## **ECOLOGICAL GENOMICS**

Summer School

October 19 - 24, 2009 Centro Residenziale Universitario di Bertinoro, Bertinoro (FC), Italy

http://www.centrocongressibertinoro.it/

Sponsored by ESF ConGen and co-sponsored by ThermAdapt

DNA sequencing technology is undergoing exceptional improvements. Next-generation parallel sequencers can generate millions of DNA sequences overnight at reduced costs. SNP detection technology is evolving fast from massive microarray to a variety of lower scale and less expensive technologies. These methods are changing the way of planning research and experimental protocols in theoretical and applied evolutionary and population genetics, and bioinformatics. Aim of the Summer School is to introduce the new genomic approaches into the field of ecological and conservation genetics.

The Summer School is dedicated to design the role of next-generation sequencing and other genomic technologies as applied in the field of population and conservation genetics. The School will provide updated overview on major genomic methods, introduce case-studies in ecological genomics, and in this way it will stimulate the audience to develop new perspectives in the application of genomic methods in the study of natural plant and animal populations. Participants will be asked to share information and discuss genomic research approaches in wildlife species to gain a more profound understanding of the variation of genes and their functions in evolution, ecology and conservation. The School will emphasize the use of bioinformatic tools and software, and will further stimulate collaboration among international research groups within the field of ecological genomics.

Invited speakers: Robert K. Wayne (UCLA, Los Angeles, California), Fyodor Kondrashov (Barcelona, Spain), Joop Ouborg (Nijmegen, The Netherlands), Thierry K.S. Janssens (Amsterdam, The Netherlands), Jacek Radwan (Kracow, Poland), Remy Bruggmann (Zurich, Switzerland), Pierre Taberlet (Grenoble, France), Eric Coissac (Grenoble, France), Michael M. Hansen (Silkeborg, Denmark), Ditte Demontis (Aarhus, Denmark), Christian Schlötterer (Wien, Austria), Christopher W. Wheat (Helsinki, Finland), Giovanni Giuseppe Vendramin (Firenze, Italy), Robert Kofler (Wien, Austria), Sean M. Rogers (Calgary, Canada).

The School is primarily intended for young researchers at the doctoral and post-doctoral stages. Candidates should preferably have some background in genomics and conservation genetics, as well as some experience in bioinformatics, and molecular evolutionary biology. The School will be

held in Bertinoro, a small hill town close to **Bologna** (**Italy**), in collaboration with the University of Bologna Conference Centre (CeUB).

A maximum of **35 students** will be selected on the base on their CV, which should be sent only by e-mail **before August 17**, 2009, to: **Ettore Randi (e-mail: ettore.randi@infs.it;** indicating in Subject **ECOLOGICAL GENOMICS 2009**).

Acceptance will be communicated by email by August 21, 2009.

ESF will provide founding covering permanence and living costs to all the students attending the School. Participant should pay their own travelling costs to Bologna. Transport from Bologna Airport or Railway station will be provided by the organization.