The special recruitment to the Wrocław Doctoral School of Institutes of Polish Academy of Sciences at the Institute of Immunology and Experimental Therapy of the Polish Academy of Sciences in Wrocław for a PhD student and scholarship holder in the NCN research project SONATA 15

THE INSTITIUTION: Wrocław Doctoral School of Institutes of Polish Academy of Sciences

CITY: Wroclaw

POSITION: PhD student-scholarship holder in the NCN research project

SCIENTIFIC DYSCYPLINE: biological sciences

NOTICE DATE: 27.07.2020

THE DEADLINE FOR APPLICATIONS: 28.08.2020
THE OUTCOME OF THE RECRUITMENT: 11.09.2020
LINK TO WSD IPAN WEBSITE: http://wsdipan.intibs.pl
LINK TO THE IITD PAN WEBSITE: www.iitd.pan.wroc.pl

KEYWORDS: pregnancy, tolerance, miscarriage, IL-35, polymorphisms, regulatory B and T cells, flow cytometry

The Wrocław Doctoral School of Institutes of Polish Academy of Sciences announces special recruitment for a PhD student and scholarship holder in a research project entitled "Significance of IL-35 expression and its polymorphisms in pregnancy and the miscarriage risk", financed by the National Science Center (grant "SONATA 15" No. 2019/35/D/NZ5/02718) in the Laboratory of Reproductive Immunology at the Institute of Immunology and Experimental Therapy Polish Academy of Sciences in Wrocław.

We offer work in a dynamic and friendly team dealing with research in the field of reproductive immunology.

I. Project description

Research and doctoral dissertation will be carried out as part of the research project: "Significance of IL-35 expression and its polymorphisms in pregnancy and the miscarriage risk "financed by the National Science Center grant "SONATA 15" No. 2019/35/D/NZ5/02718.

The main objective of this project is to evaluate the association between the expression of IL-35 and its polymorphisms and the risk of miscarriage. The research hypothesis assumes that in women who have had a miscarriage, there is a change in the expression of IL-35, which may be crucial for maintaining pregnancy. Because cytokine expression may be influenced by polymorphism in cytokine genes, polymorphisms localized in genes encoding

cytokines may be potential factors associated with the risk of miscarriage. The research hypothesis assumes that IL-35 administration in abortion-prone female mice, with impaired ability to induce immunological tolerance to developing pregnancy, will increase the proportion of regulatory cells and decrease the Th17 cell population, thereby limiting the fetal resorption rate. In the proposed project, we also want to broaden the knowledge about different populations of regulatory cells (Breg and Treg) during pregnancy and indicate subpopulations responsible for its maintenance.

The proposed experiments are designed to broaden and improve knowledge about determinants of successful of pregnancy. These studies will allow us to answer the question whether IL-35 affects the proportion of regulatory (Breg and Treg) and Th17 cells and determines the success of pregnancy, and whether IL-35 can be a prospective therapeutic tool, especially in immunologically mediated failure of pregnancy. Moreover, linking IL-35 polymorphisms with the risk of miscarriage may be helpful in the diagnosis and possible therapy of future mothers. The results of this project may be helpful in developing programs to improve animal reproduction performance, and to indicate the directions of therapeutic intervention at the systemic level in case of pregnancy failure in humans.

II. Requirements:

- Only a person who does not have a doctoral degree and who is not a doctoral school participant may enter the competition;
- Master's degree in biotechnology, biology or related fields,
- Scientific interests in the field of reproductive immunology
- Knowledge and experience in experimental and laboratory work (supported by bachelor and master research topics, internships in research institutions) in the field of flow cytometry methods, polymorphism studies, ELISA
- Minimum one year of experience in working with laboratory animals (completion of training in the performance of procedures certified with an appropriate certificate),
- Good written and oral communication in English
- Enthusiasm, motivation for scientific work, independence, ability to work in a team, creativity

III. Legal basis for recruitment

Recruitment is carried out in accordance with:

- the Act of 20 July2018 (Law on Higher Education and Science),
- Recruitment Rules for the Wrocław Doctoral School of Institutes of Polish Academy of Sciences,
- Regulations for granting funds in research projects financed from the National Science Center funds, which is attached to the resolution of the Council of the National Science Center No. 49/2020 of April 29, 2020 regarding the amendment to the Regulations for granting funds for the implementation of tasks financed by the National Science Center in research projects.

IV. Criteria and evaluation method of Candidates:

The detailed criteria and method of assessing candidates are described in the Regulations for granting funds for the implementation of tasks financed by the National Science Center in the field of research projects, adopted by the Resolution of the Council of the National Science Center No. 49/2020 of April 29, 2020, and the Regulations of the Wrocław Doctoral School of the Institutes of the Polish Academy of Sciences.

V. Duties and obligations:

- Receiving and securing material for research,
- Study of polymorphisms, cytometric analysis, ELISA,
- Participation in in vivo experiments,
- Data analysis, preparation of scientific reports and publications,
- Cooperation with other researchers in the group, purchasing equipment and reagents, participation in scientific conferences,
- Implementation of tasks resulting from the duties of a doctoral student at the Wroclaw Doctoral School IPAN.

VI. Scholarship

Upon obtaining doctoral status, the candidate will receive a doctoral scholarship, the amount of which is regulated by Art. 209 paragraph 1 of the Act of 20 July 2018 (Journal of Laws of 2018, item 1668, as amended), where the PhD student will be covered by the costs of social insurance, referred to in Art.6 clause 1 point 7b of the Act of 13 October 1998 on the social insurance system (Journal of Laws of 2019, item 300, 303 and 730).

The approximate **doctoral scholarship amounts** of according to Art. 209 paragraph 1 of the Act of 20 July 2018 (Journal of Laws of 2018, item 1668, as amended):

- a) PLN 2,371.70 gross monthly to the month of mid-term evaluation of the PhD student in the Doctoral School
- b) PLN 3,653.70 gross monthly after the month of mid-term evaluation of the PhD student in the Doctoral School

If during the recruitment the candidate also meets the requirements for granting **scientific scholarships**, specified in the Regulations on the award of scholarships in research projects financed from the National Science Center funds on March 14, 2019, the current consolidated text of which is attached to the resolution of the Council of the National Science Center No. 25/2019., will receive an additional financial benefit in the form of an **NCN scholarship for 10 months duration of the project**, in the amounts of 377,40 zł per month.

The scientific scholarship will be paid on the basis of a contract and the above-mentioned Regulations for the granting of scholarships.

VII. Application

Applications for admission to the School must be submitted by 28.08.2020 before 3:00 pm:

- in person at the School premises (at Okólna Street 2 in Wrocław) from 9:00 a.m. to 3:00 p.m., or
- by e-mail to wsdipan@intibs.pl (with the note: recruitment AS), the original documents should be however delivered before the beginning of the education.

For further information please contact Anna Sławek, PhD (e-mail: anna.slawek@hirszfeld.pl, phone: +48 713709990).

VIII. Required documents:

- a completed integrated form downloaded from the WSD IPAN website containing: application for admission to the School, personal questionnaire and a statement that if admitted to WSD IPAN it will be the only doctoral school in which the candidate will be educated;
- a curriculum vitae containing a list of scientific publications, scholarships and awards, a list of conferences in which the Candidate participated together with the titles and authors of the speeches;
- a cover letter containing a brief description of scientific interests and achievements as well as the justification for the intention to undertake education in a doctoral school;
- a copy of the diploma confirming the completion of studies or a certificate of obtaining the master's degree, or a certificate of the prescribed period of defense;
- a copy of the entire index of first and second degree studies (or uniform master's studies), or a diploma supplement with grades from entire studies, or a student grade card from all years of studies confirmed by the dean's office,
- English language proficiency certificate at B2 level or higher (does not apply to candidates who have passed the final exam at this level during their studies),
- one or more letters of recommendation.

IX. Information clause for recruitment process:

Based on Article. 13 of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 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 (General Data Protection Regulation) (Official Journal of the EU L 119 of 04/05/2016, p. 1), hereinafter "GDPR", I would like to inform you that:

- The administrator of your personal data is the Ludwik Hirszfeld Institute of Immunology and Experimental Therapy of the Polish Academy of Sciences in Wrocław, ul. Rudolfa Weigla 12, 53-114 Wrocław,
- The administrator of personal data can be contacted by post to the address provided in point 1 above, or by phone at 71 3709940, and the data protection officer appointed by him can be contacted in all matters regarding data processing via the email account: iod@hirszfeld.pl or by post to the office address,
- Personal data will be processed in order to implement the administrator's tasks related to recruitment for the research project entitled "Insulin metallacarborane conjugates: A new strategy to enhance the biological efficacy of peptide drugs" implemented at the request of the National Science Center (grant "PRELUDIUM BIS-1" No. 2019/35/O/NZ7 / 03764) and to the Wrocław Doctoral School of the Polish Academy of Sciences Institutes, including your

personal data will be processed on the basis of the Act of 20 July 2018 Law on Higher Education and Science (art.6 point 1 c RODO), the legitimate interest of the Administrator related to the implementation of the research project (art. 6 point 1 f of the GDPR) and in connection with their necessity to conclude the NCN scholarship agreement (Article 6 point 1 b of the GDPR),

- Providing your personal data is voluntary, but necessary to achieve the above-mentioned purposes,
- Personal data collected in the current recruitment process will be stored for the recruitment period,
- The person whose data is processed has the right to: access to personal data, request correction of personal data, request removal of personal data, request restriction of personal data processing, object to data processing due to a special situation,
- The person whose data is processed also has the right to lodge a complaint to the President of the Office for Personal Data Protection, in the event that the Administrator is found to have violated the provisions on the protection of personal data,
- As a result of processing, no decisions will be made in an automated manner (without human intervention), including those not based on profiling,
- Personal data may be disclosed to our authorized employees, processors, i.e. those carrying out activities on our behalf (e.g. IT services, accounting), and the personal data of the candidate selected in the competition may then be disclosed to third parties authorized by law.