

## **ANNE DAPHNE YODER**

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### **EDUCATION**

B.A. Zoology  
University of North Carolina - Chapel Hill  
September 1977 - December 1981

Ph.D. Department of Anatomy  
Duke University Medical Center  
August 1986 - September 1992

Workshop in Molecular Evolution  
Marine Biological Laboratory  
Woods Hole, Massachusetts  
August, 1994

Summer Institute in Statistical Genetics  
North Carolina State University  
Raleigh, NC  
June, 1999

### **RESEARCH INTERESTS**

Phylogeny and evolution of mammals, with emphasis on the mammals of Madagascar; conservation genetics; historical biogeography and biodiversity of Madagascar; Old World biogeography

### **POSITIONS HELD**

Director - Duke Lemur Center, January 1, 2006 - present  
Professor (Primary Appointment) - Department of Biology, Duke University, July 1, 2005 - present  
Professor (Secondary Appointment) - Department of Biological Anthropology and Anatomy, Duke University September 1, 2005 - present  
Adjunct Professor, Centre for Computational and Evolutionary Biology, Institute of Zoology, Chinese Academy of Sciences, Beijing, July 2007 - present  
Associate Professor - Department of Ecology and Evolutionary Biology, Yale University. September 1, 2001 - June 30, 2005 (awarded tenure December, 2004)  
Associate Curator of Mammals, Yale Peabody Museum, December 2001 - June 2005.  
Research Associate - Department of Zoology, Field Museum of Natural History October 1996 - present  
Assistant Professor - Department of Cell and Molecular Biology, Northwestern University Medical School. September 1995 - August 2001  
Postdoctoral Fellow - National Science Foundation, Environmental Biology Program Harvard University. August 1992 - August 1995.  
Curatorial Research Intern - Department of Mammalogy, American Museum of Natural History. Data management and curation of Bolivian Mammals. January 1986 - May 1986  
Museum Technician - Department of Vertebrate Zoology, Smithsonian Museum of Natural History. Curation, cataloging, specimen preparation, and collection management of vertebrate collections. July 1983 - September 1985

### **TEACHING EXPERIENCE**

*Duke University*: Biodiversity: Human Impacts Versus the Forces of Nature (Biology 93FCS; Evolution and Humankind FOCUS cluster)

*Yale University*: Advanced Seminar in Phylogenetics and Systematics; Conservation Biology (guest

lecture); Diversity of Life (vertebrate evolution section); Phylogenetic Methods (lecture/lab course); Evolution of Mammals (lecture/lab course)

*Northwestern Medical School:*

Undergraduate Education - Conservation Genetics

Graduate Seminars - Molecular Evolution; Systematic Biology

Medical Education - Human Gross Anatomy (lecture and lab); Selected lectures in Population and Quantitative Genetics

*University of Antananarivo, Madagascar:* Phylogenetic Systematics (August, 1997)

*Duke University Medical School:* Human Gross Anatomy (1987 - 1991)

## **SOCIETY MEMBERSHIPS**

American Association for the Advancement of Science

Groupe d'Etude et de Recherche sur les Primates de Madagascar

Society for Conservation Biology

Society for the Study of Evolution

Society for the Study of Mammalian Evolution

Society of Molecular Biology and Evolution

Society of Sigma Xi

Society of Systematic Biologists

## **FEDERAL AWARDS**

National Science Foundation – Environmental Biology: REU Supplement for Collaborative Research: Testing the Role of Historical Geology and Rivers for Shaping the Distribution of Land Vertebrate Biodiversity in Western Madagascar.

(June 2007 – May 2008) \$6000

National Science Foundation – Division of Biological Infrastructure: Continued Support of the Duke University Primate Center for the Study of Primate Biology and History.

(March 2006 – February 2011) \$ 1,921,809

National Science Foundation - Environmental Biology: Collaborative Research: Testing the role of historical geology and rivers for shaping the distribution of land vertebrate biodiversity in western Madagascar.

(October 2005 – September 2009) \$219,981 (Duke budget)

National Science Foundation – Division of Biological Infrastructure: A high-throughput DNA analyzer for comparative population genomics.

(June 2005) \$ 264,529

National Science Foundation - Environmental Biology: CAREER: Comparative vertebrate phylogeography as a tool for reconstructing environmental change and effect in Madagascar.

(June 2000 - May 2004) - \$408,133

National Science Foundation - Social, Behavioral, and Economic Research: Evolutionary history of subfossil lemurs as determined by ancient DNA analysis. (July 1999 - May 2001) –

\$210,361

National Science Foundation - Environmental Biology: Biogeography of Malagasy carnivores.

(July 1998 - August 2000) - \$76,000

National Institutes of Health - NCRR Shared Instrumentation Grant: An automated DNA sequencing facility (March 1998) - \$128,500

National Science Foundation - Social, Behavioral, and Economic Research: Analysis of mitochondrial DNA in subfossil lemurs. (January 1998 - June 1999) - \$78,363

National Science Foundation - Environmental Biology - Research Planning Grant: Phylogeny and evolution of mitochondrial DNA in extinct Malagasy primates. (September 1997 - January 1999) - \$18,000

National Science Foundation - Environmental Biology - Postdoctoral Fellowship: Molecular evolution in strepsirrhine primates. (August 1993 - August 1995) - \$64,800

National Science Foundation - Social, Behavioral, and Economic Research: Dissertation Research: The phylogenetic affinities of the Cheirogaleidae (May 1990 - September 1992) - \$8490

## **OTHER AWARDS AND HONORS**

National Evolutionary Synthesis Center (NESCent), Catalysis Meeting Award, “Patterns of

Biodiversity in Madagascar” \$36,000 (with C. Kremen) (2006)  
 Duke Provost’s Fund, The Neurobiology of Sleep and Hibernation, \$50,000 (with P. Klopfer and A. Krystal) (2006)  
 Society for Systematic Biology, Executive Vice President nominee (2003)  
 Josephine Bay Paul and C. Michael Paul Foundation, Biodiversity Leadership Award (2002) – \$180,000 award  
 Society for Systematic Biology, Council nominee (1995; 2000)  
 George Joost Award for Outstanding Teaching nominee- 1998-99 nomination by NU Medical School Class of 2002  
 Northwestern University Research Grants Committee Award (May, 1999 - May, 2001)  
 Conservation International, Margot Marsh Biodiversity Fund - Research Grant (May, 1998 - April, 1999)  
 L.S.B. Leakey Foundation - Research Grant (January, 1998 - December, 1998)  
 Northwestern University Research Grants Committee Award (March, 1997 - March, 1998)  
 Intramural Research Grant, Northwestern Medical School (June, 1996 - May, 1997)  
 L.S.B. Leakey Foundation - Research Grant (January, 1995 - December, 1995)  
 L.S.B. Leakey Foundation - Research Grant (January, 1994 - December, 1994)  
 American Museum of Natural History - Collection Study Grant (June 1991)  
 Sigma Xi - Grant-in-Aid-of-Research (March 1991)  
 Katherine Stern Dissertation Fellowship (September 1991 - May 1992)  
 Best Student Paper in Systematic Zoology, American Society of Zoologists (December 1991)  
 The Sherwood Washburn Student Paper Prize, American Association of Physical Anthropologists (April 1991)  
 Sigma Xi - Grant-in-Aid-of-Research (December 1989)  
 Douracouli Foundation - Research Grant (July 1989 - October 1989)  
 World Wildlife Fund - Research Grant (July 1989 - October 1989)  
 Dean's Discretionary Fund - Duke University (August 1987)  
 Duke University Graduate Fellowship (August 1986 - August 1991)

## PROFESSIONAL SERVICE

Associate Editor for *Evolution* (2002-2005)  
 Editorial Board for *International Journal of Primatology* (2000 - 2006), *Molecular Phylogenetics and Evolution* (2002 - present) and *Systematic Biology* (1995 - 1998)  
 Council Member: Society for Systematic Biology (2002 - 2005)  
 Duke University Primate Center, External Advisory Committee (2001 - 2005)  
 Integrated Primate Biomaterials and Information Resource, Scientific Advisory Committee (2003 - present)  
 Peer review for: *American Journal of Physical Anthropology*, *American Journal of Primatology*, *American Museum Novitates*, *American Naturalist*, *Ancient Biomolecules*, *Biochemical Genetics*, *Biological Journal of the Linnean Society*, *BMC Evolutionary Biology*, *Cladistics*, *Conservation Genetics*, *Current Biology*, *Evolution*, *Gene*, *International Journal of Primatology*, *Journal of Evolutionary Biology*, *Journal of Human Evolution*, *Journal of Molecular Evolution*, *Molecular Biology and Evolution*, *Molecular Development and Evolution*, *Molecular Ecology*, *Molecular Phylogenetics and Evolution*, *Nature*, *Proceedings of the National Academy of Sciences*, *Science*, *Systematic Biology*, *Zoological Journal of the Linnean Society*  
 NSF Panel Member: Major Research Instrumentation Program, Spring Panel - 1998, 1999  
 NSF Panel Member: Division of Environmental Biology, Spring Systematics Panel - 2000  
 NSF Panel Member: Division of Environmental Biology, Biotic Surveys & Inventories - 2001  
 NSF Panel Member: Human Origins (HOMINID) - 2002  
 NSF Panel Member: Eukaryotic Genetics, Spring Panel - 2003, 2004, 2005, 2006, 2007  
 NSF Tree of Life Workshop (December 2000)  
 NSF Genomics of Human Origins Workshop (July 2002)  
 NSF Workshop: Enhancing Collaborative Research on the Environment in Sub-Saharan Africa (SSA) (January 2005)  
 Member, External Review Committee for New York Consortium on Evolutionary Primatology (NYCEP) (March 2007)  
 External review of grant proposals to NSF (Systematic Biology, Population Genetics, Molecular

and Cellular Biosciences, Eukaryotic Genetics, Animal Behavior, Physical Anthropology, International Programs, and Archaeology); the Leakey Foundation; Louisiana Education Quality Support Fund (LEQSF); National Geographic Society's Committee for Research and Exploration; New York University Research Challenge Fund; Smithsonian Institution Scholarly Studies Program; AAAS Women's International Scientific Collaboration Program  
Book review for Academic Press, Oxford University Press, Sinauer Associates, University of Chicago Press

### UNIVERSITY SERVICE (DUKE)

- Director, Duke Lemur Center (January 2006 – present)
- Primate Genomics Initiative Steering Committee (September 2008 – present)
- Member, BAA Task Force (Fall 2006 – Fall 2007)
- Academic Council (May 2007 – present)
- Athletic Council (September 2007 – present)
- Committee Service: Role of Professors of the Practice, Department of Biology (Spring 2007); Department of Biology, Graduate Advisory Committee (Spring 2007); Promotion Review Committee (Spring, 2007); Tenure Review Committee (Spring, 2007); Biology Department Graduate Admissions (Spring, 2008); Promotion Review Committee (Fall, 2008); Primate Genomics Steering Committee (September 2008 – present)

### UNIVERSITY SERVICE (YALE)

- Director of Graduate Admissions, Dept. of Ecology and Evolutionary Biology, Yale University (2002 – 2005)
- EEB Undergraduate Advisor (Class of 2004)
- EEB Seminar Series Coordinator (2001/2002)
- Committee Service: EEB faculty search committee (Fall, 2001); ESC Sub-Committee for Teaching Facilities (Fall, 2002); Long-term Genetic Resource Facility for the Yale Peabody Museum (Spring, 2002; committee chair); George Gaylord Simpson Prize Committee (Spring, 2002); Coe Professorship in Ornithology search committee (Spring, 2003); Yale Biological Safety Committee (2002/2003); Packard Fellowship nomination committee (Spring 2004); Shared-equipment grant exploratory committee (Fall 2004; committee chair); Peabody Museum Advisory Council for NSF Graduate Teaching Fellows in K-12 Education program (Fall 2004); Science, Technology, and Research Scholars (STARS) Advisory Committee (Fall, 2004); Donnelley Postdoctoral Fellowship Selection Committee (Spring, 2005)
- Yale Representative to Organization for Tropical Studies (2002/2003); Yale Representative to Tropical Biology Association (2002 - 2005)
- African Studies Council (2003 - 2005)

### PUBLICATIONS

#### PUBLISHED OR IN PRESS:

- 2009 Groeneveld, L.F., Weisrock, D.W., Rasoloarison, R., **Yoder, A.D.** and P.M. Kappeler. Species delimitation in lemurs: multiple genetic loci reveal low levels of species diversity in the genus *Cheirogaleus*. BMC Evolutionary Biology (in press)
- 2009 O'Brien, J., Mariani, C., Olson, L.E., Russell, A.L., Say, L., **Yoder, A.D.** and T.J. Hayden. Multiple colonizations of the Western Indian Ocean by *Pteropus* fruit bats (Megachiroptera: Pteropodidae): the furthest islands were colonized first. Mol. Phyl. & Evol. (in press)
- 2009 Karanth, K.P. and **A.D. Yoder**. Geographic origins of aDNA samples and prospects for aDNA studies in the tropics. In: Molecular Markers, PCR, Bioinformatics and Ancient DNA – Technology, Troubleshooting And Applications (G. Dorado, ed.) Science Publishers (in press)
- 2009 Noonan, B.P. and **A.D. Yoder**. Anonymous nuclear markers for Malagasy plated lizards (*Zonosaurus*). Molecular Ecology Resources, 9:402-404.
- 2009 Raselimanana, A., Noonan, B.P., Karanth, P., Gauthier, J., and **A.D. Yoder**. Phylogeny and Evolution of Malagasy Plated Lizards. Mol. Phyl. & Evol. 50: 336-344.

- 2008 Riddle, BR; Dawson, MN; Hadly, EA, Hafner, D.J., Hickerson MJ, Mantooth SJ, and **A.D. Yoder**. The role of molecular genetics in sculpting the future of integrative biogeography. *Progress in Physical Geography*, 32 (2): 173-202
- 2008 Horvath, J., Weisrock, D., Embry, S.L., Fiorentino, Balhoff, J.P., I., Kappeler, P., Wray, G.A., Willard, H., and **A.D. Yoder**. The development and application of a phylogenomic toolkit: resolving the evolutionary history of Madagascar's lemurs. *Genome Research* 18(3): 489-499
- 2008 Russell, A.L., Goodman, S.M., Fiorentino, I., and **A.D. Yoder**. Population genetic analysis of *Myzopoda* spp. (Chiroptera: Myzopodidae) in Madagascar. *J. Mamm.* 89 (1): 209-221
- 2007 **Yoder, A.D.** Lemurs: a Quick Guide. *Current Biology*, 17 (20): 866-868.
- 2007 Heckman, K.L., Hanley, C.L., Rasoloarison, R. and **A.D. Yoder**. Multiple nuclear loci reveal patterns of incomplete lineage sorting and complex species history within western mouse lemurs (*Microcebus*). *Mol. Phyl. & Evol.* 43 (2): 353-367.
- 2007 Naghibalhossaini, F., **Yoder, A.D.**, Tobi, M., and C.P. Stanners. Evolution of a tumorigenic property conferred by Glycophosphatidyl-inositol membrane anchors of CEA gene family members during the primate radiation. *Molecular Biology of the Cell* 18 (4): 1366-1374).
- 2007 Russell, A.L., Ranivo, J., Palkovacs, E.P., Goodman, S.M., and **A.D. Yoder**. Working at the interface of phylogenetics and population genetics: a biogeographic analysis of *Triadenops* spp (Chiroptera: Hipposideridae) *Molecular Ecology*, 16:839-851
- 2006 Kellie L. Heckman, Rasoazanabary, E., Machlin, E., Godfrey, L.R., and **Anne D. Yoder**. Incongruence between genetic and morphological diversity in *Microcebus griseorufus* of Beza Mahafaly. *BMC Evolutionary Biology*, 6:98 (16 Nov 2006)
- 2006 **Yoder, A.D.** and M. Nowak. Has vicariance or dispersal been the predominant biogeographic force in Madagascar?: only time will tell. *Ann. Rev. Écol. Evol. Syst.*, 37:405-431.
- 2006 Goodman, S.M., Cardiff, S. G., Ranivo, J., Russell, A.L. and **A.D. Yoder**. A new species of *Emballonura* (Emballonuridae: Chiroptera) from the dry regions of Madagascar. *American Museum Novitates*, No. 3538: 1-24.
- 2006 **Yoder, A.D.** and K. Heckman. Mouse lemur phylogeography revises a model of ecogeographic constraint in Madagascar. In: *Primate Biogeography: Progress and Prospects* (J. Fleagle and S.M. Lehman, eds.) Kluwer Press, pp. 255 – 268.
- 2005 **Yoder, A.D.** The biogeography of Madagascar: where to turn when the fossils aren't there. *Paleontological Society Papers*, V. 11, 129-139.
- 2005 Tan, Y., **Yoder, A.D.**, Yamashita, N. and W.-H. Li. Evidence from opsin genes rejects nocturnality in ancestral primates. *Proceedings of the National Academy of Sciences* 102: 14712-14716.
- 2005 **Yoder, A.D.**, Olson, L.E., Hanley, C., Heckman, K., Rasoloarison, R., Russell, A.L., Ranivo, J., Soarimalala, V., Karanth, K.P., Raselimanana, A.P. and S.M. Goodman. A multidimensional approach for detecting species patterns in Malagasy vertebrates. *Proceedings of the National Academy of Sciences* 102: 6587-6594, Suppl. 1 (invited Colloquium contribution)
- 2005 Karanth, P. Rakotosamimanana, B., Parsons, T.J. and **A.D. Yoder**. Ancient DNA from giant extinct lemurs verifies single origin of Malagasy primates. *Proceedings of the National Academy of Sciences* 102: 5090-5095
- 2005 Karanth, K.P., Palkovacs, E., Gerlach, J., Glaberman, S., Caccone, A., and **A.D. Yoder**. Native Seychelles tortoises or Aldabran imports? The importance of radiocarbon dating for ancient DNA studies. *Amphibia-Reptilia* 26(1): 116-121
- 2004 Olson, L.E., Goodman, S., and **A.D. Yoder**. Illumination of cryptic species boundaries in long-tailed shrew tenrecs (Mammalia: Tenrecidae; *Microgale*) provides insights into geographic variation and distributional constraints. *Biological Journal of the Linnean Society*, 83:1-22.
- 2004 **Yoder, A.D.** and Z. Yang. Divergence dates for Malagasy lemurs estimated from multiple gene loci: geological and evolutionary context. *Molecular Ecology*, 13:757-773.
- 2003 Kunstman, K., Puffer, B., Korber, B., Kuiken, C., Smith, U., Kunstman, J., Stanton, J., Agy, M., Shibata, R., **Yoder, A.D.**, Pillai, S., Doms, R., Marx, P., and S. Wolinsky. Structure and Function of CC-Chemokine Receptor 5 Homologues Derived from Representative

- Primate Species and Subspecies of the Taxonomic Suborders *Prosimii* and *Anthropoidea*.  
Journal of Virology, 77(22): 12310-12318
- 2003 **Yoder, A.D.** and J.J. Flynn. Origin of Malagasy Carnivora. In: The Natural History of Madagascar (S. M. Goodman and J. Benstead, eds.) University of Chicago Press, pp. 1253-1256.
- 2003 **Yoder, A.D.** Phylogeny of the lemurs. In: The Natural History of Madagascar (S. M. Goodman and J. Benstead, eds.) University of Chicago Press, pp. 1242-1247.
- 2003 Yang, Z. and **A.D. Yoder**. Comparison of likelihood and Bayesian methods for estimating divergence times using multiple gene loci and calibration points, with application to a radiation of cute-looking mouse lemur species. Systematic Biology, 52(5):705-716.
- 2003 **Yoder, A.D.** The phylogenetic position of genus *Tarsius*: whose side are you on? In: Tarsiers: Past, Present, and Future (P.C. Wright, E.L. Simons and S. Gursky, eds.) Rutgers University Press, pp. 161-175.
- 2003 Eriksson, T., Hibbs, M.S., **Yoder, A.D.**, Delwiche, C.F., and M.J. Donoghue. The phylogeny of Rosoideae (Rosaceae) based on sequences of the internal transcribed spacers (ITS) of nuclear ribosomal DNA and the trnL/F region of chloroplast DNA. International Journal of Plant Sciences, 164(2):197-211.
- 2003 **Yoder, A.D.**, Burns, M.M., Zehr, S., Delefosse, T., Veron, G., Goodman, S.M., and J.J. Flynn. Single origin of Malagasy Carnivora from an African ancestor. Nature, 421: 734-737.
- 2002 **Yoder, A.D.**, Burns, M.M., and F. Genin. Molecular evidence of reproductive isolation in sympatric sibling species of mouse lemurs. International Journal of Primatology, 23: 1335-1343.
- 2002 Olson, L.E. and **A.D. Yoder**. Using secondary structure to identify ribosomal numts: cautionary examples from the human genome. Molecular Biology and Evolution, 19(1): 93-100
- 2002 **Yoder, A.D.** and T. Delefosse. Ancient DNA. McGraw-Hill, Yearbook of Science and Technology, pp. 9-14.
- 2001 **Yoder, A.D.**, Irwin, J.A., and B. Payseur. Failure of the ILD to determine data combinability for slow loris phylogeny. Systematic Biology, 50: 408-424.
- 2001 **Yoder, A.D.** Ancient DNA from *Megaladapis edwardsi*. Folia Primatol (Basel), 72(6):342-4
- 2000 **Yoder, A.D.**, Rasoloarison, R., Goodman, S., Irwin, J.A., Atsalis, S. Ravosa, M.J., and J.U. Ganzhorn. Remarkable species diversity in Malagasy mouse lemurs (*Primates, Microcebus*) Proceedings of the National Academy of Sciences, 97: 11325-11330.
- 2000 **Yoder, A.D.**, Irwin, J.A., Rakotoarisoa, S.V., and S. Goodman. Genetic tests of the taxonomic status of *Lemur catta* from the high mountain zone of the Andringtra Massif, Madagascar. Journal of Zoology, 252:1-9.
- 2000 **Yoder, A.D.** and Z. Yang. Estimation of primate speciation dates using local molecular clocks. Molecular Biology and Evolution, 17(7):1081-1090.
- 1999 **Yoder, A.D.** and J.A. Irwin. Phylogeny of the Lemuridae: effects of taxon and character sampling on resolution of species relationships within *Eulemur*. Cladistics, 15:351-361.
- 1999 **Yoder, A.D.**, Rakotosamimanana, B. and T.J. Parsons. Ancient DNA in subfossil lemurs: methodological challenges and their solutions. In: Rasaminanana, H., B. Rakotosamimanana, S. Goodman and J. Ganzhorn (eds.), New Directions in Lemur Studies. Plenum Press, pp. 1-17.
- 1999 Yang, Z. and **A.D. Yoder**. Estimation of the transition/transversion rate bias and species sampling. Journal of Molecular Evolution, 48(3): 274-283
- 1997 **Yoder, A.D.** Back to the future: a synthesis of strepsirrhine systematics. Evolutionary Anthropology, 6(1):11-22.
- 1997 **Yoder, A.D.** An infinitude of connecting links. Trends in Ecology and Evolution, 12(3):86-88.
- 1996 **Yoder, A.D.**, Vilgalys, R., and M. Ruvolo. Molecular evolutionary dynamics of cytochrome *b* in strepsirrhine primates: the phylogenetic significance of third position transversions. Molecular Biology and Evolution, 13(10):1339-1350.
- 1996 **Yoder, A.D.**, Cartmill, M., Ruvolo, M., Smith, K., and R. Vilgalys. Ancient single origin for Malagasy primates. Proceedings of the National Academy of Sciences, 93:5122-5126.
- 1996 **Yoder, A.D.** The use of phylogeny for reconstructing lemuriform biogeography. In: Biogeographie de Madagascar. (W.R. Lourenco, ed.) Editions de l'ORSTROM, Paris,

- pp. 245-258.
- 1994 **Yoder, A.D.** The relative position of the Cheirogaleidae in strepsirhine phylogeny: a comparison of morphological and molecular methods and results. *American Journal of Physical Anthropology*, 94(1):25-46.
- 1994 Cartmill, M. and **A.D. Yoder**. Molecules and Morphology in Primate Systematics: An Introduction. *American Journal of Physical Anthropology*, 94(1):1.
- 1992 **Yoder, A.D.** Applications and limitations of ontogenetic comparisons for phylogeny reconstruction: the case of the strepsirhine internal carotid artery. *Journal of Human Evolution*, 23:183-195.
- 1992 Kay, R.F., Thewissen, J.G.M. and **A.D. Yoder**. Cranial anatomy of *Ignacius graybullianus* and the affinities of the Plesiadapiformes. *American Journal of Physical Anthropology*, 89:477-498.

#### MANUSCRIPTS (submitted or in manuscript):

- 2009 M. J. Hickerson, B. C. Carstens, J. Cavender-Bares, K. A. Crandall, C. H. Graham, J. Johnson, L. Rissler, P. F. Victoriano, and **A.D. Yoder**. 20 years after Avise et al. 1987: Comparative phylogeography fulfilling original promise by integrating with emerging fields (in prep)
- 2009 Heckman, K.L., Russell, A.L., and **A.D. Yoder**. Demographic history of mouse lemur sister species: insight into species diversification (in prep.)
- 2009 Weisrock, D.W., Rasoloarison, R.M., Fiorentino, I., Ralison, J.M., Goodman, S.M., Kappeler, P.M., and **A. D. Yoder**. Extraordinary levels of cryptic species diversity in Malagasy mouse lemurs revealed with novel analyses of multilocus genetic data (in prep)

#### BOOK REVIEWS:

- 2004 Yoder, A.D. Review of *A Primer of Conservation Genetics*, by Frankham, R., Ballou, J.D. and D.A. Briscoe. *Journal of Mammalogy* (in prep)
- 1998 **Yoder, A.D.** Review of *Introduction to the Primates*, by Daris R. Swindler. *American Zoologist*, 39(1):186-187
- 1993 **Yoder, A.D.** Review of *Classification, Evolution, and the Nature of Biology*, by Alec L. Panchen. *American Journal of Physical Anthropology*, 91(4):535-537.

#### NON-REFEREED:

- 1999 **Yoder, A.D.**, and J.A. Irwin. Eulemur is a phylogenetically-defensible taxon (but species relationships within the genus are problematic). *Lemur News*, 4:31-32.
- 1999 **Yoder, A.D.**, Irwin, J.A., Goodman, S.M., and S.V. Rakotoarisoa. *Lemur catta* from the Andringitra Massif are *Lemur catta*. *Lemur News* 4:32-33.
- 1996 **Yoder, A.D.** Pilot study to determine the status of *Allocebus trichotis* in Madagascar. *Lemur News*, 2:14-15.
- 1996 **Yoder, A.D.** Malagasy primate origins. *Lemur News*, 2:17 (invited review).
- 1984 **Yoder, A.D.**, Simons, E.L., and J. Pollock. Conservation at Duke University Primate Center. *IUCN/SSC Primate Specialist Group Newsletter*, 4:48-50.

#### CONTRIBUTED PAPERS:

- 2007 Noonan, B.P., Rasilimanana, A., Karanth, K.P., Gauthier, J., **A.D. Yoder**. Systematics and biogeography of Malagasy plated lizards (Zonosaurinae). (Podium presentation at 2007 ASIH meetings)
- 2006 Russell, A.L., Ranivo, J., Palkovacs, E.P., Goodman, S.M., **A.D. Yoder**. Integrating phylogenetics and population genetics for biogeographic analyses. (Podium presentation at 2006 SBE meetings)
- 2004 Heckman, K., Hanley, C., Rasoloarison, R., and **A.D. Yoder**. Investigating species boundaries in mouse lemurs: a multilocus perspective. (Podium presentation at 2004 Evolution meetings)
- 2004 Karanth, K.P., Raselimanana, A., and **A.D. Yoder**. The Plated lizards of Madagascar: a model system for the study of cryptic speciation, budding speciation, and incomplete lineage sorting. (Podium presentation at 2004 Evolution meetings)

- 2004 Hanley, C., Goodman, S.M., Russell, A.L. and **A.D. Yoder**. Examining gene flow in the endangered Malagasy narrow-striped mongoose (*Mungotictis decemlineata*) using a novel panel of microsatellite loci. (Poster presentation at 2004 Evolution meetings)
- 2004 Russell, A., Palkovacs, E., Goodman, S.M., Ranivo, J. and **A.D. Yoder**. A complex inter-species phylogeny reveals distinctive biogeographic patterns of diversification in triple leaf-nosed bats (*Triaenops* spp.) in Madagascar. (Podium presentation at 2004 Evolution meetings)
- 2004 Meyer, W., Russell, A., Rakotomalala, D. and **A.D. Yoder**. The impact of habitat destruction on population genetic structuring in Malagasy chameleons (Chamaeleonidae: *Calumma*). (Poster presentation at 2004 Evolution meetings)
- 2004 Karanth, K.P. Palkovacs, E., Gerlach, J., Glaberman, S., Pender Hume, J., Caccone, A.G., and **A.D. Yoder**. Ancient DNA and evolution of the Seychelles giant tortoise. The Northeast Ecology & Evolution Conference, 26-28 March 2004, University of Connecticut, Storrs.
- 2003 **Yoder, A.D.** and Z. Yang. Mouse lemurs are older than you think. (Podium presentation at 2003 Evolution meetings). *Session Chair*
- 2003 **Yoder, A.D.**, Olson, L., Rasoloarison, R., Soarimalala, V., Rakotondravony, D., and S. Goodman. The many ways in which phylogenetic analysis is refining conservation priorities for Malagasy mammals. (Podium presentation at 2003 Society for Conservation Biology meetings)
- 2002 **Yoder, A.D.** Comparing Bayesian and likelihood methods for estimating divergence dates in strepsirrhine primates. (Podium presentation at New England Molecular Evolutionary Biologists Meeting, XIII)
- 2001 **Yoder, A.D.** and J.P. Huelsenbeck. Testing the effects of methods, characters, and taxa on a persistent problem in primate phylogeny. (Podium presentation at 2001 Evolution meetings) *Session Chair*
- 2001 Delefosse, T. and **A.D. Yoder**. Evaluating mutation patterns in clones as a test of ancient DNA authenticity. (Podium presentation at 2001 Evolution meetings).
- 2001 Olson, L.E. and **A.D. Yoder**. Using secondary structure to identify ribosomal numts: cautionary examples from the human genome. (Poster presentation at 2001 Evolution meetings).
- 2001 Burns, M.M, Rakotomalala, D., and **A.D. Yoder**. Phylogeographic patterns in multiple species of Malagasy chameleons. (Poster presentation at 2001 Evolution meetings).
- 2001 Olson, L.E., Goodman, S. and **A.D. Yoder**. Comparative phylogeography of Madagascar's shrew tenrecs (Tenrecidae, *Microgale*). (Abstract, podium presentation at 81th Annual Meeting of the American Society of Mammalogists).
- 2000 **Yoder, A.D.** There is something wrong with the partition homogeneity (ILD) test. (Podium presentation at 2000 Evolution meetings)
- 2000 Yang, Z. and **A.D. Yoder**. Estimation of primate speciation dates using local molecular clocks. (Podium presentation at 2000 Evolution meetings)
- 2000 Olson, L., Goodman, S., and **A.D. Yoder**. Systematics of Madagascar's tenrecs: adding taxa versus adding characters and the effects of untested species limits. (Podium presentation at 2000 Evolution meetings)
- 2000 Olson, L., Goodman, S., and **A.D. Yoder**. Molecular phylogeny and phylogeography of Madagascar's shrew tenrecs (Tenrecidae: *Microgale*). (Abstract, podium presentation at 80th Annual Meeting of the American Society of Mammalogists)
- 1999 **Yoder, A.D.**, Rasoloarison, R., Ganzhorn, J., Goodman, S., Irwin, J.A., and S. Atsalis. Genetic data contradict established views of mouse lemur biogeography and taxonomy. (Podium presentation at 1999 Evolution meetings) *Session Chair*
- 1999 Eriksson, T., Donoghue, M.J. and **A.D. Yoder**. The phylogeny of Rosoideae as evidenced by DNA sequences from ITS (nuclear ribosomal) and the trnI/f region (chloroplast). (Abstract, podium presentation at International Botanical Congress)
- 1998 **Yoder, A.D.** and T.J. Parsons. DNA sequences from extinct giant lemurs: consequences for biogeographic and phylogenetic hypotheses of the extant. (Podium presentation at 1998 Evolution meetings) *Session Chair*
- 1998 Eriksson, T. and **A.D. Yoder**. A computer simulation evaluation of the effect of homoplasy based character weighting on the success of finding expected trees. (Podium

- presentation at 1998 Evolution meetings)
- 1998 **Yoder, A.D.**, Rakotoarisoa, S.V. and S. Goodman. Genetic analysis of *Lemur catta* from the Andringtra Massif of Madagascar. *American Journal of Physical Anthropology*, Suppl. 26:237.
- 1997 **Yoder, A.D.**, Eriksson, T. and M.D. Donoghue. Combined-data analysis can amplify phylogenetic signal: a computer simulation study. (Podium presentation at 1997 Evolution meetings)
- 1996 **Yoder, A.D.** Comparing the phylogenetic informativeness of mitochondrial and nuclear DNA in strepsirrhine primates. (Podium presentation at 1996 Evolution meetings)
- 1996 **Yoder, A.D.** and M. Ruvolo. Strepsirrhine phylogeny: Congruence of results from a mitochondrial and a nuclear gene. *American Journal of Physical Anthropology*, Suppl. 22:250. *Session Chair*
- 1996 Burney, D., Burney, L., Griffin, W., Wright, H., James, H., Jungers, B., MacPhee, R., Rafamantanantsoa, J-G., Rakotondrazafy, T., Ramilisonina, R., Warren, D., and **A.D. Yoder**. Belo-sur-mer and other integrated sites from Holocene Madagascar. *Proceedings of the North American Paleontological Convention*, Smithsonian Institution, Washington, D.C.
- 1994 **Yoder, A.D.** The reality of *Eulemur*, with comments on molecular character weighting. (Podium presentation at 1994 Evolution meetings) *Session Chair*
- 1994 **Yoder, A.D.** Molecular systematics of the Lemuridae: is *Eulemur* necessary? *American Journal of Physical Anthropology*, Suppl. 18:212-213.
- 1993 **Yoder, A.D.** Molecules and morphology together reveal strepsirrhine phylogeny. (Podium presentation at 1993 Evolution meetings)
- 1993 **Yoder, A.D.** Relative rates of molecular evolution in strepsirrhine primates. *American Journal of Physical Anthropology*, Suppl. 16:214. *Session Chair*
- 1992 **Yoder, A.D.** Morphological and molecular systematics of the Strepsirhini. *American Journal of Physical Anthropology*, Suppl.15:177.
- 1991 **Yoder, A.D.** A comparison of character ontogeny in two strepsirrhine primates: applications and limitations for phylogenetics. *American Zoologist*, 31(5):62A.
- 1991 **Yoder, A.D.** A comparison of the early developmental stages of the internal carotid artery in a cheirogaleid and a loriform: implications for phylogeny. *American Journal of Physical Anthropology*, Suppl. 12:187.
- 1989 **Yoder, A.D.** A phylogenetic systematic study of the true lorises. *American Journal of Physical Anthropology*, 78(2):327.

## EDITED VOLUMES

- 1994 *Molecules and Morphology in Primate Systematics*. Edited by G. Conroy, M. Cartmill and **A.D. Yoder**. New York: Wiley-Lyss; special volume of *American Journal of Physical Anthropology*, 94(1).

## DISSERTATION TITLE

- 1992 **Yoder, A.D.** *The Phylogenetic Affinities of the Cheirogaleidae: A Molecular and Morphological Analysis*. Duke University.

## SYMPOSIA ORGANIZED

- 2004 *Theoretical and Empirical Concerns in Estimating Clade Ages: the Placental Mammals as a Test Case*. Held at annual meetings of the Society for Systematic Biologists, 2004. Organized with Z. Yang.
- 1992 *Molecules versus Morphology in Primate Systematics*. Held at annual meetings of American Association of Physical Anthropologists. Organized with M. Cartmill.

## WORKSHOPS ORGANIZED

- 2007 *Really big biogeographically-based integrative historical and ecological science: grand collaborative studies of whole biotas*. Organized with C. Cunningham, M. Donoghue, and B. Riddle. Funded by NSF-DEB.
- 2006 *Historical Perspectives on the Distribution of Biodiversity in Madagascar*. Organized with C. Kremen; funded by NESCent.

## INVITED SEMINARS

NESCent, *Evolution in the Triangle*, Fall 2009  
University of Iowa, Departments of Biology and Geoscience, April 2009  
University of Iowa, *Darwin Celebration*, April 2009  
University of Alaska – Fairbanks, Experimental Program to Stimulate Research, February 2009  
Sigma Xi, September 2008  
University of Washington, Department of Genome Sciences, May 2008  
South Eastern Louisiana University, Department of Biology, *Graduate Student Invited Speaker*, November 2007  
Duke University, Department of Pediatrics Research Retreat, *Keynote Speaker*, May 2007  
Osher Lifelong Learning Institute (Duke Chapter), May 2007  
University of North Carolina – Chapel Hill, Ecology Group, January 2007  
University of Iowa, Departments of Geoscience and Biological Sciences, 2007 (declined)  
Rutgers University, Department of Ecology, Evolution, & Natural Resources, Spring 2007  
Duke University Continuing Studies Program, Parents’ Weekend “Student for a Day”, October 2006  
University of California, Berkeley, Department of Integrative Biology, *Graduate Student Invited Speaker*, October 2006  
L.S.B. Leakey Foundation, Board of Trustees, October 2006  
University of Idaho, “*Randall Seminars: Women in Science*”, September 2006  
George Washington University, Department of Biology, March 2006  
Southeastern Ecology and Evolution Conference, University of Alabama, *Keynote Speaker*, March 2006  
The Forest at Duke, Retirement Community, November 2005  
Stanford University, Department of Biological Sciences, May 2005 (declined)  
University of Missouri-St. Louis, Department of Biology, *Graduate Student Super Speaker*, Spring, 2005 (declined)  
Duke University, DUPC Director Search, September 2004  
Max Planck Institute for Evolutionary Anthropology (Leipzig), (standing invitation)  
Fellows of Calhoun College, Yale University, April 2004  
SUNY - Stony Brook, Department of Anatomy. March 2004  
John H. Ostrom Lecture Series, Yale Peabody Museum, March 2004  
NYCEP (New York Consortium in Evolutionary Primatology): December 2003  
Peabody Museum, Yale University, O.C. Marsh Program: December 2003  
Wesleyan University, Hughes Program in the Life Sciences, July 2003  
Boston University, Department of Biology (Ecology, Behavior, and Evolution group), April 2003  
Duke University, Department of Biological Anthropology & Anatomy and Department of Biology, March 2003  
Yale University, Yale Institute for Biospheric Studies, January 2003  
Yale University, Department of Anthropology, October 2002  
University College London, Department of Biology (Yang Lab), October 2002  
University of Connecticut - Storrs, Department of Ecology and Evolutionary Biology. September, 2002  
Fordham University, Department of Biology. May 2002  
American Museum of Natural History, April 2002  
Duke University, EEOB Seminar Series (*Systematics Super Speaker*). April 2001  
Royal Botanic Gardens, Kew Science Innovation Lecture Series. Spring 2001 (declined)  
Yale University, Department of Ecology and Evolutionary Biology. December 2000  
University of Tennessee - Knoxville, Department of Ecology and Evolutionary Biology. November 2000.  
DePaul University, Department of Biology: April 2000 (declined)  
Northeastern Ohio Universities College of Medicine, Department of Anatomy (Evolutionary Morphology Seminar Series). May 1999  
Harvard University, Department of Anthropology (BioWing Colloquium). February 1999  
Vanderbilt University, Department of Biology. February 1999  
NYCEP (New York Consortium in Evolutionary Primatology): April 1998

University of Virginia, Department of Biology: February 1998  
 Georgetown University, Department of Biology: February 1998  
 Armed Forces DNA Identification Laboratory: September 1997  
 Wayne State University, Department of Anatomy and Cell Biology: March 1997 (declined)  
 Smithsonian Institution, Museum of Natural History, Department of Vertebrate Zoology:  
 May 1996  
 Southeastern Louisiana University, Department of Biology: February 1995  
 Northwestern University, CMS Biology: May 1994  
 University of Texas - Austin, Department of Anthropology and The Institute for Cellular and  
 Molecular Biology: February 1994  
 Harvard University, Department of Organismal and Evolutionary Biology (Lewontin Lab Seminar  
 Series). November 1993  
 SUNY - Stony Brook, Department of Anatomy. October 1993  
 Northwestern University, CMS Biology. October 1993  
 Chicago Field Museum of Natural History, Department of Zoology. October 1993  
 Harvard University, Department of Anthropology: February 1993  
 Yale University, Department of Anthropology: May 1993

### **INVITED SYMPOSIUM PARTICIPATION**

Asia Africa Evolution Meeting, Chiba, Japan; Tokyo Institute of Technology: December, 2007  
 (declined)  
 Academy of Natural Sciences, Philadelphia, PA; Women in the Natural Sciences; WINS 25th  
 Anniversary: October, 2007 (declined)  
 American Genetics Association, 3<sup>rd</sup> Annual Conservation Genetics Meeting: September, 2007  
 Evolutionary Biology in the 21st Century – Tracing Patterns of Evolution through the Tree of Life,  
 Beijing, China (Organized by Y-L Qiu & M. Donoghue): June 2007  
 American Association for Anthropological Genetics: Origins, the Genetic Evidence, Philadelphia,  
 PA (Organized by L. J. Hlusko): March 2007  
 University Göttingen & German Primate Center: December 2005  
 Primate Diversity: Past, Present, and Future – *Plenary Speaker*  
 (Organized by P.M. Kappeler)  
 DFG/NSF Research conference, Understanding Species Diversity on Earth: Unifying Field,  
 Museum and Laboratory Scientists in Global Biodiversity Study. November 2005  
 (Organized by the DFG and NSF; held at AAAS)  
 Geological Society of America Annual Meetings: October/November 2005  
 "Paleobiogeography: Generating New Insights Into The Coevolution Of The Earth And Its  
 Biota" (Organized by B.S. Lieberman) (declined)  
 American Association of Physical Anthropology Annual Meetings: April 2005  
 "Lorisoid evolution, morphology, and behavior" (Organized by A.M. Burrows) (declined)  
 Phylogenetics in Biodiversity Studies, Bangalore, India: June 2005 (Organized by R. Geeta)  
 NAS Colloquium on Systematics and the Origin of Species – Celebration of Ernst Mayr and his  
 works; National Academy of Sciences, Irvine, CA: December 2004 (Organized by F.J.  
 Ayala, J. Hey, and W.M. Fitch)  
 Biogeography and Molecular Phylogenetics, Tokyo, Japan; Japan Society for the Promotion of  
 Science, November 2004 (Organized by M. Hasegawa) (declined)  
 XIXth International Congress of Zoology, Beijing, China: August 2004  
 "Phylogeography: Principles and Practice" (Organized by G.M. Hewitt and D.-X. Zhang)  
 XIXth International Congress of Zoology, Beijing, China: August 2004  
 "Methodological Advances in Estimation of Species Divergence Dates Using Molecular  
 Data" (Organized by Z. Yang and B. Rannala)  
 Society for Conservation Biology, Duluth, Minnesota: July 2003  
 "Protecting Moving Targets: Integrating Movement Ecology and Conservation" (Organized  
 by M. Neel for the Nature Conservancy's David H. Smith Conservation Research  
 Fellowship Program)  
 American Society of Botanists, Mobile, Alabama: July, 2003  
 "Dating in the 21st Century: Theory and Reality in Finding a Date for your Clade"  
 (Organized by P. Crane and P. Herendeen)

American Association of Physical Anthropology Annual Meetings: April, 2000  
 "Reconstructing Primate Phylogeny and Human Evolution in the Age of Genomic Exploration" (Organized by M. Goodman and M. Weiss)  
 Museum National d'Histoire Naturelle, Paris, France: September, 1999  
 "Species Diversity and Endemism in Madagascar" (Organized by W. Lourenco)  
 American Association of Physical Anthropology Annual Meetings: April, 1999 (declined)  
 "Homoplasy in Primate Evolution" (Organized by C. Lockwood and J. Fleagle)  
 International Primatological Society, Antananarivo, Madagascar: August, 1998  
 "Contribution of Molecular Biology to Systematics, Phylogeny and Conservation of the Lemurs" (Organized by Y. Rumpler)  
 International Primatological Society, Antananarivo, Madagascar: August, 1998  
 "Lemuriform Evolution and Extinction" (Organized by W. Jungers and L. Godfrey)  
 Spring Systematics Symposium, Field Museum of Natural History, Chicago: April, 1998  
 "Combining Molecular and Paleontological data: a twofold approach for documenting major evolutionary patterns" (Organized by P. Wagner and J. Bates)

### **INVITED WORKSHOPS**

Workshop on Genomic Analysis of Species Extinctions, Pennsylvania State University, April 2009  
 (Organized by Webb Miller et al.)  
 Workshop on Molecular Evolution, Europe (Český Krumlov, Czech Republic) - Phylogeography and Conservation Genetics (January 2009)  
 Marine Biological Laboratory, Woods Hole, Massachusetts  
 Workshop in Molecular Evolution - Phylogeography and Conservation Genetics (Years 2000 - 2009)  
 NESCent Catalysis Group on Perspectives on the Origin and Conservation of Biodiversity in Patagonia, Durham, NC, June 16 – 18, 2008 (Organized by Jack Sites)  
 Academy of Natural Sciences Philadelphia, WINS – Women in Natural Sciences: “25 Years of Women in Science – Putting the Gender Gap Under the Microscope”, June, 2007  
 NESCent Working Group on Genomic Introgression, Durham, NC, December 17 – 19, 2006 (Organized by Marcy Uyenoyama)  
 NSF-DFG Conference on Biodiversity, AAAS, Washington, D.C., November 6-8, 2005  
 Mathematical Biosciences Institute, Ohio State University. Phylogeography and Phylogenetics (organized by Craig Moritz, Michael Hickerson, and Dennis Pearl) September 2005  
 Workshop on Molecular Evolution and Systematics, Institute of Zoology (CAS), Beijing, August, 2004  
 Ancient DNA: concerns and methodology. New York University, Department of Anthropology, May, 1998  
 Phylogenetic Systematics: methods and applications. The National Center for Genome Resources, workshop in Bioinformatics and Functional Genomics. Northwestern University Medical School, March, 1998  
 Mitochondrial Eve and the Coalescent (undergraduate level). Georgetown University, Department of Biology, February, 1998  
 Ancient DNA Techniques. Southeastern Louisiana University, Department of Biology, February, 1995

### **LAB MEMBERS (past and present)**

#### **Postdocs**

Link Olson, Thomas Delefosse, Praveen Karanth, Achille Raselimanana, Amy Russell, Brice Noonan, David Weisrock

#### **Graduate Students (primary advisor)**

Mike Nowak, Meredith Barrett, Kellie Heckman

#### **Graduate Students (committee membership)**

Charles Bell, Melissa Burns, Erica Edwards, Alana Kawakami, Sang-Tae Kim, Vincent Lynch, Brian Moore, William Moore, Eric Palkovacs, Bret Payseur, Gisele Ravololonarivo Randria, Saverio Vicario

**Technicians**

Kasia Witkos, Jodi Irwin, Melissa Burns, Carol Hanley, Isabella Fiorentino

**Undergraduates**

Zachary Hartman (Northwestern University); Wynn Meyer, Erica Machlin, and Melodie Zamora (Yale University); Dean Choi, Teresa Ai, Samantha Pearlman, and Johnathan Schwartz (Duke University)