

SUSAN L. PERKINS
ASSOCIATE CURATOR AND ASSOCIATE CURATOR
DIVISION OF INVERTEBRATE ZOOLOGY

HIGHEST DEGREE EARNED

Ph.D.

AREA OF SPECIALIZATION

Evolution, biogeography, and genomics of parasites

EDUCATIONAL EXPERIENCE

Ph.D. in Biology (Ecology and Evolution), University of Vermont, 2000

Department of Zoology, University of Maryland at College Park, 1993 - 1995

B. A. in Biology, State University of New York at Potsdam, 1993, *Summa Cum Laude*

PREVIOUS EXPERIENCE IN DOCTORAL EDUCATION

FACULTY APPOINTMENTS

Assistant Professor, University of Colorado, Boulder, Ecology and Evolutionary Biology,
2001-2004

Adjunct faculty at New York University Medical School, 2006-present

Adjunct Faculty Member. City University of New York Graduate School. 2006- present.

Adjunct Faculty Member. New York University School of Medicine, Department of
Medical Parasitology. 2007-present

Program Director. National Science Foundation. Division of Environmental Biology,
Systematics and Biodiversity Science Cluster. April 2011 - June 2012

COURSES TAUGHT

Seminar in Eukaryotic Microbial Evolution, University of Colorado, 2001.

Microbiology, University of Colorado, 2002, 2003

Evolution of Infectious Disease, University of Colorado, 2003

Coevolution, University of Colorado, 2003

Museum Seminar Series, RGGGS, 2008-2009

Applied Phylogenetics, RGGGS

Anolis Lizards: Ecology and Evolution

GRADUATE ADVISEES

Diana Balanger, CUNY, co-advisor, defended 2011

Bryan Falk, Richard Gilder Graduate School, present

Miguel Pinto, CUNY, co-advisor, present

GRADUATE COMMITTEES

Elizabeth Borda, CUNY, 2004-2008

Megan Harrison, CUNY, 2004-2008

Lauren Esposito, CUNY, 2007-2011

Anna Phillips, CUNY, 2008-2011
Alejandro Oceguera-Figueroa, CUNY, 2008-2011
Sandeep Kishore, Cornell Medical School, 2008-present
+ 17 others at University of Colorado

RECENT ARTICLES IN REFEREED JOURNALS (2006-2011)

- Falk, B. G., S. L. Perkins, and D. L. Mahler. Tree-based delimitation of morphologically ambiguous taxa: a survey of the malaria parasites of Hispaniola. *International Journal for Parasitology*. [In press – accepted 6 May 2011.]
- Valkiunas, G., Ashford, R. W., Bensch, S., Killick-Kendrick, R. and S. Perkins. 2011. A cautionary note concerning *Plasmodium* in apes. *Trends in Parasitology*. [In press-accepted 13 April 2011.]
- Perkins, S. L., E. S. Martinsen, and B. G. Falk. Do molecules matter more than morphology? Promises and pitfalls in parasites. *Parasitology*. [In press – accepted 11 April 2011.]
- Martinsen, E. S., and S. L. Perkins. The diversity of *Plasmodium* and other haemosporidians: the intersection of taxonomy, phylogenetics, and genomics. In: Carlton, J. M., Deitsch, K., and Perkins, S. L. (Eds.), *Comparative Genomics of Malaria Parasites*. Horizon Press. [In press.]
- Belanger, D.H., S. L. Perkins, and R. F. Rockwell. Inference of population structure and patterns of gene flow in canine heartworm (*Dirofilaria immitis*). *Journal of Parasitology*. [In press – accepted 14 December 2010]
- Gómez, A., E. Nichols, and S.L. Perkins. 2011. Parasite conservation, conservation medicine, and ecosystem health. In: Aguirre, A.A., Daszak, P., Ostfeld, R.S. (Eds.), *Conservation Medicine: Applied Cases of Ecological Health*. Oxford University Press, New York.
- Belanger, D.H., and S. L. Perkins. 2010. *Wolbachia* infection and mitochondrial diversity in the canine heartworm (*Dirofilaria immitis*). *Mitochondrial DNA* 21:227-233.
- Waltari, E., and S. L. Perkins. 2010. In the hosts' footsteps? Ecological niche modeling and its utility in predicting parasite distributions. Invited book chapter for: *The Geography of Host-Parasite Interactions* (Morand, S., and B. Krasnov, eds.) Oxford University Press.
- Murdock, C.C., K.J. Olival, and S. L. Perkins. 2010. Molecular identification of host feeding patterns of snow-melt mosquitoes (Diptera: Culicidae): Potential implications for the transmission of Jamestown Canyon Virus. *Journal of Medical Entomology* 47:226-229.
- Greiner, E., K. Crook, and S. Perkins. 2009. Apparent absence of *Parahaemoproteus lophortyx* in north Florida population of Bobwhite Quail (*Colinus virginianus*). *Journal of Parasitology* 95:1142-1144.
- Kishore, S.P., S. L. Perkins, T.J. Templeton, and K.W. Deitsch. 2009. An unusual expansion of the C-terminal domain of RNA polymerase II in primate malaria parasites features a motif only otherwise found in mammalian polymerases. *Journal of Molecular Evolution* 68:706-714.
- Perkins, S.L., and C.C. Austin. 2009. Four new species of *Plasmodium* from New Guinea

- lizards: integrating morphology and molecules. *Journal of Parasitology*. 95:424-433.
- Perkins, S.L., A.S. Kerwin, and A.D. Rothschild. 2009. Patterns of infection of the lizard malaria parasite, *Plasmodium floridense*, in invasive brown anoles (*Anolis sagrei*) in southwestern Florida. *Parasitology Research*. 104:1191-1196.
- Beadell, J.S., R. Covas, C. Gebhard, F. Ishtiaq, M. Melo, B.K. Schmidt, S.L. Perkins, G.R. Graves, R.C. Fleischer. 2009. Host associations and evolutionary relationships of avian blood parasites from West Africa. *International Journal for Parasitology* 39: 257-266.
- Piaggio, A.J., M. Neubaum, H. Yueh, C. Ritland, J. Johnston, and S.L. Perkins. 2009. Development of 10 polymorphic microsatellite loci isolated from the mountain beaver, *Aplodontia rufa rufa* (Rafinesque). *Molecular Ecology Resources*. 9:323-325.
- Piaggio A.J., K. E. G. Miller, M. Matocq, and S.L. Perkins. 2009. Eight polymorphic microsatellite loci developed and characterized from Townsend's big-eared bat, *Corynorhinus townsendii*. *Molecular Ecology Resources*. 9:258-260.
- Perkins, S.L. 2008. Molecular systematics of the three mitochondrial protein-coding genes of malaria parasites: Corroborative and new evidence for the origins of human malaria. *Mitochondrial DNA* 19:471-478.
- Baillie, G.J., S.O. Kolokotronis, E. Waltari, J.G. Maffei, L.D. Kramer, and S.L. Perkins. 2008. Phylogenetic and evolutionary analyses of St. Louis encephalitis virus genomes. *Molecular Phylogenetics and Evolution* 47:717-728.
- Davalos, L.M. and S.L. Perkins. 2008. Saturation and base composition bias explain phylogenomic conflict in *Plasmodium*. *Genomics* 91:433-442.
- E. S. Martinsen, S.L. Perkins, and J.J. Schall. 2008. A three-genome phylogeny of malaria parasites. *Molecular Phylogenetics and Evolution* 47:261-273.
- Piaggio, A.J., J.J. Johnston, and S.L. Perkins. 2008. Development of polymorphic microsatellite loci for the common vampire bat, *Desmodus rotundus* (Chiroptera: Hylostomidae). *Molecular Ecology Resources* 8:440-442.
- Olival, K. J., E. O. Stiner, and S. L. Perkins. 2007. Detection of *Hepatocystis sp.* in Southeast Asian flying foxes (Pteropodidae) using microscopic and molecular methods. *Journal of Parasitology*. 93: 1538-1540.
- S. L. Perkins, A. Rothschild, and E. Waltari. 2007. Infections of the malaria parasite, *Plasmodium floridense*, in the invasive anole, *Anolis sagrei*, in Florida. *Journal of Herpetology* **41**: 750-754.
- R. L. Burke, S. R. Goldberg, C. R. Bursey, S. L. Perkins, and P. T. Andreadis. 2007. Depauperate parasite fauna in introduced populations of *Podarcis* (Squamata: Lacertidae) lizards in North America. *Journal of Herpetology*. 41: 755-757.
- Waltari, E., R. J. Hijmans, A. Townsend Peterson, A. S. Nyári, S. L. Perkins, and R. P. Guralnick. 2007. Locating Pleistocene refugia: comparing phylogeographic and ecological niche model predictions. *PLoS ONE*. 2:e563.
- S. L. Perkins, I. N. Sarkar, and R. Carter. 2007. The phylogeny of rodent malaria parasites: simultaneous analysis across three genomes. *Infection, Genetics, and Evolution*. **7**:74-83.
- C. C. Austin and S. L. Perkins. 2006. Parasites in a biodiversity hotspot: a survey of

hematozoa and a molecular phylogenetic analysis of *Plasmodium* in New Guinea
skinks. *Journal of Parasitology*. **92**:770-777.