

Please note: For summer 2021, GRAP is offered as a **remote** opportunity. If conditions change (Tufts allows international travel, and the country where the research takes place allows incoming student researchers), we will consider allowing students to travel internationally.

Faculty: Zarin Machanda, Assistant Professor, School of Arts & Sciences

Project Locations: Remote work from home or at Tufts University/Medford, MA and Kibale National Park, Uganda

Dates: TBD

Project Title: Evaluating the academic outcomes of primary school students in rural Uganda

Project Details: Dr. Machanda is one the directors of both the Kibale Chimpanzee Project (KCP) and the Kasiisi Project. Together, these two organizations work towards the conservation of Kibale National Park, Uganda through programs that support education, health, and care for the environment in local government primary schools. Currently, there are almost 1500 wild chimpanzees living in Kibale National Park. However, this habitat is threatened by the pressure caused by increased human population growth around the park boundaries. These anthropogenic factors are predicted to cause the extinction of all wild apes including chimpanzees by 2100 (Nishida et al. 2001). Effective conservation activities are necessary to save this species both within and outside of the National Park. Kasiisi Project works in 16 primary schools that are all located within 5km of the border of Kibale National Park. We service over 10,000 children and our philosophy is that we offer a diverse set of programs to make these schools as wonderful as possible. We believe that we need to give students the resources they need to succeed in order to pursue a future that does not rely on cutting down Kibale National Park for subsistence farming. Along with programs on health, nutrition, reading, art, drama, and photography (to name a few), we also have several programs that teach the students about conservation and the environment. One question we often receive from stakeholders (both here and in Uganda) is whether we are actually making a difference for these children. This summer, we are launching a new research project that will allow us to evaluate our long-term success. We hope to collect data on different measures of academic outcomes from our participant schools along with non-participant schools in the area (n= 16 for participant schools, n=24 nonparticipant schools) and compare them. For example, one measure of success for a school is to determine how many students who are enrolled in primary level 1 (the equivalent of kindergarten) stay in school and finish primary level 7. We hope that our support helps keep students, especially girls, in school but we have never compared our schools with comparable schools in the area. Other metrics would look specifically at the percentage of girls that stay in school, standardized test scores, and the proportion of students that continue to secondary school. Preliminary data that we collected for a few years indicated that students at 5 of our partner schools show great improvement on standardized test scores than other non-partner schools in the area but we would like to include these additional metrics as well as more data across 20 years and more schools.

Tasks and Responsibilities of Research Assistant:

Remote Work:

This research could be done remotely by hiring a research assistant in Uganda who could collect and scan the data to be used by students here. They would meet with this research assistant over zoom daily or as often as necessary. Professor Machanda's students worked under this model last summer and it was successful.

If international travel is allowed:

1. Training with Dr. Zarin Machanda on the details of the study and how to collect the data and do basic statistical analyses.
2. Traveling to Ugandan schools and meeting with head teachers to collect data on school enrollments (this can be done virtually with the help of a research assistant if necessary)
3. Traveling to government offices to collect data on standardized test scores and other performance metrics for each of the school. This can be done virtually with the help of a research assistant if necessary.
4. Entering and analyzing data
5. Presenting data to Kasiisi Project team members and writing a report that will be shared with local and international stakeholders
6. Assisting the current conservation and health teams at Kasiisi in planning their programming for the summer

Qualifications:

The student does not need any special skills other than strong word and data processing skills on a computer. The student should have a deep interest in learning about different cultures and be comfortable traveling to a part of the world without first world amenities like running water and reliable electricity. The student should also be extremely adaptable, patient and understand that they will need to listen to and follow directions that might not make sense to them given their cultural background. Finally, the student should have an interest in conservation and international development and they should enjoy working with children.

Description of Field Site:

Students will be living in rural Uganda, about a 20 minute car ride from the closest town. There is no running water, so students should be prepared to have bucket showers and use pit latrines. Drinking water comes from boiled and filtered rain water. There is electricity to charge laptops and phones but there are frequent outages. A generator is available at the office for emergencies.

Housing in Uganda:

Students will stay in project owned accommodation built to house volunteers. They will share the house with at least 3 and up to 5 other American volunteers and interns, likely with their own room but this is not guaranteed. This number may be quite lower depending on the COVID-19 situation in Uganda. The house has pit latrines and bucket showers. All drinking water is from rain barrels and is boiled and filtered. The house is surrounded by a fence with a barbed wire top and a locked metal gate. During the day, there is a cook on site and at night there is a security guard. Dr. Emily Otali lives 8 km from the volunteer house. The house has a safe for valuables.