

Faculty of Mathematics and Natural Sciences

## PhD Position (f/m/d) in Gene Expression & Splicing

### CECAD Uhlirova Lab of Development and Cancer

Foto: Thomas Josek

The University of Cologne is one of the largest and most research-intensive universities in Germany, offering a wide range of subjects. With its six faculties and its interfaculty centres, it offers a broad spectrum of scientific disciplines and internationally outstanding profile areas, supported by the administration with its services.

**The Uhlirova Lab** investigates the pleiotropic functions of the stress-inducible signaling pathways and downstream mechanisms orchestrating gene expression in *Drosophila* and mouse models combining genetics, cell biology, and biochemistry with omic approaches and imaging. We study how diverse stress signals modulate transcription and pre-mRNA splicing during development and physiology and how malfunctions of transcription and splicing machinery contribute to aging and diseases (Claudius et al., 2014; Donohoe et al., 2018; Stankovic et al., 2020; Erkelenz et al., 2021).

**Web:** [www.uni-koeln.de/inter-fak/cecad/uhlirova/](http://www.uni-koeln.de/inter-fak/cecad/uhlirova/)

#### YOUR TASKS

- » To study the crosstalk between transcription and pre-mRNA splicing under physiological, stress, and disease conditions
- » To investigate mechanisms underlying spliceosome assembly and functional plasticity
- » To study what renders different transcripts, cells, and tissues sensitive to aberrant splicing
- » To elucidate how spliceosome malfunction impacts genome stability and contributes to loss of tissue homeostasis, premature aging and diseases

#### YOUR PROFILE

- » Master of Science or equivalent in Biology, Biochemistry, Bioinformatics or Biophysics
- » Motivation, curiosity and creativity and a strong ability for problem-solving through critical analytical thinking
- » Keen interest in the mechanisms of signaling and regulation of gene expression in development and disease
- » Ability to drive the project with a high degree of independence
- » Good communication skills, fluency in English, sense for teamwork and commitment to high-quality research
- » Strong background in genetics and molecular biology is essential
- » Experience with model organisms (e.g. *Drosophila*, mouse), imaging techniques, and knowledge of basic bioinformatics tools are welcome

#### WE OFFER YOU

- » Interactive and international research group with access to the state-of-the-art imaging, proteomic, lipidomic and genomic research facilities
- » a diverse and fair working environment
- » support in reconciling work and family life
- » flexible working time models
- » extensive advanced training opportunities
- » occupational health management offers
- » local transport ticket at a discount for UoC employees

The position is available as soon as possible on a part-time basis with 25,89 working hours. The position is limited to three years. If the necessary prerequisites required by tariff regulations as well as the sought after personal qualifications are met, the salary will correspond to the pay grade 13 as specified in the States' Tariff Agreement (TVL).

The University of Cologne is committed to equal opportunities and diversity. Women are especially encouraged to apply and will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from people with disabilities / special needs or of equal status.

Please apply online at: <https://jobportal.uni-koeln.de>

#### Your application must include:

- » a Cover Letter stating a specific motivation for the application, your scientific achievements and research interests
- » a Curriculum Vitae including your publication list
- » contact information for two references
- » proof of the qualification, copies of your degree certificates

**The reference number:** Wiss2210-30.

**The application deadline:** 02.12.2022.

If you have any questions, please contact Dr. Eva Külshammer:  
[uhlirova-jobs@uni-koeln.de](mailto:uhlirova-jobs@uni-koeln.de)