

Workshop on Molecular Evolution, North America 2011

Fort Collins, Colorado, USA

24 July - 6 August 2011

Application Deadline: 15 May was the preferred application deadline, after which time people will be admitted to the course following review of applications by the admissions committee. However, later applications are accepted.

<http://www.molecularevolution.org/workshops/WME>

Michael P. Cummings (University of Maryland), Scott A. Handley (Washington University, St. Louis) and Kendra Nightingale (Colorado State University), Co-Directors

The Workshop consists of a series of lectures, demonstrations and computer laboratories that cover various aspects of molecular evolution. Faculty are chosen exclusively for their effectiveness in teaching theory and practice in molecular evolution. Included among the faculty are developers and other experts in the use of computer programs and packages such as BEAST, *BEAST, DataMonkey, FigTree, Genealogical Sorting Index, GARLI, HyPhy, LAMARC, MAFFT, MrBayes, and SeaView who provide demonstrations and consultations.

The course is designed for established investigators, postdoctoral scholars, and advanced graduate students with prior experience in molecular evolution and related fields. Scientists with strong interests in molecular evolution, phylogenetics, population genetics, and related fields are encouraged to apply for admission. Scheduled lectures and computer laboratories total ~90 hours of instruction. Admission is limited and highly competitive.

Topics to be covered include:

- Phylogenetic analysis: theoretical, mathematical and statistical bases; sampling properties of sequence data; Bayesian analysis; hypothesis testing
- Maximum likelihood and Bayesian theory and practice in phylogenetics and population genetics: coalescent theory; estimation of population genetic parameters
- Detecting positive selection: theory and practice; codon models
- Dating phylogenies: theory and practice
- Coalescent species trees

2011 Fee: 1100 USD does not include other meals or housing. Special

discounted housing and meals are available on the campus of Colorado State University.

For more information and online application see the Workshop web site -

<http://www.molecularevolution.org/workshops/WME>

and for housing and payment information see -

<https://regstg.com/Registration/RegForm.aspx?rid=3D76c8770d-9b70-44e5-9d1d-804beeceb915&action=add>

The Workshop on Comparative Genomics is also being offered immediately before the Workshop on Molecular Evolution, see <http://www.molecularevolution.org/workshops/WCG>

For program details or other questions contact Michael Cummings (mike@umiacs.umd.edu)