

Patrick T. Rohner

PERSONAL INFORMATION

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Orcid ID: [0000-0002-9840-1050](https://orcid.org/0000-0002-9840-1050)
Google Scholar ID: [YxOStmUAAAAJ](https://scholar.google.com/citations?user=YxOStmUAAAAJ)

Date of birth: 28.02.1992
Nationality: Swiss
Pronouns: He/him/his

DEGREES

PhD in Evolutionary Biology , University of Zurich, Switzerland	2015-2018
MSc in Systematics and Evolution , University of Zurich, Switzerland	2014-2015
BSc in Biology , University of Zurich, Switzerland	2011-2014

APPOINTMENTS

Postdoctoral Research Fellow , Indiana University, Department of Biology, USA	2019-2020
Postdoctoral Researcher , University of Zurich, Department of Evolutionary Biology and Environmental Studies, Switzerland	2018-2019

GRANTS & AWARDS

Alfred Russel Wallace Award of the Royal Entomological Society for an outstanding PhD thesis	2019
Early Postdoc.Mobility fellowship of the Swiss National Science Foundation	2018
Forschungskredit of the University of Zurich	2015
Semester prize of the University of Zurich for best undergraduate student project	2012

PUBLICATIONS IN PEER-REVIEWED JOURNALS

accepted / in press

Rohner P.T., Macagno A.L.M. and Moczek, A.P. Evolution and plasticity of morph-specific integration in the bull-headed dung beetle *Onthophagus taurus*. **Ecology and Evolution**. [\[doi\]](#)

2020 Rohner P.T. and Moczek A.P. (2020) Rapid differentiation of plasticity in life history and morphology during invasive range expansion and concurrent local adaptation in the horned beetle *Onthophagus taurus*. **Evolution** 74: 2059-2072. [\[doi\]](#)

Blanckenhorn W.U., Baur J., Busso J.P., Giesen A., Gourgoulianni N., van Koppenhagen N., Roy J., Schäfer M.A., Wegmann A. and **Rohner** P.T. (2020) Sexual size dimorphism is associated with reproductive life history trait differentiation in coexisting sepsid flies. **Oikos** 129:1152-1162. [\[doi\]](#)

Crabtree J.R., Macagno A.L.M., Moczek A.P., **Rohner** P.T. and Hu Y. (2020) Notch signaling patterns head horn shape in the bull-headed dung beetle *Onthophagus taurus*. **Genes Development and Evolution** 230:213-225. [\[doi\]](#)

Rohner P.T. (2020) Evolution of multivariate wing allometry in schizophoran flies (Diptera: Schizophora). **Journal of Evolutionary Biology** 33:831-841. [\[doi\]](#)

- Baur J., Roy J., Schäfer M.A., Puniamoorthy N., Blanckenhorn W.U. and Rohner P.T. (2020) Intraspecific mating system evolution and its effect on complex male secondary sexual traits: Does male-male competition increase selection on size or shape? *Journal of Evolutionary Biology* 33:297-308. [\[doi\]](#)
- van Koppenhagen N., Gourgoulianni N., Rohner P.T., Roy J., Wegmann A. and Blanckenhorn W.U. (2020) Sublethal effects of the parasiticide ivermectin on male and female reproductive and behavioral traits in the yellow dung fly. *Chemosphere* 242:125240. [\[doi\]](#)
- Baur J., Giesen A., Rohner P. T., Blanckenhorn W. and Schäfer M. (2020) Exaggerated male forelegs are not more differentiated than wing morphology in two widespread sister species of black scavenger flies. *Journal of Zoological Systematics and Evolutionary Research* 58:159-173. [\[doi\]](#)
- 2019** Khelifa R., Blanckenhorn W., Roy J., Rohner P. T. and Mahdjoub H. (2019) Usefulness and limitations of thermal performance curves in predicting ectotherm development under global change. *Journal of Animal Ecology* 88: 1901-1912. [\[doi\]](#)
- Rohner P. T., Roy J., Schäfer M. A., Berger D. and Blanckenhorn W. U. (2019) Does thermal plasticity predict clinal variation in wing size and shape? An inter- and intraspecific comparison in two sepsid flies. *Journal of Evolutionary Biology* 32:463-475. [\[doi\]](#)
- Zeender V., Roy J., Wegmann A., Schäfer M. A., Gourgoulianni N., Blanckenhorn W. U. and Rohner P. T. (2019) Comparative reproductive dormancy differentiation in European black scavenger flies (Diptera: Sepsidae). *Oecologia* 189:905-917. [\[doi\]](#)
- Laux A., Wegmann A., Roy J., Gourgoulianni N., Blanckenhorn W. U. and Rohner P. T. (2019) The role of larval substrate specialization and female oviposition in mediating species diversity of closely-related sepsid flies (Diptera: Sepsidae). *European Journal of Entomology* 116:75-84. [\[doi\]](#)
- Rohner P.T., Haenni J.-P., Giesen A., Busso J.P. Schäfer M. A., Püchel-Wieling F. and Blanckenhorn W. U. (2019) Temporal niche partitioning of Swiss black scavenger flies in relation to season and substrate age (Diptera: Sepsidae). *Alpine Entomology* 3:1-10. [\[doi\]](#)
- 2018** Rohner P.T. and Blanckenhorn W.U. (2018) A comparative study of the role of sex-specific condition dependence in the evolution of sexually dimorphic traits. *The American Naturalist* 192:E202-E215. [\[doi\]](#)
- Schäfer M.A., Berger D., Rohner P.T., Kjaersgaard A., Bauerfeind S.S., Guillaume F., Fox C.W. and Blanckenhorn W. U. (2018) Geographic clines in wing morphology relate to colonization history in New World but not Old World populations of yellow dung flies. *Evolution* 72:1629-1644. [\[doi\]](#)
- Conforti S., Dietrich J., Kuhn T., van Koppenhagen N., Baur J., Schäfer M.A., Rohner P.T. and Blanckenhorn W.U. (2018) Comparative effects of the common parasiticide ivermectin on adult survival and reproduction of nine sepsid fly species. *Ecotoxicology and Environmental Safety* 163:215-222. [\[doi\]](#)
- Roy J., Blanckenhorn W.U. and Rohner P.T. (2018) Largely flat latitudinal life history clines in the dung fly *Sepsis fulgens* across Europe (Diptera: Sepsidae). *Oecologia*. 187:851-862. [\[doi\]](#)
- Rohner P.T., Pitnick S., Blanckenhorn W.U., Snook R.R., Bächli G. and Lüpold S. (2018) Interrelations of global macroecological patterns in wing and thorax size, sexual size dimorphism, and range size of the Drosophilidae. *Ecography* 41:1707-1717. [\[doi\]](#)

- Rohner P. T., Teder T., Esperk T., Lüpold S. and Blanckenhorn W.U. (2018) The evolution of male-biased sexual size dimorphism is associated with increased body size plasticity in males. **Functional Ecology** 32:581-591. [\[doi\]](#)
- 2017 Rohner P. T., Blanckenhorn W.U. and Schäfer M. A. (2017) Critical weight mediates sex-specific body size plasticity and sexual dimorphism in the yellow dung fly *Scathophaga stercoraria* (Diptera: Scatophagidae). **Evolution & Development** 19:147-156. [\[doi\]](#)
- 2016 Rohner P.T., Blanckenhorn, W.U. and Puniamoorthy, N. (2016). Sexual selection on male size drives the evolution of male-biased sexual size dimorphism via the prolongation of male development. **Evolution** 70:1-11. [\[doi\]](#)
- Blanckenhorn W. U., Rohner P. T., Bernasconi M. V., Haugstetter J. and Buser A. (2016). Is quantitative mass barcoding of dung fauna biodiversity feasible? **Environmental Toxicology and Chemistry** 35:1970–1977. [\[doi\]](#)
- Rohner P. T. and Bächli G. (2016). Faunistic data of Sepsidae (Diptera) from Switzerland and additional countries including the first Swiss record of *Meroplus fukuharai* (Iwasa, 1984). **Mitteilungen der Schweizerischen Entomologischen Gesellschaft** 89:237-260. [\[doi\]](#)
- 2015 Ang Y., Rohner P. T. and Meier R. (2015). Across the Baltic: a new record for a Swedish fly, *Zuscamira inexpectata* (Pont, 1987) (Sepsidae) in Finland. **Biodiversity Data Journal** 3:e4308. [\[doi\]](#)
- Rohner, P.T. (2015). An updated checklist of the Sepsidae (Diptera) of Switzerland, including the first record of *Themira superba* (Haliday, 1833). **Mitteilungen der Schweizerischen Entomologischen Gesellschaft** 88: 371–377. [\[doi\]](#)
- Rohner P. T., Bächli G., Pollini L., Duelli P., Obrist M., Jochmann R. and Blanckenhorn W. U. (2015). Distribution, diversity gradients and Rapoport's elevational rule in the black scavenger flies of the Swiss Alps (Diptera: Sepsidae). **Insect Conservation and Diversity** 8:367-376. [\[doi\]](#)
- 2014 Rohner P. T., Ang Y., Zhao L., Puniamoorthy N., Blanckenhorn W.U. and Meier R. (2014). Genetic data confirm the species status of *Sepsis nigripes* Meigen, 1826 (Diptera: Sepsidae) and adds one species to the Alpine fauna while questioning the synonymy of *Sepsis helvetica* Munari, 1985. **Invertebrate Systematics** 28:555-563. [\[doi\]](#)

MANUSCRIPTS DEPOSITED ON BIORXIV

Rohner P.T., Yoong K.S., Tuan M.J.M and Meier R. (2018) Evolution of male costs of copulation in sepsid flies (Diptera: Sepsidae). **bioRxiv**. [\[doi\]](#)

MANUSCRIPTS IN PREPARATION

Perdigón Ferreira J., Rohner P.T. and Lüpold S. Sexual selection and the evolution of sexual dimorphism, condition dependence, and trait integration in *Drosophila prolongata*.

Puniamoorthy N., Rohner P.T., Lüpold S., Schiestl F. and Blanckenhorn W.U. Divergence in volatile organic compounds including cuticular hydrocarbons among 13 widespread *Sepsis* species (Diptera: Sepsidae).

Blanckenhorn W.U., Baur J., Roy J., Puniamoorthy N., Busso J.P., Schäfer M.A., Rohner P.T. Congruent sexual selection in field and laboratory in closely related sepsid flies.

EDITORIAL BOARD MEMBERSHIP

Subject Editor for *Alpine Entomology* (Diptera, Evolution, Ecology; alpineentomology.net)

REVIEWER FUNCTIONS (publons.com/a/1051154)

<i>Animal Behaviour</i>	<i>Insect Conservation and Diversity</i>
<i>Behavioral Ecology and Sociobiology</i>	<i>Insect Science</i>
<i>Biological Journal of the Linnean Society</i>	<i>Journal of Animal Ecology</i>
<i>Biology Letters</i>	<i>Journal of Evolutionary Biology</i>
<i>BMC Evolutionary Biology</i>	<i>Journal of Morphology</i>
<i>Cladistics</i>	<i>Nature Ecology and Evolution</i>
<i>Ecology Letters</i>	<i>Oikos</i>
<i>Ecological Entomology</i>	<i>Oecologia</i>
<i>Ecology and Evolution</i>	<i>PeerJ</i>
<i>Entomologica Experimentalis et Applicata</i>	<i>Physiological Entomology</i>
<i>Entomological Science</i>	<i>Proceedings B</i>
<i>Ethology</i>	<i>Scientific Reports</i>
<i>Evolution</i>	<i>Zoology</i>
<i>Evolution & Development</i>	

SOCIETY MEMBERSHIPS

American Society of Naturalists (ASN)
European Society for Evolutionary Biology (ESEB)
Royal Entomological Society
Swiss Entomological Society

PRESENTATIONS AT NATIONAL AND INTERNATIONAL MEETINGS

Oral contributions

Rohner P.T. and Berger D. (2019) *Does thermal plasticity align with local adaptation? – An interspecific comparison of wing shape and size in sepsid flies*. Evolution Evolving in Cambridge, United Kingdom.

Rohner P.T., Blanckenhorn W.U. and Lüpold S. (2017). *Global macroecology of size, dispersal and range extent in drosophilids*. Biology17 in Bern, Switzerland.

Rohner P.T., Puniamoorthy N. and Blanckenhorn W. U. (2016). *Multiple origins of reversals in sexual size dimorphism and sexual selection in black scavenger flies*. Biology16 in Lausanne, Switzerland.

Rohner P.T., Bächli G., Pollini L. P., Duelli P., Obrist M., Jochmann R. and Blanckenhorn W.U. (2015). *Distribution, diversity gradients and Rapoport's elevational rule in the Sepsidae*. Entomo.ch in Zurich, Switzerland.

Rohner P.T., Ang Y., Zhao L., Puniamoorthy N., Blanckenhorn W.U. and Meier R. (2014) *Morphology vs. molecules – species boundaries in two rare dung fly species (Diptera; Sepsidae)*. Swiss Systematics Society Meeting 2014 in Geneva, Switzerland.

Rohner P. T., Blanckenhorn W.U. and Puniamoorthy N. (2014). *Cross-continental variation in sexual selection and its effect on the contrasting reversal of sexual size dimorphism in closely related sepsid fly species*. 8th International Congress of Dipterology in Potsdam, Germany.

Poster presentations

Rohner P.T. and Blanckenhorn W.U. (2018). *A comparative study of the role of sex-specific condition dependence in the evolution of sexually dimorphic traits*. Biology18 in Neuchâtel, Switzerland.

Dallo R., Rohner P. T., Blanckenhorn W.U. and Martin O. (2018). *How costly is sex? - Insights from a fly in benign vs. stressful environments*. Biology18 in Neuchâtel, Switzerland.

Rohner P.T., Pitnick S., Blanckenhorn W.U., Snook R.R., Bächli G. and Lüpold S. (2017) *Clinal variation in wing and body size of drosophilids: Selection for increased dispersal capacity in the cold?* 16th Congress of the European Society for Evolutionary Biology in Groningen, the Netherlands.

Rohner P. T. and Blanckenhorn W.U. (2014). *A shitload of flies: Surprisingly rich alpine fauna of dung flies in Switzerland (Diptera: Sepsidae)*. 8th International Congress of Dipterology in Potsdam, Germany.

Rohner P. T., Ang Y., Zhao L., Puniamoorthy N., Blanckenhorn W.U. and Meier R. (2014). *Genetic data confirm the species status of Sepsis nigripes Meigen, 1826 (Diptera: Sepsidae) and adds one species to the Alpine fauna while questioning the synonymy of Sepsis helvetica Munari, 1985*. 8th International Congress of Dipterology in Potsdam, Germany.

Rohner P. T., Blanckenhorn W.U. and Puniamoorthy N. (2014). *Cross-continental variation in sexual selection: Contrasting reversal of sexual size dimorphism in closely related sepsid flies*. biology14 conference in Geneva, Switzerland.

Rohner P. T., Blanckenhorn W.U. and Puniamoorthy N. (2013). *Cross-continental variation in sexual selection: Contrasting reversal of sexual size dimorphism in closely related sepsid flies*. 14th Congress of the European Society for Evolutionary Biology in Lisbon, Portugal.

TEACHING ACTIVITIES

Teaching assistant at the University of Zurich: Ecology (BIO329), Principles of Evolution (BIO352), Biology of Reproduction (BIO361), Diversität der Wirbellosen [invertebrate diversity] (BIO114)

(Co-)Supervision of undergraduate students at the University of Zurich: Ramon Dallo (Semesterarbeit; MSc at ETHZ); Sheena Conforti, Jana Dietrich, Thierry Kuhn, Nicola van Koppenhagen (Research Practical in Evolutionary Biology (BIO 378))