

POLISH ACADEMY OF SCIENCES

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Director of the Institute of Dendrology, Polish Academy of Sciences, invites applicants for the position of Post-doc at the Department of Ecology

I. REQUIRMENTS:

- 1. Doctoral degree in the field of biological or closely related sciences*;
- 2. Knowledge about microbial community, plant physiology, biochemistry and molecular biology;
- 3. Knowledge, expertise, and techniques in using NGS method to study microorganism community; additional advantage will be an experience in application of other molecular biology techniques and bioinformatics;
- 4. Scientific output including publications indexed by Clarivate Analytics;
- 5. Proficiency in English (speaking and writing);
- 6. Skills in data analyses using statistical software (preferably R);
- 7. Favorably: experience with specialized R packages for vegetation analyses (vegan, biodiversityR lub phylloseq);
- 8. Readiness to participate in scientific expeditions and training, and ability to conduct field investigations;
- 9. An additional advantage will be an internship abroad or and internship in a research unit in Poland;
- 10. High motivation for further development and ability to work in a team;
- 11. Aptitude for scientific research;
- 12. Very good work organization.

II. POSSIBILITIES

- 1. Salary 120,000 PLN annually;
- 2. Possibility to cooperate with research centers in Poland;
- 3. Scientific development;
- 4. Strengthening the scientific portfolio.

* According to the criteria of the National Science Centre (Kraków, Poland), the candidates can be accepted only if they were awarded the PhD degree up to 7 years before employment in the project. This period excludes intervals due to maternity leave, adoption leave, paternity leave, parental leave, or parental care leave, granted according to the principles set out in the Labor Code, or else associated with receiving sickness benefits or disability benefits because of temporary inability to work, including those

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caused by a disease requiring therapeutic rehabilitation. In the case of women, the above-mentioned 7-year period can be extended with 18 months for each born or adopted child. Women can choose more favorable ways to document the intervals in their scientific career.

III. PROJECT DESCRIPTION

The recruitment for 31 months concerns OPUS 18 project no. 2019/35/B/NZ8/01361, entitled "How the origin of *Pinus sylvestris* affects belowground processes?", funded by the National Science Centre.

Principal Investigator: dr hab. Joanna Mucha, ID PAS Professor

Key words: fungal and bacterial community, functional root traits, climate

Project topics:

Symbiotic interactions between tree roots, ectomycorrhizal fungi, and other soil microorganism communities play a critical role in optimizing the acquisition of nutrients under diverse environmental conditions. Although abiotic conditions can directly affect microbial communities, increases in carbon allocation and functional plant root traits (e.g. root cortical thickness fosters the establishment of a symbiotic relationship with ectomycorrhizal fungi) can also shape the community of belowground microorganisms. Root phenotypic traits such as root length, biomass, density, volume, and surface area, alter soil properties that may selectively filter different microbial communities. Increases in the biomass of absorptive roots in northern populations of trees allow for greater secretion of nutrients and metabolites, which can impact composition of the soil microorganism community. Linking root phenotypic traits with the soil microorganism community composition may enhance our understanding of the role of belowground processes in exacerbating or reducing the negative impact of adverse environmental changes on plant species. Given that roots are the primary sink organ for photosynthetically fixed carbon and that up to 30% of the carbon in ectomycorrhizal interactions is transferred underground to fungal cells, increased biomass of metabolically active absorptive roots should result in an increase in the flux of carbon compounds. This could be transferred to mycorrhizal roots and/or stimulate the growth and activity of other soil organisms, which in turn could influence the biogeochemical cycles of C, N, and P. Unfortunately, little is known about the impact of the origin (geographical location) of a tree species on the coordination or tradeoffs between root morphology and root exudation, and the composition of soil microbiota.

Tasks for the Post-doc: The selected Candidate will be involved in the following tasks in the project: 1) analysis of response of soil microorganism community to traits of *P. sylvestris* population of different origin; 2) analysis of metabolome and proteome of root and soil; 3) analysis of root characteristic of *P. sylvestris* population.

IV. CONDITIONS OF EMPLOYMENT

Fulltime employment contract. Employment period: 31 months.

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V. LIST OF REQUIRED DOCUMENTS

- 1. Application for employment, addressed to the Director of the Institute of Dendrology, Polish Academy of Sciences;
- 2. Personal data questionnaire valid at the Institute;
- 3. Tertiary education diploma or its confirmed copy;
- 4. Description of previous scientific, teaching, and organizational activity of the job applicant, with documentation confirming his/her achievements.

The documents should be submitted utill 31st February 2021 to the Department of Scientific Information, Institute of Dendrology, Polish Academy of Sciences (Mrs. Magdalena Łukowiak, MSc lukowiak@man.poznan.pl) with a note: application for the position of Post-doc at the Department of Ecology.

Recruitment

The recruitment procedure will take place in two stages:

- 1. First stage the committee will evaluate the submitted documents. On this basis, a group of candidates will be selected to participate in the second stage of recruitment.
- 2. Second stage interviews with the recruitment committee. The selected candidates will be informed by email about the date and time of the interview.

The final decision will be published utill 16th March 2021

The Institute of Dendrology Polish, Academy of Sciences, does not provide any flat for the Candidate.

Additional information may be provided by the Principal Investigator: dr hab. Joanna Mucha, ID PAS Professor, email: jmucha@man.poznan.pl

Kórnik, 13th January 2021

Job applicants who are interested in starting to work at the Institute of Dendrology, Polish Academy of Sciences, Kórnik, are asked to submit also the following statement:

"I hereby declare that I agree to processing of my personal data during the process of recruitment for the position of, conducted by the Institute of Dendrology, Polish Academy of Sciences, Kórnik (62-035, ul. Parkowa 5).

In compliance with article 13 of the General Data Protection Regulation (EU) 2016/679 of 27 April 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing the Directive 95/46/EC (general directive on data protection), hereafter referred to also as "GDPR", the Institute of Dendrology, Polish Academy of Sciences, informs that:

The personal data included in the job application (and the documents attached to it) will be administered by the Institute of Dendrology, Polish Academy of Sciences, address: 62-035 Kórnik, Parkowa 5 (hereafter referred to also as "Administrator").

The Administrator can be contacted via an e-mail message sent to iod.idpan@man.poznan.pl or a letter sent to the address: Institute of Dendrology, Polish Academy of Sciences, 62-035 Kórnik, Parkowa 5, marked as "Dane osobowe" (= "Personal data").

Your personal data will be processed by the Administrator to conduct the process of recruitment for the position indicated in the recruitment announcement.

The legal basis for personal data processing is the consent (article 6, paragraph 1(a) of GDPR). At any time you have a right to withdraw consent, with no effect on the compliance with the right to process, which was implemented on the basis of the consent before its withdrawal. If the consent is withdrawn, the data covered by the consent, processed on its basis, will be removed immediately.

The consent can be withdrawn via an e-mail message sent to iod.idpan@man.poznan.pl or a letter sent to the address: Institute of Dendrology, Polish Academy of Sciences, 62-035 Kórnik, Parkowa 5, marked as "Dane osobowe" (= "Personal data").

The personal data will be processed until the end of the recruitment process and will be removed within 3 months after the end of the recruitment.

The predicted categories of recipients of the data are: providers of job announcement publication services, providers of systems for recruitment management, providers of IT services, such as providers of information systems.

Providing of personal information is voluntary but necessary for participation in the recruitment process.

You have a right to ask the Administrator for access to your personal data, including also asking for their copy, a right to correct them, remove or limit their processing, and a right to move the data (for processing of which a consent was given). You also have a right to lodge a complaint with the supervisory authorities (President of the Personal Data Protection Office in Poland, i.e. Urząd Ochrony Danych Osobowych).

