

## Two PhDs in Community Ecology & Population Genetics

We invite prospective candidates for two four-year fully-funded **PhD Studentships** to explore exciting questions on the interface of community ecology and population genetics. How do species coexist in diverse communities? And how is genetic variation maintained within populations? These processes are typically studied separately, but likely interact to structure diversity in ecological communities. For example, rapid evolution is likely to have a key role in determining species coexistence.

To address these questions, our collaborative project uses a novel experimental community model system of wild *Drosophila* species and their parasitoids from tropical Australia. We are able to perform multigenerational laboratory microcosm experiments and track eco-evolutionary dynamics in fine detail. We are offering two positions – one more focused on community ecology and the other on population genetics. The candidates will use a combination of some of the following approaches: laboratory experiments on maintenance of species diversity in communities and maintenance of genetic variation, experimental evolution, genome-wide association studies, eco-evolutionary modelling, population genomics using whole genome data, and field surveys of *Drosophila* - parasitoid food webs in Australian tropical rainforest. The specific PhD chapter projects will result from a discussion between the candidate and the supervisor.

The successful applicant will join the Laboratory of Experimental Ecology [ <http://lab.hrcek.net> ] at the Biology Centre, Czech Academy of Sciences, Ceske Budejovice, Czech Republic, under the supervision of Dr Jan Hrcek. The laboratory is a multinational team of postdocs, PhD students and technicians and the applicant will have the opportunity to work extensively with other team members. The laboratory obtained prestigious high-level funding for five years (ERC-CZ grant) and therefore can provide substantial resources and support for exceptional research. The laboratory is part of the Department of Ecology, a dynamic international centre for research on interaction networks.

Together with each PhD student we will choose a co-supervisor from current international collaborators (listed at the bottom of [ <http://lab.hrcek.net/people.html> ] page) or start new collaborations. The position will include a research stay abroad.

The deadline for applications **is extended to 16<sup>th</sup> May 2022**. The positions can start from August 2022 onwards. The students will receive a salary which comfortably covers living expenses in the Czech Republic. The working language is English and applicants from all countries are eligible. A MSc degree is required to enter PhD in Czech Republic. Following experience is an advantage:

- Research experience with laboratory experiments, insect ecology or molecular ecology
- Experience in eco-evolutionary dynamics or population genetic modelling
- Experience with population genetics
- Driving licence and fieldwork experience

To apply please send one document comprising a CV, contact details for two references, and a motivation letter to Jan Hrcek [ [janhrcek@gmail.com](mailto:janhrcek@gmail.com) ].