

Johannes Gutenberg University Mainz (JGU) is one of the largest universities in Germany. Thanks to its location in the Rhine-Main science region, the university can unfold to its full potential and showcase its innovative power and dynamism. Its status as a comprehensive university allows for multidisciplinary learning and teaching and has great potential for internationally renowned, interdisciplinary research. Almost all of its institutes are located on a single campus close to the Mainz city center – creating a lively academic culture for researchers, teaching staff, and students from every continent.

Faculty 10: Biology / Institute of Molecular Physiology / Molecular Plant Science of Johannes Gutenberg University Mainz

Academic staff member (Postdoc): Plant RNA Biology

full-time (100%)

The Wachter group investigates the molecular mechanisms and biological functions of alternative RNA splicing in plants (<https://mps-imp.biologie.uni-mainz.de/>). Our recent work has identified novel components of the plant splicing-regulatory code, including structured mRNA elements (e.g., <https://doi.org/10.1111/tpj.71060>) and position-dependent functions of pyrimidine motifs (<https://doi.org/10.1111/tpj.16739>). By combining these functional studies with global profiling approaches, we are building a framework to understand and engineer alternative splicing in the context of plant development and stress responses.

As a member of our international research team, you will examine the regulation and functional impact of splicing decisions controlled by polypyrimidine tract-binding proteins (PTBs), a family of key splicing regulators in plants and animals. Your work will build on our previous findings on PTB functions in alternative splicing and on recent results from ongoing transcriptome-wide approaches, including splicing pattern profiling, iCLIP, and TRIPE. You will further develop these analysis pipelines and integrate the resulting datasets to define the role of this central component of splicing control in the model plant *Arabidopsis thaliana*. The new insights from these mechanistic studies will be linked to physiological PTB functions we previously observed, including ABA-dependent seed germination and drought tolerance. The overarching goal of this project is to establish the molecular connections between PTB functions and key traits of stress physiology, thereby laying the groundwork for novel strategies to enhance plant resilience. This work is supported by extensive expertise, various core facilities, and a completely new research infrastructure.

Your tasks:

- Tackling critical questions on PTB functions in *A. thaliana* using a multidisciplinary approach, which integrates molecular biology, RNA biochemistry, and plant stress physiology
- Applying state-of-the-art techniques for gene-specific and genome-wide analyses of RNA biology
- Developing an integrated framework to decipher PTB's role in splicing and its downstream physiological outcomes, with a particular focus on drought stress
- Assisting with lab organisation and other general tasks
- Contributing to teaching activities for Bachelor's and Master's students within our group
- Supervising PhD students and other group members
- Presenting your research findings in oral and written form, including conference contributions, reports, and manuscripts

Your profile:

- A successfully completed scientific university degree in Biology or in a related field
- A successfully completed doctorate (PhD) in molecular plant biology or RNA biology
- Experience with a spectrum of molecular methods
- Experience in plant (stress) physiology is a plus, but not mandatory
- Teaching experience is a plus, but not mandatory
- Very good English language skills (at least level B2); German language skills are a plus, but not mandatory
- A successful academic track record documented by publications, conference contributions, etc.
- A fascination for science, very good communication and teamwork skills

In addition to the general requirements according to public services law, applicants must meet the recruitment requirements stipulated in § 57 of the Hochschulgesetz of Rhineland-Palatinate.

Our benefits:

- Secure and transparent remuneration as well as additional benefits, such as an annual special payment and a company pension scheme
- Discounted Deutschlandticket
- Flexible working time arrangements
- A wide range of offers for the development of your talents and perspectives
- Opportunity to participate in general university sports programs

The position is paid according to **EG 13 TV-L** and can be filled from **01/01/2027** on. The position is limited initially to a period of 3 years and serves the purpose of academic qualification with independent contributions to teaching and research as a prerequisite for a habilitation or an equivalent.

JGU is diverse and welcomes qualified applications from people with varied backgrounds.

We aim to increase the number of women in the field of research and teaching and therefore encourage female researchers to apply.

People with severe disabilities and people with disabilities who are treated equally in accordance with Section 2 (3) SGB IX will be given preferential consideration if they are suitable.

Are you ready for a new challenge and interested in this varied and responsible position? Then submit your complete application [*cover letter, CV, certificates (with German recognition if applicable), references, and a list of publications*] by **11/5/2026**, via the „Apply now“ button.

You may only be employed in the civil service of the state of Rhineland-Palatinate if you can guarantee that you will uphold the free democratic basic order as defined in the Basic Law and the Constitution of Rhineland-Palatinate at all times.

For questions and further information please contact Prof. Dr. Andreas Wachter by e-mail: jobs-aw@uni-mainz.de.

[Data protection information](#)

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