

CURRICULUM VITAE

Justyna Wolinska

Born: 06.04.1977; Nationality: Polish; Family: 9-year-old daughter

Address

Ludwig Maximilian University, Munich
Department Biologie II
Evolutionsökologie
Grosshaderner Str. 2
82152 Planegg-Martinsried, Germany
Tel: +49(0)89 2180 74201
Fax: +49(0)89 2180 74204
email: wolinska@bio.lmu.de

Education

Habilitation, Evolutionary Ecology, LMU Munich, **Germany, 2012**
PhD., Evolutionary Ecology, Eawag/ETH Zurich, **Switzerland, 2006**
MSc., Environmental Biology, Jagiellonian University, Krakow, **Poland, 2001**
BSc., Environmental Protection, Jagiellonian University, Krakow, **Poland, 1999**

Academic and Research Appointments

Assistant Professor, LMU Munich, **Germany, 2008-present**
Postdoctoral Fellow, Indiana University, Bloomington, **USA, 2006-2008**
(with Prof. C. Lively and Prof. M. Lynch)

Research Interests

I study rapid evolutionary change in natural populations and communities, as a response to environmental challenges. As an empirical framework to study rapid evolutionary changes I use: i) host-parasite interactions, ii) interspecific hybridization and iii) phenotypic plasticity.

Scientific grants

- 2013-2016: DFG** (proposal integrated within a Priority Program: *Host-parasite coevolution; rapid reciprocal adaptation and its genetic basis*): "Red Queen dynamics in *Daphnia*; revealing evolutionary change in a parasite population". 180.000 €. I am the only PI on this project.
- 2012-2015: DFG & SNF** (German-Swiss collaboration project): "Host-parasites interactions in *Daphnia*: the role of variable environments". German part: 196.000 €. Co-PI (Swiss part): PD Dr. Piet Spaak (Eawag/ETH Zurich).
- 2012-2015: DFG** (proposal integrated within a Research Unit: *Selection in structured populations*): "The role of hybridization in the colonization of newly opened habitats". 188.000 €. I am the only PI on this project.
- 2010-2013: DFG**: "Facing multiple enemies: trade-offs between adaptive responses to predators and parasites in the context of inducible defences". 139.000 €. Co-PI: Prof. Christian Laforsch (Universität Bayreuth).
- 2010-2013: Bayerische Elite Förderung** (PhD stipend): "The effect of multiple stressors on *Daphnia*". Co-PI: Prof. Christian Laforsch (Universität Bayreuth).
- 2010-2013: DFG** (proposal integrated within a Priority Program: *Host-parasite coevolution; rapid reciprocal adaptation and its genetic basis*): "Red Queen dynamics in *Daphnia*: the role of variable environments. Part 2". 145.000 €. I am the only PI on this project.

2009-2010: DFG: “Red Queen dynamics in *Daphnia*: the role of variable environments. Part 1”. 49.000 €. I was the only PI on this project.

Other grants (I helped to write and / or to defend these proposals in front of the funding committee)

2010-2013: VW-Stiftung: International Master Program in Ecology, Evolution and Systematics (EES)

2010-2014: EU funding: International Master Program in Evolutionary Biology (Erasmus Mundus); partner universities: Munich, Groningen, Uppsala, Montpellier and Harvard

Academic and Professional Service

Reviewer duties

Scientific journals: Evolution, Ecology, Am Nat, Proc R Soc B, Mol Ecol, PLoS ONE, Funct Ecol, Evol Ecol, Ecol Res, BMC Evol Biol, BMC Biology, Int J Parasitol, J Anim Ecol, Oecologia, Oikos, Biol Invasions, FEMS Microbiol Ecol, Freshw Biol, Parasitology, Dis Aquat Org, J Eukaryot Microbiol, Aquat Biol, Aquat Ecol, Aquat Sci, Hydrobiologia, Arch Hydrobiol, Acta Zool, Acta Zool Acad Sci Hung, Sensors

Funding agencies: National Science Foundations (in Belgium, Czech Republic, Germany, Israel, Poland and USA), National Geographic Society (USA), Graduate Women in Science (USA)

Editorial activities

Editorial Board, Journal of Evolutionary Biology (since 2010)

Duties and responsibilities at LMU Munich

Board of Directors for the International Master Program, EES (2008-present)

Admission Committee for the International Master Program, EES (2008-present)

Admission Committee for the International Master Program, Erasmus Mundus (2010-present)

Organization committee

ESEB conference, Lisbon, Portugal, 2013 – Symposium: “Evolution of symbiotic interactions in communities: novel approach”

International Summer School on Host-parasite coevolution, Chiemsee, Germany, 2009

7th International Symposium on Cladocera, Herzberg, Switzerland, 2005

Invitations

2013 Freie University, Berlin, **Germany** (department seminar)

2013 University of Liverpool, **UK** (department seminar)

2013 University of Leipzig, **Germany** (job interview: W3 professorship)

2013 KU Leuven, **Belgium** (invited speaker of the International Symposium on Eco-Evolutionary Dynamics)

2012 IGB, Berlin, **Germany** (job interview: group leader position)

2012 National Institute of Parasitic Diseases in Shanghai, **China** (department seminar)

2012 Fudan University, Shanghai, **China** (department seminar and leading of round table discussions)

2012 University of Aveiro, **Portugal** (initiator and invited speaker of the workshop on “Environmental stress and host-parasite relationships”)

2012 University in Lausanne, **Switzerland** (department seminar)

2012 University of Fribourg, **Switzerland** (department seminar)

2012 Max Planck Institute for Evolutionary Biology, Plön, **Germany** (department seminar)

2012 University of Tuebingen, **Germany** (department seminar)

2011 Goethe University, Frankfurt, **Germany** (department seminar)

2011 Johannes Gutenberg University, Mainz, **Germany** (department seminar)

2011 University of Warsaw, field station in Wierzba, **Poland** (invited speaker of the workshop for PhD students in Evolutionary Biology)

2011 University of Warsaw, **Poland** (department seminar)

2010 Eawag, Dübendorf, **Switzerland** (committee member of the PhD defence)

2010 Jagiellonian University, Krakow, **Poland** (department seminar)

2010 Jagiellonian University, Krakow, **Poland** (member of the Admission Committee for the International PhD Program)
2010 Charles University of Prague, **Czech Republic** (department seminar)
2010 Eawag, Dübendorf, **Switzerland** (department seminar)
2009 Institute of Hydrobiology, Ceske Budejovice, **Czech Republic** (department seminar)
2008 Charles University of Prague, **Czech Republic** (committee member of the MSc defence)
2007 Ludwig Maximilians University, Munich, **Germany** (department seminar)
2005 CNR Institute for Ecosystem Studies, Verbania Pallanza, **Italy** (department seminar)

International conferences

Belgium, Finland, Germany, Italy, Poland, Portugal, Switzerland, UK (~15 presentations)

Student Supervision

PhD principal advisor (six students): LMU Munich

- Enrique Tortuero Gonzalez, 2013-present
- Jakub Rusek, 2012-present
- Johanna Griebel, 2012-present
- Olivia Hesse, 2010-2013
- Wolfgang Engelbrecht, 2010-present
- Mingbo Yin, 2009-2011
(Assistant Professor at Fudan University, Shanghai, China; **winner** of the Chinese Government Award for Outstanding Students Abroad)

PhD co-advisor (two students): Eawag/ETH Zurich

- Claudia Buser, 2008-2011
(Postdoc at University of Auckland, New Zealand)
- Corine Schoebel, 2007-2010
(Postdoc at Swiss Federal Institute for Forest, Snow and Landscape Research, Switzerland)

MSc/Diploma principal advisor (eight students): LMU Munich

- Amanda Navas Faria, 2013
(PhD student at Georg-August-University Göttingen; **winner** of the 7th LMU EES annual conference: best presentation of the MSc Project)
- Gokce Ayan, 2013
(PhD student at the Max Planck Institute, Kiel; **poster prize** at the international SEFS conference in Münster, 2013)
- Felicitas Buchberger, 2013
- Monika Poxleitner, 2012
(PhD student at LMU Munich; **winner** of the 6th EES annual conference: best presentation of the MSc Project)
- Stefanie Weigl, 2011
(MSc student at TU Munich; thesis has been **published**: *Weigl et al. 2012, Parasitology*)
- Isara Arsiranant, 2010
(working at Marine and Coastal Resources Research Center in Thailand)
- Olivia Hesse, 2010
(PhD student at LMU Munich; thesis has been **published**: *Hesse et al. 2012, BMC Eco*)
- Wolfgang Engelbrecht, 2010
(PhD student at LMU Munich)
- Jennifer Lohr, 2009
(PhD student at University of Fribourg, Switzerland; thesis has been **published**: *Lohr et al. 2010, Parasitology*; *Lohr et al. 2010, J Eukaryot Microbiol*)

Bachelor advisor (ten students): LMU Munich

Lab rotation advisor (twenty three students): LMU Munich and Indiana University Bloomington

PUBLICATION LIST

Justyna Wolinska

Peer-reviewed journals only (32 publications)

2013

- Giessler S., and J. **Wolinska**. Capturing the population structure of microparasites: using ITS-sequence data and a pooled DNA approach. *Mol Ecol Res* 13:918-928.
- Engelbrecht W.*, O. Hesse*, J. **Wolinska**, and C. Laforsch. Two threats at once: encounters with predator cues alter host life-history and morphological responses to parasite spores. *Hydrobiologia*. 715:93-100.

2012

- Hesse O.*, L. Laforsch, W. Engelbrecht*, and J. **Wolinska**. Fighting parasites and predators: How to deal with multiple threats? *BMC Ecol* 12:12.
- Buser C.C.*, P. Spaak, and J. **Wolinska**. Disease and pollution alter *Daphnia* taxonomic and clonal structure in experimental assemblages. *Freshw Biol* 57:1865-1874.
- Leung T.L.F., K.C. King, and J. **Wolinska**. Escape from the Red Queen: an overlooked scenario in coevolutionary studies. *Oikos* 121:641-645.
- Weigl S.**, H. Koerner, A. Petrusek, J. Seda, and J. **Wolinska**. Natural distribution and co-infection patterns of microsporidia parasites in the *Daphnia longispina* complex. *Parasitology* 139:870-880.
- Yin M.*, A. Petrusek, J. Seda, and J. **Wolinska**. Fine-scale temporal and spatial variation of taxon and clonal structure in the *Daphnia longispina* hybrid complex in heterogeneous environments. *BMC Evol Biol* 12:12.
- Yin M.*, A. Petrusek, J. Seda, and J. **Wolinska**. Fine-scale genetic analysis of *Daphnia* host populations infected by two virulent parasites – strong fluctuations in clonal structure at small temporal and spatial scales. *Int J Parasitol* 42:115-121.

2011

- Wolinska** J., J. Seda, H. Koerner, P. Smilauer, and A. Petrusek. Spatial variation of *Daphnia* parasite load within individual waterbodies. *J Plankton Res* 33:1284-1294.
- Yin M.*, C. Laforsch, J. Lohr**, and J. **Wolinska**. Predator-induced defence makes *Daphnia* more vulnerable to parasites. *Evolution* 65:1482-1488.
- Schoebel C.N.*, C. Tellenbach, P. Spaak, and J. **Wolinska**. Temperature effects on parasite prevalence in a natural hybrid complex. *Biol Lett* 7:108-111.
- Wolinska** J., P. Spaak, A. Petrusek, H. Koerner, J. Seda, and S. Giessler. Transmission mode affects the population genetic structure of *Daphnia* parasites. *J Evol Biol* 24:265-273.

2010

- Schoebel C.N.*, J. **Wolinska**, and P. Spaak. Higher parasite resistance in *Daphnia* populations with recent epidemics. *J Evol Biol* 23:2370-2376.
- Yin M.*, J. **Wolinska**, and S. Giessler. Clonal diversity, clonal persistence and rapid taxon replacement in natural populations of species and hybrids of the *Daphnia longispina* complex. *Mol Ecol* 19:4168-4178.
- Lohr J.**, C. Laforsch, H. Koerner, and J. **Wolinska**. A *Daphnia* parasite (*Caullerya mesnili*) constitutes a new member of the Ichthyosporea, a group of protists near the animal-fungi divergence. *J Eukaryot Microbiol* 53:328-336.
- Lohr J.**, M. Yin*, and J. **Wolinska**. Prior residency does not always pay off – coinfections in *Daphnia*. *Parasitology* 137:1493-1500.

2009

- Wolinska** J., S. Giessler, and H. Koerner. Molecular identification and hidden diversity of novel *Daphnia* parasites from European lakes. *Appl Environ Microbiol* 75:7051-7059.
- Wolinska** J., and K.C. King. Environment can alter selection in host-parasite interactions. *Trends Parasitol* 25:236-244.
- Wolinska** J., and P. Spaak. The cost of being common: evidence from natural *Daphnia* populations. *Evolution* 63:1893-1901.

2008

- Wolinska** J., K.C. King, F. Vigneux, and C.M. Lively. Virulence, cultivating conditions, and phylogenetic analyses of oomycete parasites in *Daphnia*. *Parasitology* 135:1667-1678.
- Wolinska** J., and C.M. Lively. The cost of males in *Daphnia pulex*. *Oikos* 117:1637-1646.
- Keller B., J. **Wolinska**, M. Manca, and P. Spaak. Spatial, environmental, and anthropogenic effect on the taxon composition of hybridizing *Daphnia*. *Philos Trans R Soc Lond B* 363:2943-2952.
- Wolinska** J., C.M. Lively, and P. Spaak. Parasites in hybridizing communities: the Red Queen again? *Trends Parasitol* 24:121-126.

2007

- Wolinska** J., B. Keller, M. Manca, and P. Spaak. Parasite survey of a *Daphnia* hybrid complex: host-specificity and environment determine infection. *J Anim Ecol* 76:191-200.
- Wolinska** J., A. Löffler, and P. Spaak. Taxon specific reaction norms to predator cues in a hybrid *Daphnia* complex. *Freshw Biol* 52:1198-1209.
- Keller B., J. **Wolinska**, C. Tellenbach, and P. Spaak. Reproductive isolation keeps hybridizing *Daphnia* species distinct. *Limnol Oceanogr* 52:984-991.
- Tellenbach C.**, J. **Wolinska**, and P. Spaak. Epidemiology of a *Daphnia* brood parasite and its implications on host life-history traits. *Oecologia* 154:369-375.

2006

- Wolinska** J., K. Bittner, D. Ebert, and P. Spaak. The coexistence of hybrid and parental *Daphnia*: the role of parasites. *Proc R Soc B* 273:1977-1983.

2005

- Fyda J., A. Warren, and J. **Wolinska**. An investigation of predator-induced defence responses in ciliated protozoa. *J Nat Hist* 39:1431-1442.
- Lass S., M. Vos, J. **Wolinska**, and P. Spaak. Hatching with the enemy: *Daphnia* diapausing eggs hatch in the presence of fish kairomones. *Chemoecology* 15:7-12.

2004

- Wolinska**, J., B. Keller, K. Bittner, S. Lass, and P. Spaak. Do parasites lower *Daphnia* hybrid fitness? *Limnol Oceanogr* 49:1401-1407.
- Löffler, A., J. **Wolinska**, B. Keller, K. O. Rothhaupt, and P. Spaak. Life history patterns of parental and hybrid *Daphnia* differ between lakes. *Freshw Biol* 48:1372-1380.

* PhD student; ** MSc student; *** BSc student