







POST-DOCTORAL POSITION

Intraspecific diversity and evolutionary processes: how, when and why taking them into consideration in translocation-based programs supporting Nature-based Solutions?

- Knowlegde Hub EVOLUTION

Location: FRB – CESAB, 5, rue de l'École de Médecine, 34000 Montpellier, France

Duration: 29 months fixed term, full time

Salary: 2743 - 2974€ gross per month according to the FRB salary scale, commensurate with

experience, plus benefits (including social insurance).

Starting date: January 1st 2026

Application closing date: September 15th 2025 (12:00 PM CET)

Job description

Context and host structures

The Knowledge-Hub (KH) **EVOLUTION** is part of a large French Priority Exploratory Research Program entitled **SOLU-BIOD** (Biodiversity and Nature-based Solutions) emanating from France 2030. SOLU-BIOD is managed by the **CNRS** and **INRAE**, and structured around several programs. One of these programs is devoted to KHs (including EVOLUTION), managed by the **University of Montpellier** over the 2025-2029 period with KHs being hosted at **FRB-CESAB**. As part of the partnership with SOLU-BIOD, the post-doctoral researcher is recruited by the FRB and housed at the FRB-Cesab in Montpellier.

The Foundation for research on biodiversity (FRB) gathers public research institutions, environmental NGOs, land and genetic resources managers and the private sector. It provides a forum where science meets society in order to address the current challenges related to biodiversity research.

The Centre for Synthesis and Analysis of Biodiversity (<u>CESAB</u>) is FRB's main program and a leading research organization in Europe, with an international reputation. Its aim is to implement the innovative work of synthesis and analysis of existing data in the field of biodiversity. Advancing knowledge, developing culture and collaboration, facilitating links between scientific disciplines and with the stakeholders, are the main objectives of FRB-CESAB, which welcomes every year a large number of researchers from all continents.

Project context and topics

Nature-based Solutions (NbS) are cost-effective solutions supported by Nature, tackling different societal challenges, such as climate change, while providing environmental, social and economic benefits and helping to build resilience. Diversity within species remains little

considered in NbS approaches, therefore disregarding the evolutionary dimension of complex socio-ecosystems and their adaptive potential in response to rapid environmental changes. In order to fill this gap, a knowledge basis should be built, including all processes impacting intraspecific diversity and the evolutionary potential (InDEP) of the involved species.

In this context, the current project will focus on "translocation" broadly defined as the transfer of organisms (genes), from point A to point B, with the NbS being implemented in B. Translocation includes both non-intentional processes and all forms of assisted migration and gene flow enhancement. "Translocation" leads to series of questions with regard to NbS success, such as the type, source and fate of translocated intraspecific diversity (possibly including manipulated variation), the conditions of translocations, the impact on recipient socio-ecosystems, or how this diversity can be handled by managers.

The work will draw widely from the corpus of knowledge and methods build up in basic and applied evolutionary biology, including from the conceptual framework and procedures from conservation and restoration biology (considering or not InDEP). A general interdisciplinary approach will be developed, based on the idea of operationalizing intraspecific diversity in NbS. This means developing relevant indicators, procedures and modus operandi. The basis of the work will be a review of the literature, in order to build a systematic map and to retrieve relevant variables or indicators for a subsequent meta-analysis. This will contribute to building a general framework of the role and use of InDEP in NbS, serving to guide research priorities on a scientific basis, but also to identify new research avenues.

Modus operandi and work to be done

The work will be carried out within the framework of the EVOLUTION Knowledge Hub (KH) - a KH is a working group similar to those in scientific synthesis centers (here FRB-CESAB). EVOLUTION is made up of 15 scientists from several countries with diverse backgrounds and expertise who will work for three years on the above topics, coordinated by the post-doctoral researcher (post-doc) recruited. The post-doc will work more closely with a core group of four to five people. The entire KH will meet in person 4 to 5 times (twice a year) for 3 to 4 days at CESAB, and regular remote meetings will also be organized.

In close collaboration with the KH members, the post-doc is expected to:

- Conduct research along the axes defined above;
- ➤ Coordinate progress and work of the KH members, and organize (scientifically) the KH meetings at FRB-CESAB as well as any other (virtual) meetings required;
- Conduct resource searches (websites, existing databases, etc.) to determine the extent of available resources;
- Conduct a systematic literature review and/or meta-analysis to produce a state-of-theart analysis on translocations and an assessment of the conditions for the success or failure of these actions.

Importantly, the post-doc is also expected to:

- Develop a cross-sectoral approach so that results can be discussed and communicated to stakeholders, in particular natural area managers and decision-makers;
- Lead the dissemination of EVOLUTION results, including writing scientific articles and presenting results at international conferences.

Profil sought - Requirements (skills and experience)

We are looking for a post-doc with a solid background in evolutionary sciences and an interest (and possibly some experience) in conservation biology, as well as in data synthesis and analysis.

Essential skills:

- > Demonstrated experience with the compilation and analysis of large databases;
- Proficiency in statistical and programming tools (e.g., R or Python) for data analysis
- Good team player and ability to work independently;
- ➤ Ability to synthesize information and translate ideas and concepts to multiple audiences;
- Previous publication experience;
- Excellent writing and communication skills in English.

Preferred skills:

- Experience in conducting systematic reviews or meta-analyses in ecological and/or evolutionary sciences;
- Experience working with and coordinating interdisciplinary teams;
- Strong track-record of communication to diverse audiences;
- Knowledge of French can be an asset.

Application instructions

- A cover letter summarizing research interests and experience, particularly in relation to the topics covered by this position, and interest in the proposed post-doc;
- A curriculum vitae;
- The names and e-mail addresses of two or three referees (who can be contacted for candidates shortlisted for an interview).

Applications (one single pdf file) must be sent no later than 12:00 PM, Central European Time, **September 15**th **2025** to **Hanna Emlein** (Univ. Montpellier, hanna.emlein@umontpellier.fr).

For more information, you can contact **Frédérique Viard** (ISEM, CNRS & Univ. Montpellier, <u>frederique.viard@umontpellier.fr</u>) and **Philippe Jarne** (Cefe, CNRS, <u>philippe.jarne@cefe.cnrs.fr</u>).