

**HST 040 Mechanisms of Microbial Pathogenesis \* Fall 2019**

Clyde S. Crumpacker	617-754-7603	ccrumpac@bidmc.harvard.edu
Harvey Simon	617-763-7666	hsimon@mgh.harvard.edu
Julia Page (TA)	339-227-0810	<a href="mailto:Julia_page@hms.harvard.edu">Julia_page@hms.harvard.edu</a>
Katherine Nabel (TA)	240-476-2124	<a href="mailto:Katherine_nabel@hms.harvard.edu">Katherine_nabel@hms.harvard.edu</a>
Josue Flores-Kim (Lab Co-Coordinator)	617-432-6970	<a href="mailto:josue_floreskim@hms.harvard.edu">josue_floreskim@hms.harvard.edu</a>
Mimi Gunning (Course Coordinator)	617-632-0760	<a href="mailto:mgunnin2@bidmc.harvard.edu">mgunnin2@bidmc.harvard.edu</a>

Date	Lecture Topics	Lecturer	Chapter in Schaechter*	Lab Exercises/ CPMs
<b>BACTERIOLOGY/MYCOLOGY</b>				
9/3 8:30 AM Tues	Bacterial Structure and Physiology: Relationships to Microbial Pathogenicity	Lory	2,3,4,10	
9/3 9:40 AM Tues	Host Response to Infectious Agents	Simon	6,7	
9/5 9:30 AM Thurs	Acute extracellular pyogenic pathogens: Streptococcus and Staphylococcus	Simon	10, 11,12	
9/10 9:30 AM Tues	Resistance to Phagocytosis: Pneumococcus, Meningococcus, and Hemophilus	Simon	13,14	
9/12 8:30 AM Thurs	Helminths	Ryan	54	PLEASE REMEMBER TO PICK UP YOUR MICROSCOPES
9/12 9:30 AM Thurs	Resistance to Serum: Gonococcus and Spirochetes	Simon	14,24,25	
9/17 8:30 AM Tues	Climate Change and Infectious Disease	Bernstein		Exercise 1: Meet the Microbes
9/17 9:40 AM Tues	Bacterial Toxins: Structure and Function	Min Dong	9,20	
9/19 8:30 AM Thurs	Malaria/Toxo	Ryan	52	Exercise 1 continued
9/19 9:40 AM Thurs	Hemoflagellates	Ryan	52,53	
9/24 8:30 AM Tues	Anaerobic Bacteria	Simon	15, 20	Exercise 1: Meet the Microbes Completed
9/24 9:40 AM Tues	Host Dependent Organisms: Mycoplasma and Legionella	Simon	21,29	Exercise 2 GI Flora unknowns and antibiotics

\*Schaechter's – "Mech. Of Microbial Disease" by Engleberg, DiRita & Dermody, 2013 5<sup>th</sup> (eds)

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9/26 8:30 AM Thurs	Coordinate Regulation, control of bacterial virulence Cholera and Pertussis as paradigms	Mekalanos	17,19	Exercise 3: Medically important bacteria
9/26 9:40 AM Thurs	Malaria-Molecular Aspects	Wirth	52	
10/1 8:30 AM Tues	Faculative Intracellular Parasites: Salmonella, Listeria and Legionella	Higgins	17, 21	Exercise 3: Some medically important bacteria continued
10/1 9:40 AM Tues	Mycobacteria	Simon	15, 20	Exercise 4: Advanced Unknowns
10/3 9:40 AM Thurs	Obligate intracellular parasites: Rickettsia and Chlamydia	Simon	27, 28	<b>No Labs</b>
10/8 8:30 AM Tues	Antimicrobial Agents: Mechanisms of Action	Eliopoulos	5	Exercise 4 Complete Advanced Unknowns
10/8 9:40 AM Tues	Selected Topics of Antibiotic Resistance	Eliopoulos	5,8	
10/10 8:30 AM Thurs	Mechanisms of Pathogenesis of Gram Organisms	Goldberg	16,17,22,66	<b>REVIEW SESSION</b> (start at 10:30 a.m.)
10/10 9:40 AM Thurs	Fungi	Simon	46,48,49	
10/15 Tuesday	<b>MIDTERM EXAM</b> 9 A.M. – 12 Noon MEC 250			

Date	Lecture Topics	Lecturer	Chapter in Schaechter*	Lab Exercises/ CPMs
<b>VIROLOGY</b>				
10/17 8:30 AM Thurs	Animal viruses: Structure, classification, replication and diagnosis	Crumpacker	31	
10/17 9:40 AM Thurs	Respiratory viruses – Influenza	Crumpacker	36	
10/22 8:30 AM Tues	HSV & VZV – Basic Sciences	Knipe	41	
10/22 9:40 AM Tues	HSV & VZV – Clinical Aspects	Crumpacker	41,44	
10/24 8:30 AM Thurs	Human retroviruses and transformation: HTLV-1 and HTLV-11	Sodroski	38	
10/24 9:40 AM Thurs	HIV and AIDS	Sodroski	38,71	
10/29 8:30 AM Tues	DNA Tumor Viruses-Human Papilloma Viruses	Munger	40	
10/29 9:40 AM Tues	CMV and Intrahost Genetic Diversity	Crumpacker/ Kowalik	42	
10/31 8:30 AM Thurs	Hepatitis	Dienstag	43	AIDS Clinical aspects and Treatment as Prevention
10/31 9:40 AM Thurs	Hepatitis C –Abstraction to Cure	Dienstag	43	
11/5 8:30 AM Tues	Zika and other Arboviruses	Hirsch	33	
11/5 9:40 AM Tues	Microbiome and Bacterial Evolution	Lieberman	8,30	
11/7 8:30 AM Thurs	AIDS Clinical aspects and Treatment as Prevention	Crumpacker	71	
11/7 9:40 AM Thurs	PicoRNA viruses	Gewurz	32	
11/7 10:40 AM Thurs	Prospect for HIV Vaccine	Barouch	45, 71	
11/12 8:30 AM Tues	Epidemiology of Antibiotic Resistance	Grad	8,30	
11/12 9:40 AM Tues	Antibiotic: Practical Aspects	Simon	5,62	

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<b>CLINICAL CORRELATIONS</b>				
11/14 8:30 AM Thurs	Upper Respiratory Infections	Simon	62	CPM I: Pulmonary
11/14 9:40 AM Thurs	Pulmonary Infections	Simon	30, 62	
11/19 8:30 AM Tues	Endocarditis	Crumpacker	67	CPM II: Bone and Joint
11/19 9:40 AM Tues	Bone and Joint Infections	Simon	65	
11/21 8:30 AM Thurs	Skin Infections	Simon	64, 68, 69	CPM IV: Endocarditis
11/21 9:40 AM Thurs	UTI	Zinner	63	
11/26 8:30 AM Tues	Intraabdominal Infections	Simon	60, 76	CPM III: CNS
11/26 9:40 AM Tues	Bacterial Meningitis	Malley	61	
<b>11/28 Thursday</b>	<b>HAPPY THANKSGIVING NO CLASSES</b>			
12/3 8:30 AM Tues	Bacteremia and septic shock	Simon	66	CPM V: Altered Host
12/5 9:30 AM Thurs	Fever	Simon	74	
12/5 10:30	<b>COURSE PARTY</b>			
12/12 Thursday	<b>FINAL EXAM 9:00 AM – 12 Noon, Room 250, HST SKILLS AREA</b>			

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