

Julia H. Bowsher
Department of Biological Sciences
North Dakota State University
Dept 2715, PO Box 6050, Fargo, ND 58108
Phone: (701) 231-7072, Email: Julia.bowsher@ndsu.edu

EDUCATION

- 2007 **PhD, Duke University**, Department of Biology, Durham, NC, USA
PhD Advisor: H. Frederik Nijhout.
Major Area: Evolution, Minor Area: Philosophy
- 2000 **MS, University of Canterbury**, Department of Zoology, Christchurch, NZ
Masters Advisor: Neil J. Gemmell
- 1999 **BS, Yale University**, Dept of Ecology and Evolutionary Biology, New Haven, CT, USA
Undergraduate Thesis Advisor: Leo W. Buss

EMPLOYMENT

- Jan 2010- **Assistant Professor**, Department of Biological Sciences, North Dakota State University
- 2007-2009 **Postdoctoral Fellow**, Center for Insect Science, University of Arizona.
Postdoctoral Advisor: Lisa M. Nagy

PUBLICATIONS

- Bowsher, J. H.** and H. F. Nijhout. 2009. Partial co-option of the appendage patterning pathway in the development of abdominal appendages in the sepsid *Themira biloba*. *Development, Genes, and Evolution* 219: 577-587.
- Fouquet, A., D. Green, B. Waldman, **J. H. Bowsher**, K. P. McBride and N. J. Gemmell. 2009. Phylogeography of *Leiopelma hochstetteri* reveals strong genetic structure and suggests new conservation priorities. *Conservation Genetics*, May 6 Published online.
- Bowsher, J. H.**, G. A. Wray and E. Abouheif. 2007. Growth and patterning are evolutionarily dissociated in the vestigial wing discs of workers of the red imported fire ant, *Solenopsis invicta*. *Journal of Experimental Zoology* 308B(6): 769-776.
- Bowsher, J. H.** and H. F. Nijhout. 2007. Evolution of novel abdominal appendages in a sepsid fly from histoblasts, not imaginal discs. *Evolution and Development* 9(4):347-354.
- Gemmell, N. J., **J. H. Bowsher** and K. P. Gomas. 2003. The genetic affinities of Hochstetter's frog (*Leiopelma hochstetteri*) populations in the Bay of Plenty. A report commissioned by the New Zealand Department of Conservation
- Cartwright, P., **J. H. Bowsher** and L. W. Buss. 1999. Expression of a Hox gene, *Cnox-2*, and the division of labor in a colonial hydroid. *Proceedings of the National Academy of Sciences* 96:2183-2186.

FUNDING

- 1/2010- Startup funding from Department of Biological Sciences
- 1/2010- Startup funding from College of Science and Mathematics
- 1/2010-6/2010 Startup funding from ND EPSCoR, \$30,000
- 2007-2009 PERT Postdoctoral Fellowship, Center for Insect Science, University of Arizona
- 2006 Graduate Award for International Research, Duke University
- 2002 Grant-in-Aid of Research, Duke University
- 2001-2004 National Science Foundation Pre-doctoral Fellowship
- 2000-2004 James B. Duke Fellowship, Duke University
- 2000-2001 Richter Fellowship, Duke University

1999-2000 Fulbright Fellowship, New Zealand

TALKS AND POSTERS

2010 Talk. Society for the Study of Evolution, Portland, Oregon
2009 Talk. European Society of Evolutionary Biology, Turin, Italy
2008 Talk. International Congress of Entomology, Durban, South Africa
Talk. Society for Integrative and Comparative Biology, San Antonio, TX
2006 Invited talk. Meeting of the European Society for Evolutionary Developmental Biology, Prague, Czech Republic
2005 Talk. Developmental Basis of Evolutionary Change, University of Chicago
2004 Talk. Evolution of Developmental Diversity, Cold Spring Harbor Labs
2003 Talk. Biology Graduate Student Symposium, Duke University
2001 Poster. Developmental Basis of Evolutionary Change, University of Chicago

TEACHING

2010- North Dakota State University, Professor, Developmental Biology, Evolution
2009 Pima Community College, Instructor, Introductory Biology.
2004-2007 Duke University, Teaching Assistant, Entomology, Diversity of Life, Principles of Genetics and Cell Biology I, Dinosaur Biology.

Training in Pedagogy

PERT Teaching Pedagogy Workshop, University of Arizona, Spring 2008
Pathways to the Professoriate workshop series, Duke University, Fall 2004

Students

Graduate:

Bodini Herath, Masters in Ecological and Conservation Biology, current student

Undergraduate:

NDSU: Tanner Ferderer (2010), Paige Nash (2010), Hannah Worrall (2010), Shanessa Ellis (2010), Alex Torson (2010).

University of Arizona: Lindsey Dermeyer (2009), Meredith Beresford (2008-2009), Avram Estes (2008-2009)

Pima Community College: Brenda Varney (2009), Bryan Smith (2009).

Facilitator, Undergraduate Biology Research Program, University of Arizona (2008).

High School: Facilitator, Howard Hughes Pre-college Summer Program, Duke University (2002, 2003, 2006). Designed laboratory activities, facilitated discussions, and mentored students in scientific writing and presentation skills

PROFESSIONAL SERVICE

2008 Selection committee, PERT Postdoctoral Fellowships, UA
2008 Selection committee, Center for Insect Science Travel Grant, UA
2002-2004 Co-president, Society of Duke Fellows, Invited speakers to campus, organized student talks and discussions
2004 Chairperson, Young Trustee Selection Committee, Duke University
2003-2004 Graduate student member, Duke University Board of Trustees, Building and Grounds Committee
2002-2004 Member, Graduate Student Affairs Advisory Committee, Duke University
2003 Member, Committee on Facilities and Environment, Duke University
2001-2002 Biology Department Representative, Graduate and Professional School Council, Duke University

REFERENCES

Dr. Lisa M. Nagy (Postdoctoral Advisor)

Associate Professor, Dept. of Molecular and Cellular Biology, University of Arizona
Phone: 520-626-2368
Email: lnagy@email.arizona.edu

Dr. H. Frederik Nijhout (Doctoral Advisor)
Professor, Department of Biology, Duke University
Phone: 919-684-4228
Email: hfn@duke.edu