brook University

Education

2007 **PhD**, City University of New York, Anthropology

2003 **MA**, Hunter College, Anthropology

1996-2000 **BA** (Honors, Summa cum laude), Muhlenberg College, History and Anthropology

Theses

2007 **Ph.D.** City University of New York; “Cranial shape variation in *Homo erectus*”

2004 **M.A.** Hunter College; “Nasal morphology and climate in Neanderthals”

Academic / Professional Appointments

2014-present Assistant Professor, Department of Anatomy, Midwestern University

2010-2014 Assistant Professor, Department of Anthropology, Stony Brook University

2008-2010 Research Instructor, Department of Anatomical Sciences, Stony Brook University

2000-2007 Graduate Student Researcher, American Museum of Natural History

2002-2005 Adjunct Lecturer, Department of Anthropology, Lehman College

2003-2004 Adjunct Lecturer, Department of Cell Biology and Anatomy, Sophie Davis
School of Biomedical Education (CUNY)

Professional Society Memberships

American Association of Physical Anthropologists

Paleoanthropology Society

European Virtual Anthropology Network (EVAN) Society

American Association of Anatomists

Professional Honors and Awards

Phi Beta Kappa (Muhlenberg College)

Extramural Grant Support

2013-2015 **L.B.S. Leakey Foundation Research Grant**

“Integration of Robust Features Across the Cranial and Postcranial Skeleton”
(\$19,100)

- 2005-2007 **L.B.S. Leakey Foundation Research Grant**
 “Cranial Shape Variation in *Homo erectus*: A Geometric Approach” (\$4,500)
- 2004-2007 **National Science Foundation** Doctoral Dissertation Improvement Grant
 “Cranial Variation in *Homo erectus*” (\$10,000)
- 2004 **Sigma Xi** Grants-In-Aid of Research

Consulting and Service Activities

Midwestern University

- 2015-Current Member, Wellness Committee (MWU)
- 2015-Current Member, College of Health Sciences, Student Promotion and Graduation Committee (MWU)
- 2014-Current Department administrator for Web-Ex technology

Stony Brook University

- 2010-Current Ph.D. Supervisor for Allison Nesbitt (SBU)
- 2013 Member, Admissions Committee for M.A. in Department of Anthropology (SBU)
- 2013 Member, Teaching Assistance Committee for Interdepartmental Doctoral Program in Anthropological Sciences (SBU)
- 2012 Member, Search Committee for Biostatistician Position in Department of Anthropology (SBU)
- 2011-2013 Served on MA committees for Ronda Graves, Katherine Goodenberger, Stephanie Blatch, and Molly Elmer (SBU)
- 2010-2014 Library Representative, Department of Anthropology, Stony Brook University

Professional and Public Service Activities

Peer Reviews for

Journal of Human Evolution, American Journal of Physical Anthropology, Anthropological Science, Journal of Anthropological Science, Anthropologischer Anzeiger, Anatomical Record, PLOS ONE

Participant in Professional Conferences

- 10/2014 “What made us human? Biological and cultural Evolution of *Homo sapiens*” Symposium, The International School of Ethology of the Ettore Majorana Centre for Scientific Culture. Erice, Italy.
- 05/2014 Peking Man International Research Conference, Confucius Institute, Stony Brook University
- 02/2009 “Darwin’s Legacy: Early Human Evolution in Africa” Conference (NYCEP), New York City
- 2011 Organized informal eight week “Geometric Morphometrics” seminar for graduate students at Stony Brook University

Seminars and Professional Presentations

Invited Symposia

- 10/2015 “The Shape of Things To Come: Geometric Morphometrics in Vertebrate Paleontology” Symposium, Society of Vertebrate Paleontology Meetings. Dallas
- 08/2010 “Stop the Presses! A Magazine to Shout for Statistics!” Special Presentation, Joint Statistical Meetings. Vancouver

Invited Seminars

- 11/2014 Seminar, National Museum of Nature and Science, Anthropology Department, Tsukuba, Japan
- 06/2012 Seminar, Département Hommes, Nature, Sociétés, Muséum national d’Histoire naturelle, Paris
- 04/2011 New York Regional Primatology colloquia, NYCEP
- 04/2009 Seminar, Department of Evolutionary Anthropology, Duke University
- 02/2008 Seminar, Turkana Basin Institute and Paleobiology Seminar Series, Stony Brook University

Teaching Experience

Midwestern University

- ANAT 1551/1552/1553 Human Anatomy and Embryology
- BASI 1509 Head and Neck Anatomy
- ANAT 503 Human Anatomy

Stony Brook University

- Human Anatomy (Undergraduate)
- Introduction to Physical Anthropology
- Seminar: Hominins in the Headlines
- Human Gross Anatomy (Dental)

City University of New York

- Human Gross Anatomy Medical (*Sophie Davis School of Biomedical Education*)
- Human Origins
- Introduction to Human Evolution

Scholarly Publications

Peer-reviewed Journal Articles and Book Chapters

- In press **Baab, K.L.** The place of *Homo floresiensis* in human evolution. *Journal of Anthropological Studies*. *Invited*
- 2016 **Baab, K.L.** The role of neurocranial shape in defining the boundaries of an expanded *Homo erectus* hypodigm. *Journal of Human Evolution*. 92: 1-21.
- 2015 **Baab, K.L.** Defining *Homo erectus*. Henke, W. and Tattersall, I. (Eds.). *Handbook of Paleoanthropology*. New York: Springer, pp. 2189-. *Invited*
- 2014 **Baab, K.L.** Phylogenetic, ecological, and allometric correlates of cranial shape in Malagasy lemuriforms. *Evolution*. 68: 1450–1468.

- 2013 **Baab, K. L.** The impact of superimposition choice in geometric morphometric approaches to morphological integration. *Journal of Human Evolution*. 65: 689-692.
- 2013 **Baab, K.L.**, McNulty, K.P., and Harvati, K. *Homo floresiensis* contextualized: A geometric morphometric comparative analysis of fossil and pathological human samples. *PLoS ONE* 8(7): e69119.
- 2012 **Baab, K.L.**, McNulty, K.P. and Rohlf, F.J. The shape of human evolution: a geometric morphometrics perspective. *Evolutionary Anthropology*. 21: 151-165. *Invited*
- 2010 McNulty, K.P. and **Baab, K.L.** Keeping asymmetry in perspective: A reply to Eckhardt and Henneberg. *American Journal of Physical Anthropology*. 143: 337-339.
- 2010 **Baab, K.L.** Cranial shape in Asian *Homo erectus*: geographic, anagenetic, and size-related variation. In: Norton, C.J., Braun, D.R. (Eds.) *Asian Paleoanthropology: From Africa to China and Beyond*. New York: Springer, pp. 57-80.
- 2010 **Baab, K.L.**, Freidline, S.E., Wang, S.L, Hanson, T. Relationship of cranial robusticity to cranial form, geography and climate in *Homo sapiens*. *American Journal of Physical Anthropology*. 141: 97-115.
- 2009 **Baab, K.L.**, McNulty, K.P. Size, shape and asymmetry in fossil hominins: the status of the LB1 cranium based on 3D morphometric analyses. *Journal of Human Evolution*. 57: 608-622.
- 2008 **Baab, K.L.** The taxonomic implications of cranial shape variation in *Homo erectus*. *Journal of Human Evolution*. 54: 827-847.
- 2008 **Baab, K.L.**, A re-evaluation of the species affinities of KNM-ER 42700. *Journal of Human Evolution*. 55: 741-746.

Published Abstracts

- 2015 **Baab, K.L.**, Perry, J.M.G., Rohlf, F.J., and Jungers, W.L. Lemur craniomandibular diversification in relation to dietary ecology. *Journal of Vertebrate Paleontology, Program and Abstracts*: 82.
- 2015 **Baab, K.L.**, Falk, D., Brown, P., Richtsmeier, J.T., McNulty, K., Hildebolt, C.F., Prior, F.W., Smith, K.E. and Jungers, W. A re-evaluation of the Down syndrome diagnosis for LB1. *American Journal of Physical Anthropology*. 156 (S60): 74.
- 2015 Nesbitt, A. and **Baab, K.L.** The magnitude of covariation among regions of the human cranium. *American Journal of Physical Anthropology*. 156 (S60): 235.
- 2013 **Baab, K.L.**, Perry, J.M.G. Assessing function via shape: what is the place of geometric morphometrics in functional morphology? *American Journal of Physical Anthropology*.
- 2012 **Baab, K.L.** Using pathology to explore cranial integration in *Homo sapiens*. *American Journal of Physical Anthropology*. 147 (S54): 88.
- 2011 **Baab, K.L.** Rohlf, F.J., Jungers, W.L., Perry, J.M.G. Application of phylogenetic comparative methods to the adaptive radiation of Malagasy lemurs. *American Journal of Physical Anthropology*. 144 (S52): 79.

- 2010 **Baab, K.L.** Comparison of the LB1 neurocranium to extinct hominins, normal and pathological modern humans. *American Journal of Physical Anthropology*. 141 (S50): 59.
- 2009 **Baab, K.L., Jungers, W.L.** Cranial shape variation in extant and giant subfossil lemurs from Madagascar. *American Journal of Physical Anthropology*. (S48): 81.
- 2008 **Baab, K.L.** A shape-based species definition for *Homo erectus*. *American Journal of Physical Anthropology* (S46): 62.
- 2007 **Baab, K.L., McNulty, K.P., Brown, P.** Allometric scaling of craniofacial shape: implications for the Liang Bua hominins. *PaleoAnthropology A2*.
- 2007 **Baab, K.L.** Magnitude and pattern of geographic variation in cranial shape within *Homo erectus*, especially from Asia. *American Journal of Physical Anthropology* (S 44): 66-67.
- 2006 **Baab, K.L., Friedline, S.E., Wang, S.L.** An investigation of robusticity in modern human crania: implications for *Homo erectus*. *PaleoAnthropology A50*.
- 2006 McNulty, K.P., **Baab, K.L.** Sexual dimorphism in hominine supraorbital morphology. *American Journal of Physical Anthropology*. 129 (S42): 128-129
- 2006 McNulty, K.P., **Baab, K.L.** Sexual dimorphism in hominin supraorbital morphology. *PaleoAnthropology*. Appendix: A65.
- 2006 Harvati, K., Panagopoulou, E., Karkanus, P., Frost, S.R., Athanassiou, A., Elefanti, P., Schrein, C., **Baab, K.**, Henderson, E., Tournalonkis, E., Garefalakis, C. New findings of the Aliakmon Paleolithic Survey, Greece 2004-2006. *PaleoAnthropology*. Appendix: A61.
- 2006 Harvati, K., Panagopoulou, E., Karkanus, P., Frost, S.R., Athanassiou, A., Elefanti, P., Schrein, C., **Baab, K.**, Henderson, E., Tournalonkis, E., Garefalakis, C. New findings of the Aliakmon Paleolithic Survey, Greece 2004-2006. Presented to the congress of the International Union for Prehistoric and Protohistoric Sciences, Lisbon, Portugal, September 2006.
- 2004 **Baab, K.L., Harvati, K.** A 3-D analysis of shape differences in the scapula between Neanderthals and modern humans using geometric morphometrics (abstract). *American Journal of Physical Anthropology*. 123 (S38): 57.
- 2003 **Baab, K.L., Ting, N., Capellini, T.D., Hagell, S.E.** Precision in 3-D landmark data collection for geometric morphometrics. *American Journal of Physical Anthropology*. 120 (S36): 61-62.
- 2003 Delson, E., Reddy, D., Rohlf, F.J., Frost, S., Friess, M., McNulty, K., **Baab, K.**, Capellini, T., Hagell, S.E. 3-D visualization of inferred intermediates on a phylogenetic tree –implications for paleoanthropology. *American Journal of Physical Anthropology*. 120 (S36): 86-87.

Other Publications

- 2012 **Baab, K.L.** *Homo floresiensis*: Making sense of the small-bodied hominin fossils from Flores. *Nature Education Knowledge* 3(9): 4. *Invited*
- 2012 **Baab, K.L.** Book Review of *Wiley-Blackwell Encyclopedia of Human Evolution* (by B. Wood, 2011) *Quarterly Review of Biology*. 87: 59-60. *Invited*

- 2011 Delson, E., **Baab, K.L.** Fossil Humans in *McGraw-Hill Encyclopedia of Science and Technology* ed. 10, vol. 7, 464-478. *Invited*
- 2010 Jungers, W., **Baab, K.** The geometry of hobbits: *Homo floresiensis* and human evolution. *Significance*. 6: 159-194. *Invited*
- 2009 McNulty, K.P, **Baab, K.L.** The Fossil “Hobbits” of Flores: Perspectives from morphometric simulation. *AnthroQuest* (Newsletter of The Leakey Foundation).
- 2009 **Baab, K.L.** Fossil Hominids from Dmanisi. 2009 *McGraw-Hill Encyclopedia of Science and Technology*. *Invited*
- 2009 **Baab, K.L.** Paleoanthropology 2009: The Chicago Meetings. *Evolutionary Anthropology*. 18: 84.
- 2009 St. Clair, E.M., **Baab, K.L.** Throwing light on human evolution in Africa. *Evolutionary Anthropology*. 18: 121-122.
- 2008 **Baab, K.L.**, Book Review of *A New Human: The Startling Discovery and Strange Story of the “Hobbits” of Flores, Indonesia* (by M. Morwood and P. van Oosterzee, 2007). *American Journal of Physical Anthropology*. 136: 369-370. *Invited*

Public Outreach

- 2013 Interviewed about *Homo floresiensis* for New York Times and Newsday
- 2009 Interviewed about *Homo floresiensis* for National Geographic News and Newsday.
- 2008 Interviewed about position of *Homo erectus* in human evolution for “A New Hominin” episode in video teaching series “Introduction to Physical Anthropology.”