

# Current Methods in Biochemistry and Cell Biology

## GS03 1023

Spring 2018

All classes to be held on Mon, Wed and Fri, 3:00 – 4:00 p.m. – Room B.625

Course Director: Dr. John Putkey

Day	Date	Room	Topic	Instructor
Mon	01/08	B.625	PCR and RNA quantification	Cunha
Wed	01/10	B.625	RNA Interference	Shyu
Fri	01/12	B.625	DNA/RNA hybridization	Shyu
Mon	01/15		<b>MLK Holiday (No Classes)</b>	
Wed	01/17	B.625	Next-Generation Sequencing	Han
Fri	01/19	B.625	Protein Expression: Bacteria I	Putkey
Mon	01/22	B.625	Protein Expression: Bacteria II and insects	Dessauer
Wed	01/24	B.625	Protein Expression: Yeast	Morano
Fri	01/26	B.625	CRISPR-Cas 9 system	Xian
Mon	01/29	B.625	Inducible systems & recombinant virus	Alcorn
Wed	01/31	B.625	Protein Isolation I	Putkey
Fri	02/02	B.625		
Mon	02/05	B.625	Protein Isolation II	Alcorn
Wed	02/07	B.625	Protein Isolation III	Alcorn
Fri	02/09	B.625	Antibodies I: Generation and Design	Alcorn
Mon	02/12	B.625	Antibodies II: Techniques	Alcorn
Wed	02/14	B.625	<b>Exam I in vitro tools (from DNA-RNA-protein)</b>	
Fri	02/16	B.625	High throughput screens: Metabolomics	Xia
Mon	02/19	B.625	<b>Presidents Day Holiday (No Classes)</b>	
Wed	02/21	B.625	High throughput screens: Chemical	Chen
Fri	02/23	B.625	Spectroscopy and FRET	Jayaraman
Mon	02/26	B.625	Microscopy	Boehning
Wed	02/28	B.625	Cellular applications of fluorescence	Dessauer
Fri	03/02		<b>BMB Retreat (No Classes)</b>	
Mon	03/05	B.625	High throughput screens: Genomic	Yoo
Wed	03/07	B.625	Model systems: Yeast molecular genetics	Morano
Fri	03/09	B.625	Flow cytometry	Lewis
Mon	03/12		Spring Break (No Classes)	
Wed	03/14		Spring Break (No Classes)	
Fri	03/16		Spring Break (No Classes)	
Mon	03/19	B.625	Model systems: Zebrafish	Breton
Wed	03/21	B.625	Model systems: Transgenic	Zsigmond
Fri	03/23	B.625	Model systems: Knockout mice	Zsigmond
Mon	03/26	B.625	Model systems: Stem Cells	Zsigmond
Wed	03/28	B.625	Model systems: Drosophila	Venkatachalam
Fri	03/30	B.625	<b>Exam 2 cellular/systemic functional analysis</b>	
Mon	04/02	B.625	Approaches to membrane proteins I	Jayaraman
Wed	04/04	B.625	Approaches to membrane proteins II	Jayaraman
Fri	04/06	B.625	Ligand binding and enzyme assays I	Kulmacz
Mon	04/09	B.625	Ligand binding and enzyme assays II	Kulmacz
Wed	04/11	B.625	Electron microscopy: Theory	Serysheva
Fri	04/13	B.625	Electron microscopy: Applications	Serysheva
Mon	04/16	B.625	X-Ray crystallography: Theory	Zheng
Wed	04/18	B.625	X-Ray crystallography: Applications	Zheng
Fri	04/20	B.625	Molecular dynamics simulations: Theory	Gorfe
Mon	04/23	B.625	Molecular dynamics simulations: Applications	Gorfe
Wed	04/25	B.625	NMR: Theory	Putkey
Fri	04/27	B.625	NMR: Applications	Putkey
Mon	04/30	B.625	<b>Exam Week (No Classes)</b>	
Wed	05/02	B.625	<b>Exam 3 protein analysis</b>	

Classes 3:00 – 4:00 (room scheduled from 2:30 to 4:00 to allow set-up time)