



## **Tutorial: Teaching bioinformatics in high school biology courses**

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Fran Lewitter, Director of Bioinformatics, Whitehead Institute  
**Date & Time:** Tutorial: Saturday July 10<sup>th</sup>, 8:30 AM to 12:30 PM; Networking lunch: Saturday July 10<sup>th</sup>, 12:30 PM to 1:30 PM  
**Place:** Hynes Convention Center, Boston

Bioinformatics has become an important component of research in the life sciences. Researchers routinely exploit bioinformatics tools and databases in every phase of a project. The wealth of information available in these databases is increasing and much of it is easily accessible to high school teachers and their students.

This tutorial is aimed at high school biology and chemistry teachers who want to use bioinformatics exercises to support their curricula. We will offer strategies for teaching bioinformatics at the high school level, including examples of student's work. We will present concrete examples of "hands-on" exercises for your students that have been designed to insert readily into current high school biology curricula and correlate with the Massachusetts State Biology Standards. Teachers attending this tutorial will leave with access to these classroom-tested exercises, suitable for a variety of student levels.

Tentative schedule:

- Why and how to teach bioinformatics in high school; examples of what students have done; success stories of students who have gone on in the field of bioinformatics
- Bioinformatics exercises for use as classroom labs (e.g. domains of life, rRNAs, phylogenetic tree)
- Web based tutorials for high school students (e.g. small regulatory RNAs and mismatch repair)
- Panel discussion (e.g. perspectives and experiences of teaching bioinformatics in high school)

Full scholarships are available for 25 teachers, so please register early to assure a spot. This tutorial is sponsored with generous support from The Harvard University NIGMS Center for Modular Biology and The Whitehead Institute for Biomedical Research. Additional information (and registration form) can be found at <http://www.iscb.org/ismb2010-program/ismb2010-tutorials>. For questions, please contact [steven@iscb.org](mailto:steven@iscb.org) or [lewitter@wi.mit.edu](mailto:lewitter@wi.mit.edu).