



## Workshop/Course

**Eco-evolutionary approaches to understanding and predicting the response of species and ecosystems to climate change.**

Organized by

**PAUL LEADLEY & NATHALIE FRASCARIA-LACOSTE**

**REGISTRATION before JUNE 30th, 2009**

### Contact persons:

Nathalie FRASCARIA-LACOSTE & Sandrine DESSAINTS  
Ecologie, Systématique et Evolution - UMR 8079  
Université Paris-Sud/CNRS/ENGREF  
Bât. 360 - 91405 Orsay Cedex

[nathalie.frascaria@u-psud.fr](mailto:nathalie.frascaria@u-psud.fr) Tél : 33 1 69 15 63 42  
[sandrine.dessaints@u-psud.fr](mailto:sandrine.dessaints@u-psud.fr) Tél : 33 1.69.15.65.30  
Fax : 33 1.69.15.46.97

## **Objective of the workshop/training course**

Climate change is predicted to become one of the most important drivers of biodiversity change in the 21<sup>st</sup> century. Until recently, however, most of the work on projecting the response of species and ecosystems to climate change using models has focused on a monolithic view of species or species groups (i.e., species are assumed to have no genetic variability and do not "evolve" in the face of climate change), or on an evolutionary view that does not account for constraints on evolution imposed by species or ecosystem functioning. The objective of this workshop is to bring together functional, molecular and evolutionary ecologists to address several key questions concerning the response of species and ecosystems to climate change:

- What role will existing genetic variability within species play in controlling the functional response of individuals to climate change?
- To what extent can species adapt to 21<sup>st</sup> century climate change through rapid "evolutionary" processes?
- How will genetically-based variability and rapid "evolution" alter the long-term abundance and distribution of species?
- Will existing genetic variability and rapid "evolutionary" processes affect the way that ecosystem functions respond to climate change?
- How can we use models to project the effects of genetic variability and rapid "evolutionary" processes on species and ecosystem response to climate change?

**Date:** Tuesday, 25 August 2009 – Evening / Friday, 28 August 2009 Evening

## **Teachers/Lecturers:**

A. Kremer (France)  
C. Eckert (Canada)  
J. Bailey (USA)  
K. Kramer (Germany)  
J. Fernandez (France)  
P. Capy (France)  
E. Dreyer (France)  
A. Gonzalez (Canada).  
F. Pelletier (Canada)  
M. Urban (USA)  
P. Leadley (France)  
N. Frascaria-Lacoste (France)

**Name (Organization)** AGROPARISTECH-ENGREF Centre de Paris

Location: 19 Avenue du MAINE, 75 732 PARIS 15<sup>ème</sup> France

<http://www.agroparistech.fr/-Adresses-et-plans-d-acces-.html#>

**Credit for students:** 3 ECTS

### **Outline of the course:**

The workshop will bring together leaders in the scientific community and "young scientists" (i.e., thesis students, early career post-docs, etc.) with the goals of: 1) creating an international network of scientists working on bridging the gaps between evolutionary, molecular and functional ecology with the specific goal of contributing to the development or improvement of models that account for both evolutionary and functional processes and 2) providing training for young scientists who are interested in the new and rapidly expanding field of eco-evolutionary research. The focus will be on plants, especially trees, but presentations will cover a broad range of organisms.

### **Reimbursement:**

The workshop is offered for students, post-docs and interested researchers from the partner institutions of EVOLTREE. Registrations will be treated on a first-come first-served basis. The number of attendants is limited to 20 persons. If less than 20 persons register from within EVOLTREE, people from outside the network will also be invited to attend the workshop. No registration fees are planned at the moment. For the reimbursement of EVOLTREE partners, please see your own organization, a budget is allowed for each partner related to the summer-school (SEA1).

### **Housing:**

*Hotels in Paris near Montparnasse are available on the site*

[http://www.sites-hotels.com/ile-de-france/hotels\\_paris/hotel\\_paris\\_14.htm](http://www.sites-hotels.com/ile-de-france/hotels_paris/hotel_paris_14.htm)