

Curriculum Vitae

Jeremias N. Brand

Contact

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Languages

German ■■■

English ■■■

French ■□□

IT Skills

R, Python, bash, javascript,
HTML, PHP, git, vim,
snakemake, SQL,
MS Office, Illustrator,
Photoshop, GIMP, ImageJ

Wetlab Skills

Microscopy (DIC, SBFSEM,
TEM), RNA extraction, PCR,
Gel electrophoresis,
Chromatography

Education

- 11.2015 – 07.2020** PhD in Zoology, University of Basel, CH.
Summa cum laude, Supervised by PD Dr. Lukas Schärer
- 11.2017 – 03.2018.** Visiting Scholar at University of Idaho, USA.
Supervised by Prof. Luke J. Harmon
- 08.2013 – 04.2015** Master of Animal Biology, University of Basel, CH.
Grade – 5.8/6.0. Specialization in Evolutionary Biology
- 08.2009 – 06.2013** Bachelor of Organismal Biology, University of Basel, CH.
Grade – 5.0/6.0. Specialization in Parasitology, Ecology,
Evolutionary Biology and Plant Science

Employment history

- Since 01.2021** Postdoc, Department of Tissue Dynamics and
Regeneration, Max Planck Institute for Biophysical
Chemistry, Göttingen, DE.
- 08. – 12.2020** Postdoc, Schärer group, University of Basel, CH.
- 11.2015 – 04.2020** PhD candidate in Zoology, University of Basel, CH.
Supervised by PD Dr. Lukas Schärer
- 04. – 11.2015** Civil Service. Research Assistant at Institute for organic
farming (FiBL), Frick, CH.
- 02. – 0.8.2012** Civil Service. Technician and Research Assistant at
Institute for Ecopreneurship, University of Applied
Sciences and Arts Northwestern Switzerland, Muttentz,
CH.
- 07. – 09.2011** Civil Service. Nature conservation work. Verein mum,
Zürich, CH.

Courses

- 09.2018** GreifOlution: 1st Greifswald Summer School on
Mathematics of Evolution (7 days), Institute of
Mathematics and Computer Science, University of
Greifswald, DE.
- 09.2018** Comparative Genomics (3 days), Swiss Institute for
Bioinformatics, Lausanne, CH.
- 05.2017** Computational Molecular Evolution (10 days), European
Bioinformatics Institute, Wellcome Genome Campus,
Hinxton, Cambridge, UK.
- 09.2017** Talking Science (1 day), University of Basel, CH.
- 01.2016** Workshop on Genomics (14 days), Cesky Krumlov, CZ.
- 06.2014** Summer School in Evolutionary Biology (7 days),
Guarda, CH.

Curriculum Vitae

Publications

- Brand, J. N.**, L. J. Harmon, and L. Schärer. 2022. Mating behavior and reproductive morphology predict macroevolution of sex allocation in hermaphroditic flatworms. *BMC Biology* 20:35.
- Brand J. N.**, G. Viktorin, R. A. W. Wiberg, C. Beisel, and L. Schärer. 2022. *Large-scale phylogenomics of the genus Macrostomum (Platyhelminthes) reveals cryptic diversity and novel sexual traits*. *Molecular Phylogenetics and Evolution*. 166:107296.
- Wiberg, R. A. W., **J. N. Brand**, and L. Schärer. 2021. *Faster Rates of Molecular Sequence Evolution in Reproduction-Related Genes and in Species with Hypodermic Sperm Morphologies*. *Molecular Biology and Evolution*, doi: 10.1093/molbev/msab276.
- Brand J. N.**, L. J. Harmon, and L. Schärer. 2021. *Frequent origins of traumatic insemination involve convergent shifts in sperm and genital morphology*. *Evolution Letters*.
- Brand J. N.**, R. A. W. Wiberg, R. Pjeta, P. Bertemes, C. Beisel, P. Ladurner & L. Schärer. 2020. *RNA-Seq of three free-living flatworm species suggests rapid evolution of reproduction-related genes*. *BMC Genomics* 21:462.
- Schärer, L., **J. N. Brand**, P. Singh, K. S. Zadesenets, C.-P. Stelzer, and G. Viktorin. 2020. *A phylogenetically informed search for an alternative Macrostomum model species, with notes on taxonomy, mating behavior, karyology, and genome size*. *Journal of Zoological Systematics and Evolutionary Research* 58:41–65. <https://doi.org/10.1111/jzs.12344>
- Neves R., **Brand J. N.**, Gan Q. and Reichert H. 2016. *First time surveying meiofauna in Singapore*. *Raffles Bulletin of Zoology Supplement* 34(I): 8-12. <http://zoobank.org/urn:lsid:zoobank.org:pub:52431AAA-09BD-4305-B9B7-EA78F989D8D7>

Publications in preparation

- Brand J. N.** & L. Schärer. In preparation. *Synapomorphies and molecular data suggest a radiation of Macrostomum flatworms in Lake Tanganjika*.
- Singh P., **J. N. Brand** & L. Schärer. In preparation. *Evolution of the suck behaviour, a postcopulatory female resistance trait in a hermaphroditic flatworm genus*.

Contributions to international conferences

Oral presentations

2022. SMBE Workshop on the Evolution of Reproduction. Instituto Gulbenkian de Ciência, Oeiras, PT.
2022. 27th Graduate Meeting in Evolutionary Biology, Bielefeld, DE.
2021. Virtual Evolution 2021.
2021. Simultaneous and Sequential Hermaphroditic Organisms Workshop, Online Event, Basel, CH.
2020. 13th International *Macrostomum* Meeting, Online Event, Innsbruck, AU.
2019. Biology of Spermatozoa 15, Nynäsgård, SE.
2019. Simultaneous and Sequential Hermaphroditic Organisms Workshop, Salford, UK.
2019. Biology 19, Zürich, CH.
2018. 17. Annual Meeting of the Swiss Systematics Society, Bern, CH.
2018. International Symposium on Flatworm Biology, Alghero, IT.
2017. Simultaneously Hermaphroditic Organisms Workshop, Lund, SE.
2016. 10th International *Macrostomum* Meeting, Basel, CH.
2015. 9th International *Macrostomum* Meeting, Innsbruck, AU.

Curriculum Vitae

Poster presentations

2022. Euro Evo Devo, Napoli, IT.

2018. 1. Summer school on Biomathematics, Greifswald, DE

2017. Biology of Spermatozoa 14, Sheffield, GB

2017. Conference of the European Society of Evolutionary Biology, Groningen, NL

2015. Conference of the European Society of Evolutionary Biology, Lausanne, CH

Institutional responsibilities

01.01.2022-present External Postdoc representative for the PostdocNet of the Max-Planck Institute of Multidisciplinary Sciences

02.2016 – 12.2017 Host and organization “Interaction Seminar”, Zoological Institute, Basel, CH.

02.2009 – 12.2009 Member of Student Parliament, Studierendenrat, SKUBA, Two terms, University of Basel, CH.

Supervision of junior researchers

Tanja Koch and **Anaïs Galli** (3rd year BSc., 6 week project). 02.-03.2017.

Block course “Zoology and Evolution”. Project co-supervisor. University of Basel, CH.

Alessandra Lochmatter and **Michaela Zwyrer** (3rd year BSc., 6 week project). 02.-03.2016.

Block course “Zoology and Evolution”. Project co-supervisor. University of Basel, CH.

Naomi Reichlin (High school student, High school thesis, 3 month project). 01.-03.2014.

Supervisor. University of Basel, CH.

Teaching activities

Morphometrics and Image Analysis Teaching assistant in 8h practical (3rd year BSc.)
03.2017 & 03.2019, University of Basel, CH.

Marine Biology and Biogeochemistry Teaching assistant in 10 day field course (MSc. Level).
06.2015 & 06. – 07.2017, University of Basel, Elba, IT.

Flatworm Biology Teaching assistant in 8h practical (3rd year BSc.)
03.2015, 03.2016, 03.2017, University of Basel, CH.

Wikipedia Writing Week Teaching assistant in one week of practical (3rd year BSc.)
02.2016, University of Basel, CH

Scientific reviewing activities

Reviewer for: **Ethology, Ecology & Evolution** (ISSN: 0394-9370), **Evolution** (ISSN: 1558-5646), **Zoologischer Anzeiger** (ISSN: 0044-5231), **Zoological Letters** (ISSN: 2056-306X), and **Zoological Science** (ISSN: 0289-0003)

Active memberships in scientific societies

European Society of Evolutionary Biology, Society for the Study of Evolution, Swiss Systematics Society

Curriculum Vitae

Organization of conferences

- 11.2016** 10th International Macrostomum Meeting
Assisted in planning and organizing of the conference, Basel, CH
- 07.2012** Conference on Managed Aquifer Recharge (MAR), Main organiser, Basel, CH.
Meeting for EU-Project partners from India and Germany
- 03.2011** Theme week "Critical Science", Main organiser, Biozentrum, Basel, CH
One week of discussion and lectures with scientists, journalists and educators
- 08.2009 – 12.2015** Co-founder and organizer of a lecture series every semester for "Freethinkers Basel"
An organization for the promotion of critical thinking and interdisciplinary exchange

Outreach activities

2017. *Sex and Violence in the Beach*. Science Slam 17, Basel, CH
2011. Theme week – „Critical Science“. Biozentrum University of Basel, CH
Main organiser. *One week of interdisciplinary discussion and lectures with scientists, journalists and educators.*

Awards and grants

Awards

- 09.2018** Best Poster Award at 1st Summer School for Biomathematics, Greifswald, DE
- 10.2017** 2nd Place Basel Science Slam 17, Basel, CH.

Grants

- 01.02.2022 SNSF Postdoc Mobility Fellowship (90,000 CHF)
- 09.2019** Travel Grant, University of Basel, (880 CHF)
- 09.2018** Deutscher Akademischer Austauschdienst (DAAD)– Sponsored participation in Summerschool
- 09.2018** Deutscher Akademischer Austauschdienst (DAAD) – Travel Grant: 250 EURO
- 08.2017** Travel Grant, University of Basel (360 CHF)
- 06.2017** Travel Grant, University of Basel (1750 CHF)
- 02.2011** Grant for Theme Week "Critical Science", Mercator Foundation Switzerland, 4500 CHF