The widespread use of antibiotics has led to the development of many strains of antibiotic resistant bacteria. This fact, along with the costs associated with bringing new drugs to market, has led many pharmaceutical companies to abandon antibiotic research. An alternative strategy to directly killing pathogenic bacteria with antibiotics is to keep the pathogens from being able to use their virulence mechanisms. In this seminar I will talk about the Type III Secretion System (TTSS), which is an apparatus used by Gram-negative pathogens to cause infection. Key differences between antibiotics and TTSS inhibitors will be addressed, as well as the uncertainty in how many TTSS inhibitors work. There will be a focus on TTSS inhibitors that are natural products.