

# Molecular population genetics for tree populations

Organised by Network of Excellence EVOLTREE  
JERA2 - Population Genomics

Aimed mainly for members of NoE EVOLTREE: doctoral students,  
post docs, other scientists

The goal of the course is to provide basics background on the theory and methods for analyzing sequence variation. The course will include lectures on theory and on analysis methods, and computer labs for practicing data analysis.

Course is planned for a maximum of 24 students (preferably fewer).

REGISTRATION by September 30, 2006 to [Sonja.Kujala@oulu.fi](mailto:Sonja.Kujala@oulu.fi), please include title: EVOLTREE COURSE

Dates: 7-9 December 2006

Teachers:

John Pannell (Oxford),  
Pär Ingvarsson (Umeå)  
Martin Lascoux (Uppsala)  
Pekka Pamilo (Oulu)  
Pauline Garnier-Gere (Bordeaux)  
Giovanni G. Vendramin (Florence)  
Outi Savolainen (Oulu)

Location: Department of Biology, University of Oulu, Finland

Credits for students: 2 points

## Outline of the course

1. Basic coalescent theory
2. Recombination and linkage disequilibrium
3. Effects of demography- population expansion, subdivision and migration, bottlenecks, metapopulations
4. Effects of natural selection, testing for the presence of selection
5. Gene trees and species trees
6. Finding suitable regions of the genome for study
7. Dealing with large genomes of conifers
8. Sequence analysis and other approaches for the study of adaptation

Computer labs (potentially with your own data)

Discussion sessions, Readings for preparing will be assigned beforehand

Further information: [Outi.Savolainen@oulu.fi](mailto:Outi.Savolainen@oulu.fi), [Martin.Lascoux@ebc.uu.se](mailto:Martin.Lascoux@ebc.uu.se);  
Practical questions: [Sonja.Kujala@oulu.fi](mailto:Sonja.Kujala@oulu.fi)

**COSTS**: Evoltree has a total budget for this activity, for those coming from Evoltree labs. The exact details of covering costs still have to be decided.

However, for now, we know we can cover on average at least 500 € per participant. The funding will probably be divided in such a way that all receive an equal percentage of the costs. The funding probably comes directly from INRA Paris, but only after the course, after submitting a travel bill to Oulu.

**HOUSING**: each participant should make hotel reservations independently. Some links to local hotels:

<http://www.hotellituristi.fi/eng/>

<http://www.sokoshotels.fi/english/index.cfm> (on the webpage, choose a location: Oulu)

<http://www.hotelapollo.fi/>

Info on prices for different room options can be found through the webpages.