

# Malaria in Madagascar: A One Health Approach

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Madagascar One Health Project: Mananjary District, Madagascar  
Funded by CHW under the Global Health Program

## Introduction

- The One Health approach recognizes important interconnections for better health outcomes
- Ongoing project to collect infectious disease data from human and wildlife hosts
- Focus on malaria in rural Southeast Madagascar

## Objective of Internship

I wanted to learn more about how collaborative global health projects function and broaden my knowledge of infectious diseases through field research.

## Work profile

- Continued field research for a longitudinal malaria surveillance study in rural Southeast Madagascar
- Worked with Princeton postdoc researcher Dr Rice
- Assisted in a mobile malaria clinic at 5 sites with researchers and doctors
- Helped with mosquito trapping, larva collection, identification, and labeling at each site
- Brainstormed for project expansion to include a toxoplasmosis study

## Reflection

- Through assisting in the mobile clinic, I learned how to take and read malaria tests and how to administer medicine for positives
- I learned that malaria infection rates vary even within the same region (Mananjary district)
- In almost each site, ecology and climate differed and this prompted me to think more critically about malaria transmission
- Better understood how to begin public health projects



My first time doing a malaria rapid test.



Assisting with mosquito sorting and labeling. Pictured: Entomologist Sylviane Miharisoa



Heading out for mosquito larva sampling & holding the supply toolbox

- Through working in the global clinic with the doctors and helping with the mosquito research, I learned about the importance of collaboration and communication in global health projects.
- I learned how valuable it is to work directly with community members when doing public health initiatives globally.
- I was able to explore connections within public health in a unique environment.
- I broadened my research experience to include hands-on field work and quantitative methods, all essential in public health.

## Looking Ahead

- I look forward to furthering my public health knowledge by pursuing a certificate in Global Health and Health Policy. I also hope to continue doing health work in African communities and learning more about infectious diseases, treatments, and prevention.

## Questions

1. How can longitudinal global public health projects better respond to changes such as weather events which impact the communities they serve?
2. How can we improve determination and treatment of malnutrition?

## Conclusion

Despite a longitudinal study, it is not clear which factors lead to varied rates of malaria even within the same region in Madagascar. This highlights the complexity of infectious diseases and the importance of future research in the global public health sphere.

## Acknowledgements

Thanks to GHP for offering this internship, CHW for funding it, and Dr. Rice for introducing me and allowing me to assist on this project. Gratitude to my colleague, Libby Blazes, for her companionship and support during this internship.