

## Postdoctoral Fellow, Basque Centre for Climate Change (BC3)

## Ecoinformatics, modelling of ecosystem services in marine and freshwater systems.

The Basque Centre for Climate Change (BC3) is seeking to fill a postdoctoral position for work to be carried out under the H2020 AQUACROSS project. AQUACROSS, in collaboration with a large consortium of European research institutions, investigates interactions between aquatic ecosystems (both marine and freshwater) and societies; an ecosystem-based management paradigm will be developed, integrating ecological function, ecosystem services and policy, with 8 case studies around Europe. The researcher will concentrate on the modelling of hydrological processes, aquatic ecosystem services and eco-social interactions, becoming a specialist team member in the ARIES (ARtificial Intelligence for Ecosystem Services) initiative, one of the most advanced global platforms for ecosystem services assessment and integrated environmental modelling in existence. The successful candidate will work with the AQUACROSS community and the large consortium of ARIES scientists led by BC3, concentrating on areas of interest for the AQUACROSS project at first. Upon satisfactory completion of the contract, opportunities for continuing on as a stable member of the ARIES team will be assessed.

## Principal responsibilities:

- Collaborate in building, evaluating and delivering models of marine and freshwater ecosystem services within the ARIES platform;
- Integrate such models and their results within a holistic, integrated trade-off assessment framework for decision- and policy-making;
- Assist and teach in training and educational activities connected with the ARIES project, such as the International Spring University on Ecosystem Services Modelling and worldwide case studies connected with the AQUACROSS themes;
- Participate in and assist modelling and data preparation in three AQUACROSS case studies, specifically in the North Sea, the Vouga River watershed (PT) and the Intercontinental Biosphere Reserve of the Mediterranean;
- Publish high-impact, peer-reviewed research in international scientific journals in ecoinformatics and environmental decision-making.

## Experience/skills required:

- The applicant must have a PhD (or be near completion) in computer science, geography, engineering, or other fields of relevance to ecoinformatics. A very strong background in computational modelling and hydrology are required, along with strong programming skills (preferentially in Java or other object-oriented languages) and a working knowledge of GIS. Expertise in the areas of ontologies, artificial intelligence, machine reasoning and learning is desirable.
- The applicant must have excellent interpersonal and communication skills. Excellent written and oral command of English is required. An ability to work in teams and experience in the use of collaborative software platforms and distributed version control systems are necessary.



• The applicant should demonstrate a track record of peer-reviewed publications as well as the ability to initiate and complete research characterized by originality, creativity and innovation.

Location: Basque Centre for Climate Change (BC3), Bilbao, Spain.

**Tenure**: The position will be for a period of 42 months, contingent to successful performance assessment after a period of 9 months.

**Salary**: The position will carry competitive salary, matching the academic and professional profile of the applicant, and excellent conditions of work.

**How to Apply**: Applicants are invited to submit their CV, a one page motivation letter and the contact details of three referees to hr@bc3research.org with "AQUACROSS postdoctoral position" in the subject line. Informal enquiries can be made to Prof. Ferdinando Villa (ferdinando.villa@bc3research.org).

**Closing date**: June 15, 2015, or until a suitable candidate is found.