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**Chadi M Saad-Roy\*** ([csaadroy@princeton.edu](mailto:csaadroy@princeton.edu)). *Coupled epidemiological and evolutionary dynamics of pathogens*. Preliminary report.

Pathogens that cause infectious diseases can be strongly influenced by rapid evolutionary pressures, e.g. by host immune systems. Thus, pathogen evolutionary dynamics can play a substantial role in disease control strategies, underlying the importance of determining and understanding the qualitative behaviour of these dynamics. In this talk, I will discuss recent mathematical modelling work that considers both the epidemiology and the evolution of pathogens. I will also illustrate how these findings relate to disease control. (Received February 29, 2020)