

## PhD position in plant epigenomics

A PhD position in plant epigenomics is available in the Johannes lab at the Technical University of Munich (Germany) ([www.johanneslab.org](http://www.johanneslab.org)).

**Description:** DNA methylation is an important epigenetic mark with fundamental roles in gene regulation and transposable element silencing. Similar to DNA sequence mutations, DNA methylation changes often arise stochastically in plant genomes. These so-called epimutations are often transmitted across many generations and have been shown to contribute to the heritability of important plant traits. It remains unclear to which extent epimutations contribute to plant evolution, and whether they are exploitable in agricultural breeding programs. A major aim of our groups is to quantify the genetic and environmental factors that shape the rate and the molecular spectrum of spontaneous epimutations in the model plant *A. thaliana* as well as in long-lived trees. Our approach relies on a combination of Next Generation Sequencing (NGS) measurements, computational analysis and statistical (epi)genetics modeling.

**What are we looking for:** We are looking for a talented PhD student who will take charge of the analysis and interpretation of a large number of NGS datasets. The applicant will use and extend several in-house computational algorithms. We have a preference for applicants with strong analytical backgrounds (computational biology, bioinformatics, physics, or engineering), who have an interest in biological phenomena. Alternatively, we also consider biologists with a solid background in bioinformatics/computational biology. For specific inquiries regarding this position contact Frank Johannes at [work@johanneslab.org](mailto:work@johanneslab.org).

**Location:** The Johannes lab is embedded in the Department of Molecular Life Sciences, and is part of the prestigious TUM Institute for Advanced Study ([www.tum-ias.de](http://www.tum-ias.de)). The TUM is rated among the best in Germany and ranked well internationally. The Freising Life Sciences campus is located about 25 minutes from the city center of Munich and 15 minutes from the Munich international airport. The campus has state of the art facilities for plant phenotyping, computing and bioinformatics.

**Application:** Send your application directly to [work@johanneslab.org](mailto:work@johanneslab.org). The application should include: 1) a full CV, 2) a short statement of research interests and experience, and 3) contact information for two references (preferably everything in a single pdf file). Starting date is as soon as possible, but applications will be accepted until the position is filled.

**Salary:** The salary is 65% of a standard E13 TV-L pay scale depending on qualifications. The TUM is interested in fostering career opportunities for women, therefore women are strongly encouraged to apply. Applicants with disabilities and more or less equal qualifications will be favoured.

### Relevant links:

Technical University of Munich (TUM): [www.tum.de/en/](http://www.tum.de/en/)

Johannes group: [www.johanneslab.org](http://www.johanneslab.org)

Technical of University Munich (TUM): [www.tum.de/en/homepage](http://www.tum.de/en/homepage)