Bioinformatics at the NIH Library

BY REX ROBISON, NIH LIBRARY

"THERE'S AN ANGRY MOB OUTSIDE," AN EVENTS management coordinator told Medha Bhagwat as she was about to introduce the instructor for her bioinformatics class in a filled-to-capacity conference room several months ago. "You'd better show your face. People are demanding an explanation."

There were more than 50 anxious people outside the room, wondering why they weren't being allowed in. "When I walked out I took a deep breath," Bhagwat recalls. "I had to tell them I appreciated their coming, but there was no more room."

Now the NIH Library, which has trained some 1,300 researchers in its Bioinformatics Support Program since September 2009, knows to hold certain sessions in bigger auditoriums (such as Building 10's Lipsett Amphitheater, which seats 260).

Bioinformatics is the intersection of biology, computer science, and mathematics. It provides researchers with powerful tools to analyze a variety of data. Bhagwat, an informationist and bioinformatics specialist, used to work at the National Center for Biotechnology Information and started the NIH Library's program a year ago. She teaches courses in sequence analysis, genome browsers, identification of pathogenic mutations, and more. She also offers one-on-one consultations and online tutorials and sometimes invites outside trainers to give presentations about their products. The more advanced courses are held in the NIH Library's state-of-the-art training room, where students are provided laptops to try out exercises on their own. And, to help meet the demand, the NIH Library recently hired Lynn Young to provide more programming support for high-throughput data analysis, especially for microarray and next-generation sequencing data. Young was formerly at NCI-Frederick and CIT's Division of Computational Bioscience.

The library also provides bioinformatics software tools that are useful for retrieving and mining relevant literature, visualizing pathways, and identifying research targets, and it recently licensed software for next-generation sequence analysis. And there are two dedicated computers loaded with bioinformatics resources for NIH staff to use.

For more information about the NIH Library Bioinformatics Support Program, registering for free classes, getting accounts for licensed tools, and finding links to online tutorials, visit http://nihlibrary.nih.gov/ResearchTools/Pages/Bioinformatics.aspx. ●
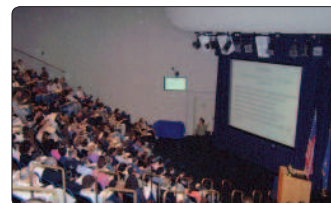
Medha Bhagwat's bioinformatics training sessions used to be held in small conference rooms, but they have become so popular that many are now held in larger auditoriums like Lipsett Amphitheater.

A wordle, or word cloud, filled with comments about the NIH Library's bioinformatics training.