

BIOCHEMISTRY BOOT CAMP

Hand Lab, Room 1144

June 1-3

PROGRAM OF EVENTS

All events are scheduled to take place in *Hand Lab 1144* (first floor) unless otherwise noted. For updates and more information, please visit <http://fitzkee.chemistry.msstate.edu/bootcamp/>.

Monday, June 1

- 8:00 am “No-Frills” Breakfast
Bagels, doughnuts, coffee, and juice
- 9:00 am Introductory Remarks Nick Fitzkee
- 9:05 am **Session 1:** Protein Structure Ailin Wang
Primary, secondary, tertiary structure; origins of function
- 10:20 am Break
- 10:30 am **Session 2:** Protein Properties and Online-Databases Nick Fitzkee
ExPASy, Entrez
- 12:00 pm Break for Lunch (on your own)
- 1:30 pm **Session 3:** Introduction to UNIX Nick Fitzkee
Filesystem, running programs, X-windows, working with text files
- 2:50 pm Break
- 3:00 pm **Session 4:** Using GNUPlot for Model Fitting Nick Fitzkee
Model basics, uncertainties and errors, chi-squared
- 4:30 pm Discussion and Day 1 Wrap-Up Participants
Take Home Lab: GNUPlot for Chemists
- 5:00 pm Break for Dinner (on your own)

Tuesday, June 2

- 9:00 am **Session 5:** Laboratory Safety EHS
- 12:00 pm Break for Lunch (on your own)

Biochemistry Boot Camp Program

1:30 pm	Session 6: DNA Structure and Properties Basic properties, predicting melting temperatures	Dinesh Yadav
2:50 pm	Break	
3:00 pm	Session 7: The PDB and Molecular Visualization Using PyMOL for analysis and figures	Nick Fitzkee
4:00 pm	Session 8: Keeping a Lab Notebook	Sri Ramya Tata
5:00 pm	Discussion and Day 2 Wrap-Up Take Home Lab: Practice Using PyMOL	Participants
5:30 pm	Break for Dinner (on your own)	

Wednesday, June 3

9:00 am	Session 9: Basic Bioinformatics Homology, sequence alignment, and BLAST	Shane Sanders
10:20 am	Break	
10:30 am	Session 10: Literature Databases and EndNote	Nick Fitzkee
11:30 am	Discussion and Day 3 Wrap-Up	Participants
11:50 am	Survey and Group Photo	
12:00 pm	Depart	