

## Introduction to phylogenetic methods

**ForBio** opens for participation of max 6 external students from Norwegian or Swedish universities in the regular University of Bergen (UiB) course *Phylogenetic methods* http://www.uib.no/course/BIO332#course).

#### **Aims**

The course aims primarily at students who will do phylogenetic computation in their thesis work, but who have no hands-on experience with some of the more frequently used software applications. Introductory lectures will cover topics such as properties of data and trees, models of evolutionary change, phylogenetic signal, model testing, and hypothesis testing. The students will learn how to prepare their data, explore the properties of the data, how to use distance, parsimony, likelihood and Bayesian methods in computation in packages such as PAUP\*, MrBayes, and BEAST, and how to present results with graphical applications.

#### **Teachers / instructors**

Endre Willassen, University of Bergen

Manuel Malaquias, University of Bergen

Sofia Fortunato, Sars Centre, Bergen (teaching assistant)

**Schedule:** The course has three successive modules:

- 1. lectures and software demonstrations (twice a week from early October)
- 2. intensive computer lab (November 7-11; 9:15-16:00) at UiB
- 3. take home exam to be submitted electronically (early December)

UiB grants 5 ECTS for a passed exam in this course. External participants will receive a certificate issued by the Department of Biology, UiB.

### **Participation**

Personal presence of participants is mandatory in module 2 only, however, external students are required to study electronic course material in order to prepare for the computing class in November. **ForBio** will support accepted participants with travel costs (refunded) and accommodation (booking will be organised and paid directly by ForBio).

# **Application**

Non-UiB students should send an application (use the regular ForBio course application form available on the ForBio website <a href="http://www.nhm.uio.no/english/research/forbio/faq/">http://www.nhm.uio.no/english/research/forbio/faq/</a>) by email to: <a href="mailto:Endre.Willassen@zmb.uib.no">Endre.Willassen@zmb.uib.no</a>

The application must indicate the academic background of the applicant and the topic and the present state of progress in the thesis work. Please add a recommendation from your supervisor.

The deadline for application is September 23.

**More information**: Christiane.Todt@bm.uib.no or Endre.Willassen@zmb.uib.no

#### The course is financially supported by:

University of Bergen, the Norwegian-Swedish Research School in Biosystematics, via The Norwegian Taxonomy Initiative (<a href="http://www.artsdatabanken.no/artPage.aspx?m=7">http://www.artsdatabanken.no/artPage.aspx?m=7</a>) and The Research Council of Norway (<a href="http://www.forskningsradet.no/en/Home\_page/1177315753906">http://www.forskningsradet.no/en/Home\_page/1177315753906</a>)