

Curriculum Vitae

Personal Information

Full name: Daniel Patrick Benesh

Date of birth: January 9, 1982

Birthplace: Omaha, Nebraska U.S.A.

Nationality: American

Permanent address: 15525 Western Ave., Omaha, NE 68154,
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Education

Ph.D., Aquatic Parasitology, University of Jyväskylä, Jyväskylä, Finland, 2006-2007

M.S., Hydrobiology, University of Jyväskylä, Jyväskylä, Finland, 2004-2006

B.S., Biological Sciences, minors in Philosophy and Entomology, University of Nebraska, Lincoln,
U.S.A., 2000-2004

Research Experience

Post Doctoral Research, Department of Evolutionary Ecology, Max Planck Institute for
Evolutionary Biology, Plön, Germany, 2007-present.

- Evolution of complex parasite life cycles

Doctoral and Master's Research, Section of Aquatic Resources, University of Jyväskylä, Finland,
2004-2007 (advisor: E. Tellervo Valtonen)

- Intermediate host exploitation and larval life history strategies of an acanthocephalan
parasite

Undergraduate Research, School of Biological Sciences, University of Nebraska, Lincoln, U.S.A.,
2002-2004 (advisor: Brent B. Nickol)

- The photic behavior of amphipods infected with an acanthocephalan

Teaching Experience

Max Planck Institute for Evolutionary Biology, Plön, Germany

-Each spring 2008-2011: Two week practical course in which students complete research project in small groups, 40-80 hrs

University of Jyväskylä, Jyväskylä, Finland

-December 2006: Instructor of one week seminar on basic statistics and scientific writing, 20 hrs

-August 2006: Field teaching on basic parasitology principles, 12 hrs

-February 2006: Instructor of two week class on the scientific method and experimental design, 40 hrs

University of Nebraska, Lincoln, U.S.A.

-August 2003 – May 2004: Teaching assistant. Instructor of introductory genetics and molecular biology laboratory class, 10-20 hrs per week

I have also mentored several students individually

-Friederike Weinreich, PhD, MPI Plön

-Bettina Bartels, Diplom, University of Kiel

-Joanne Kitchen, MSc, University of Jyväskylä

-Arto Tuomainen, MSc, University of Jyväskylä

Accomplishments

DFG Fellowship, 2013

Alfred Kordelin grant recipient (declined), 2007

Master's thesis given Laudatur rating (highest rank), 2006

CIMO grant recipient for foreign students in Finland, 2005

Best oral student presentation at meeting of Scandinavian-Baltic Society for Parasitologists, Vilnius, Lithuania, 2005

Fulbright scholar in Finland, 2004-2005

Graduated from Bachelor's program with highest distinction, University of Nebraska, 2004

UCARE grant for undergraduate research, 2003-2004

Mark Dresden award for oral presentation at meeting of Southwestern Association of Parasitologists, University of Oklahoma field station, U.S.A., 2003

Academic accolades from the University of Nebraska: 4.0 high scholar (2001-2003), Regent's scholar (2000-2004), honors program (2000-2004), dean's list (2000-2004)

Language Skills

English (native)

German (very good) - European Language Certificate, level B1, note 1

Finnish (basic)

Reviewer Experience (2007-present)

J. Parasitol., Parasitology, Int. J. Parasitol., Freshw. Biol., Invertebr. Biol., J. Evol. Biol., Am. Nat., Proc. Roy. Soc. B, Comp. Parasitol., Biol. J. Linn. Soc., J. Exp. Biol.

Memberships in Professional Organizations

European Society of Evolutionary Biologists

Scandinavian-Baltic Society of Parasitologists

Phi Beta Kappa Honor Society

Golden Key Honor Society

Invited seminars

Humboldt University, Berlin, Germany, 2013

University of Duisburg-Essen, Essen, Germany, 2013

Helmholtz Centre for Ocean Research, Kiel, Germany, 2012

Goethe-University, Frankfurt am Main, Germany, 2011

EAWAG, Swiss Federal Institute of Aquatic Science and Technology, Zürich, Switzerland, 2008

Max Planck Institute for Limnology, Plön, Germany, 2006

Oral Presentations at conferences

European Multicolloquium of Parasitology, Cluj-Napoca, Romania, 2012

International Symposium of Fish Parasites, Vina del Mar, Chile, 2011

Deutsche Gesellschaft für Parasitologie, Düsseldorf, Germany, 2010

Deutsche Ichthyoparasitologie Symposium, Germany, 2009-2013

Invited speaker, Scandinavian-Baltic Society of Parasitologists, Riga, Latvia, 2009

Scandinavian-Baltic Society of Parasitologists, Rovaniemi, Finland, 2007

Aquavit (in-house symposium), Max Planck Institute for Evolutionary Biology, Plön, Germany, 2007-2013

Biological interactions graduate school seminar, University of Turku, Finland, 2006

Finnish mini-symposium on parasitology, University of Jyväskylä, Finland, 2005

Scandinavian-Baltic Society of Parasitologists, Vilnius, Lithuania, 2005

American Voices Conference, University of Turku, Finland 2004

Southwestern Association of Parasitologists, University of Oklahoma field station, U.S.A., 2003 and 2004

University of Nebraska undergraduate research conference, U.S.A., 2003

Poster presentations

European Society for Evolutionary Biology, Tübingen, Germany 2011

Jacques-Monod Conference on Coevolution, Roscoff, France, 2011

European Society for Evolutionary Biology, Turin, Italy 2009

Publications

Benesh, D.P. 2013. Parental effects on the larval performance of a tapeworm in its copepod first host. *Journal of Evolutionary Biology* 26 (8): 1625-1633. doi: 10.1111/jeb.12165

Henrich, T., Benesh, D.P., and Kalbe, M. 2013. Hybridization between two cestode species and its consequences for intermediate host range. *Parasites & Vectors* 6: 33. doi:10.1186/1756-3305-6-33

Benesh, D.P., Chubb, J.C., and Parker, G.A. 2013. Complex life cycles: why refrain from growth before reproduction in the adult niche? *The American Naturalist* 181 (1): 39-51. doi: 10.1086/668592

Weinreich, F., Benesh, D.P., and Milinski, M. 2013. Suppression of predation on the intermediate host by two trophically-transmitted parasites when uninfected. *Parasitology* 140 (1): 129-135. doi:10.1017/S0031182012001266

Benesh, D.P. and Hafer, N. 2012. Growth and ontogeny of the tapeworm *Schistocephalus solidus* in its copepod first host affects performance in its stickleback second intermediate host. *Parasites & Vectors* 5: 90. doi:10.1186/1756-3305-5-90

Benesh, D.P., Weinreich, F., and Kalbe, M. 2012. The relationship between larval size and fitness in the tapeworm *Schistocephalus solidus*: bigger is better? *Oikos* 121: 1391-1399. doi: 10.1111/j.1600-0706.2011.19925.x

Benesh, D.P., Chubb, J.C., and Parker, G.A. 2011. Exploitation of the same trophic link favors convergence of larval life history strategies in complex life cycle helminths. *Evolution* 65: 2286-2299. doi:10.1111/j.1558-5646.2011.01301.x

Benesh, D.P. 2011. Intensity-dependent host mortality: what can it tell us about larval growth strategies in complex life cycle helminths? *Parasitology* 138: 913-925. doi:10.1017/S0031182011000370

Benesh, D.P. 2010. What are the evolutionary constraints on larval growth in a trophically-transmitted parasite? *Oecologia* 162: 599-608. doi: 10.1007/s00442-009-1507-6.

- Benesh, D.P. 2010. Developmental inflexibility of larval tapeworms in response to resource variation. *International Journal for Parasitology* 40 (4): 487-497. doi: 10.1016/j.ijpara.2009.10.001
- Benesh, D.P., Seppälä, O., and Valtonen, E.T. 2009. Acanthocephalan size and sex affect the modification of intermediate host coloration. *Parasitology* 136 (8): 847-854. doi: 10.1017/S0031182009006180
- Hasu, T., Benesh, D.P., and Valtonen, E.T. 2009. Differences in parasite susceptibility and cost of resistance in naturally exposed and unexposed host populations. *Journal of Evolutionary Biology* 22 (4): 699-707. doi: 10.1111/j.1420-9101.2009.01704.x
- Benesh, D.P., Hasu, T., Seppälä, O., and Valtonen, E.T. 2009. Seasonal changes in host phenotype manipulation by an acanthocephalan: time to be transmitted? *Parasitology* 136 (2): 219-230. doi: 10.1017/S0031182008005271
- Seppälä, O., Valtonen, E.T., and Benesh, D.P. 2008. Host manipulation by parasites in the world of dead-end predators: adaptation to enhance transmission? *Proceedings of the Royal Society B* 275: 1611-1615. doi: 10.1098/rspb.2008.0152.
- Benesh, D.P., Valtonen, E.T., and Seppälä, O. 2008. Multidimensionality and intra-individual variation in host manipulation by an acanthocephalan. *Parasitology* 135 (5): 617-626. doi: 10.1017/S0031182008004216
- Benesh, D.P., Kitchen, J., Pulkkinen, K., Hakala, I., and Valtonen, E.T. 2008. The effect of *Echinorhynchus borealis* (Acanthocephala) infection on the anti-predator behavior of a benthic amphipod. *Journal of Parasitology* 94 (2): 542-545. doi: 10.1645/GE-1380.1
- Benesh, D.P., Valtonen, E.T., and Jormalainen, V. 2007. Reduced survival associated with precopulatory mate guarding in male *Asellus aquaticus* (Isopoda). *Annales Zoologici Fennici* 44 (6): 425-434.
- Benesh, D.P. and Valtonen, E.T. 2007. Effects of *Acanthocephalus lucii* (Acanthocephala) on intermediate host survival and growth: implications for exploitation strategies. *Journal of Parasitology* 93 (4): 735-741. doi: 10.1645/GE-1093R.1
- Benesh, D.P. and Valtonen, E.T. 2007. Proximate factors affecting the larval life history of *Acanthocephalus lucii* (Acanthocephala). *Journal of Parasitology* 93 (4): 742-749. doi: 10.1645/GE-1094R.1
- Benesh, D.P. and Valtonen, E.T. 2007. Sexual differences in larval life history traits of acanthocephalan cystacanths. *International Journal for Parasitology* 37 (2): 191-198. doi:10.1016/j.ijpara.2006.10.002

Benesh, D.P., Hasu, T., Suomalainen, L.R., Valtonen, E.T., and Tirola, M. 2006. Reliability of mtDNA in an acanthocephalan: the problem of pseudogenes. *International Journal for Parasitology* 36 (2): 247-254. doi:10.1016/j.ijpara.2005.09.008

Benesh, D.P., Duclos, L.M., and Nickol, B.B. 2005. Behavioral response of amphipods harboring *Corynosoma constrictum* (Acanthocephala) to various components of light. *Journal of Parasitology* 91 (4): 731-736. doi: 10.1645/GE-440R.1

References

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