

John Philip Dumbacher Jr., Curator of Ornithology and Mammalogy
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Positions held:

Associate Curator, Ornithology and Mammalogy, California Academy of Sciences, 2003 to present.
Department Head, Ornithology and Mammalogy, California Academy of Sciences, 2003 to 2011.
Professor of Biology, San Francisco State University, 2003 to present.
Smithsonian Research Associate, Molecular Genetics Laboratory, and Smithsonian Conservation Research Center, National Zoological Park, Smithsonian Institution, 2001-2003.

Academic Degrees:

Ph.D. Ecology and Evolution, The University of Chicago, June 1997.
M.S. Ecology and Evolution, The University of Chicago, March 1995.
B.S. General Biology, Vanderbilt University, May 1987.

Honors and Awards:

Elected Fellow, American Ornithologists' Union 2012.
Fellow National, Explorer's Club, Inducted December 2010.
Fellow, California Academy of Sciences, Elected 2006.
Elected Member of the American Ornithologists' Union, 2005.
Scientific Advisor, Pinhead Institute, Telluride, CO 2002-present.
Smithsonian Scholarly Studies Fellow, Conservation Research Center, National Zoo, 1999-2000.
Friends of the National Zoo Post-doctoral Fellowship, Genetics Program, National Zoo, 1998-99.
Smithsonian Post-doctoral Fellowship, Genetics Program, National Zoological Park, 1997-98.
US Department of Education GAANN Training Grant Fellow, University of Chicago, 1997.
William Rainey Harper Doctoral Dissertation Fellowship, University of Chicago, 1995-96.
NIH Genetics Training Grant Fellow, Committee on Genetics, University of Chicago, 1993-95.
National Institutes of Health Summer Fellowship, Laboratory of Bioorganic Chemistry, 1994.
AOU Travel Award to International Ornithological Congress in Vienna, Austria 1994.
Quintessence Award, Publication Excellence in Environmental Contamination and Toxicology, 1994.
Christensen Research Institute Fellow, Papua New Guinea, 1993-1994.
Who's Who in Science and Engineering, biographical sketch published, 1993 - 2000.
Centennial Fellowship, University of Chicago, 1991.

External Research Grants:

US Fish and Wildlife Service, Small Mammal and Herp Inventory of Desert National Wildlife Refuge, Nevada Refuges Inventory & Monitoring Program; \$34,000, 2013- 2015.
National Science Foundation, CSBR: Natural History Collections: Liquid Nitrogen Facilities for Biological Specimen Curation and Research at the California Academy of Sciences, \$178,937, 2012-2014.
National Oceanic and Atmospheric Administration, Prescott Grant. 2008-2010, \$100,000, "Improving marine mammal data collection facilities and specimen archives."
National Science Foundation, 2006-2008, \$500,000, Scientific infrastructure for Ornithology and Mammalogy collections.
National Geographic Society, 2005-2007, \$26,000, Linking diet, toxicity and defense in New Guinea's poisonous *Pitohui* birds.
Conservation International, 2004, \$18,000 grant for hosting Papua New Guinea symposium, art fair, and mini film festival within the Telluride MOUNTAINFILM Festival (June 2004).
WWF and TNC, 2002, \$40,000, Assessing the ecological impacts of oil palm development in PNG.
National Science Foundation, 2001-2006, \$325,000, Lowland phylogeography of New Guinea.
Abbott Fund, National Zoological Park, 2001, \$9,900 for captive studies of Hooded Pitohuis
Sisley Fund, National Zoological Park, 2000, \$7,000 for field studies of Hooded Pitohuis.
Abbott Fund, National Zoological Park, 2000, \$8,000 for field studies and telemetry training course.

Smithsonian Scholarly Studies Grant, 1999-2001, \$64,000 for field studies and molecular genetics of Hooded Pitohui (*Pitohui dichrous*).

Sisley Fund, National Zoological Park, 1999, \$5,100 for field studies of Hooded Pitohuis.

Pittsburgh Zoo Conservation Grant, 1999, \$1,400 for radiotelemetry study of Hooded Pitohui populations in Varirata National Park, Papua New Guinea.

National Geographic Society, 1993, \$41,140, Geographical variation in New Guinea's poisonous birds.

Hinds Fund Grant, University of Chicago, 1991, \$750, Chemistry of toxin use by *Pitohuis*.

Sigma Xi Grant-in-aid of Research, 1988, \$600, Study of lek evolution in Raggiana Birds of Paradise.

Other Fundraising:

\$40K total in private gifts from Bay Area families, for field projects and collections projects.

\$284K gift from one major donor for New Guinea projects and infrastructure.

Publications:

Original Papers:

1. **J. P. Dumbacher**, G. B. Rathbun, T. O. Osborne, M. Griffin, and S. J. Eiseb. 2014. A new species of round-eared sengi (genus *Macroscelides*) from Namibia. *Journal of Mammalogy*, 95(3) 443-454.
2. L. Rocha, et al. 2014. Specimen collection: An essential tool. *Science* 344(6186):814-815.
3. **J. P. Dumbacher**. 2014. Batrachotoxin. In: Wexler, P. (Ed.), *Encyclopedia of Toxicology*, 3rd edition vol 1. Elsevier Inc., Academic Press, pp. 371–373. ISBN: 9780123864543
4. G. Menon and **J. P. Dumbacher**. 2014. A “toxin mantle “ as defensive barrier in a tropical bird: evolutionary exploitation of the basic permeability barrier forming organelles. *Experimental Dermatology* 23(4): 288-290.
5. **J. P. Dumbacher**. 2014. A taxonomic revision of the genus *Pitohui*, with historical notes on names. *Bulletin of the British Ornithologists Club* 134(1): 19-22.
6. M. J. Andersen, Á. S. Nyári, I. Mason, L. Joseph, **J. P. Dumbacher**, C. E. Filardi, and R. G. Moyle. 2014. Molecular systematics of the world's most polytypic bird: the *Pachycephala pectoralis/melanura* (Aves: Pachycephalidae) species complex. *Zoological Journal of the Linnean Society*. 170(3): 566-588 (Cover article).
7. L. V. Diller, **J. P. Dumbacher**, R. P. Bosch, R. R. Bown, R. J. Gutiérrez. 2014. Removing Barred Owls From Local Areas: Techniques and Feasibility. *Wildlife Society Bulletin* 38(1): 211-216.
8. **J. P. Dumbacher**, H. S. Smit, S. Eiseb, and G. B. Rathbun. (2012). Phylogeny and taxonomy of the round-eared sengis or elephant-shrews, genus *Macroscelides* (Mammalia, Afrotheria, Macroscelidea). *PLoS One* 7(3): e32410.
9. K. Deiner, A. R. Lemmon, A. L. Mack, R. C. Fleischer, and **J. P. Dumbacher**. 2011. A passerine bird's evolution corroborates the geologic history of New Guinea. *PLoS One* 6(5): e19479.
10. **J. P. Dumbacher**, M. Flannery, J. Miller, Y. Xiaojun. 2011. The avifauna of the Gaoligongshan Mountains of western China: A hotspot of avian species diversity. In S. C. Renner, Ed., *The Avifauna of the Eastern Himalayas and Southeastern Sub-Himalayan Mountains*. *Ornithological Monographs*, No. 70: 30-63.
11. H. K. M. M. Thwin, **J. P. Dumbacher**, K. S. Lwin, and S. C. Renner. 2011. Ornithology of Northern Myanmar. In S. C. Renner, Ed., *The Avifauna of the Eastern Himalayas and Southeastern Sub-Himalayan Mountains*. *Ornithological Monographs*, No. 70:109-142.
12. **J. P. Dumbacher** and B. West. 2010. Collecting Galapagos and the Pacific: How Rollo Howard Beck shaped our understanding of evolution. *Proceedings of the California Academy of Sciences*, Series 4, Vol 61, Supplement II, No. 13: pp 211-243.
13. K. P. Johnson, D. H. Clayton, **J. P. Dumbacher**, and R. C. Fleischer. 2010. The flight of the Passenger Pigeon: Phylogenetics and biogeographical history of an extinct species. *Molecular Phylogenetics and Evolution* 57: 455-458.
14. **J. P. Dumbacher**, G. K. Menon, and J. W. Daly. 2009. Skin as toxin storage organ in the endemic New Guinea genus *Pitohui*. *The Auk* 126(3) 520-530.
15. **J. P. Dumbacher**, K. Deiner, L. Thompson, and R. C. Fleischer. 2008. Phylogeny of the avian genus *Pitohui* and the evolution of toxicity in birds. *Molecular Phylogenetics and Evolution* 49: 774-781.

16. S. C. Renner, J. H. Rappole, P. C. Rasmussen, T. Aung, M. Aung, N. M. Shwe, **J. P. Dumbacher**, and R. C. Fleischer. 2008. A new subspecies of *Tesia olivea* (Sylviidae) from Chiang Mai province, northern Thailand. *J. Ornithol.* 149: 439-450.
17. H. D. Ishak, **J. P. Dumbacher**, N. L. Anderson, J. J. Keane, G. Valkiūnas, S. M. Haig, L. A. Tell, R. N. M. Sehgal. 2008. Blood Parasites in Owls with Conservation Implications for the Spotted Owl (*Strix occidentalis*). *PLoS One* 3(e2304): 1-9.
18. **Dumbacher, J. P.**, A. Mack. Chapter 4.9: Birds of Papua. 2007. In Beehler, B.M. ed., *The Ecology of Papua*. Volume IX in the *Ecology of Indonesia* series. Oxford University Press, UK.
19. B. S. Arbogast, **J. P. Dumbacher**, S. J. Steppan, S. P. Courtney, and L. A. Sztukowski. 2006. Evaluation of scientific information regarding Preble's meadow jumping mouse. Sustainable Ecosystems Institute, Portland, Oregon. ([Report submitted by Sustainable Ecosystems Institute to US Fish and Wildlife Service, July 20, 2006.](#))
20. R. C. Fleischer, J. J. Kirchman, **J. P. Dumbacher**, et al. 2006. Mid-Pleistocene divergence of Cuban and North American ivory-billed woodpeckers. *Biology Letters* 2(3) 466-469.
21. A. L. Töpf, M. T. Gilbert, **J. P. Dumbacher**, and A. R. Hoelzel. 2006. Tracing the phylogeography of human populations in Britain based on 4th-11th century mtDNA genotypes. *Mol. Biol. Evol.* 23(1): 152-161.
22. **J. P. Dumbacher**. 2005. "Batrachotoxin" in *Encyclopedia of Toxicology* (Wexler P), 2nd edition. Oxford. Elsevier. pp. 215-17.
23. Beadell, J. S., E. Gering, J. Austin, **J. P. Dumbacher**, M. A. Peirce, T. K. Pratt, C. A. Atkinson, and R. C. Fleischer. 2004. Prevalence and differential host-specificity of two avian blood parasite genera in the Australo-Papuan region. *Molecular Ecology* 13:3829-3844.
24. **J. P. Dumbacher**, A. Wako, S. R. Derrickson, A. Samuelson, T. F. Spande, and J. W. Daly. 2004. Melyrid beetles (Choresine): A putative source for the batrachotoxin alkaloids found in poison-dart frogs and toxic passerine birds. *Proc. Natl. Acad. Sci. USA*, 101(45): 15857-15860.
25. S. P. Courtney, J. A. Blakesley, R. E. Bigley, M. L. Cody, **J. P. Dumbacher**, R. C. Fleischer, A. B. Franklin, J. F. Franklin, R. J. Gutiérrez, J. M. Marzluff, L. Sztukowski. 2004. Scientific evaluation of the status of the Northern Spotted Owl. Sustainable Ecosystems Institute, Portland, Oregon. ([Available online.](#))
26. **J. P. Dumbacher**, T. K. Pratt, and R. C. Fleischer. 2003. Phylogeny of the owlet-nightjars (Aves: Aegothelidae) based on mitochondrial DNA sequence. *Molecular Phylogenetics and Evolution* 29: 540-549.
27. **J. P. Dumbacher** and R. C. Fleischer. 2001. Phylogenetic evidence for colour-pattern convergence in toxic pitohuis: Müllerian mimicry in birds? *Proceedings of the Royal Society of London: Biology*, **268**: 1971-1976.
28. L. Shapiro and **J. P. Dumbacher**. 2001. Adenylate kinase intron 5: A new nuclear locus for avian systematics. *The Auk*, 118(1): 248-255.
29. **J. P. Dumbacher**, T. Spande, and J. W. Daly. 2000. Batrachotoxin alkaloids from passerine birds: A second toxic bird genus (*Ifrita kowaldi*). *Proc. Natl. Acad. Sci. USA*, 97(24): 12970-12975.
30. **J. P. Dumbacher**. 1999. The evolution of toxicity in *Pitohuis*: I. Effects of homobatrachotoxin on chewing lice (Order Phthiraptera). *The Auk* **116**(4): 957-963.
31. R. Visnak and **J. P. Dumbacher**. 1999. Comparison of four fumigants for removing avian lice. *Journal of Field Ornithology*, **70**(1): 42-48.
32. **J. P. Dumbacher**. 1997. The ecology and evolution of chemical defense in the avian genus *Pitohui*. Ph.D. Thesis. University of Chicago.
33. **J. P. Dumbacher** and S. Pruett-Jones. 1996. Avian chemical defense. *Current Ornithology*, **13**: 137-174.
34. B. M. Beehler and **J. P. Dumbacher**. 1996. More examples of fruiting trees visited predominantly by birds of paradise. *Emu*, **96**: 81-88.
35. **J. P. Dumbacher**, B. M. Beehler, T. F. Spande, H. M. Garraffo, and J. W. Daly. 1993. Pitohui: How toxic and to whom? *Science*, **259**: 582-583.
36. **J. P. Dumbacher**, B. M. Beehler, T. F. Spande, H. M. Garraffo, and J. W. Daly. 1992. Homobatrachotoxin in the genus *Pitohui*: Chemical defense in birds? *Science*, **258**: 799-801.
37. **J. P. Dumbacher**. 1991. Bird life of Kagi, Central Province. *Muruk* (Journal of the Papua New Guinea Bird Society), **5**(1): 19-21.
38. B. M. Beehler and **J. P. Dumbacher**. 1990. Interesting observations of birds at Varirata National Park, June - July 1990. *Muruk*, **4**(3): 111.

Published Abstracts:

39. **J. P. Dumbacher**. 1994. Chemical defense in New Guinean birds. Journal für Ornithologie **135**(3): 407.
40. J. W. Daly and **J. P. Dumbacher**. 1994. Alkaloids as a chemical defense in birds. Journal für Ornithologie **135**(3): 408.

Book Reviews:

41. **J.P Dumbacher**. 2014. [review of] A Feathered River Across the Sky, by Joel Greenberg, Journal of Field Ornithology, In press.
42. **J.P Dumbacher**. 2004. [review of] My Family Album, by Franz de Waal, and Animal Social Complexity, edited by Franz de Waal and Peter Tyack. California Wild Magazine.
43. **J. P. Dumbacher**. 2002. [review of] The Birds of Paradise, by Clifford Frith and Bruce M. Beehler. The Auk **119**(3): 880-881.
44. **J. P. Dumbacher**. 1991. [review of] The Ruff, by Johan G. Van Rhijn. The Auk **108**(4): 1007.
45. **J. P. Dumbacher**. 1991. [review of] Social, Sexual, and Pseudosexual Behavior of the Blue-bellied Roller, *Coracias cyanogaster*. The Consequences of Crowding or Concentration, by Martin Moynihan. Auk **108**(2): 457.

Presentations at scientific meetings (in the last 12 months)

- E. Carlen, G.B. Rathbun, W. Stanley, C. Sabuni, & J.P. Dumbacher. Reconstructing the molecular phylogeny of giant elephant shrews (genus *Rhynchocyon*). (Poster 2014 SICB meeting)
- A. H. El-Bibany, M. Zylberberg & J. P. Dumbacher. Comparison of Gut Microbiota Diversity among Avian Species from Papua New Guinea. (Poster 2014 SICB meeting)
- O. Carmi, C. C. Witt, A. Jaramillo, and **J. P. Dumbacher**. Phylogeography of the Vermilion Flycatcher, *Pyrocephalus rubinus* (Passeriformes: Tyrannidae). (POSTER 2013 AOU meeting)
- L. Kahle, M. Flannery and **J. P. Dumbacher**. Correlates of avian building strikes at a glass façade museum surrounded by avian habitat (POSTER 2013 AOU meeting)

Museum Curatorial Experience:

- Curator, Ornithology and Mammalogy, California Academy of Sciences, 2003 to present.
- Organized and co-led ornithological collecting trips to Papua New Guinea, Gaoligongshan Mountains of China, Baviaanskloof region of South Africa, various locations in Namibia, and various locations in North America.
- Organized and co-taught museum biology course, August 2001, University of Papua New Guinea
- Ornithological collection technician, North Carolina Museum of Natural History, 1988.
- Ornithological collection technician, Cincinnati Museum of Natural History, 1988 (volunteer).

Teaching Experience:

- Master Birding Course, California Academy of Sciences and Golden Gate Audubon Society, 2013 - 2014.
- Summer Systematics Institute (an NSF-funded REU program), California Academy of Sciences, lecturer and mentor for multiple projects 2006 - 2013.
- CAS Student Science Fellow mentor, 2013-2014.
- Trip leader and study leader, California Academy family travel program to the Galápagos Islands, June 2008.
- Trip leader and study leader, California Academy Travel trip to the mountains of Western China and Tibet, October 2007.
- Trip leader and study leader, California Academy Travel trip to Greenland, Labrador, and Newfoundland in the Russian research vessel "Akademic Ioffe", 2005.
- Vertebrate Natural History, UC Berkeley, Co-taught undergraduate/graduate course with Jim McGuire and Bill Lidicker, Spring 2005. Two lectures + one lab + one field trip per week.
- Guest lecture – species and management unit concepts, Smithsonian Conservation Biology Course, Conservation Research Center, Front Royal, Spring 2003.
- Museum Biology Training Workshop, organized and taught one-week course at the University of Papua New Guinea in collaboration with the PNG National Museum and Smithsonian Institution, August 2001.

Wildlife Conservation Biology and Management, a 2-week field course for university students and conservation professionals, Varirata National Park, Papua New Guinea, July and August 2001.

Radio telemetry, field course for 3rd and 4th-year university students and wildlife managers, University of Papua New Guinea and Smithsonian Institution, Varirata National Park, PNG, Sept. 2000.

Mentored high school student, Thomas Jefferson High School (Alexandria, VA) Mentorship Program, 1998-99, Mentored a student in 6-month nuclear-gene phylogenetics project.

Teaching assistantships held for the following classes:

THE UNIVERSITY OF CHICAGO

Environmental Ecology, 1996 (Instructor Mathew Leibold).

Field Ecology (lab course), 1993 (Instructor Stephen Pruett-Jones).

Evolution in Human Environments (lab course), 1992 (Instructor Stevan Arnold).

Global Ecology, 1991 (Instructor Monty Lloyd).

CLEMSON UNIVERSITY:

Ornithology (lab course), 1990 (Instructor Sid Gauthreaux Jr).

Ecology (lab course), 1990 (Instructor David Tonkyn).

Animal Behavior (lab course), 1989 (Instructor Sid Gauthreaux Jr).

Introductory Biology lab, 1988, 1989, 1990. Screened, edited, and recommended films for biology video-library, 1989, Clemson University.

Instructor and coordinator, Outdoor Education Program, 1984-1987, Vanderbilt University.

Symposium Participation

2009 AAAS Pacific Meeting: presentation on Rollo Beck for Darwin and Galapagos Symposium

2008 Organizer: Biogeography of South Pacific Birds, American Ornithologists' Union Meeting

2008 Presenter: Biogeography of SE Himalaya, American Ornithologists' Union meeting

2008 Presenter: Reality and Utility of Subspecies, American Ornithologists' Union meeting

2005 Attendee at invitation-only World Summit on Evolution, San Cristobal Island, Galapagos

2004 Organizer: Telluride Mountain Film Festival, Papua New Guinea Moving Mountains

Symposium on Treasures of New Guinea

1994 Organizer: Avian chemical defense, International Ornithological Congress in Vienna

Invited Scientific Presentations

2014 Humboldt State University, Wildlife Biology Department (scheduled Fall 2014)

2013 University of Santa Barbara, Biology Department

2012 CA Institute for Biodiversity, Keynote speaker at annual Gala event

2010 The Explorers Club, Northern California Chapter

2009 Swarthmore University, Biology Department

2009 San Francisco State University, Biology Department Seminar

2006 Wildlife Conservation Society, WCS country office, Goroka, PNG

2006 Bay Area Biosystematics group, co presenter on subspecies issues and conservation

2005 University of California, Berkeley, Integrative Biology Seminar series

2005 University California, Berkeley Museum of Vertebrate Zoology Lunch

2004 Golden Gate Audubon Society, San Francisco, CA

2004 California Academy of Sciences, Members Lecture, CA

2004 CAS Science Council; trustees meeting, guest presentation

2003 San Francisco State University, Biology Department

2003 Smithsonian Bird Identification Course, Front Royal, VA

2003 Smithsonian Conservation Research Center, Explorer's Lecture Series

2003 Telluride Pinhead Institute, Bird Identification lecture, Telluride, CO

2002 California Academy of Sciences, San Francisco, CA

2002 Pinhead Institute, Telluride Colorado

2002 University of California, Berkeley, Museum of Vertebrate Zoology and Integrative Biology

2002 University of Kansas, Ornithology Group and Natural History Museum

2002 University of Texas, Arlington, Biology Department

2001 Smithsonian Vertebrate Biology Group, National Museum of Natural History

2001 University of Connecticut, Storrs CT, Biology Department

2001 Philadelphia Academy of Natural Sciences, Philadelphia, PA
 2001 California State University, Los Angeles, Biology Department
 2001 Department of Biology, Gettysburg College, Gettysburg, PA
 1999 Sigma Xi Induction Ceremony, Plenary talk, Washington, DC chapter
 1999 NOAHS (New Initiatives in Animal Health Sciences) Group meeting, held at Smithsonian Conservation Research Center, Front Royal, VA
 1999 National Zoological Park, Public Lecture Series
 1998 University of Maryland; Behavior, Ecology, and Evolutionary Biology Sciences
 1998 Papua New Guinea National Museum and Art Gallery
 1998 University of Papua New Guinea, Biology Department
 1998 Conservation Research Center, National Zoo (Front Royal Virginia)
 1998 Tracy Aviary, Distinguished lecture series, Salt Lake City
 1998 University of Utah, Biology Department
 1998 St. Mary's College of Maryland, Division of Science and Mathematics
 1998 Villanova University, Department of Biological Sciences
 1998 National Zoological Park, Division of Zoological Research
 1996 Laboratory of Bio-organic Chemistry, National Institutes of Health
 1996 Conservation International, Washington, DC office
 1994 Cenderawasih University, Biology Department, Jayapura, Irian Jaya, Indonesia
 1992 University of Chicago, Evolutionary Morphology Series; Natural History Seminar Series
 1990 Cornell University, Behavioral Ecology Group
 1988 Clemson University, Biology Department, South Carolina

Service on Scientific Panels (for Endangered Species Act decisions)

2010 Invited review of taxonomic status, North American Wolves, for SEI
 2008 Invited review of taxonomic status, Cactus Ferruginous Pygmy Owl, USFWS
 2006 Evaluation of scientific information regarding the taxonomic status of Preble's meadow jumping mouse (*Zapus hudsonius preblei*). Sustainable Ecosystems Institute
 2005 Department of Interior workshop on the use of genetic data in evaluating taxonomic status for the Endangered Species Act (held in Washington, DC)
 2004 Scientific evaluation of endangered species status of the Northern Spotted Owl (US Fish and Wildlife, contracted through Sustainable Ecosystems Institute).

Panel service to evaluate funding proposals

National Science Foundation panelist for Evolutionary Processes
 California Academy of Sciences Education Fellowship
 National Science Foundation panelist for Population Biology and Evolution (served on two panels)
 Smithsonian Institution Fellowship program, evaluated proposals to the National Zoological Park
 Abbott Fund panelist for research funding to the Smithsonian National Zoological Park
 Provided peer review for individuals proposals for National Science Foundation (several panels, including animal behavior, systematics, biological infrastructure, population biology, and biological surveys and inventories), Rolex Grants, National Geographic Society, Wildlife Conservation Society, and others.

Peer review for scientific publications

Animal Behaviour, The Auk, Chemoecology, Condor, Conservation Biology, Conservation Genetics, Evolution, Journal of Biogeography, Journal of Chemical Ecology, Molecular Ecology, Molecular Phylogenetics and Evolution, Nature, Nature Reviews Genetics, Ornithological Monographs.
 Associate editor, The Auk (2009 to present).

Public lectures/outreach

2014 Marin Audubon Society
 2014 Golden Gate Audubon Society
 2013 Golden Gate Audubon Society
 2012 Golden Gate Audubon Society
 2012 Eastwood Associates lecture at The Towers.

2012 De Young Museum of Art.
 2012 Galileo Academy (SF High School presentation).
 2011 Friends of Varirata National Park, Port Moresby, Papua New Guinea.
 2010 The Bone Room; public lecture program.
 2009 Ohlone Audubon Society, Hayward, CA.
 2008 Telluride, Colorado Town Stewards program presenter.
 2008 Fromm Institute, University of San Francisco.
 2007 Pacific Grove Museum of Natural History.
 2007 Hidden Treasures symposium, California Academy of Sciences.
 2005 Scholars in the Schools program: talks and nature walks, giving one talk each to 10th, 7th, 4th, and 6th, and 3rd graders, Telluride Colorado
 2005 Interviewed Kenn Kaufman for "Conversations at the Herbst" (aired nationally on NPR)
 2005 Darwin Day lecture, UC Berkeley Darwin Day program on evolution
 2005 California Academy of Sciences, Bioforum for High School Teachers
 2005 Bear Creek Symposium, Telluride Pinhead Institute, Colorado.
 2005 Marin County Audubon Society, California UC Berkeley Darwin Day Lecture.
 2004 California Academy of Sciences, Members Lecture, CA.
 2003 Smithsonian Conservation Research Center, public evening lecture.
 2002 Telluride Pinhead lecture on basic ornithology.
 2002 Wildlife Conservation Society, PNG, Lecture.
 2002 Department of Environment and Conservation, Papua New Guinea.

Students / Post-doctoral Researchers Mentored

Maxine Zylberberg, Post-doc, present post-doc.
 Jerome Fuchs, Post-doc completed 2012, Curator of Birds, Paris Museum of Natural History.
 Zachary Hanna, University of California Berkeley, PhD in progress.
 Elizabeth Carlen, San Francisco State University, MS in progress (expected Spring 2014).
 Laura Wilkinson, San Francisco State University, MS, awarded Spring 2013.
 Ore Carmi, San Francisco State University, MS, awarded Spring 2013.
 Jean Mattos, San Francisco State University, MS, awarded Summer 2011.
 Hazel Thwin, San Francisco State University, MS degree awarded Summer 2010.
 Susan Tomda, University of Papua New Guinea, Honours Thesis, University of PNG.
 Tanya Zeriga, University of Papua New Guinea, MS degree.

Expeditions and Field Work

1985 Baja California, Mexico, field course, "Natural History of Baja California"
 1986 Baja California field assistant studying scorpion biogeography, led by Gary Polis, Michael Whitlock
 1987 Northern Australia, teaching assistant on month long field course led by Gary Polis; assisted with several other university level field trips led by David and Kirstin Thomae
 1987 Field assistant, giant clam ecology, Orpheus Island Research Station, Australia
 1988 Varirata National Park, Central Province, Papua New Guinea, field assistant, Behavior and Ecology of Raggiana Bird of Paradise, PI Bruce Beehler
 1989 Varirata National Park, Central Province, Papua New Guinea, Field Team Leader, Behavior and Ecology of Raggiana Bird of Paradise, PI Bruce Beehler; expedition to Kagi, Kokoda Track, to study Streaked Bowerbirds
 1990 Amazon Bay, Central Province, and Wau, East Sepik, Papua New Guinea, PI, Toxin use in Pitohui birds
 1992-1993 Madang Province, PNG, PI, Geographic toxin variation in New Guinea birds
 1994-1995 Eastern Highlands Province, PNG, PI, Geographic toxin variation in New Guinea birds, Toxicity of Blue-capped Ifrita (*Ifrita kowaldi*), and avian toxicity as a defense against louse ectoparasites
 1997 Morobe Province, Gulf Province, and Western Province (Fly River), PNG, PI, Surveys of toxicity in Pitohui birds and their relatives, and filmmaking for National Geographic Society
 1997 Kruger National Park, South Africa and Masai Marra National Park, Kenya, project reconnaissance with Frank Bonaccorso

- 1998 Tiputini River region, Ecuador, field assistant, behavioral ecology of wooly monkeys, PI Anthony diFiore
- 1998 Climbing the world's tallest volcanoes, Pichincha, Cotopaxi, and Chimborazo, Ecuador
- 1999-2000 Two expeditions to Varirata National Park, PNG, PI, Ecology, home-range, and spatial movements of Hooded Pitohuis (*Pitohui dichrous*)
- 2001 Herowana, Eastern Highlands Province, PNG, PI, Identifying the source of Pitohui toxins
- 2002 Kimbe, West New Britain, PNG, co-PI with Peter Leimgruber, mapping palm oil and its impact on lowland forests in New Britain using GIS technology
- 2002 Wabo, Gulf Province, PNG, co-PI with Andrew Mack, Biotic surveys of lowland birds
- 2003 Kaironk-Simbai, Madang Province, Goroka, Eastern Highlands Province, meeting partners, gathering films and photos for the Telluride MOUNTAINFILM Festival (with Rick Silverman)
- 2004 Nujiang region, Gaoligongshan Mountains, Yunnan, China, 6-week avian surveys and collecting with Yang Xiaojun, Kunming Institute of Zoology, Yunnan
- 2004 Herowana Village, Eastern Highlands, PNG, PI, Captive studies of Pitohui toxin physiology, with UC Berkeley student Daniel Levitis
- 2004 Baviaanskloof and coastal South Africa, PI, bird and mammal collecting trip
- 2005 Sierra Nevada Field Station and Plumas National Forest, collecting with Greg Spicer
- 2005 Klamath National Forest, co-PI with Brian Woodbridge, impacts of invasive Barred Owl on endangered Spotted Owls; similar coastal field studies with co-PI Lowell Diller.
- 2005 Galapagos, Ecuador, World Congress on Evolution
- 2005 Northern Atlantic, led CalAcademy travel program expedition to Greenland, Newfoundland, and Labrador
- 2006 Herowana, PNG, PI, field collecting for captive studies of Pitohui physiology, with Daniel Levitis
- 2006 Baoshan region, Yunnan China, field leader, avian surveys of the southern Gaoligongshan Mountains
- 2007 Namibia, Namib-Rand Nature Reserve; Erongo; and Windpoort Farm (near Etosha NP), co-PI with Galen Rathbun, surveys and collections of sengis for biogeography of elephant shrews
- 2007 Western China and Tibet, expedition leader with California Academy Travel Program
- 2009 Papua New Guinea, expedition with BBC and pilot trips to Milne Bay Islands and Manus Prov.
- 2009 Milne Bay islands by sail, visited the Louisiade Archipelago to study and collect birds
- 2010 Kunene District, Northern Namibia; studies of a new species of *Macroselides sengi*
- 2010 Yosemite, Kings Canyon and Sequoia National Park), Virus collections.
- 2010 Humboldt Co., Collecting birds and bird virus samples.
- 2011 Papua New Guinea, Milne Bay Islands, avian collections and metagenomic collections.
- 2013 Multiple collection trips for Barred Owls in Northern California
- 2014 Desert National Wildlife Refuge, NV, Small mammal surveys (two trips).
- 2014 Messum Crater, Namibia. Small mammal collecting and *Macroselides* natural history.

Scientific Society Memberships:

American Ornithologists' Union (AOU), American Society of Mammalogists (ASM), Association of Field Ornithologists (AFO), Cooper Ornithological Society (COS), Society for the Study of Evolution (SSE), Society for Systematic Biologists (SSB).

Service to professional societies:

Head of Nominations Committee, American Ornithologists' Union.
Editorial Board Member (and Associate Editor), American Ornithologists' Union.

Public/community Service (a sample of recent activities)

Board of Directors, Golden Gate Audubon Society (2011 to present)
Chair of the San Francisco Conservation Committee, Golden Gate Audubon Society (2012 – 2014)
Scientific Advisor; Revive and Restore Project, The Long Now Foundation (2012-present)
Science Advisor, Telluride Pinhead Institute for Science. 2002-2012
Volunteer naturalist for the "Call Of the Sea" program, sailing aboard the 82' sailing schooner, USS "Seaward" to the Farallons and on sails within the San Francisco Bay
Expert witness for US Fish and Wildlife Service wildlife smuggling case; the defendant received a three-year sentence for illegally smuggling protected Eurasian Owls
Our department hosts the Marine Mammal Stranding hotline

A Sample of Service to the California Academy of Sciences:

IBSS (research division) service –

Institutional Animal Care and Use Committee, Chair and member (2012-present).

Science in Action content committee, IBSS representative (2010 – present).

Search Committee Chair; Microlife Diversity Curator search (2010-2011).

Curators' Forum, Chair (This is our equivalent to a Faculty Senate, 2010-2011).

Department Chair, Ornithology and Mammalogy (2003-2011).

Worked extensively to help design work and collection spaces at Howard Street facility and the New Academy in Golden Gate park; oversaw two moves of the department and our collections.

Scientific Seminar Committee, Chair 2008-10.

Education Committee member (2008-present).

Search Committee Member, Dean of Science Search (2007-2008).

Secretary of Curators' Forum (2003-2007).

Research and Collections Committee of the Board of Trustees – Member.

Dean of Research Search Committee – member.

Osher Lab Manager Search Committee – Head (two successful searches).

Science Council member (representing Dept. of Ornithology and Mammalogy).

CAS Assets Review Committee – member

Education Fellowship Program application reviewer (for MS degree students)

Science Council member (representing Dept. of Ornithology and Mammalogy)

Education – pioneered satellite-linked programs with student interns from Papua New Guinea,

Student Science Fellow mentor, exhibits lectures for Tis the Season (to docents and

educators), co-produced Highlands Field Guide (with the deYoung Museum of Art), several

lectures for Hidden Treasures docent program (three 1-hour lectures plus collections tours),

lectures for Careers in Science Intern program, lectures for Bioforum for high school

teachers, assisted with design of intern "toxin cart," member's lectures (two), assisted with

several "Science Now kiosks; proofread articles for CALWILD magazine, produced weblogs

of field trips ([Namibia link](#))([PNG Blog](#))

Web teams – Helped develop and deploy the Farallones live Web Cam, used for online

programming, the Farallones Exhibit (2009-2011), and for scientific research. Oversee our

Bird and Mammal online blog.

Public Programs – I regularly attend and participate in public events when I am in town (e.g. McEvoy

Ranch Platinum Circle event, Feb 2014, Nightlife Friends Salons, Annual Gala, Donors'

Halloween party, Curators' Receptions, Research Division Open House, NightLife programs,

Docent Volunteer thank you, Eastwood Associate Reception), and our department has lead

a monthly birdwatching excursion for volunteers and associates until 2013 (it is presently

quarterly).

Press – work with press department to improve press coverage of department research (see articles

above on my personal work), and I regularly talk with and am cited in the press about local

natural history events (e.g., Barred Owl invasion of western USA, de-extinction of Passenger

Pigeon, 40-year anniversary of the Endangered Species Act, grey whale sightings in the

San Francisco Bay, coyotes shot in Golden Gate Park, rogue sea lions injuring swimmers

near Berkeley Aquatic Park, etc.)

Exhibits – Lead Scientist, Skulls Exhibit, and 'Tis the Season 2012 and 2013 exhibits, and Extreme

Mammals and associated programming, and Farallones exhibit; Co-lead scientist

Earthquake! Exhibit; Scientific consultant on Biodiversity planetarium show; Review and

assist with content in the ant exhibit and California Hotspot exhibit. I work dilligently to

appropriately show our scientific specimens on the exhibit floor so that the public is aware of

our valuable holdings and supports CAS's scientific enterprise; bird and mammal specimens

are highly used on the public floor. (I am currently collaborating with the de Young Museum

of Art on an exhibit of feather art of the Hawaiian Islands.)

A sample of scientific and popular press featuring me or my work:

[Examiner.com](#). Feb 2014. "Scientists studies poisonous birds" (pitohui work)

[AP Release](#) July 2013. Scientists advance plan to study barred owls.

NY Times, 2011. "Scientist at work" online blog from our 2011 Milne Bay Expedition.
BBC-1 television: 2010. Lost Land of the Volcano. 3 1-hr television segments in the field.

AudubonMagazine.org 2007. Plumes of Poison. By Kristin Phillips ([Link to online article](#)).

SF Chronicle 2005. Sniffing out a lethal link between birds, beetles. By David Perlman.

IndyBay 2005. S.F. researcher tracks poison over 9,500 miles. By Louis Bettencourt.

ScienceNews **166**(19): 292. 2004. Poison source: toxic birds may get poisons from beetles. By Susan Milius ([Link to online article](#)).

New Scientist **2472**:20. 2004. Eat a toxic beetle to become a poison frog. ([link](#)).

National Geographic News (online) 2004. Toxic frogs, birds may get their toxins from beetles. By Cameron Walker ([link](#)).

Scientific American 2004. Scientists Identify Source of Potent Animal Toxin. By Sarah Graham ([link](#)).

Chemical and Engineering News 2004. Birds And Beetles: A Toxic Trail. By Bethany Halford.

Zoogoer Magazine, April 2003. **32**(2): 26. Pitohuis.

Science News, 2001. **160** (14): 214. Poison birds copy 'don't touch' feathers. By Susan Milius.

Proceedings of the National Academy of Sciences 2000. **97** (24): 12948-9. Commentary: Avian chemical defense: toxic birds not of a feather. By Paul Weldon.

NPR Living on Earth Series, November, 24th, 2000. By Maggie Villiger.

The Auk **116**(4): 878-881. Think small. 1999. By Edward H. Burt, Jr.

National Geographic Explorer Series Journal. Half-hour television presentation aired June 7, 1998.

National Geographic **183**: v. 1993. Geographica: Beware the Pitohui, bird with a poisonous streak. By Weintraub.

BBC Wildlife **11**: 11. 1993. The tingle factor. By S. Young.

Das Tier **9104**: 66. 1993. Glücklich über eine giftige Entdeckung.

New York Times Oct. 30: 1. 1992. Rare bird indeed carries poison in bright feathers. By N. Angier.

Nature **360**: 19-20. 1992. News and Views: Rubbish birds are poisonous. By J. M. Diamond.

New Scientist **1845**:10. 1992. Bird with a sting in its tail. By G. Vines.

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chindwin@sbcglobal.net. (Former Director, Conservation Research Center, Smithsonian Institution, now retired).