

Postdoctoral Research Associate: Systems Genetics of Malaria Drug Resistance Phenotypes

The Ferdig lab (<http://www3.nd.edu/~ferdilab/>), in The Eck Institute for Global Health and the Department of Biological Sciences at the University of Notre Dame, is seeking a highly motivated post-doctoral researcher to join our team. We are leading an NIH program project grant designed to elevate traditional genetic linkage mapping to the level of a nimble and powerful 'systems genetics' approach broadly accessible to the malaria research community. Our group at Notre Dame has partnered with cutting-edge teams at CID Research (Seattle) and Texas Biomed (San Antonio) in a highly collaborative framework to innovate the pipeline, from the generation of novel genetic crosses ([Vaughan et al. 2015, Nature Methods](#)) to comprehensively connecting genotypes to phenotypes.

The position can support a strong career development trajectory for the fellow and will include leadership of a local phenotyping team as well as fostering strong collaborative relationships. The fellow will work both independently and as part of a collaborative team with the responsibility of developing and implementing semi-high throughput phenotyping assays related to drug resistance evolution in the malaria parasite, *Plasmodium falciparum*. In addition to being a pivotal part of a program to build innovative data integration and analytical methods, the fellow will have ample opportunity to publish, write proposals, travel to collaborator sites and conferences and to partake in career development/training opportunities at Notre Dame. The fellow will have the opportunity (but not the obligation) to develop skills in bioinformatics and computation.

Required:

- A recent or anticipated PhD in Parasitology, Microbiology, Genetics or a related field
- A record of successful publication of research manuscripts
- Ability to design and conduct experiments and work independently
- Ability to work with others as a team
- Ability to write proposals and present their research at conferences
- Command of the English language
- Organizational skills
- Experience with aseptic cell culture
- Willingness to work flexible hours

Ideal:

- Experience culturing human parasites
- Experience with drug dose-response assays
- Experience with flow cytometry
- Experience with assay development and validation

Submit a current C.V. and names of 3 references to Dr. Michael Ferdig, Professor, Department of Biological Sciences, University of Notre Dame, IN 46556-0369, ferdig.1@nd.edu (574) 631-9973