

CHRISTOPHER JOHN RAXWORTHY
ASSOCIATE DEAN OF SCIENCE FOR EDUCATION AND EXHIBITION
CURATOR-IN-CHARGE, ASSOCIATE CURATOR AND ASSOCIATE PROFESSOR
DEPARTMENT OF HERPETOLOGY

HIGHEST DEGREE EARNED

Ph.D.

AREA OF SPECIALIZATION

Systematics, biogeography, ecology, ethology, and conservation biology of reptiles and amphibians

EDUCATIONAL EXPERIENCE

Ph.D. in Biology, The Open University, Milton Keynes, England, 1985-1989
B.Sc. in Zoology, Royal Holloway and Bedford New College, University of London, Egham, England, 1982-1985

PREVIOUS EXPERIENCE IN DOCTORAL EDUCATION

FACULTY APPOINTMENTS

Assistant Professor, Department of Ecology and Evolutionary Biology, University of Kansas, 1998 – 2000
Assistant Professor, Center for Environmental Research and Conservation, Columbia University, 1996 – 1998

COURSES TAUGHT

Biotic Surveys and Inventories, Columbia University, 2002
Principles of Biogeography, University of Kansas, 1999
Topics in Reptile Research, University of Kansas, 1999
Biogeography, Columbia University, 1997-98
Evolution Core Courses I and II, Columbia University, 1996-97 (team taught)
Ecology Core Courses I and II, Columbia University, 1996 (team taught)
Biogeography Seminar, University of Antananarivo, 1997

GRADUATE ADVISEES

Antonia Florio, Richard Gilder Graduate School, 2008-present
P. Razafimahatratra, University of Antananarivo, 2006-present
M. Randriambahiniarime, University of Antananarivo, 2004-present
A. (Tsoa) Ranjanahaisoa, University of Antananarivo, 2004-present
V. Rakotomalala, University of Antananarivo, 2003-present
L. Andrimandimbarisoa, University of Antananarivo, 2003-present
Valerie Clark, Columbia University, 2002-2003
Minh Le, Columbia University, 2001-present
N. Rabibisoa, University of Antananarivo, 2001-present
A. (Ny) Rakondrazafy, University of Antananarivo, 2001-present

R. Razafindrasoa, University of Antananarivo, 2001-2002
S. Mahaviasy, University of Antananarivo, 2000-2004
C. Maminirina, University of Antananarivo, 2000-2004
Minh Le, Columbia University, Masters Sponsor, 2000-01
N. Harilanto, University of Antananarivo, 2000-2001
Jenny Pramuk, University of Kansas, 1999-2000
Eli Greenbaum, University of Kansas, 1999-2000
Jennifer Garrison, University of Kansas, 1999-2000
Anna Clark, University of Kansas, 1998-2000
Brian Yang, University of Michigan, 1997-1998
Eugenia F.S. Naro, Columbia University, 1996-1998
Andrea Peffley, Columbia University, 1996-1998
Ana Luz Porzecanski, Columbia University, 1996-1998
F. Rabemananjara, University of Antananarivo, 1996-1998
A. Ravoninjatovo, University of Antananarivo, 1996-1998
Isabelle Constable, University of Michigan, 1995-2000
A. Raselimanana, University of Antananarivo, 1994-2000
J.-B. Ramanamanjato, University of Antananarivo, 1991-1993
A. Raselimanana, University of Antananarivo, 1991-1993

GRADUATE COMMITTEES

M. Randriambahiniarime, University of Antananarivo, 2004-present
A. (Tsoa) Ranjanahaisoa, University of Antananarivo, 2004-present
V. Rakotomalala, University of Antananarivo, 2003-present
L. Andrimandimbarisoa, University of Antananarivo, 2003-present
Ryan P. Kelly, Columbia University, 2003-present
Adrian Tejedor, CUNY, 2002-present
Valeria Tavares, CUNY, 2002-present
Minh Le, Columbia University, 2001-present
N. Rabibisoa, University of Antananarivo, 2001-present
A. (Ny) Rakondrazafy, University of Antananarivo, 2001-present
Julian Faivovich, Columbia University, 2000-present
Taran Grant, Columbia University, 2000-present
Mike Friedman, CUNY, 2000-present
Kris Karsten, Oklahoma State University, 2000-present

RESEARCH GRANT SUPPORT

National Science Foundation (co-PIs C. Ingram, R. Pearson). Chameleon (Reptilia: Chamaeleonidae) phylogeny, biogeography, and continental speciation in Madagascar, \$480,000, 2007
National Science Foundation, "CAREER: Amhiblings, Reptiles and Small Mammals in the Tsaratanana Massif Complex of Northern Madagascar," \$397,649, September 15, 2000 – August 31, 2006
National Science Foundaion, "Curation and Data Capture for Reptilian and Amphibian Biodiversity at AMNH," \$307,400, May 1, 2002 – April 30, 2006

National Science Foundation, "SGER BS&I: Accelerating discovery of new species in Madagascar using remotely sensed data and ecological niche modeling," \$80,142, September 1, 2004 – February 28, 2006

RECENT ARTICLES IN REFEREED JOURNALS (2003-2008)

- Maminirina, C.P., Goodman, S. M., and Raxworthy, C.J., 2008. Les micro-mammifères (Rodentia et Afrosoricida) du massif du Tsaratanana et leur biogéographie dans les forêts des hautes montagnes de Madagascar. *Zoosystema* 30: 695-721.
- Raxworthy, C.J., Pearson, R.G., Zimkus, B., Reddy, S.B., Deo, A., and Ingram, C. Evolution of the *Uroplatus* Leaf-tailed gecko radiation in Madagascar: contrasting biogeographic patterns of cladogenesis. (2008). *Journal of Zoology* 275: 423-440.
- Cramer, A., Rabibisoa, N., and Raxworthy, C.J. (2008) Descriptions of two new *Spinomantis* frogs from Madagascar (Amphibia: Mantellidae), with new morphological data for two other poorly known species: *S. brunae* and *S. massorum*. *American Museum Novitates* 3618: 1-22.
- Frost, D., Grant, T., Faivovich, J., Bain, R., Haas, A., Haddad, C.F.B., De Sa, R.O., Channing, A., Wilkinson, M., Donnellan .S.C., Raxworthy, C.J., Campbell, J.A., Blotto, B. L. , Moler, P., Drewes, R. C., Nussbaum, R.A., Lynch, J.D., Green, D. and Wheeler, W. (2008). Is the Amphibian Tree of Life really fatally flawed? *Cladistics* 24: 385-395.
- Hannah, L. Dave, R., Lowry, P.P., Andelman, S., Andrianarisata, M., Andriamaro, L., Cameron, A., Hijmans, R., Kremen, C., MacKinnon, J., Randrianasolo, H.H., Andriambololonera, S., Razafimpahanana, A., Randriamahazo, H., Randrianarisoa, J., Razafinjatovo, P., Raxworthy, C.J., Schatz, G.E., Tadross, M. and Wilmé, L. (2008). Climate change Adaptation for conservation in Madagascar. *Biology Letters*. DOI: 10.1098/rsbl.2008.0270.
- Karsten, K.B., Andriamandimbarisoa, L. N., Fox, S. F., and Raxworthy, C. J. (2008). Discovery of a novel tetrapod life history: an annual chameleon living mostly as an egg. *Proceedings of the National Academy of Sciences of the United States of America*. 105: 8980-8984.
- Kremen, C., Cameron, A., Razafimpahanana, A., Moilanen, A., Thomas, C.D., Beemtje, H., Fisher, B.L., Glaw, F., Good, T.J., Hijmans, R., Lees, D.C., Louis, E., Nussbaum, R.A., Raxworthy, C.J., Philips, S., Schatz, G., Vences, M., Vietes, D. R., Wright, P.C., and Zjha, M.L. (2008). Response to The Cost of Conservation and Conservation with Caveats *Science* 321: 341-342.
- Raxworthy, C.J., Pearson, R.G., Rabibisoa, N., Rakotondrazafy, A.M., Ramanamanjato, J.-B., Raselimanana, A.P., Wu, S., Nussbaum, R.A., and Stone, D. (2008). Extinction vulnerability of tropical montane endemism from warming and upslope displacement: a preliminary appraisal for the highest massif in Madagascar. *Global Change Biology* 14: 1-18.

- Andreone, F., Carpenter, A.I., Cox, N., du Preez, L., Freeman, K., Furrer, S., Garcia, G., Glaw, F., Glos, J., Knoxx, D., Köhler, J., Mendelson, J.R., Merurio, V., Mittermeier, R.A., Rabibisoa, N. H.C., Randrianmahazo, H., Randrianasolo, H., Rasoamampionona Raminosoa, N., Ravoahangimalala Ramilijaona, O., Raxworthy, C.J., Vallan, D., Vences, M., Vietes, D.R., and Weldon, C. (2008). The challenge of conserving amphibian megadiversity in Madagascar. *PLoS Biology* 6: e118 (pages 1-4).
- Kremen, C., Cameron, A., Moilanen, A., Phillips, S., Thomas, C.D., Beemtje, H., Dransfeld, J., Fisher, B.L., Glaw, F., Good, T.J., Harper, G.J., Hijmans, R., Lees, D.C., Louis, E., Nussbaum, R.A., Raxworthy, C.J., Razafimpahanana, A., Schatz, G., Vences, M., Vietes, D. R., Wright, P.C., and Zjha, M.L. (2008). Aligning conservation priorities across taxa in Madagascar with high-resolution planning tools. *Science* 320: 222-225.
- Raxworthy, C.J., Ingram, C. Rabibisoa, N. and Pearson, R. (2007). Applications of Ecological Niche Modeling for Species Delimitation: A Review and Empirical Evaluation using Day Geckos (*Phelsuma*) from Madagascar. *Systematic Biology* 56 (6): 907-923.
- Frost, D., Grant, T., Faivovich, J., Bain, R., Haas, A., Haddad, C.F.B., De Sa, R.O., Channing, A., Wilkinson, M., Donnellan .S.C., Raxworthy, C.J., Campbell, J.A., Blotto, B. L. , Moler, P., Drewes, R. C., Nussbaum, R.A., Lynch, J.D., Green, D. and Wheeler, W. (2006) The amphibian tree of life. *Bulletin of the American Museum of Natural History* 297: 1-370.
- Goodman, S. M., Raxworthy, C.J., Maminirina, C.P., and Olson, L.E. (2006) A new species of *Microgale* (Family Tenrecidae) from the Tsaratanana Massif of northern Madagascar: Description, phylogeny and biogeography. *Journal of Zoology* 270: 384-398.
- Greenbaum, E., Campbell, A.C., and Raxworthy, C.J. (2006). A revision of Sub-Saharan Chalcides (Squamata: Scincidae), with redescriptions of two East African Species. *Herpetologica* 62 (1): 71-89.
- Le, M., Raxworthy, C.J., McCord, W. and Mertz, L. (2006). A molecular phylogeny of tortoises (Testudines: Testudinidae) based on mitochondrial and nuclear genes. *Molecular Phylogenetics and Evolution*. 40: 517-531.
- Mendelson, J.R., Lips, K.R., Gagliardo, R.W., Rabb, G. B., Collins, J.P., Diffendorfer, J.E., Daszak, P., Ibáñez, R., Zippel, K.C., Lawson, D.P., Wright, K.M., Stuart, S. N., Gascon, C., da Silva, H. R., Burrowes, P. A., Joglar, R. L., La Marca, E., Lötters, S., du Preez, L. H. , Weldon, C., Hyatt, A., Rodriguez-Mahecha, J. V., Hunt, S., Robertson, H. Lock, B., Raxworthy, C. J., Frost, D. R., Lacy, R.C., Alford, R.A., Campbell, J. A., Parra-Olea, G. Bolaños, F, Domingo, J. J. C., Halliday, T., Murphy, J. B., Wake, M. H., Coloma, L. A., Kuzmin, S. L., Price, M. S., Howell, K. M., Lau, M., Pethiyagoda, R., Boone, M., Lannoo, M. J., Blaustein, A. R., Dobson, A., Griffiths, R.A., and

- D. B. Wake. (2006). Mitigating Global Amphibian Extinctions: A Call For Fundamental Changes In Policy And Actions. *Science*. 313: 48.
- Pearson, R.G., Raxworthy, C.J. Nakamura, M. and A.T. Peterson. (2006). Predicting species distribution from small numbers of occurrence records: a test case using cryptic geckos in Madagascar. *Journal of Biogeography* 34: 102-117.
- Raselimanana, A.P., Nussbaum, R.A., and Raxworthy, C.J. (2006). Observations and re-description of *Zonosaurus boettgeri* Steindachner 1891 and description of a second new species of long-tailed *Zonosaurus* from Western Madagascar. *Occasional Papers of the Museum of Zoology University of Michigan*. 739: 1-16.
- Raxworthy, C.J., and Nussbaum, R.A. (2006). Six new species of occipital-lobes *Calumma* chameleons (Squamata: Chamaeleonidae) from montane regions of Madagascar, and a new description and revision of *Calumma brevicorne*. *Copeia* 2006: 711-734.
- Andreone, F., Cadle, J.A., Cox, N., Glaw, F., Nussbaum, R.A., Raxworthy, C.J., Stuart, S.N., Vallan, D. and Vences, M. (2005). Species Review of Amphibian Extinction Risks in Madagascar: Conclusions from the Global Amphibian Assessment. *Conservation Biology* 19: 1790-1802.
- Clark, C., Raxworthy, C.J., Rakotomalala, V., Sierwald, P. and Fisher, B.L. (2005). Convergent evolution of chemical defense in poison frogs and arthropod prey between Madagascar and the Neotropics. *Proceedings of the National Academy of Sciences* 102 (33): 11617-11622.
- Raxworthy, C.J., Martinez-Meyer, E., Horning, N., Nussbaum, R.A., Schneider, G.E., Ortega-Huerta, A., and Peterson, A.T. (2003). Predicting distributions of known and unknown reptiles species in Madagascar. *Nature*. 426: 837-841.
- Andreone, F., Glaw, F., Nussbaum, R. A., Randrianirina, J. E., Raxworthy C. J. and Vences, M (2003). Diversity and conservation of amphibians and reptiles on offshore islands: the case study of Nosy Be and nearby islets (NW Madagascar). *Journal of Natural History* 37 (17): 2119-2149.
- Vences, M., Raxworthy C. J., Glaw, F., Andreone, F., Nussbaum, R. A (2003). A revision of the *Scaphiophryne marmorata* complex of marbled toads (Amphibia: Microhylidae) from Madagascar, including the description of a new species. *Herpetological Journal* 13 (2): 69-80.
- Vences, M., Raxworthy C. J., Nussbaum, R. A., and Glaw, F. (2003). A new microhylid frog (*Plethodontohyla*) from Madagascar, with semi-arboreal habits and possible parental care. *Journal of Herpetology* 37: 629-636.