

AUGUST 2017

POSITION AVAILABLE

Postdoctoral Research Fellowship

Ecological modeling, experimental ecology, physiology, molecular ecology

Closing Date : 30th September 2017

Duration: 30 Months, start date: early 2018

A postdoctoral researcher position is available with the REEFLEX project, an ANR-funded collaborative project to study energy fluxes on coral reefs. The specific goal of the project is to disentangle trophic interactions, energy and nutrient fluxes in coral reef fish communities by using data from field collections and experiments, physiological trials, tank experiments, molecular approaches and a holistic bioenergetics modeling framework. The post-doc will work mainly with Valeriano Parravicini (EPHE-CRIOBE, Perpignan, France) and Simon Brandl (Simon Fraser University, Vancouver, CA).

The post-doc will 1) work closely with a collaborative field team composed of graduate students, the PIs and other collaborators on obtaining data from various components of the project, 2) devise a holistic model to quantify shifts in energy fluxes on coral reefs due to measured changes in cryptobenthic fish communities, 3) conduct her/his own research project on a topic related to the project in collaboration with the PIs. The post-doctoral position will be based at the CRIOBE in the core laboratory on the University of Perpignan Campus, Perpignan (France). However, a substantial part of the time during the postdoctoral appointment will also be spent in Moorea (French Polynesia).

KEY REQUIREMENTS & QUALIFICATIONS

The successful candidate must hold a PhD in ecology, marine science, or a related field, demonstrate excellent quantitative skills, and have a strong background in ecological modeling, trophic dynamics, and coral reef ecology. Preference will be given to candidates with additional skills, interests, and experience in one or several of the following fields: ichthyology, experimental ecology, physiology, life-history, molecular ecology and/or stable isotope analyses. Applicants will need to be comfortable living and working in France and at a field station on a remote island in the South Pacific (Moorea, French Polynesia), but proficiency in French is not essential. The successful candidate will work within the framework of two large recently funded projects in collaboration with several other international leaders in coral reef ecology.

PROJECT CONTEXT AND OVERARCHING OBJECTIVES

Modern coral reefs are maintained by structurally-complex coral forms that sustain many small-bodied and fast-growing fish species (cryptobenthic fishes), which, in turn, may be responsible for the transfer of biomass to higher trophic levels. However, the dependence of cryptobenthic fish assemblages on the structure of the benthic habitat makes them particularly vulnerable to the effects of global changes. Future coral reefs will likely be subjected to frequent die-offs of corals; yet, the ecological consequences of this phenomenon are still largely unknown. The major goal of this project is to quantify the consequences of live coral loss for trophic dynamics on coral reefs. The post-doc will participate in the collection of data to quantify trophic roles, metabolic needs, and consumption rates of cryptobenthic fishes, and ultimately lead the construction of a detailed food-web characterizing energy flows across cryptobenthic fish communities and the potential effects of changes in live coral habitat. In addition, the post-doc is expected to devise an independent project on a related topic in collaboration with the PIs that reflects her/his interests.

HOW TO APPLY

Interested applicants should send a cover letter describing qualifications and career goals, a research statement (including a preliminary framework for an independent project), a CV, and letters of recommendation from two referees to valeriano.parravicini@gmail.com. Applicants will receive an e-mail confirming their application has been received. Questions on the position can be directed to Valeriano Parravicini (valeriano.parravicini@gmail.com) or Simon Brandl (simonjbrandl@gmail.com).

CLOSING DATE

Review of applications will begin on the 30th September 2017. However, we will continue to accept application materials until the position is filled. The start date for the position is February 2018, although an earlier start date can be possible.