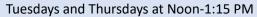
ANTIMICROBIAL RESISTANCE Foundations Course







| Week | Торіс | Faculty 2024 | Objective | Dates 2024 |
|------|---|-------------------|--|--------------------|
| 1 | AMR and the environment | Ashok Chopra | Summarize the main influence of AMR in the environment (including hospital) in relation to dissemination of AMR determinants and their effect on human health. | Tues., October 1 |
| 1 | Genomics and AMR | Blake Hanson | Provide overview of current genomic tools used to study dissemination and spread of AMR organisms | Thurs., October 3 |
| 2 | AMR: a global public health threat | Cesar Arias | Provide an overview of main AMR problems and their impact on clinical practice | Tues., October 8 |
| 2 | Mechanisms of AMR I: macrolides, lincosamides, tetracyclines, oxazo- lidinones, aminoglycosides, quinolones | Yousif Shamoo | Antibiotic mechanism of action and resistance; implications for research and therapy | Thurs., October 10 |
| 3 | NO CLASS ID Week | | | Tues., October 15 |
| 3 | NO CLASS ID Week | | | Thurs., October 17 |
| 4 | Mechanisms of AMR II: β-lactams, fosfomycin, glycopeptides & derivatives, daptomycin and polymyxins | Timothy Palzkill | Antibiotic mechanism of action and resistance; implications for research and therapy | Tues., October 22 |
| 4 | C. difficile and AMR | Charles Darkoh | Examine current concepts related to pathogenesis of <i>C. difficile</i> infections, therapeutic approaches, and AMR emergence. | Thurs., October 24 |
| 5 | Antifungal resistance | Michael Lorenz | Review major mechanisms of fungal resistance and their clinical impact | Tues., October 29 |
| 5 | Microbiome and AMR | Samuel Shelburne | Discuss the important interactions of antibiotics with the microbiome and the evolution of AMR organisms | Thurs., October 31 |
| 6 | Drug discovery, non-traditional antibiotics | Julian Hurdle | Discuss non-traditional antibiotic approaches to combat antibiotic-resistant bacteria. | Tues., Nov. 5 |
| 6 | Antibiotic stewardship, infection control and AMR | Edward Septimus | Review most effective approaches for infection control and antibiotic stewardship in the context of emergent resistance in hospital pathogens. | Thurs., Nov 7 |
| 7 | New diagnostic approaches in clinical microbiology for AMR diagnosis | Micah Bhatti | Discuss new emerging technologies for identification and diagnosis of multidrug-resistant organisms | Tues., Nov. 12 |
| 7 | Pharmacokinetics/pharmacodynamics of AMR | Cecilia Truc Tran | Review relevant concepts of PK/PD and their influence on development and prevention of resistance | Thurs., Nov 14 |