

Post-doctoral position (22 months) in pest risk modelling at
[INRA](#) (French National Institute for Agricultural Research)
[URZF](#) (Forest Zoology Research Unit, Orléans, France)

Context:

The post-doctoral researcher will participate to the European project HOMED (HOListic Management of Emerging pests and Disease; 2018-2022; <http://homed-project.eu/>). The goal of this project is to develop a full panel of scientific knowledge and practical solutions for the management – from assessment to control – of emerging native and non-native pests and pathogens threatening European forests. HOMED is composed of 23 partners from 15 countries throughout the world.

Description of the work:

The post-doctoral researcher will be in charge of: (i) developing generic models (likely statistical semi-mechanistic models) to describe the emergence (spread or outbreak) of forest pests and pathogens, and (ii) assessing the costs and benefits of risk mitigation. Emergence of forest pests and pathogens will be considered due to climate change, environmental changes and management practices. The postdoc will make a review and meta-analysis of published (and unpublished) data with some interactions with partners of HOMED, identify key-drivers for species emergence, design the conceptual model framework and apply the model(s) to a set of selected case studies. She/he will work in close interaction with Wageningen University to apply a generic framework for economic assessment to case studies. Finally, she/he is expected to publish these studies in international scientific journals. The postdoc will be supervised by Dr. Christelle Robinet at INRA URZF (Orléans, France) and will also work in close collaboration with Dr. Bob Douma, Dr. Wopke van der Werf, and Dr. Monique Mourits from Wageningen University (Netherlands).

Description of the position:

Duration: 22 months

Dates: from October 2019 to July 2021 (specify your availability in cover letter if not this one)

Location: INRA URZF, 2163 Avenue de le Pomme de Pin, Ardon, 45075 Orléans, France

Conditions to apply:

- Speak and write fluently in English ; French spoken will be appreciated
- PhD thesis in mathematical and statistical modelling or quantitative ecology
- Experience needed in modelling population dynamics and programming (R programming language), and an experience in GIS would be advantageous.
- Strong interest in forest ecology, forest entomology and/or forest pathology
- Willingness to travel (e.g. some meetings could take place at Wageningen)

Application:

Candidates should prepare:

- 1) a Curriculum Vitae, including the complete list of publications and communications;
- 2) a cover letter explaining your motivation and experience, providing a list of 2-3 references with email contact information, and the date at which you are available for this position if different from the expected one.
- 3) PDF of your PhD dissertation (or link to download it) and PDFs of 1-3 representative publications. If your PhD dissertation is not available yet (PhD defense is coming), provide a summary of the PhD thesis and specify the date of defense.

Send these files to Christelle Robinet (christelle.robinet@inra.fr) **before 15 June 2019** the latest.

A first selection will be done based on these documents and then pre-selected candidates will be interviewed.

