

MCB230 Spring 2016

Dirk Hockemeyer, Michael Rape, and Dev Bio faculty

Tuesday and Thursday 2-3:30PM in 125LKS (lecture)

Friday 2-3 in 103 Moffitt (discussion)

General notes: no exam; depending on class size, we will meet in place of the discussion session and each student has to prepare a 15 min presentation about a paper, plus a handout; grade: 50% talk, 50% participation

Date	Topic
1/19	Intro; Proteomics
1/21	shRNA screens; synthetic lethality
1/26	Genome editing
1/28	CRISPR screens
2/2	Signaling of cell cycle transitions
2/4	Cell cycle transitions
2/9	DNA damage signaling
2/11	DNA damage signaling
2/16	Signaling Dynamics (fold change detection)
2/18	Signaling Dynamics
2/23	Signaling by disordered proteins
2/25	Signaling on the protein level (turnover, autophagy etc)
3/1	Signaling on the protein level
3/3	Stem cell reprogramming
3/8	Stem cell reprogramming
3/10	Organismal signaling (organoids et al)
3/15	Organismal signaling
3/17	Epigenetic regulation of cellular functions
3/21-25	Spring break
3/29	Embryological dynamics
3/31	Symmetry Breaking
4/5	Patterning
4/7	Developmental signaling
4/12	Developmental gene regulation
4/14	Morphogenesis
4/19	Growth
4/21	Regeneration
4/26	Evolution and Development
4/28	Development and Disease