Natural Selection Engineering Internship

Nov. 12, 2019 **Day 1/49**

At the end of todays lesson you will be able to;

- Design a treatment that does not cause an increase in the malaria parasite population while considering three criteria: minimizing drug resistance in the malaria parasite population; minimizing patient side effects; and keeping costs low.

Classwork-

- Natural Selection Engineering Internship Day 3
- As interns continue in the Research phase, they focus more on how drug resistance occurs in parasite populations and how the choices biomedical engineers make for drugs used in malaria treatments affect the overall distribution of traits for drug resistance in these populations. Interns re-watch the Natural Selection in Malaria animation segment and read more about drug resistance. They return to the MalariaMed Design Tool in order to investigate the effect of using one drug on long-term drug resistance, and then discuss the pros and cons of each drug type.
- The purpose of these activities is for interns to synthesize their knowledge of natural selection and malaria in order to understand how malaria treatments can shift the distribution of traits for drug resistance in a population of malaria parasites..

Homework-

- After-Hours: Reread and revise annotations in Chapter 4: "Antimalarial Drug Resistance"