

Application of microsatellite markers in biosystematic studies

Facts about the course:

Recommended course credits: 1 ECTS

Level: PhD-level course

Language of instruction: English

Place: Department of Biology at the Norwegian University of Science and Technology

(NTNU), Trondheim, Norway

The course is arranged by the Research School in Biosystematics – ForBio – and travel and accommodation is refunded for ForBio members. ForBio members have priority if the number of students exceeds 8. ForBio may also support master students who fulfill the prerequisites and need the course for their thesis work. See http://www.forbio.uio.no/ for more information on ForBio and membership.

Course content:

The course will give an introduction to application of microsatellites in biosystematics. This course covers the different laboratory steps involved in amplification of microsatellites as well as how to genotype, analyze and interpret the microsatellite data. The laboratory steps include: DNA extraction, measuring DNA quality and quantity using spectrophotometer and electrophoresis, primer preparation for multiplex PCR, testing for amplification using agarose gel electrophoresis and preparation of PCR products for fragment analysis. An introduction to use of softwares and preliminary data analysis is also included in this course.

Learning outcomes:

Upon completion of the course, the students should be able to use microsatellite markers in their own biosystematics research.

Admission:

Deadline for applications is October 15.

Prerequisites:

Students are required to have basic knowledge about working in a molecular biology laboratory specially in handling single and multichannel pipettes. Students should bring and wear own laboratory coats while working at the laboratory.

Location:

The laboratory and data analyses will be conducted at the Department of Biology at the Norwegian University of Science and Technology (NTNU), Trondheim, Norway.

Teacher:

Mohsen Falahati-Anbaran, Assistant Professor, Department of Biology, NTNU

Exam information:

Final evaluation: Submission of laboratory report. The laboratory report will be marked as passed/not passed.

Course starts at 08:15 on Wednesday 21 November 2012.

Course ends at 16:00 on Friday 23 November 2012.

More information about the course including a schedule will be sent to all participants in November.

Any questions can be sent by email to heidi.solstad@ntnu.no