

# Workshop on Molecular Phylogenetics

In the last two decades there has been an astronomical increase in DNA sequence data in various public databases. In recent times complete genomes of numerous organisms have also been sequenced. Additionally, there have been tremendous advances in sequence analyses. Thanks to the advancement of computational power. These developments have contributed significantly in phylogenetic studies. Today in labs across India DNA sequence data is routinely generated in various genetic diversity and phylogenetic studies. However, these data are often not analysed appropriately due to lack of training in molecular phylogenetics.

This rigorous, individualized, hands-on training course will provide participants an opportunity to learn the basic principles of molecular phylogenetics and its applications in biology. The course consists of theory and computer lab classes. Course topics include: Distance, Parsimony, Likelihood and Bayesian approaches to tree building, historical biogeography, phylogeography, character evolution, molecular clock and dating nodes, molecular markers, hypotheses testing in phylogenetics framework. Hands-on training will be conducted in MEGA, PAUP, MrBayes, RAXml, BEAST, S-DIVA.

Participants are encouraged to bring their sequence alignments for analysis. The course is aimed at taxonomists, biogeographers, zoologists, botanists, evolutionary biologists and biologists in general who are interested in phylogenetics.

Number of seats limited to 15, there is no course fee, however the participants have to take care of their travel, boarding and lodging. For more details, they may also visit the CMLRE Website.

Applications are invited from postdoctoral fellows, Ph.D. and M.Sc. students.

**Workshop Dates: 8<sup>th</sup> -10<sup>th</sup>, October 2018**

**Application deadline: Oct 5<sup>th</sup>, 2018 (selected candidates will be informed by mail)**

Course Convener:

Director

Centre for Marine Living Resources & Ecology(CMLRE)

Ministry of Earth Sciences

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Applicants are required to fill the format below and send by email to [sherine@cmlre.gov.in](mailto:sherine@cmlre.gov.in):

1. Full Name (in block letters) :
2. Date of Birth :
3. Affiliation:
4. Address for communication:(including tel/mob/fax & email)
5. Area of research & Professional experience :
6. Reasons for taking the workshop:

Date:

Place:

Signature of the Applicant

7. Recommendation of forwarding authority:

Signature of Competent Authority: