Clare O’Connor

Letter of Intent!

For the research proposal I am interested in looking at the removal of pharmaceuticals, specifically antibiotics, in wastewater. I was considering something within this topic before reading the co-metabolism paper for this week, but I may include and aspect of that at that at this point, as it seemed like an effective technique for the pharmaceuticals in the study. I am not sure of which specific antibiotic compounds I would like to address at this point but it will likely tetracycline or another common category, as they are likelier being released in higher quantities into water systems through wastewater so there is more background available. My motivation to look at this is the increase in prevalence of antibiotic resistance organisms that may have an effect on human health in addition to known effects on aquatic life. I think one of the challenges in this will be keeping the model parameters and theoretical considerations simple enough to keep it manageable while still capturing the main processes involved.