

Schedule:

Date	Time	Module	Instructor
Monday, July 18			
Asynchronous Pre-work and Evaluation Materials <i>Please check Canvas for recordings and evaluation materials, which must be completed prior to attending in person.</i>			
		<i>Lecture</i> Basics of nucleic acid isolation	Sarah Teter
		<i>Lecture</i> PCR Technologies	Rod Pennington
Additional Assignments:	Nucleic acid isolation quiz		
In-Person Schedule			
	9:00a – 9:30a	Welcome and Introductions	Amy Prevost
	9:30a – 11:00a	<i>Laboratory</i> Nucleic acid isolation from tissues	Dana Brecklin, Amy Prevost
	11:00a -12:30p	<i>Lecture</i> Overview of protein expression and purification	Dick Burgess
	12:30p – 1:30p	<i>Lecture</i> Cloning tools and techniques	Jim Hartnett
	1:30p – 2:15p	<i>Lecture</i> PCR Basics	Rod Pennington
	2:15p – 3:00p	<i>Laboratory</i> Cloning – RT-PCR amplification	Natalie Betz, Amy Prevost
Tuesday, July 19			
Asynchronous Pre-work and Evaluation Materials <i>Please check Canvas for recordings and evaluation materials, which must be completed prior to attending in person.</i>			
		<i>Lecture</i> PCR Technologies	Rod Pennington
Additional Assignments:	Real time PCR quiz; cloning quiz		
In-Person Schedule			
	9:00a – 10:30a	<i>Laboratory</i> Cloning – RT-PCR analysis and ligation reaction	Natalie Betz, Amy Prevost

	10:30a – 12:30p	<i>Lecture and Laboratory</i> Plasmid Purification	Doug White, Amy Prevost
	12:30p – 1:00p	<i>Lunch</i>	
	1:00p – 3:00p	<i>Laboratory</i> Cloning – Transformation <i>Chalk Talk and Laboratory</i> RT-qPCR <i>Laboratory</i> Plating cells	Natalie Betz, Amy Prevost
Wednesday, July 20			
Asynchronous Pre-work and Evaluation Materials <i>Please check Canvas for recordings and evaluation materials, which must be completed prior to attending in person.</i>			
		<i>Lecture</i> Reporter Gene Assays	Carl Strayer
Additional Assignments:	Plasmid purification quiz		
In-Person Schedule			
	9:00a – 11:00a	<i>Lecture and Laboratory</i> Transfection	Erica Golueke, Amy Prevost Guest: Sandy Tseng
	11:00a – 12:30p	<i>Laboratory</i> Analysis of RT-qPCR Data <i>Laboratory</i> Start Colony PCR	Natalie Betz, Amy Prevost
	12:30p – 1:15p	<i>Lunch</i>	
	1:15p – 2:00p	<i>Lecture</i> Using Halotag to study protein degradation	Elizabeth Caine
	2:00p – 3:00p	<i>Lecture</i> Characterizing Proteins	Mike Rosenblatt
Thursday, July 21			
Asynchronous Pre-work and Evaluation Materials <i>Please check Canvas for recordings and evaluation materials, which must be completed prior to attending in person</i>			
Additional Assignments:			
In-Person Schedule			
	9:00a – 10:00	<i>Laboratory</i> Protein purification from mammalian cells using tags	Amy Prevost

	10:00a – 11:30a	<i>Lecture</i> Protein purification from mammalian cells using tags	Rachel Ohana
	11:30a – 12:15p	<i>Laboratory</i> Protein purification from mammalian cells using tags	Amy Prevost
	12:15p – 1:15p	<i>Lunch</i>	
	1:15p – 3:00p	<i>Laboratory</i> Gel analysis colony PCR Protein purification form mammalian cells using tags	Amy Prevost
Friday, July 22			
Asynchronous Pre-work and Evaluation Materials <i>Please check Canvas for recordings and evaluation materials, which must be completed prior to attending in person</i>			
		<i>Lecture</i> Western Blot, ICC and ELISA	Chris Eggers
Additional Assignments:	TBD		
In-Person Schedule			
	9:00a – 10:00a	<i>Lecture</i> Western Blot and protein analysis	Chris Eggers
	10:00a – 3:00p	<i>Laboratory</i> Western Blot Transfection results Mammalian protein purification results Wrap up and Closing	Chad Zimprich, Amy Prevost, Erica Golueke