

Rebecca J. Rundell

Departments of Zoology and Botany, Biodiversity Research Centre
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Education

- Ph.D. Evolutionary Biology. University of Chicago, Chicago, Illinois. 2008
Diversification of the rock and leaf litter dwelling land snails of Belau (Republic of Palau, Oceania). Advisors: Rüdiger Bieler and Paul Z. Goldstein.
- M.S. Evolutionary Biology. University of Chicago, Chicago, Illinois. 2004
- M.S. Zoology and Ecology, Evolution and Conservation Biology. 2001
University of Hawaii at Manoa, Honolulu, Hawaii. *Phylogeny, biogeography and reproductive biology of the endemic Hawaiian succineid land snails*. Advisor: Robert H. Cowie.
- B.S. Biology. Cornell University, Ithaca, New York. 1996
Ecology and Evolutionary Biology concentration; Marine Biology specialization.

Professional Positions

- Post-doctoral Fellow**, University of British Columbia 2008-Present
Evolution, morphology and convergence in meiofaunal marine invertebrates.
Supervisor: Brian S. Leander
- Research Assistant**, University of Hawaii 2000-2001
Conducted field research in American Samoa, helped train Samoan field assistants, sorted and catalogued field collections, selected and photographed specimens for Samoan Land Snail Field Guide. Supervisor: Robert H. Cowie.
- Research Assistant**, University of Hawaii 1999-2000
Conducted field research (e.g. mark-recapture, tissue dissection for molecular work) and participated in the captive rearing program for endangered achatinelline tree snails. Supervisor: Michael G. Hadfield.
- Research Assistant**, University of Hawaii 1998-1999
Computerized Bishop Museum Samoan Land Snail Collection and conducted research on endemic Samoan land snail fauna. Supervisor: Robert H. Cowie.
- Assistant to the Director and Volunteer Coordinator**, Paleontological Research Institution, Ithaca, NY 1997-1998
Edited *At PRI* newsletter; created, edited and illustrated children's paleontology and evolution newsletter; managed advertising for *American Paleontologist*; supervised volunteers and work-study students; created and implemented Volunteer Training Program; designed and produced paleontology and evolution-themed exhibits; wrote Exhibit Design Manual; planned, staffed and ran museum-sponsored events; presented university and secondary school educational programs; assisted Director in his research and running a major natural history museum.
Supervisor: Warren D. Allmon.

Collections Assistant, Cornell University 1996-1997
Computerized and archived labels for the Malacology Collection; addressed collection organization and conservation issues. Supervisor: Robin Hadlock Seeley.

Collections Assistant, Paleontological Research Institution 1996-1997
Curated fossil invertebrates, vertebrates and Recent molluscs. Assumed Collections Manager's responsibilities for several months; trained and supervised work-study students and volunteers; presented paleontology and evolution-themed educational programs; helped manage Education Department. Supervisor: Wendy Taylor.

Publications

Peer-reviewed

1. **Rundell, R.J.** In Press. Snails on an evolutionary tree: Gulick, speciation, and isolation. *American Malacological Bulletin* 29: xx-xx.
2. **Rundell, R.J.** and B.S. Leander. 2010. Masters of miniaturization: Convergent evolution among interstitial eukaryotes. *BioEssays* 32: 430-437.
3. **Rundell, R.J.** 2010. Diversity and conservation of the land snail fauna of the western Pacific islands of Belau (Republic of Palau, Oceania). *American Malacological Bulletin* 28: 81-90.
4. ***Rundell, R.J.** and T. D. Price. 2009. Adaptive radiation, nonadaptive radiation, ecological speciation and nonecological speciation. *Trends in Ecology and Evolution* 24(7): 394-399.
* **Faculty of 1000 Biology Recommended Paper**
5. **Rundell, R.J.** 2008. Cryptic diversity, molecular phylogeny and biogeography of the rock- and leaf litter-dwelling land snails of Belau (Republic of Palau, Oceania). *Philosophical Transactions of the Royal Society B Biological Sciences* 363(1508): 3401-3412.
6. **Rundell, R.J.**, B.S. Holland and R.H. Cowie. 2004. Molecular phylogeny and biogeography of the endemic Hawaiian Succineidae (Gastropoda: Pulmonata). *Molecular Phylogenetics and Evolution* 31: 246-255.
7. **Rundell, R.J.** and R.H. Cowie. 2003a. Preservation of species diversity and abundances in Pacific island land snail death assemblages. *Journal of Conchology* 38(2): 155-170.
8. **Rundell, R.J.** and R.H. Cowie. 2003b. Growth and reproduction in Hawaiian succineid land snails. *Journal of Molluscan Studies* 69: 288-289.
9. Cowie, R.H. and **R.J. Rundell**. 2002. The land snails of a small tropical Pacific island, Aunuu, American Samoa. *Pacific Science* 56(2): 143-147.
10. Cowie, R.H., **R.J. Rundell**, F. Mika and P. Setu. 2002. The endangered tree snail *Samoana thurstoni* on Olosega and the land snail diversity of the Manua Islands, American Samoa. *American Malacological Bulletin* 17(1/2): 37-43.
11. Lach, L.L., D.K. Britton, **R.J. Rundell** and R.H. Cowie. 2000. Food preference and reproductive plasticity in an invasive freshwater snail. *Biological Invasions* 2(4): 279-288.

Technical reports, conservation articles and published abstracts

1. **Rundell, R.J.** 2007a. (Guest Editorial) Turning research into conservation action. *Tentacle. Newsletter of the IUCN/SSC Mollusc Specialist Group* 15: 1-3.
2. **Rundell, R.J.** 2007b. Land snail survey of Techakl, Island of Beliliou, Belau. Report. Belau Cares, Inc., Republic of Palau. 2 p.
3. Brewer, R., J. Czekanski-Moir and **R.J. Rundell**. 2007. *Partula* programme consortium and Belau Partulidae update. *Tentacle. Newsletter of the IUCN/SSC Mollusc Specialist Group*. 15: 19-20.
4. **Rundell, R.J.** 2006. Conservation of the land snails of Palau and the Federated States of Micronesia. *Tentacle. Newsletter of the IUCN/SSC Mollusc Specialist Group*. 14: 27-28.

5. **Rundell, R.J.** 2005a. Republic at a turning point: CBS reality series ‘Survivor’ strikes Palau. *Tentacle. Newsletter of the IUCN/SSC Mollusc Specialist Group*. 13: 16.
6. **Rundell, R.J.** 2005b. The land snails of Belau: Survey of the 16 States. Report. Distributed to Federal, State and Local Governments and NGOs, Republic of Palau. 60 p.
7. **Rundell, R.J.** 2004. Determinants of diversity of the diplommatinid land snails of Palau. *Tentacle. Newsletter of the IUCN/SSC Mollusc Specialist Group*. 12: 20.
8. **Rundell, R.J.** 2002a. Aspects of the evolution of Hawaiian endemic succineid snails. Published abstract. *Pacific Science* 56(1): 98.
9. **Rundell, R.J.** 2002b. Hawaiian endemic succineid land snails: preliminary study of phylogeny and biogeography. Published abstract. *Western Society of Malacologists Annual Report* 33: 26.
10. **Rundell, R.J.** and R.H. Cowie. 2002. Hawaiian succineid project. *Tentacle. Newsletter of the IUCN/SSC Mollusc Specialist Group*. 10: 19-20.
11. **Rundell, R.J.** 2001. Hawaiian endemic succineid land snails: preliminary study of phylogeny and biogeography. Published abstract. *Pacific Science* 55(1):107-108.
12. **Rundell, R.J.** 2000. Hawaiian Succineidae: still around, but for how long? *Tentacle. Newsletter of the IUCN/SSC Mollusc Specialist Group*. 9:12.
13. Cowie, R.H., F.G. Howarth, D.J. Preston, **R.J. Rundell**, F.D. Stone, and S.L. Montgomery. 1999. Proposed new Hawaii island correctional facility, Waiakea, South Hilo, Island of Hawaii: assessment of potential impacts on invertebrates (snails, insects and other arthropods). Report. Hawaii Biological Survey, Bishop Museum, Honolulu, Hawaii. 82 p.
14. Howarth, F.G., R.H. Cowie, D.J. Preston, R.A. Englund, **R.J. Rundell**, F.D. Stone, and S.L. Montgomery. 1999. Proposed new Hawaii island correctional facility, Waiakea, South Hilo, Island of Hawaii: assessment of potential impacts on invertebrates (snails, insects and other arthropods) of proposed improvements to Stainback Highway. Report. Hawaii Biological Survey, Bishop Museum, Honolulu, Hawaii. 90 p.

In Review, In Revision and In Preparation

- Rundell, R.J.** and B.S. Leander. In Review. Diversity of Pacific acoels as inferred from small subunit rDNA sequences. *Integrative and Comparative Biology*.
- Rundell, R.J.** and B.S. Leander. In Review. Phylogenetic position and description of the first sand-dwelling entoproct species from the western coast of North America: *Loxosomella vancouverensis* sp. nov. *Marine Biology Research*.
- Rundell, R.J.** In Prep. Diversification of Pacific island endemic land snails through build-up of ecologically similar species. *Journal of Biogeography*.
- Rundell, R.J.** and B.S. Leander. In Prep. Suction cups and sand: description and phylogenetic position of a new species of meiofaunal leech (Annelida, Hirudinida). *Marine Biology Research*.
- Cowie, R.H. and **R.J. Rundell**. In Prep. *Samoan Land Snails and Slugs: A Field Identification Guide*. (currently looking for a publisher; published online at <http://www2.bishopmuseum.org/PBS/samoasnail/fieldguide.html>)

Grants

National Geographic Society Committee for Research and Exploration Research Grant (\$16,860)	2006-2008
University of Chicago Women’s Board Travel Award (\$500)	2007
International Biogeography Society Travel Grant (\$1,850)	2006
Graduate Assistance in Areas of National Need training grant in evolution and conservation, US Dept. of Education (supported as a trainee, not a PI)	2006
University of Chicago Hinds Fund Research Grant (\$1,500)	2005
Western Society of Malacologists Research Grant (\$500)	2005
Conchologists of America Research Grant (\$1,500)	2005

Doolittle-Harrison Fellowship (for research; \$500)	2005
Unitas Malacologia Research Grant (£1000)	2004
American Malacological Society Research Grant (\$800)	2004
University of Chicago Hinds Fund Research Grant (\$1,600)	2004
University of Chicago Hinds Fund Research Grant (\$1,500)	2003
Tinker Foundation & Center for Latin American Studies Field Research Travel Grant (\$750)	2002
Conchologists of America Research Grant (\$1,200)	2000
American Malacological Society Research Grant (\$700)	2000
University of Hawaii Ecology, Evolution and Conservation Biology Research Grant (\$532)	1999
Cornell University Morley Undergraduate Research Grant (\$500)	1995

Awards

Conchologists of America Walter Sage Memorial Award (\$300)	2000
Maybelle Felker Roth ARCS Award for Conservation Biology	1999
ARCS Foundation Research Award (\$5,000)	1999

Fellowships

Field Museum of Natural History Brown Family Fellowship	2007-2008
University of Chicago William Rainey Harper Fellowship	2006-2007

Presentations

Invited talks

- Rundell, R.J.** and B.S. Leander. 2011. Speciation in marine microeukaryotes. Symposium: Speciation in Marine Organisms. Society for Integrative and Comparative Biology. Salt Lake City, Utah, 3-7 January.
- Rundell, R.J.** 2009. Diversification of ecologically similar species on Pacific islands. President's Symposium: Speciation in Molluscs. American Malacological Society. Cornell University, Ithaca, New York, 20 July.
- Rundell, R.J.** and B.S. Leander. 2009. Evolution of miniaturization in marine meiofaunal metazoans. Annual Meeting of the Program in Integrated Microbial Diversity, Canadian Institute for Advanced Research (CIFAR). Asilomar, California, 19 June.
- Rundell, R.J.** 2009. Marine meiofauna evolution and the evolution of the rock and leaf litter-dwelling land snails of Belau. Kewalo Marine Laboratory Seminar, University of Hawaii, 4 November.
- Rundell, R. J.** 2009. Diversification of the rock and leaf litter dwelling land snails of Belau (Republic of Palau, Oceania). Ecology and Evolutionary Biology Seminar Series. University of British Columbia, Vancouver, BC, Canada, 7 January.
- Rundell, R.J.** 2008. Cryptic diversity, evolution and conservation of the land snails of Belau. Leslie Hubricht Memorial Symposium on Terrestrial Gastropods. American Malacological Society. University of Southern Illinois, Carbondale, Illinois, 29 June - 3 July.
- Rundell, R.J.** 2007. Diversification and conservation of the land snails of Belau. Coral Reef Research Foundation and Belau National Museum, Koror, Republic of Palau.
- Rundell, R.J.** 2006. Conservation of land snails and evolution and conservation of the land snail fauna of Palau and Micronesia. The Pritzker Laboratory for Molecular Systematics and Evolution, Field Museum of Natural History, Chicago, Illinois.
- Rundell, R.J.** 2005. Evolution of the Palau diplommatinids and conservation of the land snails of Palau and the Southwest Islands. Pacific Island Land Snail Evolution and Conservation Symposium.

American Malacological Society and Western Society of Malacologists, Joint Meeting, Asilomar, California.

- Rundell, R.J.** 2004. Land snail research on the islands of the Pacific: Palau, Samoa and the Hawaiian Islands. Chicago Shell Club. Chicago, Illinois.
- Rundell, R.J.** 2003. Conservation of the native land snails of the Republic of Palau. Palau Conservation Society. Koror, Republic of Palau.
- Rundell, R.J.** 2001. The Hawaiian endemic succineid land snails. Hawaiian Malacological Society. Honolulu, Hawaii.
- Rundell, R.J.** 2000. Phylogeny and biogeography of Hawaiian endemic succineid land snails: a preliminary study. Ecology, Evolution and Conservation Biology Program Departmental Seminar.

Contributed talks and posters

- Rundell, R.J.** and B.S. Leander. 2010. Microeukaryotes and the masters of miniaturization: Diversification in marine sand. Society for Integrative and Comparative Biology. Seattle, Washington, 2 -6 Jan. 2010 (talk).
- Rundell, R.J.** 2008. Molecular phylogenetics, biogeography and conservation of the rock- and leaf litter-dwelling land snails of Belau (Republic of Palau), Oceania. University of Chicago 5th Annual Evolutionary Biology Graduate Student Symposium, Lincoln Park Zoo, Chicago, 26 April (talk).
- Rundell, R.J.** 2007a. Systematics and biogeography of the diplommatinid land snails of Palau. International Biogeography Society, Tenerife, Canary Islands, 9-13 January 2007 (poster).
- Rundell, R.J.** 2007b. Diversification of the Palau diplommatinid land snails. Society for the Study of Evolution, Society of Systematic Biologists and American Society of Naturalists, Joint Meeting. Christchurch, New Zealand, 16-20 June 2007 (talk).
- Rundell, R.J.** 2005. Evolution of the Palau diplommatinids and conservation of the land snails of Palau and the Southwest Islands. University of Chicago 2nd Annual Evolutionary Biology Graduate Student Symposium (talk).
- Rundell, R.J.** 2004. Determinants of diversity in the Palau diplommatinid land snails. University of Chicago 1st Annual Evolutionary Biology Graduate Student Symposium (talk).
- Rundell, R.J.**, B.S. Holland and R.H. Cowie. 2003a. Molecular phylogeography of the endemic Hawaiian Succineidae (Gastropoda: Pulmonata). International Biogeography Society, Mesquite, Nevada (poster).
- Rundell, R.J.**, B.S. Holland and R.H. Cowie. 2003b. Molecular phylogeography of the endemic Hawaiian Succineidae (Gastropoda: Pulmonata). American Malacological Society, University of Michigan, Ann Arbor, Michigan (talk).
- Felling, C. et al. (17 authors). 2001. A systems-based evaluation of forest bird conservation efforts in Hawaii. Society for Conservation Biology, Hilo, Hawaii (poster).
- Rundell, R.J.** 2000a. Conservation of Hawaiian endemic succineid land snails: a preliminary study of range size and life history. *Abstracts of the 2000 Hawaii Conservation Conference*. Honolulu, Hawaii (poster).
- Rundell, R.J.** 2000b. Hawaiian endemic succineid land snails: Preliminary study of phylogeny and biogeography. American Malacological Society/Western Society of Malacologists, San Francisco State University, San Francisco, California, 2000. (poster).
- Lach, L.L., D.K. Britton, **R.J. Rundell** and R.H. Cowie. 2000. Food preference and reproductive plasticity in an invasive freshwater snail. *Abstracts of the Ecological Society of America 2000*. ESA Annual Meeting, Snowbird, Utah, 6-10 August (poster).

Teaching Experience

Teaching Assistant, University of Chicago

2006

Biology of Invertebrates (BioSci 22244 with Michael LaBarbera) Taught laboratory, assisted in lab set-up and live animal care; gave guest lectures on molluscan diversity, functional morphology, ecology and evolution.	2006
Teaching Assistant, University of Chicago	
Environmental Ecology (BioSci 13107 with Cathy Pfister) Taught two discussion sections, graded exams and papers, led outdoor lab.	2006
Instructor, Northwestern University and Field Museum (Chicago, Illinois)	
Science and Engineering Research and Teaching Synthesis (with Teresa Horton) Developed lesson plan and taught non-science major undergrads about scientific research and evolutionary biology through hands-on learning; graded reports.	2004
Teaching Assistant, University of Chicago	
Biological Evolution (NatSci 10300 with Jane Masterson) Taught laboratory, assisted in writing exams, graded exams and reports.	2003
*Teaching Assistant, University of Chicago	
Biological Evolution (NatSci 10300 with David Jablonski) Taught laboratory, assisted in writing exams, graded exams and reports.	2002
*Teaching Assistant, University of Chicago	
Biological Diversity (BIOS 20184 with Michael LaBarbera) Taught laboratory, assisted in writing lab practical exams, graded exams and reports.	
*Nominated by students for the University of Chicago Teaching Prize.	
Field Training (formal coursework)	
Field Geology and Paleontology (University of Chicago field course in western Texas's Big Bend and Guadalupe National Parks)	2003
Tropical Biology: An Ecological Approach (Organization for Tropical Studies (OTS) wet season field course in Costa Rica)	2002
Field Marine Science (Cornell University field course at Shoals Marine Lab, Gulf of Maine)	1994
 Academic Service	
Reviewer , <i>American Malacological Bulletin</i> , <i>Biological Journal of the Linnean Society</i> (2), <i>Biological Invasions</i> , <i>Evolution</i> , <i>Journal of Molluscan Studies</i> , <i>Journal of Natural History</i> , <i>Molecular Phylogenetics and Evolution</i> (3), <i>PLoS Computational Biology</i> , <i>Revista Científica UDO Agrícola</i> , <i>Zootaxa</i>	
IUCN Species Assessment Contributor (Specialist) , IUCN Red List of Threatened Species	2011
Judge, Best Presentation , Division of Ecology and Evolution, Society for Integrative and Comparative Biology	2011
Scientific Advisor , Beaty Biodiversity Museum, University of British Columbia	2010-2011
Councilor-at-Large , American Malacological Society	2010-2011
Co-organizer , University of Chicago 1 st Annual Evolutionary Biology Graduate Student Symposium	2004
Expert Reader , Raintree Press, Chicago, Illinois	2003
Faculty Representative , University of Chicago Women in Science	2003-2005
Biological Sciences Division Representative , University of Chicago Women	2002-2003

in Science

Science Fair Judge , Hyde Park Career Academy, Chicago, Illinois	2003-2004
Coordinator , University of Chicago Darwinian Cluster Student Seminar	2001-2002
Member , U.S. Fish and Wildlife Service Hawaiian Terrestrial Mollusc Conservation Group	2000-2001
Coordinator , University of Hawaii Ecology, Evolution and Conservation Biology Journal Club	1999-2001
Treasurer , Cornell Herpetological Society, Cornell University	1995-1996

Outreach and Mentorship Activities

Museum docent training: Trained volunteer docents at the Beaty Biodiversity Museum at the University of British Columbia (UBC).	2010
Museum exhibit development: Produced twenty exhibits on evolution, ecology, morphology and invertebrates for the Beaty Biodiversity Museum at UBC.	2010
Museum exhibit development: Contributed text, photos and material for DNA Discovery Center Exhibition at the Field Museum of Natural History.	2007
Members' Night at the Field Museum: Gave hands-on educational programs on cone snail predation, conotoxin and bioprospecting.	2006
Field Museum Natural History Tours: Led collections and molecular lab tours for Northern Iowa University undergraduates and faculty.	2006
Members' Night at the Field Museum: Gave hands-on educational programs on invasive species and their impact locally and internationally.	2005
Trained and mentored four post-graduate field assistants in tropical field biology, field research techniques and land snail identification as part of continuing research in the Republic of Palau and Federated States of Micronesia. Three have since pursued graduate research in ecology, evolution and conservation biology; one has implemented snail conservation programs at his institution.	2005
Museum exhibit development: Produced a permanent exhibition on the Land Snails of Palau for the Grand Opening of the Belau National Museum (Koror, Republic of Palau).	2005
Educational program: Taught hands-on classes on local forests and land snail diversity and conservation at Maris Stella Elementary School (Koror, Republic of Palau).	2005
Conservation workshops: Led workshops for local (Palau) conservation managers and NGO personnel on land snail conservation and biodiversity surveys.	2005
Trained and mentored two undergraduates in tropical field biology, field research techniques and land snail identification as part of continuing research in the Republic of Palau; both have since pursued graduate research in biology.	2003

Professional Affiliations

American Malacological Society (AMS)
American Society of Naturalists (ASN)
Canadian Institute for Advanced Research (CIFAR)
Centre for Microbial Diversity and Evolution (CMDE) at the University of British Columbia
Paleontological Research Institution (PRI)
Society for Integrative and Comparative Biology (SICB)