

# Course on Genetic Data Analysis

## Recent Approaches for Estimation of Population Size, Structure, Gene flow, Landscape Genetics & Selection Detection

11 - 16 September, 2007, Flathead Lake Biological Station, Montana

**Objective:** To provide training in conceptual and practical aspects of data analysis for molecular ecology, conservation genetics, and the management of populations. Emphasis will be on interpretation of output from recent novel statistical approaches and software programs. The course also will allow daily discussions among young researchers and top-researchers to help develop the next generation of conservation geneticists, and to identify developments needed to improve data analysis approaches. This course will cover analysis methods including the coalescent, Bayesian, approximate Bayesian, and likelihood-based approaches.

**Who should apply:** Ph.D. students, post-docs, and population biologists with a background of at least one semester university-level course in population genetics and a course in population ecology. Applicants must have a basic background in population genetic data analysis, including testing for Hardy-Weinberg proportions and gametic disequilibrium. Participation will be limited to 28 people allowing efficient instruction with hands-on computer exercises during the course. Priority will be given to persons with their own data to analyze (for example graduate students at the end of their degree program).

**Course/Workshop Format:** For each subject, we provide 30-45 minutes of background, theory, discussion and introduction to concepts. Immediately following, we will conduct data analyses together for 30-60 minutes using relevant software programs and real data sets. Evening hands-on computer sessions and housing together of instructors and students in the same location will allow for extensive exchange and facilitate learning.

**Location:** The course will be held at the beautiful Flathead Lake Biological Station near Glacier National Park (see 'Location' at <http://popgen.eu/congen2007/>, click "Site Map" then "Location Map"). The International airport is 40 miles drive north of the Biological Station (see <http://www.iflyglacier.com/>).

**Application and cost:** For detailed information see <http://popgen.eu/congen2007/>. Accommodations and meals are included in the registration fee. Cost: \$US 1,100 per person (plus \$200 if payment arrives after June 15) will cover all meals, lodging, transportation to and from the airport, and a visit to Glacier National Park. Up to two reduced-cost scholarships could be available for candidates with no funding.



Lecture during the 1st Congen Course

**Instructors**  
Sam Cushman  
Albano Beja-Pereira  
Oscar Gaggiotti  
Gordon Luikart  
David Lynn  
Mark Miller  
Jonathan Pritchard  
Bruce Rannala  
Mike Schwartz  
David Tallmon  
Robin Waples  
& more



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