Deadline 20 October 2020 (midnight CEST).

Postdoc/Research Assistant in Ecological Modeling
IIASA ECOSYSTEMS SERVICES AND MANAGEMENT (ESM) PROGRAM

Vacancy 20/2020 - The successful candidate will initially be involved in the projects Climate Change Mitigation from Achieving Biodiversity Targets funded by the European Climate Fund and by Quadrature foundation, and the Nature Map project, funded by the Norway International Climate and Forest Initiative.

BACKGROUND

The ESM program conducts research on ecosystem management for the provision of services related to fiber, food, water and energy, in connection to economic, societal and environmental changes. The Program is renowned for its expertise in long-term global agricultural changes and food systems, and builds its competence by means of a multi-disciplinary team where quantitative analysis plays a strong role with a wide spectrum of models; from detailed process based ecological and biophysical models to global economic models. Within its new 2021-2030 strategy, IIASA has made a strong commitment to further increase its capacity with regard to ecology and conservation. From 2021 onward, the ESM program will merge with the IIASA Water program to form a new Biodiversity and Natural Resource Management program. Within that program a new research group, the Biodiversity, Ecology and Conservation (BEC) group, led by Dr. Piero Visconti will be formed, of which the ecological modeler will be part of.

JOB DETAILS

The ideal candidate will have expertise in at least one of the following areas:

- Statistical modeling applied to ecology, e.g. species distribution or occupancy modeling. Knowledge of Bayesian Hierarchical Modeling would be beneficial.
- Optimization methods e.g. use of integer programming or global search algorithms to solve multi-objective problems in R environment. Experience of applying them to conservation problems would be beneficial.

The successful candidate will work within the ESM program and the BEC research group, and in close collaboration with Dr. Martin Jung and Dr. Piero Visconti. Depending on the interests of the selected individual, they will work either on developing a new class of hierarchical and integrated species distribution models or applying spatial prioritization methods for integrated land-use planning at national scales. While we are looking for
REQUIREMENTS

- Advanced degree in a related subject and/or experience in advanced statistical modeling or optimization methods
- Good understanding of current applied ecology and conservation research
- Familiarity with at least one scientific coding language (R, Python, C++, Julia). Experience in parallel computing and version control (e.g. Git) would be advantageous
- Excellent organizational skills, pro-active and results-oriented plus the capacity to deliver on allocated tasks and respond in a timely manner to deadlines
- Ability to work independently and as part of an international team distributed across different institutions and time-zones
- Ability to write scientific articles and contribute to science-policy reports
- Excellent communication skills (both written and verbal) in English.

MAIN TASKS AND RESPONSIBILITIES

- Develop workflows for integrated conservation planning, statistical analyses and projections of species distribution as well as general data preparation with regards to project needs
- Lead the dissemination of project results via high-quality journal publications and conference presentations
- Contribute to the organization of project-related workshops and/or webinars
- Support all project partners in the drafting of reports, proposals and other scientific outputs as need arises
- In line with the team spirit that prevails at IIASA, the incumbent may occasionally work on other tasks assigned by their superiors, that might not be directly related to this appointment but where the post holder has relevant experience and skills, and/or a shortage of immediate personnel capabilities requires such.

APPOINTMENT TERMS

This position is classified as "Scientific". The successful candidate will be offered a full-time (40 hours per week) position, and should be available to take up the appointment on, or as soon as possible after 1 November 2020. An initial contract of one year with the possibility for extension thereafter will be offered.

Duties will be carried out at the IIASA premises in Laxenburg, near Vienna in Austria.

IIASA is committed to a working environment that promotes equality, diversity, tolerance and inclusion within its workforce. This is reflected in our Core Values.

We encourage qualified candidates from all religious, ethnic and social backgrounds to apply. In the case that candidates are equally qualified, preference will be given to applicants who are nationals of IIASA member countries.

We offer a competitive salary based on qualifications and experience which is exempt from taxation in the host country of Austria (subject to the principle of income aggregation).

Details about further attractive benefits here.
About IIASA

The International Institute for Applied Systems Analysis (IIASA) is an international scientific institute that conducts research into the critical issues of global environmental, economic, technological, and social change that we face in the twenty-first century. Our findings provide valuable options to policymakers to shape the future of our changing world. IIASA is independent and funded by prestigious research funding agencies in Africa, the Americas, Asia, and Europe. www.iiasa.ac.at

Further Information

For further information about this opportunity please contact:

Dr. Piero Visconti or Dr. Martin Jung.

For general inquiries about working at IIASA:

Name: Alia Harrison
Function: Recruitment Coordinator
Email: harrison@iiasa.ac.at

Applications

To apply for this opportunity, you will need to provide the following documents in English:

- A cover letter outlining your motivation for and fit to the position
- Your Curriculum Vitae or Resume
- The names, addresses (including e-mail), and telephone numbers of two work-related reference givers

Review of applications and shortlisting will begin immediately, and candidates will be invited to interview as soon as they are shortlisted.

Deadline for receipt of applications: 20 October 2020 midnight CEST.

APPLY