

On **15 March 2022** the Polish National Science Center announced the POLONEZ BIS 2 Postdoctoral Fellowship for research projects lasting 24 months and pursued by scientists coming to Poland from abroad. The aim of the programme is to develop the career of scientists by supporting their international mobility and financing ambitious research projects carried out in the most renowned Polish research institutions. The call for applications is open until **15 June 2022**.

The competition is aimed at persons who:

- hold a PhD degree or have at least 4 years of documented full-time research experience,
- have not resided, studied or been employed in Poland for more than 12 months during the 3 years preceding the call launch (scientists who are currently residing in Poland may also apply if their stay does not exceed 12 months),
- have at least one peer-reviewed publication arleady published or accepted for publication.

The Institute of Dendrology, Polish Academy of Sciences, in Kórnik is a scientific unit that carries out interdisciplinary research on the biology of woody plants at all levels of their organization and is keen to cooperate with foreign scientists. The Institute conducts research in two scientific disciplines: biological sciences and forest sciences. Research directions pursued at the Institute include: biogeography and systematics, physiology and ecophysiology, molecular biology, seed biology, biochemistry, genetics, proteomics, ecology, bioindication, phytoremediation, mycology and mycorrhiza, selection, breeding, and propagation of woody plants, entomology, and biology of invasive species.

The Institute of Dendrology PAS is one of the most renowned units in Poland conducting research on woody plants. Research projects can be implemented in five different scientific departments:

- Biogeography and Systematics,
- Developmental Biology,
- Ecology,
- Genetics and Environmental Interactions,
- Symbiotic Relationships,

as well as in the Arboretum, Experimental Forest, and Herbarium.

Our scientific laboratories carry out research on a broad range of topics:

The **Department of Biogeography and Systematics** conducts research on systematics and geography of trees and shrubs of Europe and the Mediterranean region; population genetics of woody plants, molecular taxonomy of trees and shrubs; phytogeography of woody plant species; micromorphology of aboveground plant parts; application of molecular methods to the study of biogeography and ecology of non-pathogenic alien fungi; modeling of geographical ranges of forest trees and shrubs.

Head of Department: Prof. Marcin Pietras (mpietras@man.poznan.pl)

The **Department of Developmental Biology** conducts research on biological mechanisms of dormancy breaking, seed germination and seedling growth and development; micropropagation of trees and shrubs by tissue cultures and somatic embryogenesis; long-term storage of gene resources of woody species; mechanisms of seed tolerance to desiccation; physiological and biochemical bases of seed longevity (antioxidants, reactive oxygen species, markers of seed aging).

Head of Department: Prof. Ewelina Ratajczak (eratajcz@man.poznan.pl)

The **Department of Ecology** conducts research on global climate change and functioning of forest ecosystems; ecological and ecophysiological mechanisms of woody plant response to abiotic, biotic and anthropogenic factors; environmental determinants of production and allocation of biomass and nutrients in forest plants; carbon retention in forest ecosystems; structure and function of plant organs and functioning of forest ecosystems in different climatic zones (including functional ecology); modeling of natural processes in forest ecosystems (decomposition, primary production, dispersal), and studying the causes and consequences of biological invasions of trees and shrubs.

Head of Department: Prof. Andrzej M. Jagodziński (amj@man.poznan.pl)

The **Department of Genetics and Environmental Interactions** focuses on population genetics of woody species; studies of genetic bases of phenotypic variation, adaptation and speciation; use of genetic markers in breeding and selection of forest trees; quantitative genetics and selection breeding of forest trees; development of new genomic resources; studies of mechanisms regulating seed dormancy and germination; studies of the genetic basis of sex determination in dioecious plants; analysis of the effects of environmental conditions and genetic factors on qualitative and quantitative reproductive characteristics of woody plants; studies of the transcriptional activity of woody plants; analysis of the molecular basis of mycorrhizal interactions; mechanisms of tolerance of woody plants to environmental stresses and industrial pollution.

Head of Department: Prof. Andrzej Lewandowski (alew@man.poznan.pl)

The **Department of Symbiotic Relationships** studies the diversity of ectomycorrhizal fungal communities in forest ecosystems; the influence of establishing protected areas on the diversity of fungi from different trophic groups; factors shaping ectomycorrhizal fungal communities in forest nurseries; the influence of tree genotype and environmental conditions on the communities and biomass of mycorrhizal fungi and other soil microorganisms; effects of global climate change on tree symbiotic relationships; interactions between alien and invasive woody species and fungi in native forest ecosystems; interactions of woody plants and herbivorous insects; effects of mistletoe on trees and stands; and also focuses on modeling of climatic niches of fungi and associated woody plants.

Head of Department: Prof. Tomasz Leski (tleski@man.poznan.pl)

The Institute of Dendrology, Polish Academy of Sciences, will provide substantive and technical support during project implementation, as well as access to modern research and laboratory infrastructure. The Institute employs highly qualified scientific and engineering staff who are open to forming research teams, consisting of both specialists employed at the Institute and outside the Institute.

If you are interested in applying, please contact the Department of Scientific Information (din.idpan@man.poznan.pl) at the Institute of Dendrology, Polish Academy of Sciences, in Kórnik, in order to get assistance with the preparation of your application.