# RÉSUMÉ

## RONALD ARCHIE NUSSBAUM

Date of Birth: 9 February 1942

Place of Birth: Rupert, Idaho, U.S.A.

## EDUCATIONAL SUMMARY

1948-1956	Rupert Public Schools, Rupert, Idaho
1956-1960	Minidoka County Consolidated High School, Rupert, Idaho
1960-1967	University of Idaho, Moscow, Idaho
1967-1968	Central Washington University, Ellensburg, Washington
1968-1972	Oregon State University, Corvallis, Oregon

## DEGREES EARNED

B.S. (Zoology) University of Idaho, 1967

M.S. (Zoology) Central Washington University, 1968

Ph.D. (Zoology) Oregon State University, 1972

Major: Vertebrate Biology

Minor: Botany-Ecology-Systematics (integrated minor)

## TITLE OF DISSERTATION

Systematics of the Salamander Genus <u>Dicamptodon</u> Strauch (Amphibia: Caudata: Ambystomatidae)

## PROFESSIONAL EXPERIENCE

- (1962-1967) Five summers with U. S. Forest Service in Idaho; primarily ecological work including land inventory, cruising, scaling, surveying; also operated a weather station and fire lookout, fire-fighting, etc.
- (1963) One summer with Colorado Fish and Game, Division of Fisheries Research, Fort Collins; ecological surveys of Colorado streams.
- (1964) Nine-month period, part-time with U. S. Fish and Game Department; chinook salmon scale annuli and circuli counts correlated with age-length-rate of growth phenomena.
- (1966-1967) One academic year as a teaching assistant at the University of Idaho.
- (1967-1968) One academic year as a NSF-funded research assistant at Central Washington University.
- (1968-1971) Three academic years as a teaching assistant (1 quarter, assistant curator) at Oregon State University.
- (1971-1973) Two and one-half academic years as a research

associate, faculty of Oregon State University.

- (1975-1978) Associate Editor, Systematic Zoology.
- (1980-1985) Associate Editor, Journal of Morphology.
- (1981-1982) General Herpetology Editor, ASIH, Copeia.
- (1981-1984) Editorial Board, Indian Journal of Applied and Pure Biology.
- (1974-1980) Assistant Professor and Assistant Curator, Division of Biological Sciences and Museum of Zoology, The University of Michigan.
- (1981-1990) Associate Professor and Associate Curator, Division of Biological Sciences and Museum of Zoology, The University of Michigan.
- (1990-present) Professor and Curator, Department of Biology and Museum of Zoology, The University of Michigan.
- (1982-2006) Director, E. S. George Reserve, The University of Michigan.
- (1983-1990) Director, Newcomb Tract, The University of Michigan
- (1983-1985) Chairman, Department of Ecology and Evolutionary Biology,

The University of Michigan.

- (1983-1993) Acting Director, Museum of Zoology, The University of Michigan (numerous times during Directors' absences).
- (1992-present) Visiting professor and research associate, Departement

de Biologie Animale, University of Antananarivo, Madagascar.

## SOCIETIES AND HONORS

Carnegie Museum, Research Associate

British Museum of Natural History, Research Associate

Society of Systematic Zoology, member and Associate Editor(1975-1978)

The American Society of Naturalists, member

American Society of Ichthyologists and Herpetologists, Life member, and General Herpetological Editor (1981-1982)

Deutsche Gesellschaft fur Herpetologie und Terrarienkunde, member Herpetologists' League, member

Society for the Study of Amphibians and Reptiles, member

Ecological Society of America, member

Society for the Study of Evolution, member

The Society of Population Ecology, member

Bombay Natural History Society, member

Association of Systematic Collections, member

Phi Sigma Society (Biological Sciences Honorary)

Sigma Xi (Science Honorary)

Phi Kappa Phi (Academic Honorary)

Academy of Zoology, India, Fellow

#### RESEARCH INTERESTS

Evolutionary Biology and Ecology of Amphibians and Reptiles; Evolution of Life History Strategies; Evolution of Parental Care; Biogeography (especially of Africa and islands of the western Indian Ocean, including Seychelles and Madagascar); Systematics of Amphibians (especially caecilians and salamanders) and Reptiles; Speciation and Species; Biodiversity and Conservation.

#### GRANTS

## A. Research Support

- (1969) Sigma Xi Grant-in-aid-of-Research.
- (1970) Sigma Xi Grant-in-aid-of-Research.
- (1971) American Museum of Natural History, Theodore Roosevelt Memorial Fund Research Grant.
- (1969-1971)Oregon State University, Dean of Research, 3 computer center grants.
- (1971) National Science Foundation, Graduate Student Research Grant.
- (1971-1973) National Science Foundation, Oregon State University (Functional role of vertebrate consumer populations in coniferous forests).
- (1973-1974) Army Corps of Engineers (Distribution, systematics and ecology of Plethodon stormi).
- (1974) Army Corps of Engineers (supplement).
- (1974-1975) Faculty research grant (Rackham-IST), University of Michigan (Cytotaxonomy of Amphibians).
- (1976) National Geographic Society (Systematics and biogeography of the amphibians of the Seychelles Archipelago).
- (1977-1978) National Geographic Society (continuance).
- (1979) Department of the Interior, U.S. Fish & Wildlife Service (Effects of fire on natural populations of amphibians and reptiles).
- (1979-1980) Faculty Research Grant, University of Michigan Biogeography of Seychellean amphibians).
- (1980-1981) Carnegie Museum Indian National Museum Smithsonian Institution, jointly sponsored (with Carl Gans) (Systematics, ecology, and biogeography of fossorial amphibians and reptiles of the uplands of India).
- (1980-1981) Indian National Museum, New Delhi (Systematics of Indian amphibians and reptiles).
- (1982-1984) National Science Foundation (Systematics and biogeography of African and Seychellean amphibians).
- (1984-1987) Smithsonian Institution (A systematic study of the

- burrowing amphibians (Gymnophiona) of India).
- (1984) Faculty Research Grant, University of Michigan (Systematics of Seychellean amphibians.
- (1984) Vice-President's Preliminary Research Grant, University Of Michigan (Mitochondrial DNA of caecilians.
- (1986) Faculty Grant Program to augment international Cooperative partnerships, University of Michigan (Systematics of Chinese amphibians: project development).
- (1986-1987) American Philosophical Society (Mitochondrial DNA of caecilians).
- (1987-1988) Faculty Research Grant, Rackham School of Graduate Studies, University of Michigan (Systematics of Chinese Amphibians).
- (1988-1989) Vice President for Research, Small Scale Projects grant, University of Michigan (Evolutionary ecology of Amphibians of the Seychelles Archipelago).
- (1989-1990) National Geographic Society (Systematics of Chinese Amphibians).
- (1989-1990)QIT Canada Madagascar (Distribution, Ecology, and Systematics of the Amphibians and Reptiles of the Forest Transition Zone of southeastern Madagascar).
- (1989-1992) National Science Foundation (Systematics of Seychellean caecilians (Amphibia: Gymnophiona).
- (1990) Faculty Assistance Fund, College of Literature, Science and the Arts, University of Michigan (Systematics of the amphibians and reptiles of Madagascar).
- (1990-1991) Vice President for Research, University of Michigan (Evolution, Systematics, and Biogeography of the Herpetofauna of Madagascar).
- (1990-1991)QIT Canada (Herpetofaunal survey of coastal forest in southeastern Madagascar).
- (1991-1994) National Science Foundation + U.S. State Department AID Program (Herpetofaunal survey of the rainforests of Madagascar).
- (1991-1992) Vice President for Research, University of Michigan (Systematics, gene flow, and biogeography of Seychelles Island amphibians and reptiles.
- (1992-1993) U. S. State Department AID CARE (Herpetofaunal survey of the Masoala Peninsula, Madagascar).
- (1992) World Wide Fund for Nature (WWF) (Herpetofaunal survey of Zombitsy proposed Reserve, Madagascar).
- (1993-1994) Rackham School of Graduate Studies, University of Michigan, Research Partnership Program (Systematics of Madagascan microhylid frogs).
- (1993) World Wide Fund for Nature (WWF) (Herpetofaunal survey of Andringitra Reserve, Madagascar).

- (1994) Conservation International (Herpetofaunal survey of Zahamena Reserve, Madagascar).
- (1994-1997) National Science Foundation (Herpetofauanal survey of the dry forests of Madagascar).
- (1995-1997) National Geographic Society (Herpetofaunal survey of the dry forests of western Madagascar).
- (1996-1997) Vice President for Research, University of Michigan, International Partnership (Systematics of Madagascan frogs, with Dr. Franco Andreone, Torino, Italy).
- (1996-2000) National Science Foundation (Herpetofaunal and small mammal surveys of the transitional and dry forests of western Madagascar).
- (1998) University of Michigan, Museum of Zoology, Graduate Student Research Assistantship/Scholarship (for interactive research with two of my students).
- (1999) Vice President for Research, Discretionary Fund, University of Michigan, Biodiversity Surveys of Madagascar's Satellite Islands.
- (2000-2001) National Geographic Society, Survey of Madagascar's Fringing Islands.
- (2000) Fulbright Senior Fellowship, Survey of Madagascar's Fringing Islands, ranked among the top five of applicants, forced to decline because of political problems within the University of Michigan. I was not granted the necessary leave of absence by a LS&A Dean who doesn't understand biology.
- (2000-2006) National Science Foundation, Biodiversity Survey of the Terrestrial Vertebrates (Amphibians, Reptiles, Small Mammals) of Madagascar's Remnant Forests and Satellite Islands.
- (2001-2002) NASA (National Aeronautics and Space Administration),
  Remotely sensed data and ecological niche modeling
  Applied to Madagascar: a herpetofaunal pilot study (with
  C. J. Raxworthy, American Museum of Natural History).

#### B. Non-research Grants

(1975-1979) National Science Foundation (with D. W. Tinkle and A. G. Kluge) (Systematics collection improvement grant). We were the first Department in any Museum to electronically capture our collections database. This was done before desktop computers were available. We have since converted from the mainframe to desktop data management.

(1986-1988) National Science Foundation (Edwin S. George Reserve improvement grant). This grant allowed us to place a chain link fence around the E. S. George Reserve to contain our deer herd and provide security for researcher, to enclose new acreage within the fence, and renovate some buildings.

## INVITATIONS TO SYMPOSIA, WORKSHOPS, SEMINARS\*

- Four workshops on the role of vertebrate consumers in ecosystems, 1971-1973, convened twice at the University of Washington and twice at Colorado State University, NSF-funded.
- Workshop on Electronic Data Processing and Storage of Catalogue Information; December 12-13, 1977; Sponsored by National Science Foundation; hosted by Museum of Zoology and the University of Michigan; organizing committee and moderator of two of the four sessions.
- Symposium on Sociobiology; October 16-18, 1978; hosted by Museum of Zoology and The University of Michigan, organizing committee.
- Symposium on the Evolution of Mimicry in caudate amphibians; joint annual meeting of the Society for the Study of Amphibians and reptiles and Herpetologists' League (two of three National herpetological societies), hosted by the University of Tennessee; August 12-17, 1979, chairman of one of two sessions.
- Contribution, by invitation, of two chapters to a symposium volume On ecology and biogeography in the Indian Ocean.
- Amphibians of the Seychelles Archipelago and Theories of Island Biogeography. A seminar presented on 26 March 1979 by invitation to the faculty of Biological Sciences at Adelphi University.
- Evolution and Diversity of Salamanders, Invited Seminar, staff of Zoological Survey of India, Calcutta, Jan. 1981.
- Evolution of Antipredator Mechanisms in Amphibians, Invited Seminar, Biology Department, Utkal University, Bhubaneswar, India, February, 1981.
- Amphibians of the Seychelles Archipelago and Theories of Island, Biogeography, Invited Seminar, faculty of Biology, University of Alberta, November, 1981.

- Symposium on gymnophionan biology, Societe Zoologique de France, Lyon, France, 1984, Invited to speak, but declined because of conflicts.
- Evolution, systematics, and biogeography of the Seychellean amphibians, Invited seminar, University of Windsor, 1986.
- International Aldabra Workshop, 18-19 November, 1986, Smithsonian Institution, Washington, D.C.
- International Seminar on Environment and Twentyfirst Century, Institute of Oriental Orissan Studies, 12-15 December, 1986, Cuttack, India.
- International Meeting on the Evolutionary Biology of Gymnophiona, 25-27 August, 1987, Museum National d'Histoire Naturelle, Paris.
- Sixth Symposium on African Amphibia, 13-17 April, 1987, Archbold Biological Station, Florida.
- First International Meeting on Oriental Amphibia, Societe Batrachologique de France, September, 1988, Paris.
- First World Congress of Herpetology, September, 1989, University of Kent, Canterbury, England (invited convenor of a symposium on Island Herpetofaunas).
- American Society of Ichthyologists and Herpetologists, June 1989, San Francisco, invited to participate in a symposium on amphibian cytogenetics and to contribute a chapter to a review volume on the same subject.
- First World Congress of Herpetology, September, 1989, University of Kent, Canterbury, England, invited to participate in a symposium on evolution and phylogeny of frogs.
- First World Congress of Herpetology, September, 1989, University of Kent, Canterbury, England, participated in a round table on caecilian biology.
- Northern Arizona University, Flagstaff, September, 1990, invited to present a seminar to Biology Department, declined because of conflicts.
- American Society of Zoologists, December, 1990, San Antonio, Texas, invited to contribute to a symposium on amphibian morphology and evolution, declined.

- International Conference of Wildlife Conservation, March, 1991, National Taiwan University, Taipei, invited to participate.
- Asian Herpetological Meeting, July, 1992, Huangshan City, Anhui Province, China, invited to participate.
- Second World Congress of Herpetology, December 1993, Australia, invited to participate in a symposium of island distribution of amphibians and reptiles.
- NSF-sponsered African Biodiversity Research Workshop, April, 1993, Virginia (Washington, D. C.), invited to participate.
- Symposium on Biogeography of Madagascar, September, 1995, Paris, invited by the Society of Biogeography to participate.
- Symposium on Human Influences on the Biodiversity of Madagascar, summer, 1995, Field Museum of Natural History, Chicago, contributed a chapter to the symposium volume.
- Symposium on the Herpetofauna of Madagascar, June, 1996, San Antonio, Texas.
- Invited to present lectures on evolution to the student body of the University of Antananarivo, Madagascar, 1994-2002.
- Invited to participate in a workshop/symposium on conservation biology at the University of Georgia, 1998-1999, declined because of commitments to NSF-funded research in Madagascar.
- Invited to present a seminar at University of San Diego, Winter, 2000, declined because of conflicts.
- Senior Fullbright Fellowship Award 2000-2001, among top five ranked candidates, declined because of incomprehensible action of UM administrators (refused to grant off-campus leave).
- The National Geographic Society, 2000-2001, in recognition of my work in Madagascar, proposed to prepare a film for National Geographic Television featuring my research. This opportunity was missed for the same reason that I had to give up the Fulbright Award (see above).

- For the academic year 2000-2001, I was invited to participate in seven seminars, workshops, symposia, and lectures. All but one was declined because of conflicts with field work and curating (I am usually in the field during the times that most societies have their annual meetings). The one in which I participated was an IUCN symposium on endangered and threatened species in Madagascar.
- Philip C. Dumas Memorial Lecture, invited to present the inaugural lecture for this series during Winter Term, 2003, at Central Washington University. They wanted to do this in Fall Term, but, as usual I had to decline because of conflicts with field work in Madagascar. They volunteered to reschedule for Winter Term, so I have agreed to give the lecture.
- Fifth World Congress of Herpetology, June, 2005, invited to present a paper on the caecilians of the Seychelles Archipelago in a symposium of caecilian biology.
- Joint Meeting of ASIH, SSAR, and HL in Portland, Oregon, July, 2009. Invited to present a paper at a symposium honoring Dr. Robert M. Storm.
- I wrote three chapters by invitation for three different books. The first is "Evolution of Parental Care in Salamanders" and the second is "Parental Care in Anurans". The third is on systematics of caecilians. Included were invitations to present papers on these three topics at symposia.
- \*I have been asked to participate in many workshops and symposia, which I declined for the reasons given above. I don't remember all of them, or the dates.

## **REVIEWS**

I regularly review 4-6 NSF proposals per annum from four different panels (Systematics, Biotic Surveys and Inventories, Facilities Improvement, Population Biology). I review about 10-15 papers per year for a wide variety of journals, including among others: Copeia, Herpetologica, Journal of Herpetology, Amphibia-Reptilia, Herpetological Journal, Evolution, Ecology, Systematic Biology, Journal of Zoology, Journal of Morphology, American Naturalist, American Midland Naturalist, Conservation Biology, Molecular Evolution and Systematics, and a new journal called Organisms, Diversity, and Systematics. I review for various odd journals as well...for example, at the moment I am reviewing a paper for "Applied Soil Ecology".

#### DEPARTMENT SERVICE

I currently serve on the Promotions and Merit Committee and the Graduate Student Evaluations Committee. I have served on the Museum Executive Committee (during Jerry Smith' last two years as Director), and I am Director of the E. S. George Reserve. been a voting member of the University's UCUCA Committee for two The latter committee work is time-intensive, because we review and approve all proposals (at least 500/year) within the University that use vertebrate animals in the research, including the medical school. We also inspect facilities where live vertebrates are housed and outdoor research stations, such as the E. S. George Reserve, on all the University of Michigan campuses. also a long standing member (20 years) of the Dean's E. S. George Reserve Advisory Committee. I have served on various ad hoc committees for reviewing proposals and awarding funds to graduate students (Hinsdale Walker, E. S. George Reserve Awards, Tinkle Award). I often handle the Donald W. Tinkle Memorial Lecture and host the invited speaker. This past year it was Dr. Edmund D. Brodie, Jr., III.

#### COURSES

I teach Biology 450 (Biology of Amphibians and Reptiles) every other Winter Term. The course, which includes a 4-day field trip to the Appalachian Mountains of North Carolina, is not team taught. I taught the animal physiology section of Biology 164 (Introductory Biology) once in the past five years. The course has two lecturers. I currently teach a freshman seminar on evolution (bio 120). I've taught three sections of it as of Winter Term, 2006. I have contributed lectures to the Evolution and Biodiversity course occasionally, and I made arrangements to teach in John Vandermeer's field ecology course on the E. S. George Reserve. Unfortunately, the course was cancelled this year, but I plan to participate in future years. I regularly have students signed up for 700's 995's etc. Recently (Fall 2008 and Fall 2009) I taught Bio 252, Comparative Anatomy and Evolution of Vertebrates.

## POSTDOCTORAL FELLOWS

Dr. Thomas Jones: Chairman, Department of Biology, Grand Canyon University, Phoenix, Arizona.

Dr. Mark Wilkinson: Mark held positions at Bristol University and the

University of Glasgow. He is currently

Associate

Keeper (head of Zoology Section), British Museum (Natural History), London.

Dr. Christopher Raxworthy: Chris held positions at Columbia
University and the University of Kansas
after departing UM. He is currently
Associate Curator (Herpetology), American
Museum of Natural History, New York.

#### DOCTORAL STUDENTS

Paul Feaver: North Carolina State University (last known address). Edward Hover: Deceased. Ed died a sudden an unexpected death from health problems. His outstanding dissertation research

on color polymorphism and male reproductive success in the lizard, *Urosaurus inornatus*, was never published.

Peter Ducey: Biology Department, SUNY, Cortland, Professor.

Russell Burke: Evolution of reproductive parameters, currently Professor of Biology, Hofstra University.

Sheng Hai Wu: Department of Life Sciences, National Chung-Hsing University, Taiwan, past Chairman, currently

professor.

Mark Wilkinson: Zoology Section, British Museum (Natural History).

Daniel York: Hinsdale College, Associate Professor.

Achille Raselimanana: World Wide Fund for Nature, Madagascar, Biodiversity Officer.

Richard Lehtinen: Department of Biology, College of Wooster, Assistant Professor.

Keith Pecor: behavior, comparison of courtship and risk allocation in

crayfish species. (co-chair with Brian Hazlett).

Steven Albee Scott: Phylogeography of mycorrhizal fungi in the Great Basin.

Corrine Richards: ecology, conservation, tropical frogs, (co-chair with Lacey Knowles).

## CURRENT DOCTORAL STUDENTS (2011)

Reed, Jay: evolution of mite pockets in lizards; currently a Candidate.

# Publications (2005-2011)

- 156. (2005) Schmitz, A., Brandley, M. C., Mausfeld, P.,
  Vences, M., Glaw, F., Nussbaum, R. A., and T. W.
  Reeder. Opening the black box: phylogenetics and
  morphological evolution of the Malagasy fossorial
  lizards of the subfamily "Scincinae". Molecular
  Phylogenetics and Evolution 34:118-133.
- 157. (2005) Gower, D. J., Wilkinson, M., Nussbaum, R. A. (plus 12 other contributors). Caecilians and the 2004 Global Amphibian Assessment, pp. 54-55. In: Gower, D. J. and M. Wilkinson. Conservation biology of Caecilian amphibians. Conservation Biology 19(1):45-55.
- 158. (2005) Glaw, F., Vences, M., and R. A. Nussbaum. A new Species of <a href="Heterliodon">Heterliodon</a> (Reptilia: Squamata: Colubridae) from Montagne des Français, far northern Madagascar. Herpetologica 61(3):275-280.
- 159. (2005) Andreone, F. Cadle, J. E., Cox, N., Glaw, F., Nussbaum, R. A., Raxworthy, C. J., Stuart, S. N. Vallan, D., and M. Vences. Species review of amphibian extinction risk in Madagascar: conclusions from the Global Amphibian Assessment program. Conservation Biology 19(6):1790-1802.
- Andreone, F. and R. A. Nussbaum. A revision of Mantidactylus microtis and M. microtympanum, and a comparison with other large Madagascan stream frogs (Anura: Mantellidae: Mantellinae). Zootaxa 1105:49-68.

- 161. (2006) Frost, Darrel R., Taran Grant, Julian Faivovich, Raoul H. Bain, Alexander Haas, Celio F.B. Haddad, Rafael O de Sa, Alan Channing, Mark Wilkinson, Stephen C. Donnellan, Christopher J. Raxworthy, Jonathan A. Campbell, Boris Blotto, Paul Moler, Robert C. Drewes, Ronald A. Nussbaum, John D. Lynch, David M. Green, and Ward C. Wheeler. The amphibian tree of life. Bulletin of the American Museum of Natural History, 297: 1-370.
- 162. (2006) Kupfer, A., Müller, H., Antoniazzi, M. M., Jared, C., Greven, H., Nussbaum R. A., and M. Wilkinson. Parental investment by skin feeding in a caecilian amphibian. Nature 440:926-929.
- 163. (2006) Wilkinson, M. and R. A. Nussbaum. Chapter 2 Caecilian Phylogeny and Classification. Pp.
  39-78. In: B.J.M. Jamieson (series ed.)
  Reproductive biology and phylogeny, Volume 5 Reproductive biology and phylogeny of Gymnophiona
  (Caecilians), J.-M. Exbrayat, (volume ed.).
  Science Publishers Inc., Enfield, NH, USA Inc.
  i-xii + 395 pp.
- Raselimanana, A. P., Nussbaum, R. A., and C. J.
  Raxworthy. 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 No. 739:1-16.
- Nussbaum, R. A. Ecology and Evolution in the Tropics. A Herpetological Perspective. Edited by Maureen A. Donnelly, Brian I. Crother, Craig Guyer, Marvalee H. Wake, and Mary E. White. xv + 675 pp., ISBN 0 226 15658 3, paperback, US\$ 45.00, USA/London, UK: The University of Chicago Press, 2005. [book review]
- Raxworthy, C. J. and R. A. Nussbaum. Six new species of occipital-lobed <u>Calumma</u> chameleons (Squamata: Chamaeleonidae) from montane regions of Madagascar, with a new description and revision of <u>Calumma</u> <u>brevicorne</u>. Copeia 2006(4):711-734.

- 167. (2007) Nussbaum, R. A. and S-H. Wu. Morphological assessments and phylogenetic relationships of the Seychellean frogs of the family Sooglossidae (Amphibia: Anura). Zoological Studies (Academia Sinica) 46(3): 129-142.
- 168. (2007) Lehtinen, R. M., Nussbaum, R. A., Richards, C. M., Cannatella, D. C., and M. Vences. Mitochondrial genes reveal cryptic diversity in plant-breeding frogs from Madagascar (Anura, Mantellidae, Guibemantis). Molecular Phylogenetics and Evolution 44:1121-1129.
- Müller, H., Nussbaum, R. A., Gower, D. J., and M. Wilkinson. Morphology of larval caecilians (Amphbia: Gymnophiona). Journal of Morphology 268(12):1110-.
- 170. (2008) Frost, Darrel R., Taran Grant, Julian Faivovich, Raoul H. Bain, Alexander Haas, Celio F.B. Haddad, Rafael O de Sa, Alan Channing, Mark Wilkinson, Stephen C. Donnellan, Christopher J. Raxworthy, Jonathan A. Campbell, Boris Blotto, Paul Moler, Robert C. Drewes, Ronald A. Nussbaum, John D. Lynch, David M. Green, and Ward C. Wheeler. Is The Amphibian Tree of Life really fatally flawed? Cladistics 24 (2008):385-395.
- 171. (2008) Raxworthy, C. J., Peason, R. G., Zimkus, B. M., Reddy, S., Deo, A. J., Nussbaum, R. A., and C. M. Ingram. Continental speciation in Madagascar: contrasting biogeographic patterns of divergence in the *Uroplatus* Leaf-tailed Geckos species radiation. Journal of Zoology, 275(4):423-440.
- 172. (2008) Kremen, C., Cameron, A., Moilanen, A., Phillips, S., Thomas, C. D., Beentje, H., Dransfeld, J., Fisher, B. L., Glaw, F., Good, T. C., Harper, G. J., Hijmans, R. J., Lees, D. C., Louis, E. Jr., Nussbaum, R. A., Raxworthy, C. J., Razafimpahanana, A., Schatz, G. E., Vences, M., Vieties, D. R., Wright, P. C., and M. L. Zjhra. Aligning conservation priorities across taxa in Madagascar with high-resolution planning tools. Science, 320, 11 April 2008: 222-226.

- 173. (2008) Gower, D. J., Rajendran, A., Nussbaum, R. A., and M. Wilkinson. A new species of *Uraeotyphlus* (Amphibia: Gymnophiona: Uraeotyphlidae) of the *Malabaricus* Group. Herpetologica 64(2):235-245.
- 174. (2008) Kremen, C., Cameron, A., Razafimpahanana, A., Moilanen, A., Thomas, C. D., Beentje, H., Dransfield, J., Fisher, B. L., Glaw, F., Good, T. C., Harper, G. J., Hijmans, R. J., Lees, D. C., Louis E. Jr., Nussbaum, R. A., Phillips, S. J., Raxworthy, C. J., Schatz, G. E., Vences, M., Vieites, D. R., Wright, P. C., and M. L. Zjhra. Conservation with caveats. Science 18 July 2008, Vol. 321:340-342.
- 175. (2008) Raxworthy, C. J., Pearson, R. G., Rabibisoa, N., Rakotondrazafy, A. M., Ramanamanjato, J.-B., Raselimanana, A. P., Wu, S., Nussbaum, R. A. and D. A. Stone. Extinction vulnerability of tropical montane endemism from warming and upslope displacement: a preliminary appraisal for the highest massif in Madagascar. Global Change Biology (2008) 14, 1703-1720. [This is the cover article.]
- 176. (2009) Wilkinson, M., Nussbaum, R. A., and M. Hoogmood.
  A new species of *Microcaecilia* (Amphibia:
  Gymnophiona: Caeciliidae) from Suriname.
  Herpetologica 65(4):413-418.
- 177. (2009) Köhler, G., Diethert, H.-M., Nussbaum, R. A., and C. J. Raxworthy. A revision of the fish scale Geckos, genus *Geckolepis* Grandidier (Squamata: Gekkonidae) from Madagascar and the Comoros. Herpetologica 65(4):419-435. [This is the cover Article.]
- 178. (2010) Hoffman, M. et al. (180 contributors). The Impact of Conservation on the Status of the World's Vertebrates. Sciencexpress, 26 October 2010/Page 1/10.1126/science.1194442
- 179. (2010) Hoffman, M. et al. (180 contributors). The Impact of Conservation on the Status of the World's Vertebrates. Science 10 December 2010, Vol. 330, No. 6010, pp. 1501-1509.

- 180. (2011) Gower, D. J., Mauro, D. S., Giri, V., Bhatta, G., Govindappa, V., Kotharambath, R., Oommen, O. V., Fatih, F. A., Mackenzie-Dodds, J. A., Nussbaum, R. A., Biju, S. D., Shouche, Y. S., Wilkinson, M. Molecular systematics of caeciliid caecilians (Amphibia: Gymnophiona) of the Western Ghats, India. Molecular Phylogenetics and Evolution 59(2011):698-707.
- 181. (2012) Ramachandran, K., Wilkinson, M., Oommen, O., Sanil, G., Nussbaum, R. A., and D. J. Gower. On the systematics, distribution and conservation status of *Ichthyophis longicephalus* Pillai, 1986 (Amphibia: Gymnophiona: Ichthyophidae). J. Natural History, in press.