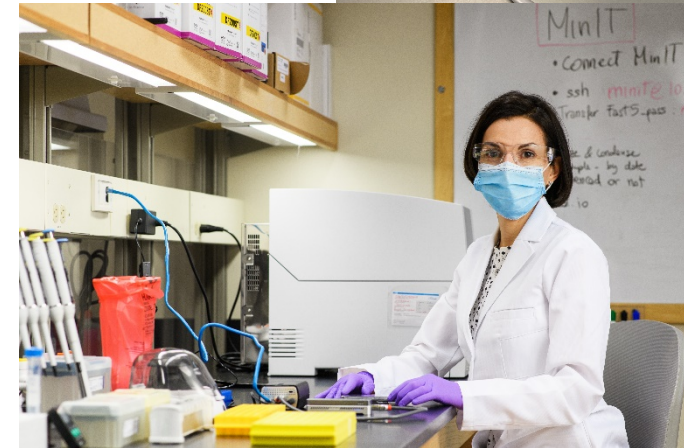
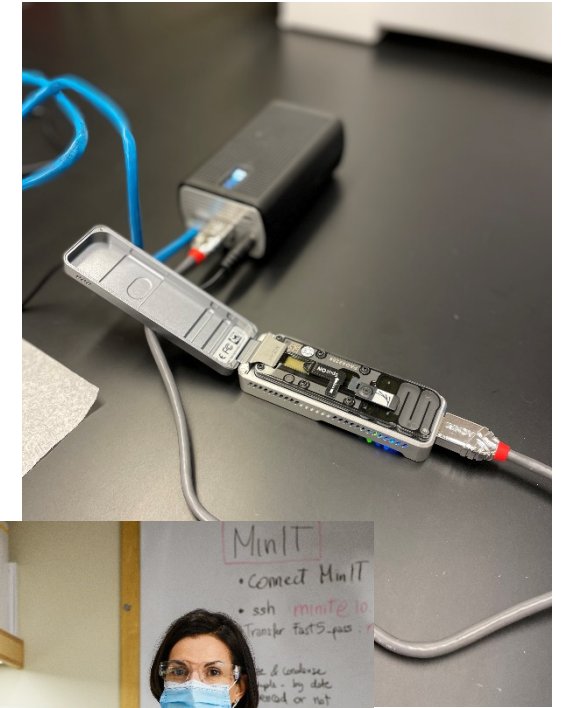


Genomic epidemiology to understand disease transmission: case studies of Malaria and COVID-19

Genome sequencing has played an important role in the fight against COVID-19 by tracking transmission and variants spread, and has increased public awareness about the need for incorporating genomics and epidemiology to improve surveillance and inform public health response. This talk will focus on advances in genomic tools and how my lab has been using genomic epidemiology to understand transmission patterns and track the spread of drug resistance of malaria parasites in Southern Africa, Zambia. I will then present how my lab is currently using real time Nanopore sequencing nested within COVID-19 surveillance testing in our community to track variants and understand dynamics of transmission. Last, sequencing and computational innovations for COVID-19 (i.e. real time sequencing, data sharing, data interpretation) and challenges for their implementation and application to malaria surveillance will be discussed.



Featuring Dr. Giovanna Carpi, Biological Sciences

Research Spotlight Series:
Wednesday 4/28 @ 10:00 am [here](#) on
Zoom



Purdue Institute of Inflammation,
Immunology and Infectious Disease