

Marko Bračić

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Education

Ph.D. in Biology

2018–2024

University of Münster, Germany

Dissertation: "Individual differences in optimism: exploring consistency, causes, ecological consequences and cognitive mechanisms of judgement bias in animals"
Supervisor: Prof. S. Helene Richter

MSc Experimental Biology

2013–2016

University of Zagreb, Croatia

Dissertation: "Social defences of ant colonies against bacterial infection"
Supervisors: Prof. Sylvia Cremer and Dr. Barbara Milutinović, Institute of Science and Technology Austria

Erasmus Student Exchange

2015

University of Vienna, Department of Cognitive Biology, Austria

Research project "Food-motivated problem-solving in birds" with Prof. Thomas Bugnyar

BSc Biology

2009–2013

University of Zagreb, Croatia

Publications

- ✓ **Bračić, M.**, Bohn, L., Siewert, V., von Kortzfleisch, V. T., Schielzeth, H., Kaiser, S., Sachser, N. & Richter, S.H. (2022). Once an optimist, always an optimist? Studying cognitive judgment bias in mice. *Behavioral Ecology*, Volume 33, Issue 4, July/August 2022, Pages 775–788. [10.1093/beheco/arac040](https://doi.org/10.1093/beheco/arac040)
- ✓ Nematipour, B., **Bračić, M.** & Krohs, U. (2022). Cognitive bias in animal behavior science: a philosophical perspective. *Animal Cognition* (2022). [10.1007/s10071-022-01647-z](https://doi.org/10.1007/s10071-022-01647-z)
- ✓ Melotti, L., Siestrup, S., Peng, M., Vitali, V., Dowling, D., von Kortzfleisch, V. T., **Bračić, M.**, Sachser, N., Kaiser, S., & Richter, S. H. (2021). Individuality, as well as genetic background, affects syntactical features of courtship songs in male mice. *Animal Behaviour*, 180, 179–196. [10.1016/j.anbehav.2021.08.003](https://doi.org/10.1016/j.anbehav.2021.08.003)
- ✓ Lauš, B., Zadavec, M., Horvatić, B., **Bračić, M.**, & Koren, T. (2020). *Capnodis porosa* (Klug, 1829) (Coleoptera: Buprestidae)—new species for the beetle fauna of Croatia. *Natura Sloveniae*, 22(2), 79–81. [10.14720/ns.22.2.79-81](https://doi.org/10.14720/ns.22.2.79-81)

Preprints

- ✓ **Bračić, M.**, Bierbaum L., Peng M., Nimalavachchlan L., Siewert, V., Kaiser, S., Sachser, N. & Richter, S. H. The behavioural ecology of optimism: exploring potential consequences of judgement bias in mice : [10.21203/rs.3.rs-3071773/v1](https://doi.org/10.21203/rs.3.rs-3071773/v1) (under review in *Animal Behaviour*)

Work Experience

Research Associate
2022

University of Jena, Institute of Ecology and Evolution, Germany

PI: Prof. Holger Schielzeth

- ✓ meta-analysis of repeatability of animal behaviour

Research Associate (PhD)
2018–2022

University of Münster, Institute for Neuro- and Behavioural Biology

PIs: Prof. S. Helene Richter and Prof. Norbert Sachser

- ✓ multi-level data analysis and visualisation (R), planning and executing behavioural experiments, tech support
- ✓ found consistent individual differences in “optimism” in lab mice that could not be explained by genetic background or environmental influences and were not connected with individual’s foraging choices
- ✓ 3 peer-reviewed publications + 1 in revision, 5 conference presentations, supervised 6 students, teaching for 3 courses

Expert associate trainee in nature conservation
2017–2018

Association Hyla, Zagreb, Croatia: NGO in nature conservation

- ✓ ecological monitoring fieldwork, insect determination, literature review, outreach, and social media management
- ✓ 1 peer-reviewed publication and 1 project report, increased media visibility and public engagement

Substitute biology teacher
2016–2017

Gymnasium and School of Economics Benedikt Kotruljević, Zagreb, Croatia

- ✓ lecturing, grading, and examination and assignment design

Research internship (MSc)
2015–2016

Institute of Science and Technology Austria, Klosterneuburg

PI: Prof. Sylvia Cremer; direct supervisor: Barbara Milutinovic

- ✓ behavioural analysis, data analysis, ant marking and handling, microbiological and immunological methods
- ✓ 1 conference presentation

Skills

Research skills

- ✓ design and conduct of behavioural tests (small mammals, birds, insects)
- ✓ proficient behavioural analysis (Boris, Any-maze, Solomon coder)
- ✓ proficient data analysis (R, SPSS)
- ✓ conservation monitoring methods for insects and birds
- ✓ open science practises (preprints publication and data and code sharing)
- ✓ basic wet lab techniques (microbiological techniques and inhibition assays)

Organisational skills

- ✓ successful project organisation and management
- ✓ effective association management, including cooperation with volunteers

Digital skills:

- ✓ basic programming (R, Python)
- ✓ proficient user of office suite (e.g. MS Word, Excel, PowerPoint)
- ✓ independent user of photo and video editing software

Other skills

- ✓ language: Croatian (native), English (proficient), German (independent)
- ✓ driving licence B
- ✓ Advanced Scuba Diver certificate (NAUI)
- ✓ first aid and firefighter certificate

Additional information

Conferences presentation

- ✓ **Bračić, M.**, Kaiser, S., Sachser, N. & Richter, S.H. The ecology of "optimism": exploring potential consequences of judgement bias in mice. Behaviour 2023, Bielefeld (talk)
- ✓ **Bračić, M.**, Nimalavachchlan L., Kaiser, S., Sachser, N. & Richter. Do optimists choose different environments than pessimists? Studying the ecological relevance of judgement bias in laboratory mice. European Conference on Behavioural Biology, ECBB 2022, Groningen (talk)
- ✓ **Bračić, M.**, Bohn L., Kaiser, S., Sachser, N. & Richter, S.H. Optimist or pessimist? Individual differences in decision-making under ambiguity, International Conference on Comparative Cognition, CO3 2021 (talk virtual)
- ✓ **Bračić, M.**, Bohn L., Kaiser, S., Sachser, N. & Richter, S.H. Optimist or pessimist? Individual differences in decision-making under ambiguity, Meeting of Animal Behavior Society, ABS 2020 (talk virtual)
- ✓ **Bračić, M.**, Kästner N., Kaiser, S., Sachser, N. & Richter, S.H. The effect of different enrichment regimes on welfare-related measures in mice. Meeting of the Ethological Society, EthoGes 2019, Tübingen (poster)
- ✓ **Bračić, M.**, Milutinović B., Cremer S. Social defences of ant colonies against bacterial infection, European Conference of Behavioural Biology, ECBB 2016, Vienna (poster)

Project report

- ✓ Burić I., Koren T., Borovečki-Voska Lj., Zdravec M., Štih A., Lauš B., **Bračić M.**, Talaja M. (2017): Biodiversity "BioOdra 2017." Asociation Hyla, Zagreb

Outreach articles

- ✓ Articles in student journals "The Eyebrow" and "Primat"

Projects

Organiser:

- ✓ international field research and educational project "Grabovača 2014"
- ✓ International Conference on Evolution and Behaviour ICEB 2014 (coordinator)

Participant:

- ✓ numerous ecological monitoring projects (small mammals, birds, herpetofauna, insects)
- ✓ "Behavioural and cognitive characteristics of the Balkan Snow Vole (*Dinaromys bogdanovi*)"
 - experiment conduct, vocalization analysis, and camera trapping
- ✓ educational project "Night of Biology" 2010–2014

Honours and awards

- ✓ Special Chancellor's Award for the research and educational project "Grabovača 2014" (2014/15)
- ✓ Special Chancellor's Award for the education project "Night of biology" (2011/12)

Memberships

- ✓ Croatian Myrmecological Society (2010–present)
 - Secretary (2017–present)
- ✓ Ethological Society (2019–present)
- ✓ Society for Open Reliable Transparent Ecology and Evolutionary biology (2020–present)