ConGen - Population Genetics Data Analysis Course

Recent Approaches for Estimation of Population Size, Structure, Gene flow, Population Viability, Selection Detection & 454 sequence data analysis

31 Aug to 4 Sept, 2009, Flathead Lake Biological Station, Montana, USA

Objective: To provide training in conceptual and practical aspects of data analysis for population genetics, 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/population 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. 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 post docs, researchers, and graduate students with a complete or nearly completed data set).

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. Three *course credits* (Biol 595) are available through the University of Montana.

Location: The course will be held at the beautiful Flathead Lake Biological Station near Glacier National Park (see 'Location' at http://popgen.eu/congen2009/, 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/congen2009/. Accommodations, all meals, coffee breaks, snacks and evening refreshments are included in the registration fee. Cost: $US 1,100 per person (plus $200 if payment arrives after July 15th) will cover materials (e.g. instructors' PowerPoint slides, exercises) meals, lodging, transportation to/from airport, & a visit to Glacier National Park guided by expert field ecologists.


Lecture during the 1st ConGen Course

Instructors

Fred Allendorf
Tiago Antao
Sam Cushman
Albano Beja-Pereira
Oscar Gaggiotti
Robert Lacy
Gordon Luikart
Jonathan Pritchard
Mike Schwartz
David Tallmon
Robin Waples