Post-Doctoral Position, Remote Sensing and GIS Expert in Bark Beetle Ecology, Prague

Background

Czech University of Life Sciences Prague (CULS), Faculty of Forestry and Wood Sciences (FFWS), is looking for a researcher to join an excellent research team of the international project EXTEMIT-K* (https://extemit.fld.czu.cz/en/), co-financed by the Operational Programme Research, Development and Education. The project aims to build a 17-member team, the core of an excellent team, to become a part of the R&D center after the end of the project. The team is focused on solving current and future climate change driven challenges faced by Czech forest ecosystems in order to find scientific solutions to protect forests as major carbon sinks. The project addresses bark beetle disturbances and related abiotic stress factors, mainly climatic fluctuations, at three ecological scales: Gene (G), Tree (T), and Landscape (L) levels.

Remote sensing and landscape scale modelling are becoming an integral part of forest insect ecology and forest management studies. The use of multispectral and hyperspectral sensors has proved to be an efficient tool for understanding the relationships between tree physiology and bark beetle population dynamics.

An open Post-Doctoral position at the project level L ‘Remote sensing and bark beetle ecology’ implies that a successful candidate will work independently with hyperspectral, LIDAR, thermal data, as well as with data obtained using UAV, airplane and satellite platforms. The work will be focused on the analyses of various remote sensing data to study the mechanisms of bark beetle attacks on coniferous stands.

Qualifications for the position
1. Completed Ph.D. education; M.S. degree in forestry and GIS is welcomed; 2. Research experience in GIS and remote sensing. Experience in bark beetle ecology and forest health research is welcomed; 3. Ability to conduct field work in forest conditions independently; 4. Driving license; 5. Experience in working with GIS and remote sensing software. R and Python programming skills are an advantage; 6. Evidence of international publication activity in high-impact journals during the two preceding years; 7. Excellent English communication and writing skills at a native speaker level.

Key responsibilities
- Participates in activities of the project level L;
- Carries out R&D activities within the assigned tasks and is encouraged to participate in further fundraising with senior scientists;
- Cooperates with and supervises students of the research center in the field of his/her expertise;
- Publishes the results of his/her work in high-rated international journals;
- Reports to the level L coordinator.

Research tasks
1) Modeling of bark beetle attacks on a landscape scale
2) Conducting GIS and remotely sensed data analyses
We offer

- Working on a temporary contract (one-year contract), with extension options. Position is currently open and the work contract should start as soon as possible.
- Full-time employment
- Salary: 1 300 – 2 000 €, depending on experience (advantage is low living expenses in Prague)
- Job location: Kamýcká 129, 16500 Prague Suchdol, Czech Rep. (EU)
- Participation in building up scientific excellence at the Faculty of Forestry and Wood Sciences CULS in Prague, Czech Republic
- Work in a dynamic, international, cooperative and highly professional team
- English-speaking working environment

The following documents must be submitted along with the application:

- Curriculum Vitae
- Letter of motivation
- Publication list

For more information please contact the leader of the Landscape project level Rastislav Jakuš: jakus@fld.czu.cz