

Ben Hanelt

Department of Biological Sciences
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Education:

- University of Nebraska-Lincoln**, Lincoln, NE August 2002
Ph. D. in Biology. Dr. John Janovy Jr. advisor
- University of New Mexico**, Albuquerque, NM May 1997
M. S. in Biology. Dr. Eric S. Loker advisor
- University of New Mexico**, Albuquerque, NM May 1995
B. S. magna cum laude, major in Biology and minor in Anthropology

Teaching Experience:

- Louisiana State University**, Baton Rouge, LA August 2002
Full time Instructor to Present
- Instructed lectures of Biology 1001, introductory biology for non-majors and laboratories for biology majors.
(www.biology.lsu.edu/introbio/spring/spring2003/1001/HB/haneltindex.html)
- University of Nebraska-Lincoln**, Lincoln, NE August 1997
Teaching Assistant to May 2002
- Instructed the laboratory for the following classes: Bio Sci 204- Biodiversity; Bio Sci 381- Invertebrate Zoology; Bio Sci 487/887- Field Parasitology; Bio Sci 101- Introduction to Biology.
- University of Nebraska-Lincoln**, Lincoln, NE Fall 2001
Temporary Instructor
- Instructed lecture portion of Bio Sci 112- Introduction to Zoology.
(www-class.unl.edu/bios112/).

Invited Classroom Lectures:

Bio Sci 101- General Biology: 5 lectures. Fall 2000; Fall 2001

Bio Sci 204- Biodiversity: 12 lectures. Spring 1998, 2000, 2001, 2002; Fall 2000, 2001

Bio Sci 101H- General Biology for Honor's Students: 1 lecture. Fall 1998

Bio Sci 381- Invertebrate Zoology: 2 lectures. Fall 1998, 1999

Teaching Interests:

Invertebrate Zoology, Biodiversity, Introductory Biology, General Zoology, General Parasitology, Field Parasitology, Field Biology.

Research Experience:

University of Nebraska-Lincoln, Lincoln, NE
Graduate Student

June 1997
to
August 2002

Investigated the life cycle, life history as well as host specificity of freshwater nematomorphs under the direction of Dr. John Janovy Jr.

Harvard Museum of Comparative Zoology, Guanacaste, Costa Rica
Field Assistant

May 2001
and
December 2001

Investigated the biodiversity of parasite fauna of birds under the direction of Dr. Douglas Causey.

University of Nebraska-Lincoln, Lincoln, NE
Research Assistant

May 1998
to
June 1998

Investigated the relationship between major lineages of fishes using molecular markers under the direction of Dr. Guillermo Ortí.

University of New Mexico, Albuquerque, NM
Research Technologist/Graduate Student

August 1995
to
June 1997

Developed a sensitive PCR-based method for the detection of the trematode *Schistosoma mansoni* in *Biomphalaria* snail hosts. Funding was provided by the Schistosomiasis Research Project (NIH) under the direction of Dr. Eric S. Loker.

Research Experience continued:

University of New Mexico, Albuquerque, NM
Independent Research Project

June 1995
to
June 1996

Studied the phylogenetic position of the phylum Orthonectida using small ribosomal subunit (18S) sequence under the direction of Dr. Eric S. Loker.

University of New Mexico, Albuquerque, NM
Senior Honors Thesis Research

September 1994
to
May 1995

Studied the phylogenetic position of the phylum Nematomorpha using ribosomal DNA sequences under the direction of Dr. Eric S. Loker.

University of New Mexico, Albuquerque, NM
Volunteer Field Technician

May 1992
to
August 1993

Studied long-term, temporal changes of parasitic infection in the Ord's Kangaroo Rat (*Dipodomys ordii*) at the Sevilleta National Wildlife Refuge under the direction of Dr. Michael J. Patrick.

University of New Mexico, Albuquerque, NM
Temporary Laboratory Technician

December 1992
to
February 1993

Studied parasites of quail on a New Mexico Department of Game and Fish grant to- and under the direction of- Dr. Michael J. Patrick.

University of New Mexico, Albuquerque, NM
Independent Research Project

June 1992
to
August 1992

Studied interspecific competition of three eimerian species in ground squirrel hosts (*Spermophilus townsendii*) under the direction of Dr. Patricia G. Wilber.

University of New Mexico, Albuquerque, NM
Volunteer Researcher

February 1992
to
June 1992

Studied long-term, temporal changes of parasitic infection in the Townsend's ground squirrel (*Spermophilus townsendii*) under the direction of Dr. Patricia G. Wilber.

Research and Travel Grants:

Moss Family Memorial Fund Scholarship- \$ 924 <i>Awarded by Special Funds Committee, UN-L</i>	May 2002
Jessie Lee Travel Scholarship Fund- \$ 300 <i>Awarded by Special Funds Committee, UN-L</i>	May 2001
Gugler Memorial Award Fund- \$ 300 <i>Awarded by Special Funds Committee, UN-L</i>	May 2001
Blair Paxton Udale Scholarship- \$ 1200 <i>Awarded by Special Funds Committee, UN-L</i>	May 2001
Marc Dresden Travel Award- \$ 400 <i>Awarded by the American Society of Parasitologists</i>	May 2001
Travel and Research Award- \$ 1500 <i>Awarded by the Initiative for Ecological and Evolutionary Analysis, UN-L</i>	March 2001
Marc Dresden Travel Award- \$ 400 <i>Awarded by the American Society of Parasitologists</i>	May 2000
Travel and Research Award- \$ 1650 <i>Awarded by the Initiative for Ecological and Evolutionary Analysis, UN-L</i>	April 2000
Marc Dresden Travel Award- \$ 400 <i>Awarded by the American Society of Parasitologists</i>	May 1999
Travel and Research Award- \$ 1000 <i>Awarded by Special Funds Committee, UN-L</i>	May 1999
Grants-in-Aid Research Award- \$ 385 <i>Awarded by the Center for Great Plains Studies, UN-L</i>	December 1998
Marc Dresden Travel Award- \$ 300 <i>Awarded by the American Society of Parasitologists</i>	April 1997
GRAC Grant , for research- \$ 295 <i>Awarded by the Graduate Research Allocations Committee, UNM</i>	March 1997
RPT Grant , for research supplies and travel- \$ 500 <i>Awarded by the Office of Graduate Studies, UNM</i>	December 1995
GRAC Grant , for research- \$ 245 <i>Awarded by the Graduate Research Allocations Committee, UNM</i>	November 1995
SRAC Grant , for research and travel- \$ 300 <i>Awarded by the Student Research Allocations Committee, UNM</i>	November 1995

Awards:

- President's Student Award** for best graduate student poster
Rocky Mountain Conference of Parasitologists, Halsey, NE May 2001
- Best Student Poster Award**
First Annual School of Biological Sciences Retreat, UN-L, Lincoln, NE January 2000
- John F. Davidson Memorial Fund Scholarship** for outstanding endeavor
and promise in the field of Biological Science June 2000
School of Biological Sciences, UN-L, Lincoln, NE
- Best Student Paper Award,**
American Society of Parasitologists, Monterey, CA July 1999
- David A. Becker Award,** for best student oral presentation May 1998
Southwestern Association of Parasitologists, Lake Texoma, OK
- First Place Best Student Paper Oral Presentation Award** December 1996
Society for Integrative and Comparative Biology, Albuquerque, NM
- VPGRF Award,** for best graduate student grant application May 1996
Student Research Allocations Committee, UNM, Albuquerque, NM
- David A. Becker Award,** for best student oral presentation May 1996
Southwestern Association of Parasitologists, Lake Texoma, OK

Presentations:

- Untying a Gordian knot: the life cycle of freshwater nematomorphs. January 2003
Museum of Natural History, Louisiana State University, Baton Rouge, LA.
- Inequality in the individual reproductive success of parasites. The June 2002
exception to the rule? Hanelt, B. Midwestern Conference of
Parasitologists, Decatur, IL.
- Paragordius varius* (Nematomorpha: Gordioidea), a domesticated model October 2001
organism for freshwater nematomorphs? Hanelt, B., and J. Janovy Jr.
Second Annual School of Biological Sciences Retreat, UN-L, Lincoln, NE.
- Paragordius varius* (Nematomorpha: Gordioidea), a domesticated model July 2001
organism for freshwater nematomorphs? Hanelt, B., and J. Janovy Jr.
American Society of Parasitologists, Albuquerque, NM.
- Morphogenesis of *Paragordius varius* (Nematomorpha) during the parasitic July 2001
phase-histological data. A. Schmidt-Rhaesa and B. Hanelt. American
Society of Parasitologists, Albuquerque, NM.

Presentations continued:

- Physid snails as sentinels of freshwater nematomorphs. L. E. Grother, B. Hanelt, and J. Janovy Jr. Rocky Mountain Society of Parasitologists, Halsey, NE. May 2001
- Morphogenesis of *Paragordius varius* (Nematomorpha) during the parasitic phase-histological data. A. Schmidt-Rhaesa and B. Hanelt. German Zoological Society, Osnabrück, Germany. April 2001
- Fine-grained distribution of horsehair worms (Nematomorpha: Gordioidae) in Lancaster County, Nebraska. B. Hanelt, L. Grother and J. Janovy Jr. American Society of Parasitologists, San Juan, Puerto Rico. June 2000
- A fine-grained distribution of nematomorph larval parasites. L. E. Grother, B. Hanelt, and J. Janovy Jr. Southwestern Association of Parasitologists, Lake Texoma, OK. May 2000
- Variation in egg string, egg, larvae and cyst morphology and oviposition behavior of three species of hair worms (Nematomorpha: Gordioidae). B. Hanelt and J. Janovy Jr. Southwestern Association of Parasitologists, Lake Texoma, OK. May 2000
- Preliminary investigations into the life history and host specificity of the hair worm *Gordius robustus* (Nematomorpha: Gordioidae). B. Hanelt. American Society of Parasitologists, Monterey, CA. July 1999
- Quantitative investigation of the crowding effect of *Hymenolepis diminuta* in *Rattus norvegicus*. Brant, S. V., and B. Hanelt. Proceedings of the 21st Workshop/Conference of the Association for Biology Laboratory Education, Lincoln, NE. June 1999
- A preliminary investigation into the life history of the hair worm *Gordius robustus* (Nematomorpha: Gordioidae). Hanelt, B. Southwestern Association of Parasitologists, Lake Texoma, OK. May 1998
- Using nested PCR to investigate the fate of *Schistosoma mansoni* in susceptible and resistant laboratory populations of *Biomphalaria glabrata*. B. Hanelt, W. M. El Mazny, M. H. Mansour and E. S. Loker. American Society of Parasitologists, Nashville, TN. July 1997
- Using nested PCR to investigate the fate of *Schistosoma mansoni* in susceptible and resistant laboratory populations of *Biomphalaria glabrata*. B. Hanelt, W. M. El Mazny, M. H. Mansour and E. S. Loker. Southwestern Association of Parasitologists, Lake Texoma, OK. March 1997
- Studying the interaction between *Schistosoma mansoni* and its *Biomphalaria* snail host by use of the nested PCR. B. Hanelt, C. M. Adema, H. M. Mansour and E. S. Loker. The Society of Integrative and Comparative Biology, Albuquerque, NM. December 1996

Presentations continued:

- Detection of *Schistosoma mansoni* infection in the snail host *Biomphalaria* using PCR. B. Hanelt, C. M. Adema, H. M. Mansour and E. S. Loker. American Society of Parasitologists, Tucson, AZ. June 1996
- A nested PCR-based method for the detection of *Schistosoma mansoni* in the snail host *Biomphalaria*. B. Hanelt, C. M. Adema, H. M. Mansour and E. S. Loker. Southwestern Association of Parasitologists, Lake Texoma, OK. March 1996
- The phylogeny of the horsehair worms (Nematomorpha) inferred by small ribosomal subunit (18S) DNA sequence analysis. B. Hanelt, C. M. Adema, J. A. Hnida and E. S. Loker. Research Day, University of New Mexico, Albuquerque, NM. April 1995

Submitted and In-preparation Manuscripts:

- Hanelt, B.** Environmental cues mediating the life cycle transition and mating of *Paragordius varius*. In preparation.
- Schmidt-Rhaesa, A., B. **Hanelt**, and W. Reeves. Redescription and compilation of North American freshwater Nematomorpha (Gordiiida). Submitted to Proceedings of the National Academy of Sciences of Philadelphia.
- Hanelt, B.**, and J. Janovy Jr. Survival of gordiid cysts through the metamorphosis of aquatic insect larvae and through multiple paratenic hosts. Accepted by the Journal of Parasitology.

Publications:

- Hanelt, B.**, and J. Janovy Jr. The natural and laboratory life cycle of *Paragordius varius* (Nematomorpha: Gordiiida). Journal of Natural History. In press.
- Hanelt, B.**, and J. Janovy Jr. Spanning the gap: identification of natural paratenic hosts of horsehair worms (Nematomorpha: Gordioidea) by experimental determination of paratenic host specificity. Invertebrate Biology. In press.
- Hanelt, B.**, and J. Janovy Jr. 2002. Morphometric analysis of non-adult characters of common species of American gordiids (Nematomorpha: Gordioidea). Journal of Parasitology 88: 557-562.
- Hanelt, B.**, Grother, L. E. and J. Janovy Jr. 2001. Physid snails as sentinels of freshwater nematomorphs. Journal of Parasitology 87: 1049-1053.

Publications continued:

Brant, S. V., and B. **Hanelt**. 2000. Quantitative investigation of the crowding effect of *Hymenolepis diminuta* in *Rattus norvegicus*. Pages 339-355 in *Tested studies for laboratory teaching*, Volume 21, S. J. Karcher, (ed.). Proceedings of the 21st Workshop/Conference of the Association for Biology Laboratory Education, 509 pages.

Hanelt, B., and J. Janovy Jr. 2000. New host and distribution record of *Gordius difficilis* (Nematomorpha: Gordioidea) from a vivid metallic ground beetle *Chlaenius prasinus* (Coleoptera: Carabidae) from western Nebraska, USA. *Comparative Parasitology* 67: 107-108.

Hanelt, B., and J. Janovy Jr. 1999. The Life Cycle of a horsehair worm, *Gordius robustus* (Gordioidea: Nematomorpha). *Journal of Parasitology* 85: 139-141.

Hanelt, B., C. M. Adema, H. M. Mansour and E. S. Loker. 1997. Detection of *Schistosoma mansoni* in *Biomphalaria* snail-host using nested PCR. *Journal of Parasitology* 83: 387-394.

Hanelt, B., D. Van Schyndel, C. M. Adema, L. A. Lewis and E. S. Loker. 1996. The phylogenetic position of *Rhopalura ophiocomae* (Orthonectida) based on 18S ribosomal DNA sequence analysis. *Molecular Biology and Evolution* 13: 1187-1191.

Wilber, P. G., B. **Hanelt**, B. Van Horne and D. W. Duszynski. 1994. Two new species and temporal changes in the prevalence of Eimerians in a free-living population of Townsend's ground squirrels (*Spermophilus townsendii*) in Idaho. *Journal of Parasitology* 80: 251-259.