**2023 Quantitative Biology Bootcamp, CSHL School of Biological Sciences**

**Instructors**:
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**GitHub Repository**: https://github.com/jbkinney/23e_qbbootcamp

**Day 1**: Tuesday, 5 September 2023, 10am - 6pm, Hershey East Room, Hershey Bldg.
  10:00am - 10:30am: **Overview of Quantitative Biology (lecture, Justin)**
  10:30am - 12:00pm: **The Unix command line (tutorial, Ivan)**
  12:00pm - 1:00pm: *Lunch (provided)*
  1:00pm - 1:30pm: **Introduction to Python and Jupyter Notebooks (tutorial, Justin)**
  1:30pm - 3:30pm: **Python: data types (tutorial, Justin)**
  3:30pm - 4:00pm: *Break*
  4:00pm - 6:00pm: **Python: flow control (tutorial, Ivan)**

**Day 2**: Wednesday, 6 September 2023, 1pm - 6pm, Samet Conference Room, Koch Bldg.
  1:00pm - 1:30pm: **Overview of high-performance computing (lecture, Justin)**
  1:30am - 3:00pm: **Read mapping using Elzar (tutorial, Justin)**
  3:00pm - 3:30pm: Break
  3:30pm - 3:00pm: **Introduction to Pandas (lecture, Justin)**
  4:00pm - 5:30pm: **Pandas I, TF analysis (tutorial, Justin)**

**Day 3**: Thursday, 7 September 2023, 10am - 6pm, Plimpton Conference Room, Beckman Bldg.
  10:00am - 11:30am: **Pandas II, Replication origin analysis (tutorial, Ivan)**
  11:30pm - 12:00pm: **Introduction to Data Visualization (lecture, Justin)**
  12:00pm - 1:00pm: *Lunch (provided)*
  1:00pm - 2:30pm: **Matplotlib (tutorial, Ivan)**
  2:30pm - 3:00pm: *Break*
  3:00pm - 4:30pm: **Advanced visualization (tutorial, Justin)**