

A short course in Systems Biology

2021 Systems Biology – Foundations “mini” Short Course
August 2nd – 13th, 2021
UCI Center for Complex Biological Systems

		Math/Comp	Bio
Monday, 8/2	9:00 – 9:45	Introduction by the course directors Arthur Lander, MD, PhD and German Enciso, PhD (Zoom 1 ; Slido 1)	
	10:00 – 11:00	Introduction to Systems Biology Arthur Lander, MD, PhD (Zoom 1 ; Slido 1)	
	11:30 – 12:30	“DevOps” for Systems Biology and intro to git Jun Allard, PhD (Zoom 1 ; Slido 1)	Molecular Biology Rahul Warrior, PhD (Zoom 2 ; Slido 2)
Tuesday, 8/3	9:00 – 10:00	Dynamical Systems German Enciso, PhD (Zoom 1 ; Slido 1)	Genetics Rahul Warrior, PhD (Zoom 2 ; Slido 2)
	10:15 – 11:15	Mathematica Tutorial Arthur Lander, MD, PhD (Zoom 1 ; Slido 1)	Developmental Biology Ken Cho, PhD (Zoom 2 ; Slido 2)
	11:30 – 12:30	Math modeling & PDEs John Lowengrub, PhD (Zoom 1 ; Slido 1)	Cell Biology Lee Bardwell, PhD (Zoom 2 ; Slido 2)
Wednesday, 8/4	9:00 – 10:00	Interdisciplinary research panel (Zoom 1 ; Slido 1)	
	10:15 – 11:15		
	11:30 – 1:30	Q&A social; Mentoring Session 1 (by appointment only) (Gather.town)	
Thursday, 8/5	9:00 – 10:00	Control of Cell Growth Arthur Lander, MD, PhD (Zoom 1 ; Slido 1)	
	10:15 – 11:15	Functional genomics Ali Mortazavi, PhD (Zoom 1 ; Slido 1)	
	11:30 – 12:30	Bioinformatics for mathematicians Jenny Wu, PhD (Zoom 1 ; Slido 1)	Bioinformatics for biologists Trina Norden-Krichmar, PhD (Zoom 2 ; Slido 2)

Friday, 8/6	9:00 – 10:00	Big Data Steve Altschuler, PhD Professor, Department of Pharmaceutical Chemistry University of California, San Francisco (Zoom 1 ; Slido 1)
	10:15 – 11:15	Principles of Evolution JJ Emerson, PhD (Zoom 1 ; Slido 1)
	11:30 – 1:30	Q&A social; Mentoring Session 2 (by appointment only) (Gather.town)

Monday, 8/9	9:00 – 10:00	Machine Learning & AI Xiaohui Xie, PhD (Zoom 1 ; Slido 1)
	10:15 – 11:15	Career skills: job-hunting, grant-writing, paper-writing (Zoom 1 ; Slido 1)
	11:30 – 12:30	Career Panel (Zoom 1 ; Slido 1)
Tuesday, 8/10	9:00 – 10:00	scRNAseq Fundamentals Kai Kessenbrock, PhD (Zoom 3 ; Slido 3)
	10:15 – 11:15	scRNAseq in breast cancer metastasis Devon Lawson, PhD (Zoom 3 ; Slido 3)
	11:30 – 12:30	scRNAseq analyses Qing Nie, PhD (Zoom 3 ; Slido 3)
Wednesday, 8/11	9:00 – 10:00	Systems Genetics Marcus Seldin, PhD (Zoom 1 ; Slido 1)
	10:15 – 11:15	Q&A social; Mentoring Session 3 (by appointment only) (Gather.town)
	11:30 – 12:30	Synthetic Biology Chang Liu, PhD (Zoom 1 ; Slido 1)
Thursday, 8/12	9:00 – 10:00	Zebrafish airinemes: an example of collaborative research in developmental biology, biophysics, and mathematical biology Jun Allard, PhD (Zoom 1 ; Slido 1)
	10:15 – 11:15	Interpreting GWAS results using functional genomics data Jing Zhang, PhD (Zoom 1 ; Slido 1)
	11:30 – 12:30	Biophysics of microbiomes Albert Sinyaporn, PhD (Zoom 1 ; Slido 1)
Friday, 8/13	9:00 – 10:00	Systems neuroscience Kevin Beier, PhD (Zoom 1 ; Slido 1)

	10:15 – 11:15	Single molecule approaches Fangyuan Ding, PhD (Zoom 1 ; Slido 1)
	11:30 – 12:30	Closing remarks; exit survey (Gather.town)

Zoom 1:

<https://uci.zoom.us/j/93288653647?pwd=dmNxOHFIK1pyaFRzR1RRY2w2amJjZz09>

Meeting ID: 932 8865 3647

Passcode: 290779

Slido 1: 768704

Zoom 2:

<https://uci.zoom.us/j/99756996913?pwd=UTJDOFlxeGVFYWtzU3ROMU9TK3Zwdz09>

Meeting ID: 997 5699 6913

Passcode: 528177

Slido 2: 328667

Zoom 3:

<https://uci.zoom.us/j/91256708927?pwd=QTcrTWwzdU5ZUHFOc2JaSlq2dGRqQT09>

Meeting ID: 912 5670 8927

Passcode: 476714

Slido 3: 118136

Gather.town:

<https://gather.town/invite?token=2OB8V6Ue>

Slack workspace

2021systemsbi-al45000.slack.com

