

CURRICULUM VITAE
KIRSTIN N. STERNER

CONTACT INFORMATION

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CURRENT POSITION

June 09- Postdoctoral Fellow, Molecular Evolution Group
Center for Molecular Medicine and Genetics, Wayne State University
Derek Wildman and Morris Goodman (Advisors)

EDUCATION

2009 Ph.D., Anthropology, New York University, New York, NY
Primate Innate Immune Defense and Adaptation to SIV/HIV Infection
(Dissertation), Todd R. Disotell (Advisor)
2007 M.Phil., Anthropology, New York University, New York, NY
2005 M.A., Anthropology, New York University, New York, NY
Colobine Molecular Phylogeny (Thesis)
2001 B.A., Anthropology, New York University, New York, NY
1999-97 Attended, Anthropology, College of William & Mary, Williamsburg, VA

TEACHING EXPERIENCE

2007 Instructor, Department of Anthropology, New York University
Human Evolution
2007 Co-Mentor (with Todd Disotell), Harlem Children Society
2003-07 Instructor, Department of Anthropology, New York University
Molecular Primatology Laboratory Internship Program
2006 Teaching Assistant, Department of Anthropology, New York University
Human Origins

2005 Teaching Assistant, Department of Anthropology, New York University
Human Evolution

RESEARCH EXPERIENCE

2009 Human Brain Evolution
Center for Molecular Medicine and Genetics at Wayne State University
Detroit, MI, USA

2009 Primate Phylogenomics
Center for Molecular Medicine and Genetics at Wayne State University
Detroit, MI, USA

2006-09 Primate Innate Immune Defense and Adaptation to Viral Infection
Department of Anthropology at New York University, New York, NY,
USA

2003-09 Molecular Phylogeny of Primates Using Mitochondrial Genomes
Department of Anthropology at New York University, New York, NY,
USA

2005 3D Geometric Morphometrics of Colobines
American Museum of Natural History, New York, NY, USA
(project advisor, Eric Delson)

2004 Screening of Chimpanzee Samples for Simian Immunodeficiency Virus
Centre International de Recherches Medicales (CIRMF), Franceville,
Gabon (project advisor, Stephen Clifford)

2000-03 Molecular Phylogeny of Primates (mtDNA and Autosomal Loci)
Laboratory Technician and Research Assistant, Department of
Anthropology at New York University, New York, NY, USA

1999 Artifact Preparation and Preservation
Volunteer, Colonial Williamsburg Foundation/Department of
Archaeological Research, Williamsburg, VA, USA

1999 Excavation of Colonial Theatre
Researcher, College of William & Mary, Archaeological Field School
Williamsburg, VA, USA

GRANTS

- 2007 National Science Foundation Doctoral Dissertation Improvement. Primate Innate Immune Defense and Adaptation to SIV/HIV Infection, \$8,974.
- 2007 Wenner-Gren Dissertation Fieldwork Grant.
Evolution of the Human Innate Immune Response, \$8,717.
- 2007 Sigma Xi Grants-in-Aid of Research.
Evolutionary History of the Toll-like Receptor 7 Locus in Primates, \$727.

FELLOWSHIPS AND AWARDS

- 2009 Arthur M. Sackler Colloquia Travel Award
- 2008-09 American Dissertation Fellowship,
American Association of University Women (AAUW).

Dean's Dissertation Fellowship, New York University.
- 2003-08 MacCracken Fellowship, New York University.
- 2004 National Science Foundation Graduate Research Fellowship
Honorable Mention.

REFEREED PUBLICATIONS

- Submitted Goodman, M and KN Sterner. Phylogenomic evidence of adaptive evolution in the ancestry of humans. The Arthur M. Sackler Colloquia Series, In the Light of Evolution IV: The Human Condition, *Proc Natl Acad Sci USA*.
- In press Goodman, M, KN Sterner, M Islam, M Uddin, CC Sherwood, PR Hof, Z-C Hou, L Lipovich, J Hui, LI Grossman, and DE Wildman. Phylogenomic analyses reveal convergent patterns of adaptive evolution in elephant and human ancestries. *Proc Natl Acad Sci USA*. Published online before print November 19, 2009, doi: 10.1073/pnas.0911239106.
- 2009 Alcantara D, O Carmichael, W Harcourt-Smith, K Sterner, S Frost, R Dutton, P Thompson, E Delson, and N Amenta. Exploration of shape

variation using localized components analysis. *IEEE Transactions on Pattern Analysis and Machine Intelligence*. 31(8):1510-1516.

- 2009 Hodgson, JA, KN Sterner, LJ Matthews, AS Burrell, RA Jani, RL Raaum, C-B Stewart, and TR Disotell. Successive radiations, not stasis, in the South American primate fauna. *Proc Natl Acad Sci USA*. 106(14):5534-5539.
- 2006 Sterner KN, RL Raaum, Y-P Zhang, C-B Stewart, and TR Disotell. Mitochondrial data support an odd-nosed colobine clade. *Molecular Phylogenetics and Evolution*. 40(1):1-7.
- 2005 Raaum, RL, KN Sterner, CM Noviello, TR Disotell, and C-B Stewart. Catarrhine primate divergence dates estimated from complete mitochondrial genomes: concordance with fossil evidences. *Journal of Human Evolution*. 48(3):237-257.
- 2004 Wildman, DE, TJ Bergman, A al-Aghbari, KN Sterner, TK Newman, JE Phillips-Conroy, CJ Jolly, and TR Disotell. Mitochondrial evidence for the origin of hamadryas baboons. *Molecular Phylogenetics and Evolution*. 32(1):287-296.
- 2003 Telfer, PT, S Souquiere, SL Clifford, KA Abernethy, MW Bruford, TR Disotell, KN Sterner, P Roques, PA Marx, and EJ Wickings. Phylogenetic divergence in mandrills. *Molecular Ecology*. 12:2019-2024.

NON-REFEREED PUBLICATIONS

- 2009 Sterner, KN. Primate Innate Immune Defense and Adaptation to SIV/HIV Infection. Ph.D. dissertation. New York University.

CONFERENCE PROCEEDINGS AND ABSTRACTS

- Submitted Sterner, KN, AM Boddy, CW Kuzawa, CC Sherwood, PR Hof, L Lipovich, LI Grossman, M Uddin, DE Wildman, M Goodman, HE Mair-Meijers, AL Weckle, L Gregoire, and HT Chugani. Functional genomic signatures of human brain growth and development. *American Journal of Physical Anthropology*.
- 2009 Hodgson, JA, L Pozzi, KN Sterner, C-B Stewart, and TR Disotell. Molecular divergence dates suggest an origin of crown primates near the K/T boundary. *American Journal of Physical Anthropology*. S48:199.

- 2008 Sterner, KN. Evolution of the Toll-like receptor 7 gene in primates. *American Journal of Physical Anthropology*. S46:201.
- 2008 Hodgson, JA, KN Sterner, LJ Matthews, R Jani, C-B Stewart, and TR Disotell. Phylogenetic relationship of the Platyrrhini inferred from complete mitochondrial genome sequences. *American Journal of Physical Anthropology*. S46:118-119.
- 2007 Sterner KN. Evolution of the Toll-like receptor 7 gene in primates. Society for Molecular Biology and Evolution Annual Meetings, Halifax, Nova Scotia, Canada.
- 2007 Alcantara D, O Carmichael, E Delson, W Harcourt-Smith, K Sterner, S Frost, R Dutton, P Thompson, H Aizenstein, O Lopez, J Becker, and N Amenta. Localized Components Analysis. *Proceedings of Information Processing in Medical Imaging*. 4584:519-531.
- 2005 Disotell, TR, AS Burrell, SL Clifford, RL Raaum, KN Sterner, and AJ Tosi. Molecular phylogeny of the Papionini. *American Journal of Physical Anthropology*. S40: 95.
- 2004 Telfer, PT, S Sonquiere, SL Clifford, KA Abernethy, MW Bruford, TR Disotell, KN Sterner, PA Marx, and MJ Wickings. Molecular diversity and biogeography of the genus *Mandrillus* (Primates: Papionini). *Folia Primatologica*. 75(S1):57-58.
- 2004 Raaum, RL, KN Sterner, AJ Tosi, SA Farley, L Zhang, MS Harper, KE Krasinski, TR Disotell, and C-B Stewart. Life history variables and nucleotide substitution rate variation in the catarrhine primates. *American Journal of Physical Anthropology*. S38:163.
- 2003 Raaum, RL, KN Sterner, and TR Disotell. Molecular estimates of primate divergence dates. *American Journal of Physical Anthropology*. S36:173.
- 2003 Sterner, KN, RL Raaum, AJ Tosi, CM Noviello, JE Schienman, RV Collura, C-B Stewart, and TR Disotell. Colobine molecular phylogeny. *American Journal of Physical Anthropology*. S36:200. (Presented at the American Association of Physical Anthropologists Annual Meeting, Tempe, AZ, USA, April 2003)
- 2002 Disotell, TR, RL Raaum, KN Sterner, CM Noviello, and C-B Stewart. Old World monkey mitochondrial DNA evolution. *American Journal of Physical Anthropology*. S34:63-64.

- 2002 Raaum, RL, KN Sterner, CM Noviello, TR Disotell, P Karanth, AP DeKoning, and C-B Stewart. Nuclear gene phylogenies from Old World monkeys. *American Journal of Physical Anthropology*. S34:128.

INVITED PRESENTATIONS

- 2009 Ting N, and KN Sterner. The molecular systematics of the Colobinae: recent advances and future directions. Darwin's Legacy: Early Human Evolution in Africa (New York Consortium in Evolutionary Primatology).
- 2008 Sterner, KN. Germs & Genomes: What the innate immune system can tell us about human evolution and human health (University of Iowa).
- 2005 Sterner KN. Colobine Molecular Phylogeny. Monkeys Old and New (New York Consortium in Evolutionary Primatology).

SYMPOSIA ORGANIZED

- 2009 Sterner, KN, N Ting, Y Xing (co-organizers). Primate Functional and Comparative Genomics. Society for Molecular Biology and Evolution Annual Meeting.

PROFESSIONAL SERVICE

- 2009 Reviewer, American Journal of Primatology
- 2009 Organizing Committee, Society for Molecular Biology and Evolution Annual Meeting 2009
- 2009 Scientific Committee, Society for Molecular Biology and Evolution Annual Meeting 2009
- 2006 Reviewer, Primate Conservation Inc.
- 2005 Student Representative, New York Consortium in Evolutionary Primatology (NYCEP) Program Review

PROFESSIONAL AFFILIATIONS

- Society of Molecular Biology and Evolution
- American Association of Physical Anthropology
- New York Consortium in Evolutionary Primatology
- Center for the Study of Human Origins at New York University