

## **Screening FDA-approved drugs and natural compounds to hemozoin biomineralization inhibitors in *P. falciparum***

Malaria has been targeted by the WHO for elimination for well over a decade now. The emergence of resistance to widely used antimalarials combined with the persistence and lack of drugs that target other Plasmodium species like *P. vivax* has made it challenging to eradicate malaria.

The main aim of this research is to find drugs that inhibit the function of a lipocalin that has been shown to be involved in hemozoin biomineralization.<sup>1</sup> The study will focus on the virtual screening of existing compounds from public databases as potential inhibitors of *P. falciparum* lipocalin (PfLCN). The screening and understanding of binding and protein ligand dynamics will require docking, free energy calculations and molecular dynamics simulations.

### **Student?**

Yes

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