JOB OFFER

The Institute of Biochemistry and Biophysics of the Polish Academy of Sciences in Warsaw is looking for a post to implement the OPUS research project entitled "Virus-triggered seed dormancy control." 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: post-doc

Domain: molecular biology

Type of contract: fixed-term full time employment

Number of job offers: 1

Remuneration: ~ PLN 8,900 gross

Employment period: 48 months

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

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

Project title: "Virus-triggered seed dormancy control"

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. Experience in laboratory work
3. Strong publication record
4. Ability to communicate in English

5. PhD degree (or equivalent) in one of life sciences disciplines, obtained less than 7 years before employment, subject to maternity and medical extension.
6. Candidates who would defend their PhD thesis shortly after the application deadline, maybe eligible to apply.
7. Outstanding publication record.
8. Experience in working with plants and/or in RNA/chromatin field is highly desired

Postdoc 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 pleased read our recent work on DOG1 regulation described here (https://swiezewskilab.pl/index.php/research**) and here (**https://swiezewskilab.pl/index.php/publications **)**

List of documents:

1. Documentation of the doctoral degree (doctorate cannot be older than 7 years)
2. CV, please include in the CV list of publications with a short description of your contribution/importance of each paper
3. Short motivation letter
4. Two reference letters and/or contact information to a previous scientific supervisor

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.swiezewski@gmail.com

Deadline for submitting applications: Review of applications will begin on 15.03.2024, and continue until the position is filled.

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 późń. zm.)"