

STUDENT

The Institute of Biochemistry and Biophysics of the Polish Academy of Sciences in Warsaw is looking for Student to implement the Sonata-Bis research project “Bet-hedging” in plants - multi level analysis of seed dormancy variability - from single cell to population.” funded by the National Science Center.

Keywords: seed dormancy, lncRNA, DOG1, SAR

Institution: Institute of Biochemistry and Biophysics of the Polish Academy of Sciences; Laboratory of Seed Molecular Biology

Type of post: student

Domain: molecular biology

Type of contract: scholarship

Number of job offers: 1

Remuneration: 3000 PLN

Employment period: 3 months

Date of commencement of work: Directly after recruitment (negotiable)

Name and surname of the project head: Dr hab. Szymon Świeżewski

Project title: “Bet-hedging” in plants - multi level analysis of seed dormancy variability - from single cell to population.”

Project description:

Seeds allow plants to colonize new places, by traveling long distances. But seeds can also travel in time. A special state, called seed dormancy, enables plants to postpone their germination despite favourable conditions. In agriculture, dormancy is also an important seed trait as it is responsible for example for seed germination synchrony. We’ve discovered that virus attack on mother plant can modify the dormancy of produced seeds. Plant viruses are powerful pathogens that can kill or reduce the growth of plants. Some of the plant viruses travel from the site of infection to seeds and thus propagate themselves to the next generation. Apparently, viruses also change the properties of seeds. In this proposal, we will explore the mechanism behind this effect, its specificity regarding different hosts and pathogens, and test its evolutionary potential. While this is a basic research project, studies of the virus effect on seed biology are important as virus seed transmission is a challenge to agriculture that has not been explored extensively.

Expectations towards candidates:

1. Interest in Plant Molecular Biology.
2. Ability to communicate in English.

Student will work on molecular biology in the context of virus induced seed dormancy defects. Candidates will use advanced molecular biology methods to analyze how viruses influence seed biology with a focus on *DOG1* expression regulation. If you like additional information please read our recent work on *DOG1* regulation described here (<https://swieczewskilab.pl/index.php/research>) and here (<https://swieczewskilab.pl/index.php/publications>)

List of documents:

1. CV
2. Short motivation letter

The evaluation of candidates consists of:

1. In the first stage the Selection Committee, composed of Project Manager and two independent researchers from IBB PAN) will select eligible candidates. We reserve the right to contact selected candidates.
2. In the second stage the candidates will be interviewed by the Selection Committee. The candidate will be asked to briefly present his or hers CV and outline one main scientific project, which will be then discussed in more detail with the Selection Committee. During the meeting the candidate will be free to inquire about details concerning the project.

Contact for formal and informal inquiries: team.swieczewski@gmail.com

Deadline for submitting applications: Review of applications will begin on the 4th of July and continue until the position is filled.

Applications should be sent via recruitment platform:

<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=3ad83b6cb489407d8c788d27727c6f1b>

In case of any difficulties please contact: recruitment@ibb.waw.pl

Please include the following consent to process personal data (applications not including this statement will not be processed for legal reasons):

„Wyrażam zgodę na przetwarzanie moich danych osobowych dla potrzeb niezbędnych do realizacji procesu rekrutacji zgodnie z Ustawą z dnia 29 sierpnia 1997 r. o ochronie danych osobowych (Dz. U. z 2016 r. poz. 922 z późn. zm.)”