The Ziolkowski lab

LABORATORY OF GENOME BIOLOGY, ADAM MICKIEWICZ UNIVERSITY

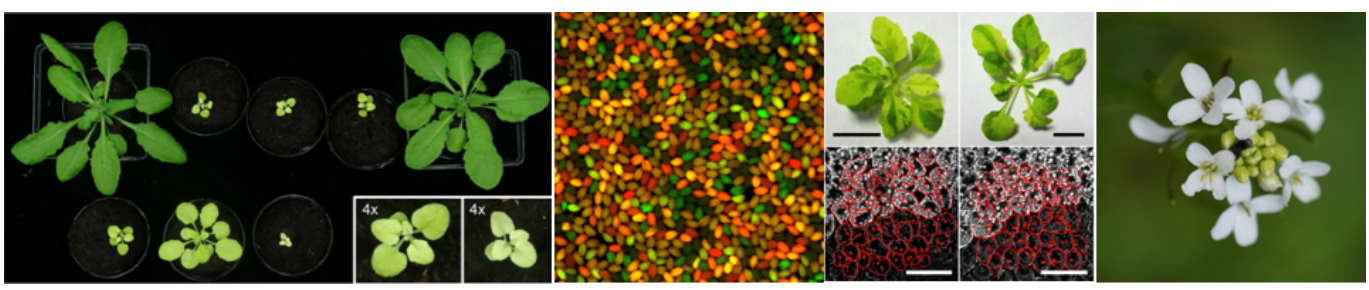
ADAM MICKIEWICZ UNIVERSITY

Two research scholarships available ‘Crossover recombination in Arabidopsis’

Two scholarships of 2500 PLN (net) are available in the Laboratory of Genome Biology led by Dr Piotr Ziolkowski at the Adam Mickiewicz University, Poznan, Poland. Scholarships will be awarded as a part of the project OPUS-LAP # UMO-2020/39/I/NZ2/02464 for a period of one and a half years (from 1.10.2023 to 31.03.2025) with the possibility of extension.

Meiosis is a specific type of cell division that, by reducing the number of chromosomes, produces gametes and enables sexual reproduction. At the heart of meiosis is crossover recombination, which allows the genetic information of both parents to be shuffled. Our lab studies the factors and pathways that control meiotic crossover formation in plants.

This project will use the natural accession of the model plant *Arabidopsis thaliana* to understand how differences in DNA sequence between parents affect crossover distribution and frequency. By applying genome editing to these accessions, we will introduce mutations in selected genes related to crossover formation. Next, we will use genome-wide sequencing analyzes to investigate the crossover pattern in different hybrids. We will also study the activity of recombination hotspots using our recently developed technique of high-resolution crossover mapping, which is based on recombinant molecule sorting and Illumina-based sequencing.



The successful candidates will have master’s degree in biotechnology, biology or related field and a solid knowledge in molecular biology and genetics. Candidates with a good background and hand-on experience on Arabidopsis molecular genetics and bioinformatics skills are encouraged to apply. The project would significantly benefit from applying Arabidopsis meiotic cytology, therefore this expertise is considered an advantage.

We offer:

- Supportive and stimulating environment in an international, friendly and well-equipped research group
- Access to newly developed methodology and cutting-edge technologies in plant genetics and molecular biology
- A chance to develop new skills in research, paper writing and grant application

These scholarships cover tasks that are part of a collaborative project funded by the NCN (Polish National Science Centre) together with Dr Charlie Underwood, Max Planck Institute for Plant Breeding Research, Cologne funded by DFG (German Research Foundation). The full regulations for granting the scholarship can be found at the link: https://tinyurl.com/2bj9yvpk

Please submit the following documents with your application:

- CV which gives an overview of the academic/education history
- Letter of motivation
- Names and contact information of at least two academic referees

Application deadline: **20.09.2023**
For further details contact us by email:
Dr Piotr A. Ziolkowski, tel. +48 61 829 59 66, pzio@amu.edu.pl

National Science Centre Poland

For more information on the group visit our website @ dgb.amu.edu.pl

Please include in your application the Information Clause (see next page)

INFORMATION CLAUSE

In accordance with the Regulation of the European Parliament and of the Council (EU) 2016/679 of April 27, 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (Data Protection Directive), Adam Mickiewicz University in Poznan informs:

1. the Administrator of your personal data is Adam Mickiewicz University in Poznan with its seat at 1 Wieniawskiego, 61 - 712 Poznan;
2. the Administrator has appointed a Data Protection Supervisor (pol. Inspector Danych Osobowych) supervising the correctness of personal data processing, who can be contacted via e-mail address: iod@amu.edu.pl;
3. your personal data will be processed in order to: carry out the recruitment process and select a scholarship recipient;
4. the data you provide will be processed on the basis of your consent to the processing of personal data;
5. the data will not be made available to external entities except to entities authorized by law;
6. the data will be stored for a period of 6 months after the end of the recruitment;
7. you have the right to access the content of your data and, subject to the law, the right to rectify, delete, limit processing, the right to object, the right to withdraw consent at any time;
8. you have the right to lodge a complaint with the President of the Office for Personal Data Protection;
9. your provision of personal data at the recruitment stage is voluntary, but if you do not provide it, you will not be able to participate in the recruitment procedure.''