



Computational Genomics

November 30 - December 7, 2022

Hershey East & West

INSTRUCTORS:

David Hawkins
William Pearson

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CO-INSTRUCTOR:

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Kansas State University
University of Maryland School of Medicine
University of Puerto Rico Medical Sciences Campus
Columbia University

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Wednesday, November 30, 2022

9:30 am	Protein Evolution and Sequence Similarity Searching	William Pearson
2:00 pm	Practical Sequence Similarity Searching	William Pearson
8:30 pm	Galaxy 101 - Using Galaxy for reproducible analyses	Collins

Thursday, December 01, 2022

9:30 am	RNA sequencing	Mills
2:00 pm	Intro to genomic sequencing technology the short and long of it all	Miller
3:30 pm	PSSMs and HMMs - customized scoring matrices	Pearson
5:30 pm	Very Basic intro to R or Unix	Miller

Friday, December 02, 2022

9:30 am	Intro to R and Reproducibility in Analysis *virtual*	Hicks
1:30 pm	Hicks research talk *remote*	Hicks
7:30p	Introduction to genome intervals, genome arithmetic, and bedtools *virtual*	Quinlan

Saturday, December 03, 2022

9:30 am	Analyzing Single-cell data	Krishnaswamy
2:00 pm	Long read sequencing	Miller
3:30p	Accessing public sequence datasets	Mills



Cold Spring Harbor Laboratory
MEETINGS & COURSES PROGRAM

Sunday, December 04, 2022

10:30 am	Single Cell analysis II	Krishnaswamy
2:00 pm	Discovery and analysis of genetic variation *virtual*	Quinlan

Monday, December 05, 2022

9:00 am	Regulatory Genomics	Hawkins
2:30 pm	Chromatin States 1: Analysis of Histone Modifications	Hawkins
4:00 pm	Gene Lists to Pathways	Mills

Tuesday, December 06, 2022

9:00 am	Chromatin States 2: Overlapping Datasets	Hawkins
10:30 am	Probing higher dimension chromatin structure	Hawkins