

2020 Quantitative Biology Bootcamp, CSHL School of Biological Sciences

Instructor: Justin B. Kinney, jkinney@cshl.edu

GitHub Repository: https://github.com/jbkinney/20_qbootcamp

Day 1: Wednesday, September 9, Hershey East (Hershey), 10am - 5pm

- 10:00am - 10:30am: **Overview of Quantitative Biology (lecture)**
- 10:30am - 12:00pm: **The Unix command line (tutorial)**
- 12:00pm - 1:00pm: *Lunch (provided)*
- 1:00pm - 1:30pm: **Introduction to Python and Jupyter Notebooks (tutorial)**
- 1:30pm - 3:00pm: **Python: data types (tutorial)**
- 3:00pm - 3:30pm: *Break*
- 3:30pm - 5:00pm: **Python: flow control (tutorial)**

Day 2: Thursday, September 10, Hershey East (Hershey), 10am - 5pm

- 10:00am - 10:30am: **Overview of High-Performance Computing (lecture)**
- 10:30am - 12:00pm: **Read mapping using BlackNBlue (tutorial)**
- 12:00pm - 1:00pm: *Lunch (provided)*
- 1:00pm - 1:30pm: **Introduction to Pandas (lecture)**
- 1:30pm - 3:00pm: **Pandas I, TF analysis (tutorial)**
- 3:00pm - 3:30pm: *Break*
- 3:30pm - 5:00pm: **Pandas II, Replication origin analysis (tutorial)**

Day 3: Friday, September 11, Hershey East (Hershey), 2pm - 6pm

- 2:00pm - 2:30pm: **Introduction to Data Visualization (tutorial)**
- 2:30pm - 4:00pm: **Matplotlib (tutorial)**
- 4:00pm - 4:30pm: *Break*
- 4:30pm - 6:00pm: **Seaborn (tutorial)**