

CURRICULUM VITAE

Beth Slikas

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EDUCATION

University of Pennsylvania

Ph.D., Biology, 1996

Dissertation: Phylogeny and evolution of the avian family Ciconiidae, the storks.

advisors - Frank B. Gill, Frederick H. Sheldon

B.S., Physics, 1984 (*magna cum laude*)

POSTDOCTORAL EXPERIENCE

National Zoological Park, Smithsonian Institution (April 97 – Sept 2001)

Systematics and biogeography of an assemblage of extinct endemic Hawaiian rails (*Aves/Gruiformes/Rallidae*); advisor - Robert C. Fleischer

University of Copenhagen (Sept 96 - March 1997)

Speciation of African montane forest birds, based on mitochondrial sequence data; advisors - Jon Fjeldså, Peter Arctander

POSITIONS HELD

Blood Systems Research Institute (June 2006 –current)

Staff Scientist, Virology Group

University of California, Berkeley (Sept 2005-June 2006)

Research Associate, Division of Insect Biology

University of California, Berkeley (Sept 2001-Sept 2005)

Manager of Molecular Systematics Laboratory, Museum of Vertebrate Zoology

TEACHING EXPERIENCE

Teaching Assistant, Biology Dept, Univ of Pennsylvania (1990-1996)

Teaching Assistant, Physics Dept, Univ of Pennsylvania (1984-1988)

GRANTS/AWARDS

1999 Smithsonian Restricted Endowment, Abbott Fund. "Evolution and conservation of Pacific Island *Acrocephalus* warblers" (\$11,000). Co-PI with R.C. Fleischer.

1999 Smithsonian Scholarly Studies Program: "Evolutionary relationships and rates in endemic Hawaiian birds" (\$70,000). PI's: R. C. Fleischer, B. Slikas, S.L. Olson, H.F. James.

1996 Smithsonian Postdoctoral Fellowship in Molecular Evolution: "Phylogeny and evolution of an extinct assemblage of Hawaiian rails (*Aves:Gruiformes:Rallidae*)" (2-year fellowship).

1996 Marcy Brady Tucker Travel Award, American Ornithologists' Union.

1994 American Ornithologists' Union Research Award: "Avian biogeography in the Tertiary: a molecular-phylogenetic approach" (\$1800)

1993 Frank M. Chapman Memorial Fund Grant, American Museum of Natural History: "Systematics and biogeography of the avian family Ciconiidae" (\$1700)

Curriculum vitae - Beth Slikas (continued)

PAPERS/POSTERS PRESENTED

- American Ornithologists' Union (AOU) 2000 – “Origins and phylogenetic relationships of Pacific island warblers in the genus *Acrocephalus*”, paper with G.R. Graves, R.C. Fleischer.
- AOU 1999 - “Relationships among species in the family Rallidae, based on DNA sequence data”, paper with R.C. Fleischer.
- AOU 1999 - “Genetic variation in Aplomado Falcons”, poster with C.E. McIntosh, R.C. Fleischer, M. Nesje.
- AOU 1998 - “Phylogenetic relationships of extinct Hawaiian rails (Aves: Gruiformes: Rallidae), based on mitochondrial sequence data”, paper with R.C. Fleischer.
- Society for Molecular Biology and Evolution 1997 - “Assessing the effects of saturation”, paper with F.H. Sheldon, F.B. Gill.
- AOU 1996 - “Phylogeny and evolution of storks”, paper by B. Slikas.
- Soc Study Evol/Soc Syst Biol 1996 - “Phylogeny of the storks (Ciconiidae) based on cytochrome *b* sequences and DNA-DNA hybridization distances”, paper by B. Slikas.
- AOU 1995 - “DNA phylogenies of titmice (Paridae)”, poster by F.B. Gill, B. Slikas, F.H. Sheldon.
- AOU 1991 - “Molecular evidence of phylogenetic relationships among the *Parus* lineages”, paper with F.H. Sheldon, and F.B. Gill.

INVITED LECTURES

- University of Copenhagen, Jan 1997 - Phylogeny and the evolution of ritualized behaviors in storks.
- Friends of the National Zoo, Oct 1997 - Using genetic data to infer evolutionary relationships among bird species.
- George Mason University, March 1998 - (for a training course for forensic scientists) Applications of ancient DNA in evolutionary biology.
- Harvard University, Nov 1999 & Cornell University, Jan 2000 - What phylogenies can tell us about evolution: some avian examples.
- Fordham University, Dec 1999 – Using DNA and fossil bones to reconstruct the origins and evolution of Hawaiian birds.
- Cornell Laboratory of Ornithology, Jan 2000 – The birds of Hawaii: Using fossil bones and “ancient DNA” to reconstruct the origins and evolution of a unique avifauna.
- Delaware Museum of Natural History, Nov 2000 – Using DNA sequences to study evolution in birds: two examples from the family Rallidae, the rails.
- Southwest Texas State University, Feb 2001 & San Jose State University, Mar 2001– Origins and evolution of Pacific Island birds: What can we learn from DNA sequences?
- Univ of California, Berkeley, May 2001 – Biogeography of Pacific island rails and reed warblers.
- Richard Stockton College of New Jersey, Jan 2005 – Building phylogenies and using trees to study evolution.

SERVICE

- * Member of the American Ornithologists' Union Research Awards Committee: 1999-2008.
- * Board member, newsletter editor for DC chapter of the National Audubon Society: Oct 1999 – 2001; President of DC Audubon Sept 2000 – Sept 2001.
- * Member of scientific advisory committee for MD-DC Audubon: May 2000 – Aug 2001.
- * Reviewed manuscripts for *The Auk*, *Condor*, *Molecular Phylogenetics and Evolution*, *Conservation Genetics*.

PUBLICATIONS

- Fleischer, R.C., B. Slikas, J. Beadell, C. Atkins, C.E. McIntosh, and S. Conant. 2007. Genetic variability and taxonomic status of the Nihoa and Laysan Millerbirds. *Condor* 109 (4): 954-962.
- Gill, F.B., B. Slikas, F.H. Sheldon. 2005. Phylogeny of titmice (Paridae): II. Species relationships based on sequences of the mitochondrial cytochrome *b* gene. *Auk* 122:121-143.

- Sheldon, F.H., L. Whittingham, R.G. Moyle, B. Slikas, D.W. Winkler. 2005. Phylogeny of swallows (Aves: Hirundinidae) estimated from nuclear and mitochondrial DNA sequences. *Mol. Phylogenet. Evol.* 35:254-270.
- James, H.F., P.G.P. Ericson, B. Slikas, F.-M. Lei, F.B. Gill, S.L. Olson. 2003. *Pseudopodoces humilis*, a misclassified terrestrial tit (Paridae) of the Tibetan Plateau: Evolutionary consequences of shifting adaptive zones. *Ibis* 145:185-202.
- Slikas, B. 2003. Hawaiian birds: Lessons from a rediscovered avifauna. *Auk* 120:953-960.
- Norman, J.A., L. Christidis, L. Joseph, B. Slikas, D. Alpers. 2002. Unravelling a biogeographical knot: Origin of the "leapfrog" distribution pattern of Australo-Papuan sooty owls (Strigiformes) and logrunners (Passeriformes). *Proc. Royal. Soc. Biol. Sci. Series B* 269:2127-2133.
- Slikas, B., S.L. Olson, R.C. Fleischer. 2002. Rapid, independent evolution of flightlessness in four species of Pacific Island rails (Rallidae): An analysis based on mitochondrial sequence data. *J. Avian Biol.* 33:5-14.
- Whittingham, L., B. Slikas, D.W. Winkler, F.H. Sheldon. 2002. Phylogeny of the tree swallow genus *Tachycineta* (Aves: Hirundinidae) by Bayesian analysis of mitochondrial DNA sequences. *Mol. Phylogenet. Evol.* 22:430-441.
- Cibois, A., B. Slikas, T. Schulenberg, and E. Pasquet. 2001. An endemic radiation of Malagasy songbirds is revealed by mitochondrial DNA sequence data. *Evolution* 55:1198-1206.
- Fleischer, R.C., C.L. Tarr, H.F. James, B. Slikas, and C.E. McIntosh. 2001. Phylogenetic placement of the Po'ouli, *Melamprosops phaeosoma*, based on mitochondrial DNA sequence and osteological characters. *Studies in Avian Biology* 22:98-103.
- Joseph, L., B. Slikas, D. Alpers, R. Schodde. 2001. Molecular systematics and phylogeography of New Guinean logrunners (Orthonychidae). *Emu* 101:273-280.
- Slikas, B., I. Jones, R.C. Fleischer, and S. Derrickson. 2000. Phylogenetic relationships of insular Micronesian white-eyes (Aves:Passeriformes:Zosteropidae), based on mitochondrial sequence data. *Auk* 117:355-365.
- Joseph, L., B. Slikas, K. Rankin-Baransky, B. Bazartseren, D. Alpers, and A.E. Gilbert. 1999. DNA evidence concerning the identities of *Crax viridirostris* Sclater, 1875 and *C. estudilloi* Allen, 1977. *Ornitologia Neotropical* 10:129-144.
- Fjelds . J., S.M. Goodman, T. Schulenberg, and B. Slikas. 1999. Molecular evidence for relationships of Malagasy birds. Pp. 3084-3094 in *Proc. 22 Int. Ornithol. Congr.* (N. Adams and R. Slotow, eds.). University of Natal, Durban.
- Gill, F.B., B. Slikas, and D. Agro. 1999. Speciation in North American chickadees: II. Geography of mtDNA haplotypes in *Poecile carolinensis*. *Auk* 116:274-277.
- Slikas, B. 1998. Recognizing and testing homology of courtship displays in storks (Aves: Ciconiiformes: Ciconiidae). *Evolution*. 52:882-893.
- Slikas, B. 1997. Phylogeny of the avian family Ciconiidae based on cytochrome *b* sequences and DNA-DNA hybridization distances. *Mol. Phylogenet. Evol.* 8:275-300.
- Sheldon, F.H. and B. Slikas. 1997. Advances in Ciconiiform systematics 1976-1996. *Colonial Waterbirds* 20:106-114.
- Slikas, B., F.H. Sheldon, and F.B. Gill. 1996. Phylogeny of titmice (Paridae): I. Estimate of relationships among subgenera based on DNA-DNA hybridization. *J Avian Biology* 27:70-82.
- Sheldon, F.H., B. Slikas, M. Kinnarney, F.B. Gill, E. Zhao, and B. Silverin. 1992. DNA-DNA hybridization evidence of phylogenetic relationships among the major lineages of *Parus*. *Auk* 109:173-185.
- Gill, F.B. and B. Slikas. 1992. Patterns of mitochondrial DNA divergence in North American crested titmice. *Condor* 94:20-28.