

The research group of Prof. Juliette de Meaux, Institute of Botany, Biocenter invites motivated and energetic students to apply for a master project currently available in the lab.

Master Project: Using interspecific hybrids to uncover the genetic basis of adaptation to flood-plain ecosystems

Lab. Prof. Juliette de Meaux



Project description:

We recently discovered natural hybridization between *Arabis nemorensis*, a highly endangered flood-plain species, and *Arabis sagittata*, a close relative adapted to drier environments. For this project you will make use of interspecific crosses to discover genetic variants underlying the phenotyping variation we see between these two plant species.

What will you learn?

- **Quantification of phenotypic variation**, e.g. resistance to flooding, flowering time, fitness, etc.
- Generation of **genotyping-by-sequencing** data (Illumina, RAD-seq) and analysis using **bioinformatics tools**
- **QTL mapping** to link phenotypic and genetic variation

WHK funding is available for this project!

To apply, please contact: jdemeaux@uni-koeln.de