

Molecular Epidemiology of Infectious Disease



This senior seminar course will provide a broad overview of the application of modern molecular and genomics methods to infectious disease epidemiology. Topics will include the identification, classification, characterization, and monitoring of pathogens in human populations; the application of molecular methods to screening, prevention and treatment of infectious diseases; and the analysis of molecular and genomics data for disease. Globally relevant diseases such as salmonellosis, TB, COVID, and influenza will be highlighted.

Topics

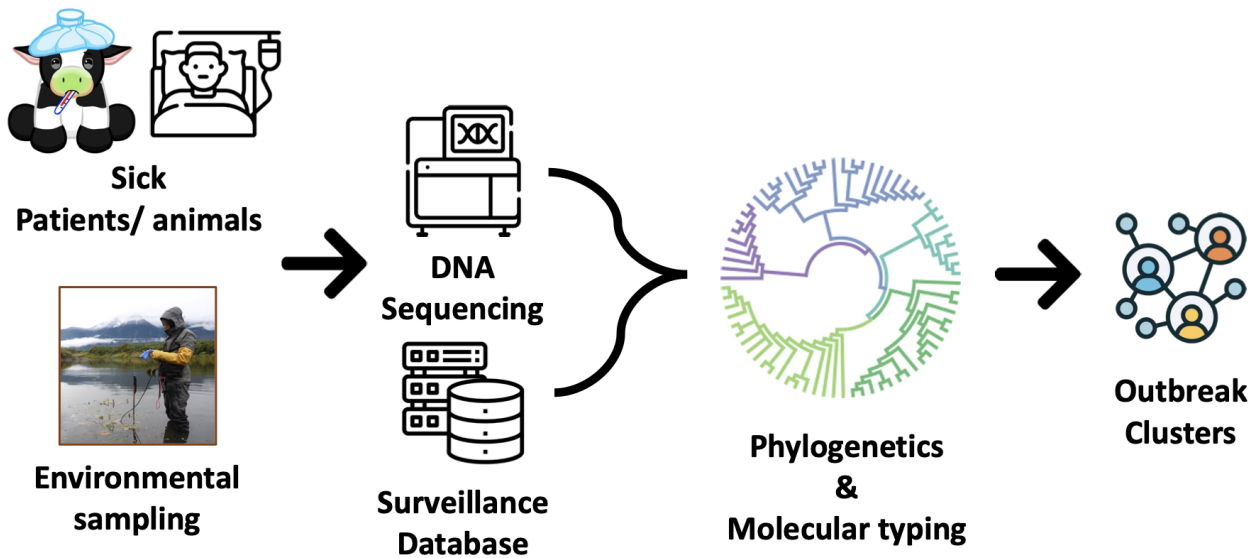
- pandemic response
- outbreak investigation
- genomic epidemiology
- high-throughput sequencing
- microbial population structure
- microbial genomics
- outbreak investigation
- bioinformatics
- molecular diagnosis
- molecular typing
- public health surveillance
- disease control and prevention"

INSTRUCTOR:

William Hsiao

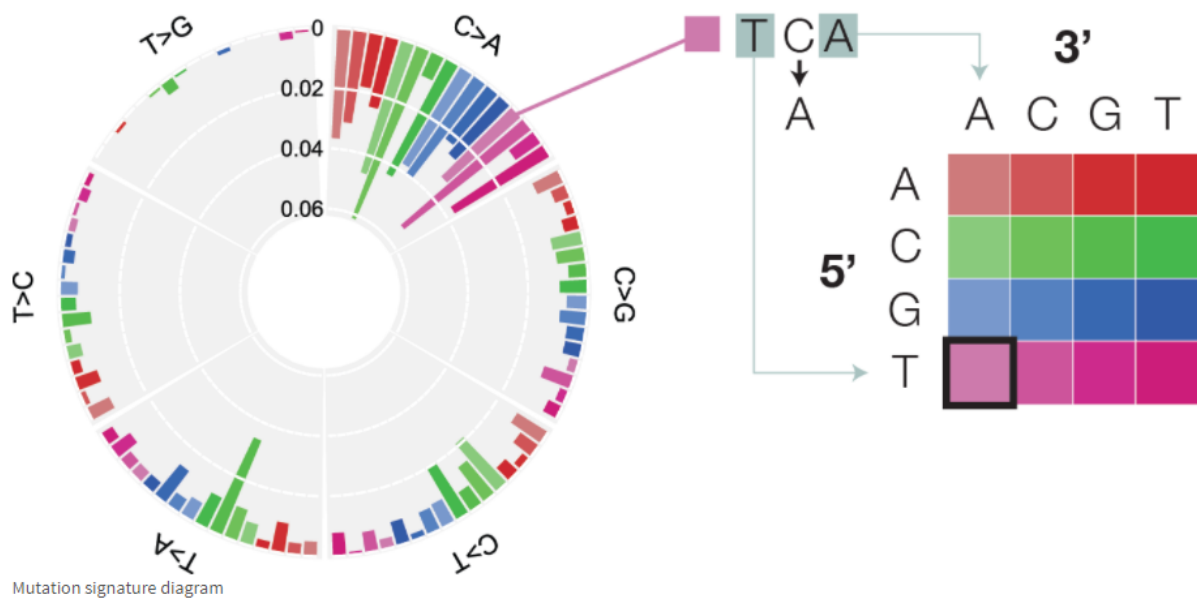


Outbreak Cluster Analysis with Genomics



12

Signature 4



RATIONALE FOR THERAPY

- ***BRCA1/2*^{-/-}** → HRD signature
- ***BRCA1/2*^{-/-}** → platinum sensitivity

