


State of the Biological and Medical Informatics Graduate Program



Tom Ferrin

Fifth Annual Program Retreat

November 16, 2006

BMI: Now Two Distinct Pathways



■ Bioinformatics

- multidisciplinary Ph.D. graduate training in the study of biological composition, structure, function, and evolution at the molecular, cellular, and systems levels
- bioinformatics.ucsf.edu

■ Medical Informatics

- UCSF Center for Clinical and Translational Informatics
- ccti.ucsf.edu (not live yet)
- Ida Sim, Director
- Targeting to admit one PhD student in Fall 2007

Bioinformatics



- Part of Integrative Program in Quantitative Biology
 - Bioinformatics
 - Biophysics
 - Complex Biological Systems
- Bioinformatics Faculty
 - David Agard, Patricia Babbitt, Bruce Conklin, Joe DeRisi, Ken Dill, Tom Ferrin, Kathy Giacomini, Matt Jacobson, Ajay Jain, Cynthia Kenyon, Tanja Kortemme, Hao Li, Neil Risch, Andrej Sali, John Sedat, Mark Segal, Brian Shoichet, Chao Tang, Chris Voigt, Ru-Fang Yeh
 - (others currently being recruited)

New Integrated Curriculum

	Summer	Fall	Winter	Spring
Bootcamp ¹	Math/Matlab Biology Didactic Molecular Biology Biochemistry			
Required Courses		Stat Mech Interactions I	Phys. Principles & Bioinformatics Interactions II	Systems & Cells Algorithms
Lab Rotations ²		Rotation I	Rotation II	Rotation III
Team Challenges ³		Genomics	Synthetic biology	

1. For entering students: 2 wks in Aug/Sept. 2. One of three should involve a wet lab project. 3. Inter-quarter sessions; interdisciplinary.

Curriculum Continued



- Other requirements:
 - BBC Journal Club (3 quarters for two years)
 - Research Seminars (3 qtrs)
 - Research Opportunities (Fall & Winter)
 - Student Research Presentations (2nd yr students)
 - 2nd Year Students: one elective course in area pertinent to student's research interests
 - 3rd Year and beyond: Oral Qualifying Exam (not later than beginning of student's third year)

New Web Site (still under construction)



- Designed to be more informative about our program to both current and prospective students
- Clear delineation of the two program pathways
- Goal: Better matching of applicants with our program
- Goal: The place to go for all program information and list of current events

- **YOUR SUGGESTIONS & FEEDBACK WELCOMED!**
 - Talk/send e-mail to Andrej Sali

Upcoming Events



- BBC Retreat - Dec 3-5 - Monterey Beach Resort
- 2007 Application Deadline - Dec 15
 - Minority candidates encouraged to apply
- Bioinformatics/Biophysics Recruitment - Feb 9-10 & Feb 16-17
 - Joint recruitment with Biophysics
 - Some separate events specifically focused on bioinformatics
- Training grant renewal submission deadline - May 25
- Training grant site visit - Fall '07