Interim Report

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Our team is studying the effects of different concentrations of sickle cell anemia on the body. Our goal is to find at “what concentration of sickle cell anemia, within the body, will greatly reduce the symptoms of malaria without causing serious symptoms within the body of the courier.” Our research consists of the basic workings of Malaria which we gather from various different sources one of them being from cdc.gov (1). According to The CDC malaria is a viral love spread through female mosquitos. Essentially when the female mosquito bites a human the parasite larvae enter the bloodstream. Sickle cell anemia is a genetic disorder that impacts red blood cells (2). A sickle cell cannot carry oxygen as well as a healthy blood cell.(2) sickle cell anemia provides limited protection from malaria.(3) because Sickle cell anemia has varying degrees of severity the amount of immunity gained against malaria is a direct correlation to the severity of sickle cell anemia. The heterozygotes from the sickle cell genes are protected to a certain degree against malaria (4). The sickle cell trait is found more commonly among humans who are living closer to a coast than on dryer land (5).

To evaluate the problem by computational means we plan to research the various behaviors of sickle cell anemia and its interactions with Malaria within the body. With enough information a pattern can be found and traced. That is what we want to do. The team, as of late, has been focusing the time to research and breaking down the construction of the code. As for results the expectations are to find that the most efficient ratio of sickle cell anemia to malaria will be low as to not harm its courrier too significantly.

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