

The University of Alicante (Spain), Department of Ecology, is seeking a well-qualified mobility student (from a foreign-country university) for a fully-funded PhD Studentship commencing between June and September 2016. The research will be supervised by Dr Susana Bautista and will be developed under the framework of the project DRYEX: Biotic structure and interactions modulating dryland restoration and dynamics (summary provided below).

See call at:

<http://ssyf.ua.es/es/accesopdi/personalinvestigador/2016/2316/convocatoria-personal-investigador-predocctoral-i-pi-23-16.html>

Deadline for submission of applications is April 1st, 2016.

Interested candidates please contact Dr. Susana Bautista (s.bautista@ua.es) briefly describing your motivation for applying for the fellowship, your previous research experience, and the quality of your academic records (e.g., average degree qualification).

The studentship provides a contract with the University of Alicante, stipend of 16.800 euros per year for 3 years, an additional mobility aid of 1.600 euros, and research expenses covered by project DRYEX

Requirements to be met by the candidates:

1-University degree from a foreign (not Spanish) University in the fields of Biology, Ecology, or Environmental Sciences,

(1) Obtained after January 1st, 2013

(2) Sufficient to allow the candidate to access a PhD program. If the University belongs to the European Higher Education Area (EHEA), the Degree must be of minimum 300 ECTS, with a minimum of 60 being MSc. If the University does not belong to EHEA, the Degree must allow the candidate to access a PhD program in her/his respective country. A letter from the University that certifies that she/he has the required qualification to access a PhD Program at her/his Country will be required

2- Good knowledge of either Spanish or English (certifications required)

The selection process will be based on the evaluation of:

1. Academic records (academic transcript, translated into Spanish required) (30%)

2. Current CV: merits, skills, expertise related to the field of research. Knowledge on statistical analyses, R software, plant ecology, and ecohydrology will be particularly valued (20%).

3. Research proposal (1500 words max; developed in agreement with the framework project DRYEX) (30%).

4. Two reference letters (20%).

For further information on the application procedure or informal discussion about the position, please contact Dr Susana Bautista (s.bautista@ua.es).

Summary of Project **DRYEX: Biotic structure and interactions modulating dryland restoration and dynamics:**

DRYEX investigates the role of biotic structure and interactions in modulating the resilience and restoration potential of dryland ecosystems, and how these biotic interactions respond to extreme drought. The project applies an innovative approach that combines community-scale manipulative experiments and modeling, and aims to both advance dryland science and provide readily applicable results that help managers to design the most suitable strategies for dryland conservation and restoration. Specifically, the project (1) experimentally assesses the effects of plant diversity on dryland recovery trajectories (restoration potential), on dryland resistance to drought, and on soil biotic structure and functioning; (2) experimentally assesses how community-scale plant-plant interactions respond to water stress as a function of plant functional and species diversity; (3) develops and tests both spatially-explicit and mechanistic models that describes the role of plant diversity (functional richness) and pattern in shaping dryland dynamics and on key ecosystem processes; and (4) promote knowledge transfer to restoration managers and disseminate advances to the scientific community and society at large on the role of dryland biodiversity. The work plan includes three main work packages, focused on field experiments, model development, and management, dissemination and knowledge transfer activities. Field experiments and models will be tightly linked. The models developed will allow exploring management and restoration scenarios, with varying diversity-pattern designs and under a variety of climatic pressures. A highly experienced team, including dryland ecologists, ecohydrologists, soil biologist, and mathematicians, and unique large-scale experimental facilities contribute to the strength of the proposed research. We expect to provide critical scientifically-sound information to managers that help to optimize dryland restoration efforts and increase the resilience of Mediterranean dryland ecosystems against future climate-driven pressures.