

Kurt Galbreath

Biology Department
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Education

- PhD – Evolutionary Biology**, Cornell University – 2009
“Of pikas and parasites: biogeography of an alpine host-parasite assemblage”
- MS – Wildlife Biology**, University of Alaska Fairbanks – 2002
“Phylogeography of the tundra vole (*Microtus oeconomus*) in Beringia”
- BS – Biology**, Illinois Wesleyan University, *Summa Cum Laude* – 1997

Appointments

2011- present Assistant Professor, Northern Michigan University

Research and Professional Experience

- 2008-2011 Research Associate, Western Washington University Herbarium
- 2002-2008 Doctoral Candidate, Ecology and Evolutionary Biology, Cornell
- 2001-2002 Visiting Researcher, US National Parasite Collection, USDA
- 2000 Visiting Researcher, Finnish Forest Research Institute
- 1999-2001 Curatorial Assistant, University of Alaska Museum

Refereed Publications

- In press **Galbreath K** and Hoberg E. Return to Beringia: parasites reveal cryptic biogeographic history of North American pikas. **Proceedings of the Royal Society of London B**. (Featured in Nature’s Research Highlights, 23 June 2011).
- In press **Galbreath K**, Cook J, Eddingsaas A, and DeChaine E. Diversity and demography in Beringia: multi-locus tests of paleodistribution models reveal complex histories for arctic ground squirrels. **Evolution**.
- 2010 Durette-Desset M-C, **Galbreath K**, and Hoberg E. Discovery of new *Ohbayashinema* spp. (Nematoda: Heligomosomoidea) in *Ochotona princeps* and *O. cansus* (Lagomorpha: Ochotonidae) from western North America and Central Asia, with considerations of historical biogeography. **Journal of Parasitology** 96:569-579.

- 2010 **Galbreath K**, Hafner D, Zamudio K, and Agnew K. Isolation and introgression in the Intermountain West: contrasting gene genealogies reveal the complex biogeographic history of the American pika (*Ochotona princeps*). **Journal of Biogeography** 37:344-362. (Featured on cover)
- 2009 **Galbreath K**, Hafner D, and Zamudio K. When cold is better: climate-driven elevation shifts yield complex patterns of diversification and demography in an alpine specialist (American pika, *Ochotona princeps*). **Evolution** 63:2848-2863. (Featured on cover)
- 2009 Hoberg E, Pilitt P, and **Galbreath K**. Why museums matter: a tale of pinworms (Oxyuroidea: Heteroxynematidae) among pikas (*Ochotona princeps* and *O. collaris*) in the American West. **Journal of Parasitology** 95:490-501.
- 2008 Raoul F, Pleydell D, Quéré J-P, Vaniscotte A, Rieffel R, Takahashi K, Bernard N, Wang J, Dobigny T, **Galbreath K**, Giraudoux P. Small-mammal assemblage response to deforestation and afforestation in central China. **Mammalia** 72:320-332.
- 2005 Cook JA, Hoberg EP, Koehler A, Henttonen H, Wickström L, Haukialmi V, **Galbreath K**, Chernyavski F, Dokuchaev N, Lahzuhtkin A, MacDonald SO, Hope A, Waltari E, Runck A, Veitch A, Popko R, Jenkins E, Kutz S, Eckerlin R. Beringia: Intercontinental exchange and diversification of high latitude mammals and their parasites during the Pliocene and Quaternary. **Mammal Study** 30:S33-S44.
- 2004 **Galbreath K** and Cook J. Genetic consequences of Pleistocene glaciations for the tundra vole (*Microtus oeconomus*) in Beringia. **Molecular Ecology** 13:135-148.
- 2003 Brunhoff C, **Galbreath K**, Fedorov V, Cook J and Jaarola M. Holarctic phylogeography of the root vole (*Microtus oeconomus*): implications for late Quaternary biogeography of high latitudes. **Molecular Ecology**, 12:957-968.
- 2003 Hoberg E, Kutz S, **Galbreath K** and Cook J. Arctic biodiversity: From discovery to faunal baselines- revealing the history of a dynamic ecosystem. **Journal of Parasitology**, 89(Suppl.):S84-S95.

Research Reports and Popular Press

- 2003 **Galbreath K**. Genetic consequences of Pleistocene glaciations for a northern mammal-tapeworm system: current progress and future work. Global Glimpses, newsletter of the Center for Global Change & Arctic System Research.
- 2000 Cook J, **Galbreath K**, Waltari E, MacDonald D, Hayward B. Mammal inventory of the Western Alaska Range, 1999. Research report for the Bureau of Land Management.

Presentations at Professional Meetings

- 2011 **Galbreath K**, Hoberg E. A worm with a view: parasite perspectives on Beringian biogeography. Invited for the symposium: Arctic Passages: Explorations of History, Diversity and Dynamic Change, Annual Meeting of the American Society of Parasitologists.
- 2010 **Galbreath K**, Cook J, Eddingsaas A, DeChaine E. Colonization and climate in Beringia: multi-locus tests of paleodistribution models reveal deep and shallow histories for arctic ground squirrels. Annual Meeting of the American Society of Mammalogists, Laramie, WY.
- 2010 **Galbreath K**. Establishing the baseline: historical biogeography of the American pika. Invited for the symposium: The American Pika's Capacity for Resilience in the Face of Climate Change, Annual Meeting of the Western Section of the Wildlife Society.
- 2009 **Galbreath K**, Hafner D, Zamudio K. The fate of alpine specialists in a changing world: phylodemography of the American pika. Annual Meeting of the American Society of Mammalogists, Fairbanks, AK.
- 2009 **Galbreath K**, Hafner D, Zamudio K. When cold is better: phylodemography of an alpine specialist in a changing world. Evolution 2009, Moscow, ID.
- 2007 **Galbreath K**, Hoberg E. Pikas and parasites: structure and historical biogeography of a montane host-parasite assemblage. Annual Meeting of the American Society of Mammalogists, Albuquerque, NM.
- 2006 **Galbreath K**, Hafner D. Of climate and conies: phylogeography of the American pika. Annual Meeting of the American Society of Mammalogists, Amherst, MA.
- 2006 **Galbreath K**, Hoberg E. Of pikas and parasites: host-parasite comparative phylogeography. Evolution 2006, Stony Brook, NY.
- 2006 **Galbreath K**. Historical biogeography of the American pika. Annual Symposium of the Ecology and Evolutionary Biology Graduate Student Association, Ithaca, NY.
- 2005 **Galbreath K**, Hoberg E, Cook J. Diversification of a Holarctic species complex of rodent tapeworms: implications for host historical biogeography. Annual Meeting of the American Society of Mammalogists, Springfield, MO.
- 2005 **Galbreath K**, Hoberg E, Cook J. Cryptic diversity in the North. Evolution 2005, Fairbanks, AK.
- 2003 **Galbreath K**, Cook J. Genetic consequences of Pleistocene glaciations for the tundra vole (*Microtus oeconomus*) in Beringia. Evolution 2003, Chico, CA.

Invited Presentations, Seminars, and Public Lectures

- 2001 **Galbreath K**, Cook J. Phylogeography of the tundra vole (*Microtus oeconomus*) in Beringia. Annual Meeting of the American Society of Mammalogists, Durham, NH.
- 2000 **Galbreath K**, Hoberg E, Telford S, Chernyavski F, Kutz S, Duszynski D, Waltari E, Cook J. Current status of the Beringian Coevolution Project. International Workshop for Arctic Parasitology, Saskatoon, SK.
- 2009 **Galbreath K**. Of pikas and parasites: historical biogeography of an alpine host-parasite assemblage. Department of Biology, Central Washington University, Ellensburg, WA.
- 2008 **Galbreath K**. Of pikas and parasites: historical biogeography of an alpine host-parasite assemblage. Biology Department, Western Washington University, Bellingham, WA.
- 2008 **Galbreath K**. Of pikas and parasites: historical biogeography of an alpine host-parasite assemblage. Department of Ecology and Evolutionary Biology, Cornell University, Ithaca, NY.
- 2007 **Galbreath K**. A worm with a view: insights from parasites on mammal biogeography. Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ.
- 2006 **Galbreath K**. Tales from the North: observations from fieldwork in Alaska and Siberia. Department of Ecology and Evolutionary Biology, Cornell University, Ithaca, NY.
- 2005 **Galbreath K**. Diversification of a Holarctic species complex of rodent tapeworms. Department of Ecology and Evolutionary Biology, Cornell University, Ithaca, NY.
- 2001 **Galbreath K**. Phylogeography of the tundra vole (*Microtus oeconomus*) in Beringia. University of Alaska, Fairbanks, AK.
- 2001 **Galbreath K**, Runck A, Waltari E. From field to freezer: mammalogy at the University of Alaska Museum. University of Alaska, Fairbanks, AK.

Grants, Fellowships, and Awards

- 2006 Cornell University, Andrew Mellon Graduate Research Grant; \$1500
- 2005 NSF Doctoral Dissertation Improvement Grant (DEB 0506042); \$12,000
- 2005 Sigma Xi – Cornell, Grant in Aid of Research; \$800
- 2004 American Society of Mammalogists, Grant in Aid of Research; \$1500
- 2004 American Society of Mammalogists, Elizabeth Horner Award; \$250
- 2004 American Museum of Natural History Roosevelt Fund; \$1250
- 2004 Sigma Xi Grant in Aid of Research; \$810

Grants, Fellowships, and Awards (cont.)

- 2004 Cornell University, Andrew Mellon Graduate Research Grant; \$1500
- 2001 NSF Graduate Research Fellowship
- 2000 Center for Global Change, International Arctic Research Center; \$9992
- 2000 American Society of Mammalogists Grant in Aid of Research; \$1000

Teaching

Western Washington University:

- 2009 **Evolutionary Biology** (BIOL 432)
 - guest lecturer

Cornell University:

- 2008 **The Vertebrates: Structure, Function, and Evolution** (BIOEE 274)
 - lab curriculum development and instruction; guest lecturer
- 2007 **Writing in the Majors: Evolution** (BIOEE 278)
 - course development and instruction
- 2007 **Mammalogy** (BIOEE 450)
 - lab curriculum development and instruction; guest lecturer
- 2003-2004 **Biology for Non-Majors** (BIOG 109 and BIOG 110)
 - lab instructor
 - Outstanding Teaching Assistant – College of Agriculture and Life Sciences

University of Alaska Fairbanks:

- 1999 **Principles of Evolution** (BIOL 481)
 - discussion section instructor; guest lecturer

Illinois Wesleyan University:

- 1995-1996 **Organic Chemistry I and II** (CHEM 311 and CHEM 312)
 - lab instructor

Advising

- 2008-2009 Christy Miller; undergraduate, Western Washington University; now a PhD student at Pennsylvania State University
- 2000-2001 Kathleen Bongiovanni; high school student, Alaska High School Science Symposium; completed MS at UC Davis and now working in medical research

Service – Reviewer

Journals – Arctic, Antarctic, and Alpine Research; Conservation Genetics; Ecography; Evolution; Global Change Biology; Heredity; International Journal for Parasitology; International Journal of Molecular Sciences; Journal of Biogeography; Journal of Mammalogy; Journal of Zoology; Molecular Ecology

Grants – American Society of Mammalogists, Grant in Aid of Research; Cornell Sigma Xi Grant in Aid; Cornell Mellon Student Research Grant

Service – Committees

2009-present American Society of Mammalogists, Grant in Aid Committee

2005-2006 Cornell EEB GSA, Graduate Symposium Committee

2003-2005 Cornell EEB GSA, Invited Speaker Committee

Society Memberships

American Society of Mammalogists (life member)

Sigma Xi

Society for the Study of Evolution

Society of Systematic Biologists

Field and Foreign Research Experience

Alaska – 1999, 2003, 2010, 2011

China - 2006

Finland - 2000

North America's Intermountain West (US, Canada) – 2004, 2005

Siberia – 2000, 2002