

CLASSIC AND 21ST CENTURY PATHOGENS (C2CP) (THI 5620Q) Fall semester, 2025

Aim: To understand the major concepts in pathogenicity of viruses, bacteria, parasites, and fungi that infect humans, and the host responses to these pathogens.

Coordinator: Dr. David Lukac **Course organization:** The course will be divided into five sub-sections. **Grading:** Will be based on 3 exams

CLASS MEETS MWF FROM 2:00--3:30 PM in ICPH Room E 220 R (*with exceptions)

Class# Date Topic

A) Intro to Immunity

			<u>Lecturer</u>
1. T	8/26	Course Overview	*(10:00 start) <i>Lukac</i> <i>Kaipilyawar</i> <i>Kaipilyawar</i>
2. W	8/27	Host Response to infection I	
3. F	8/29	Host Response to infection II	
	9/1*	Labor Day	

B) Viral Pathogenesis

4. W	9/3	Intro to Animal Viruses I	<i>Whitehead</i>
5. F	9/5	Intro to Animal Viruses II	<i>Whitehead</i>
6. M	9/8	Mechanisms of viral pathogenesis I	<i>Lukac</i>
7. W	9/10	Mechanisms of viral pathogenesis II	<i>Lukac</i>
8. F	9/12	Antivirals and immune evasion (distribute Exam I—take home)	<i>Rajsbaum</i>

C) Bacterial Pathogenesis

9. M	9/15	Bacterial genetics and molecular biology	<i>Kachlany</i>
10. W	9/17	Introduction to Bacteria	<i>Kachlany</i>
11. F	9/19	Mechanisms of bacterial pathogenesis I	<i>Parveen</i>
	9/22, 9/24*	Rosh Hashanah	
12. F	9/26	Mechanisms of bacterial pathogenesis II	<i>Parveen</i>
13. M	9/29	Antibacterial agents and resistance	<i>Yang</i>
		distribute EXAM II	
	10/1*	Yom Kippur	

D) Fungal Pathogenesis

14. 10/3 F	The Fungus Among Us: Fungi overview	<i>Kaback</i>
15. 10/6 M	Tales from the Crypt: Genetic Approaches to understanding a Eukaryotic Pathogen	<i>Xue</i>

E) Parasitic Pathogenesis

16. 10/13 M	Hiding in our bodies/Intracellular Parasites	<i>Bhanot</i>
17. 10/17 F	More bugs and other creepy crawly creatures that live within or on us	*(4:00 start) <i>Kaback</i>
	distribute EXAM III	