## Cara Brook

October 12, 2018

# Statement of Interest

I am applying to your courses program in Ecological and Epidemiological Modeling in Madagascar for January 13- 21, 2019. After completed my Bachelor degree in Geology at department of Earth Sciences options Geoscience and Technology at the University of Toliara, I worked for two years as an Assistant Research at NGO Catholic Relief Service-Madagascar with FARARANO Research project and MAHERY (Madagascar Health and Environmental Research) supervised by Professor Chris Golden and leading by Benjamin L.Rice on "Seasonal cycle of the human health, nutritional survey and livelihood impacts of environmental changes in Madagascar".

During my work experiences my dream was oriented through to Public Health research after surveying since long period in human health and their dependence on environmental with global climate changes for example our follow up mission showing the heavy drought in Toliara and Morombe, Southwestern of Madagascar provoking troubles on human health, food contributions (agricultural production and fisheries decline), and socioeconomic revenue constantly. Couples with these work, several surveys have equipped me with knowledge the importance of epidemiological health surveillance, the relationship between social ecological and health impact, and malnutrition.

I am passionate about building upon the success and fulfillment I have already experienced as an Assistant Research. My career goals include exploring cutting-edge on Ecological and Epidemiological within my colleague. The Institut Pasteur de Madagascar & Centre ValBio program reputation for excellence in developing new model frameworks and corresponding equations, a series of interactive lectures and computer-based tutorials and learn to fine-tune model-based research questions, and fit models to real-world data is the catalyst for my decision to attend graduate school in the first case. As I am a naturalist, I am particularly interested in pursuing your course for better developing my skill, and I will plan to continue my study as a graduate student on next years, and I'm considering writing a thesis on the topic as well.

Thank you for your considering my application. It would be an honor to continue my studies and pursue my passion.

Sincerely,

Robuste Mahonjolaza

# Seasonal dietary survey: a longitudinal follow up study

# Abstract:

The Harvard-Fararano research project have made fieldwork across 4 ecological zones of Madagascar for longitudinal dietary, food security and human Health since 2017, and we continue surveying of at risk communities is performed through of divers seasonal weather cycle for 11 months. Our main study comprises to collect a dietary data for food and health diary with socioeconomic survey, how is the variety of food they may consumed and what types of diseases may found frequently for every individual. Repeated follow up at these zones will allow a better understanding: 1) the complete study at all zones during the same seasons and permit more direct comparisons between regions, 2) the relative contributions of regionally and seasonally available food items, 3) regional differences in the temporal fluctuation of chronic and acute nutritional stresses. Primary the results from our first research mission indicate that the most commonly consumed food items on January- March: breadfruit/ soanambo in Mananjary; on March- April: stock-rice/ vary stock and corn/ katsaka in Toliara; on April- May: rice/ vary gasy in Morombe and Ambositra. The second mission results on June: freshcasava/ mangahazo lena and stock-rice/ vary stock in Mananjary; on July: corn/katsaka and rice/vary gasy in Toliara and Morombe. Now we still compare how diets may change across all seasons for better identifying the differences in perceived food insecurity between the regions that we have working.

# Robuste F.Mahonjolaza

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#### **EDUCATION**

BSc. The University of Toliara, Madagascar

2015

Department of Earth and Environmental Sciences,

Options Geosciences and Technology

## PROFESSIONNAL ACTIVITIES & SERVICE

Professional memberships

- Madagascar Health and Environmental Research (MAHERY) field research team
- Association Geosciences for University of Toliara (AGUT)
- Mutuelle d'Organisations Sociales- Actions Individuelles ou Communautaires (MOSAIC Madagascar)
- Actions Universelles de Partages et d'Education Citoyenne (VOARABE pour Madagascar)
- Jeune Chambre Internationnale (JCI) Toliara

#### Service

- Research Assistant at NGO Catholic Relief Services (CRS), Madagascar- HARVARD FARARANO
  - Scientific research project for Seasonal cycle of the Human Health, Nutritional Survey and livelihood impacts of environmental changes in Madagascar January 2017- to present
- Enumerator Consultant at NGO Ezaka Fampandrosoana hoan'ny tontolo Ambanivohitra (EFA)
  - Research project for Characterizations and Intervention in Environmental zones from Western Madagascar with World Wide Fund Menabe and Melaky Organization 2016
- Assistant Geologist at Trans Mad'Development, Potable Water Addiction project in Southwestern of Madagascar Itampolo
   2016
- Graduate Student Research Volunteer, for research of hydrological risks in anthropized watersheds: modeling of hazard, vulnerability and impacts on population from south-west of Madagascar, collaboration with University of Anger, France
  2015
- Outreach volunteer at the Field for CEDRATOM Museum of Natural History and Archeology University of Toliara

### **SOFTWARE SKILLS**

Microsoft Office (Word, Excel, Powerpoint), MapInfo 8.0

## **OTHERS**

Language: Malagasy, French, and English