

## Doctoral researcher or postdoctoral position in carnivorous plant biology

The research group of Kenji Fukushima at the University of Würzburg is seeking 1 Doctoral researcher (i.e., PhD student) or 1 Postdoctoral researcher. The successful applicant will participate in the research project "Conferring carnivorous plant-like traits by single gene transfers" funded by HFSP (granted to KF, and co-Pls, Tanya Renner at the Penn State University and Ulrike Bauer at the University of Bristol) in which multiple aspects of carnivorous plant biology will be studied by combining genomics, plant molecular biology, and biomechanics. In collaboration with the co-Pls, we will analyze how carnivory-related traits are regulated and test what happens when the traits are transferred to other plants. The successful applicant of this position is expected to analyze functional surface and/or digestive physiology of the Australian pitcher plant Cephalotus follicularis (photo) or other carnivorous plants.



The position is available from **October 2021**, but the start date can be flexibly decided between 1 Oct 2021 and 1 Apr 2022. The salary and benefits will be based on the "Tarifvertrag für den öffentlichen Dienst der Länder" (Collective Agreement for the Public Service of German Federal States, TV-L). The exact amount of salary will vary according to the pay step ("Stufe") and the pay grade ("Entgeltgruppe"). To which pay grade and step the successful applicant will be assigned will depend on their professional background. If all requirements are met, the applicant will be assigned to pay grade E13. The Doctoral researcher position is part-time (0.65 FTE), and the postdoc position is full-time (1 FTE). A fixed term until the end of the HFSP project will be applied (i.e., from the start date to **September 30, 2024**). A salary calculator can be found here.

## Minimum qualifications:

- Master's degree (Doctoral researcher) or PhD degree (postdoc) in Molecular Biology, Plant Biology, Evolutionary Biology, Genomics, Bioinformatics, or a related discipline
- · Strong interest in plant biology
- Sound knowledge and skills in molecular biology
- Ability to work independently and in a team environment

## **Preferred qualifications:**

- Sound knowledge and skills in plant physiology
- Sound knowledge and skills in statistics and bioinformatics
- A good record of publications in peer-reviewed journals

**Application:** Applications and inquiries should be emailed to Kenji Fukushima (kenji.fukushima@uni-wuerzburg.de). The closing date for applications is **30 September 2021**. Review of applications will begin immediately and continue until the positions have been filled. The University of Würzburg aims to increase the number of women in those areas where they are underrepresented. Therefore, we explicitly encourage applications from woman. Severely handicapped applicants will be given preferential consideration when equally qualified. All applications should be submitted as a single pdf file containing:

- A cover letter including the statement of interest
- A CV including a list of publications
- Names and contact details of at least two professional references

**Research:** For details, please see <u>our website</u> or our previous publications:

- 1. Hedrich and Fukushima, 2021. On the origin of carnivory: Molecular physiology and evolution of plants on an animal diet.

  Annual Review of Plant Biology 72: 133–153
- 2. Fukushima et al., 2021. A discordance of seasonally covarying cues uncovers misregulated phenotypes in the heterophyllous pitcher plant *Cephalotus follicularis*. **Proceedings of the Royal Society B** 288: 20202568
- 3. Fukushima and Pollock, 2020. <u>Amalgamated cross-species transcriptomes reveal organ-specific propensity in gene expression evolution</u>. **Nature Communications 11**: 4459
- 4. Fukushima et al., 2017. <u>Genome of the pitcher plant *Cephalotus* reveals genetic changes associated with carnivory.</u> **Nature Ecology & Evolution** 1: 59
- 5. Fukushima et al., 2015. Oriented cell division shapes carnivorous pitcher leaves of Sarracenia purpurea. Nature Communications 6: 6450
- 6. Fukushima and Hasebe, 2014. Adaxial-abaxial polarity: The developmental basis of leaf shape diversity. Genesis 52(1): 1-18