

**RA position (deadline 31st July 2022):** We are looking for a motivated student research assistant to join our project studying neuroanatomy, behaviour and speciation in tropical *Heliconius* butterflies. The RA will join Richard Merrill's research group at LMU Munich (<https://www.evol.bio.lmu.de/research/index.html>), and will work closely with our collaborators at the Universidad Regional Amazónica Ikiam (Ecuador), the Universidad del Rosario (Colombia), and the University of Bristol (UK).

The position is for 2.5 years, following successful assessments at ~4 and ~10 months. The applicant will be primarily based at LMU in Munich, after a period of 3 to 6 months working in our insectaries in Ecuador, and a possible shorter visit to Bristol. As such, applicants must be prepared to spend considerable time in the tropics, be self-motivated and work well as part of a team. In addition to butterfly breeding and behavioural experiments in the tropics, the work would mostly involve antibody staining, confocal imaging and segmentation of brains. Experience with these techniques would be welcome, but is not required. More important is self motivation, an interest in the evolution of brains and behaviour, good communication and English skills, and the ability to problem solve.

**The position would suit someone interested in the evolution of brains and behaviour, with a relevant MSc or bachelors degree, who is considering pursuing a PhD.** The successful applicant will work closely with Postdocs in the lab and will contribute to ongoing experiments, but there is scope for independent projects. Depending on available funding, and the right candidate, the position could be extended to allow a PhD project in the future.

LMU is recognized among Europe's premier academic and research institutions, being consistently ranked among the top Universities worldwide. Within the Division of Evolutionary Biology (<http://www.evol.bio.lmu.de>), the researcher will be part of vibrant international communities of scientists. In addition, the researcher will join a collaborative and driven community of *Heliconius* biologists. **The working language of the lab and the Division of Evolutionary Biology is English.**

The position is funded by an ERC starting grant (*The genetic and neural basis of reproductive isolation*) awarded to Richard Merrill. The expected salary will be equivalent to that paid at the level of a PhD student (mostly likely EV13 65%, approx. 1750 € after tax and contributions). The successful applicant could start at the earliest from September/October 2022, but this start date could be extended for the right candidate (and might depend on obtaining visas). The position is open to EU and international applicants, assuming they can obtain the necessary work documents.

Further information about the lab can be found <https://www.evol.bio.lmu.de/research/merrill/index.html> and links within. For relevant publications see below. Informal questions should be directed to Richard Merrill ([merrill@bio.lmu.de](mailto:merrill@bio.lmu.de)), Shane Wright ([dswright@biologie.uni-muenchen.de](mailto:dswright@biologie.uni-muenchen.de)) or Lucie Queste ([queste@biologie.uni-muenchen.de](mailto:queste@biologie.uni-muenchen.de)).

**Applications**, made up of a \*single pdf\* including: **i) A short letter of motivation, ii) A current CV (including grades) and iii) the names and contact details of two referees**, should be sent to Richard Merrill ([merrill@bio.lmu.de](mailto:merrill@bio.lmu.de)) with

the subject header “HELICONIUS RA” by 31st July 2022. Interviews will be held most likely over zoom in the following 2 weeks.

Relevant publications:

Montgomery, S.H., Rossi, M., McMillan, O. & Merrill, R.M. (2021) Neural divergence and hybrid disruption between ecologically isolated *Heliconius* butterflies. ***PNAS*** 116: e2015102118 [LINK](#)

Rossi, M., Hausmann, A.E., Thurman, T., Montgomery, S.H., Papa, R., Jiggins, R.D., McMillan, O. & Merrill, R.M. (2020) Visual mate preference evolution during butterfly speciation is linked to neural processing genes. ***Nature Communications*** 11: 4763. [LINK](#)

Montgomery, S.H. & Merrill, R.M. (2017) Divergence in brain composition during the early stages of ecological specialisation in *Heliconius* butterflies. ***J Evol Biol*** 30: 571-582 [LINK](#)

Merrill, R.M., Dasmahapatra, K., Davey, J., Dell’Aglia, D., Hanly J.J, Huber B., Jiggins C.D., Joron, M., Kozak K., Llaurens V., Martin S.H., Montgomery S.H., Morris, J., Nadeau N.J., Pinharanda A.L., Rosser N., Thompson M.J., Vanjari, S., Wallbank R.W., Yu, Q. (2015) The diversification of *Heliconius* butterflies. What have we learned in 150 years? ***J Evol Biol*** 28: 1417-38 [LINK](#)

For more relevant publications from the lab (and before) please see <https://richmerrill.wordpress.com/about/>.

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