Island Biogeography

Teachers: Ana M. C. Santos (coordinator; CBA/CITA-A/UFG, Brazil), Isabel Amorim (CITA-A), Luis Borda de Água (CBA), Paulo A. V. Borges (CITA-A), Joaquín Hortal (MNCN, Madrid).

Calendar: 9-13 January 2012
Duration: 30 hours
Schedule: 9h-12h and 14h-17h, everyday

Objectives: This course introduces the field of island biogeography, a discipline that has long influenced other research areas such as macroecology, community ecology, evolution and conservation biology. This course covers the main aspects of island biogeography, and on completion of the course the students shall have acquired knowledge and understanding on:

1) Ecological/evolutionary theories developed from studies on islands, and its applications in other research areas.
2) Processes that occur during and after island colonization, that shape island community characteristics.
3) Island evolutionary processes.
4) Applications of island biogeography to conservation biology

General Plan:

1. Introduction to island biogeography – historical context, types of islands, characteristics of island biodiversity (Ana MC Santos; Day 1 - 3 hours).
2. Ecological processes I – equilibrium theory of island biogeography, species-area relationship (Ana MC Santos; Day 1 - 3 hours).
3. Ecological processes II – metapopulation ecology, theoretical models in island biogeography (Joaquin; Day 2 - 3 hours).
4. Ecological processes III – Neutral Theory of Biodiversity (Luis Borda de Água; Day 2 - 3 hours).
5. Island Communities – colonization, assemblage characteristics, assembly processes, succession (Ana MC Santos; Day 3 – 6 hours).
6. Evolution on islands – speciation, evolutionary models, adaptive radiation, phylogeography (Isabel Amorim with the participation of Sofia Gabriel; Day 4 - 6 hours).
7. Island biogeography and Conservation biology – theory of island biogeography and conservation, reserve design, human impacts (Paulo AV Borges; Day 5 – 3 hours).
8. Mini-symposium and final discussion – Students will present a short project (up to 5 minutes) applying what they have learned during the course. It can be fictitious or based on their own research projects (Ana MC Santos & Paulo AV Borges; Day 5 – 3 hours).

Location: Departamento de Biologia Animal (FCUL), room 2.3.37
Nº (min, max) students: 5 – 20
Minimum formation: "Licenciatura" (bachelor) in Biology, Geography or related areas

Fee: free for 1st year PhD students in the Doctoral programme in Biology (FCUL), Biodiversity, Genetics and Evolution (UL; UP) or Biology and Ecology of Global Changes (UA; UL); 150 euros for FCUL master students; 200 euros for research technicians and non-FCUL PhD students; 250 euros for others.

Deadline for applications: 7th December, 2011

Candidates should send a short CV and motivation letter explaining why they are interested in the course, also including a brief description of their research projects (if applicable). Send all information and requests to Ana M. C. Santos (ana.margarida.c.santos@googlemail.com).