



## Permanent research position: Restoration ecology and ecological connectivity Lyon, France

BAP/ research area: Ecology and Hydrology

### Position open to candidates with a Phd or equivalence

NB: in some cases and under certain conditions, applicants may apply for recognition of equivalence of diplomas that are not in the list of qualifications required for this examination (diplomas issued or recognized by a Member State of the European Union or the States Parties to the agreement of the European Economic Area, or the professional qualification obtained).

### Description

Irstea (formerly Cemagref) is the National Research Institute of Science and Technology for Environment and Agriculture. It focuses on three main social challenges: Sustainable management of land and water, natural hazards and environmental quality. Within the framework of French and European research, the Institute carries out research in support of public policies and in partnership with industry. It employs 1,600 people across nine regional centres in France.

The DYNAM team (<http://dynam.irstea.fr/>) develops, tests and transfers tools for predicting the ecological consequences of the management and the restoration of stream physical habitats (hydrology, hydraulics, temperature, substrate, flow intermittence). Stream organisms are organized in meta-populations and meta-communities that are influenced by dispersal processes, the hydrological regime, the organization of physical habitats in the hydrographic network, and the modifications of these characteristics (e.g. connectivity losses, dams and weirs, drying, clogging). Most models of population and community responses to their habitat have been developed at the stream reach scale. Models should be extended at the larger spatial scale of physical processes and biological dispersal, in order to predict the effects of changes in longitudinal, lateral, vertical and temporal connectivity.

### Abilities

The applicant will organize and contribute to the scientific support of restoration projects related to longitudinal, lateral and vertical connectivity in riverine networks in a meta-ecosystem perspective, with a strong physical component (hydrology, hydraulic, substrate, temperature, flow intermittence). The applicant will test scientific hypotheses related to the dynamic responses of meta-populations and meta-communities to physical restoration of rivers and improve predictive tools and models for managing ecological connectivity using existing long-term datasets and leading new research both in the lab and in field. Although being experienced with one taxonomic group (invertebrates, fish or other groups), the applicant will integrate the responses of multiple taxa in collaboration with local, regional and national colleagues. The applicant will contribute to the organisation, planning and assessment of research in the team and will interact with colleagues from other IRSTEA teams (hydrologists, ecologists, ecotoxicologists, microbiologists, biogeochemists, and chemists), and colleagues from regional, academics (eg. University of Lyon, LTER ZABR) and managers (eg. Water Agency). The applicant will be dynamic and autonomous, and will have demonstrated his ability for collective work and leadership. She/he will have strong skills in ecohydrology, restoration ecology, dispersal and conservation biology.

### Contacts

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### How to apply

Application form can be obtained:

- on the website: [www.irstea.fr](http://www.irstea.fr) link "Nous rejoindre" and then link "concours externe"
- or by contacting the recruitment centre: [concours@irstea.fr](mailto:concours@irstea.fr) - +33 (0)1.40.96.60.37 ou 6091

**Full application should be submitted before 12/04/2018**

**and sent to: Irstea  
Direction des Ressources Humaines et des  
Relations Sociales – Pôle RMDC  
1 rue Pierre-Gilles de Gennes CS 10030  
F-92761 ANTONY Cedex**