

## **One Health study abroad program – Kamuli, Uganda, May 28-June 12, 2023**

### **Program Description**

An experiential study-abroad program of approximately two weeks for veterinary students of any year focusing on human health, animal health, and the environment in the Kamuli District, Uganda. The overarching goal of this program is to improve the lives of the people of Kamuli through work on health-related projects. Each student will utilize observational and questionnaire surveys that they design and administer as part of a team to evaluate water, sanitation, and hygiene (WASH) within the district, or to evaluate zoonotic disease awareness and prevention of households. Students will attend an eight-week predeparture course to prepare them for their time in Uganda, and to learn more about Uganda, Kamuli, the people, health issues, expectations, and to design the surveys. The information collected through these surveys will lay the groundwork for future students to build upon. Students must be able to work individually and in small teams, be able to conduct a PubMed literature search, to summarize literature findings, be comfortable in visiting and communicating with others (possibly through interpreter) for the interview processes and be respectful of cultural differences.

This is a new program. As such, students should expect that changes may occur to their planned daily schedule while in Uganda, their project activities, project focus, or changes to other areas. Students should be flexible, adaptable, adventurous, selfless, and willing to work in unfamiliar settings.

### **Prerequisites**

Enrolled in the ISU, DVM program

### **Program Leader**

Radford Davis, DVM, MPH, Diplomate ACVPM

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### **Program Format**

Pre-departure course (once a week for 8 weeks)

- Eight-week pre-departure course focusing on learning about Uganda, the Kamuli District, the people and culture of Uganda, common health issues, the history of the ISU, Center for Sustainable Rural Livelihoods (CSRL) and the ISU-Uganda Program (UP), project research and planning, travel risks, and expected outcomes upon completion. Students will work in the areas of water, sanitation, and hygiene (WASH), and zoonotic disease awareness/education. Students will work together to design/refine surveys, conduct literature searches, gather citations, and write reports of results. Students will work with Dr. Davis to find, read, and utilize citations to design an observation survey as well as a questionnaire survey for WASH and a separate set of surveys for zoonotic education. The two finished surveys must be completed by April 19, 2023.

In-country experiential learning, Kamuli, Uganda (2-weeks)

- Students will travel to the ISU-UP campus in Kamuli, Uganda, in May 2023. This campus is run by the ISU, Center for Sustainable Rural Livelihoods, and is where students will be housed. All meals are included. Students will share a room (4 per room). Bag lunches will be provided for the days when traveling to villages. Undergraduate ISU and Makerere University students will be housed at the ISU-UP campus at the same time. Daily transportation will be provided, with group leaders, translators, and Dr. Davis accompanying students to villages and/or farms where students will meet with people and carryout pilot evaluations of our observation and questionnaire surveys. Students will keep daily journals and work on summarizing all survey data and formulating a final paper of results and conclusions of their surveys. Students will attend daily meetings.

### **Program Objectives**

1. To enhance the wellbeing of the people of the Kamuli District through better understanding of WASH and zoonotic disease awareness/prevention.
2. To pilot WASH and zoonotic education surveys, identify problems, and refine them.
3. To use survey data to create a plan for carrying out effective zoonotic disease community education/prevention, and a plan for improving WASH.
4. To immerse students in a unique culture where they can experience the differences and similarities in human and animal health problems and solutions between Uganda and the U.S.
5. To give students public health experience centered on actively engaging through field work.
6. To build a greater understanding of health in students.
7. To build positive, respectful relations with the people of the Kamuli District.
8. To lay a foundation of knowledge and actionable steps for succeeding groups of DVM students to build upon and refine.
9. To learn what works and what doesn't in the inaugural offering of this study abroad program so it may improve.

### **Program Outcomes**

1. The recording of observational and questionnaire survey data surrounding WASH and zoonotic disease education in the Kamuli District.
2. A final report with background, summation of results, needs, actionable next steps, and conclusions regarding WASH and zoonotic disease education within the Kamuli District.
3. A stronger working relationship with ISU-UP
4. To earn the trust of the people of Kamuli.
5. Evidence that students can work successfully on public health and animal health issue in the Kamuli District.
6. To lay a foundation for succeeding DVM students to build upon.

### **Student Objectives**

1. To learn while contributing to the health of a community.
2. To gain perspective on health, public health, and animal health in Uganda.
3. To gain perspective on cultural differences between the U.S. and Uganda.
4. To learn about the habits and customs surrounding WASH of the people of Kamuli District and how WASH connects to health, wellbeing, livelihoods, income, gender, and education.
5. To learn about WASH in Kamuli District: state of knowledge, impact, barriers, needs, priorities
6. To learn about the habits and customs surrounding the raising of food animals and cooking of the people of Kamuli District.
7. To learn about zoonoses in Uganda: state of knowledge, impact, means of communication/education, priorities
8. To design an observational survey and questionnaire survey that are practical and useful
9. To describe the disease reporting systems for animal and human health within Uganda.
10. To recognize the challenges to obtaining health care and the inequalities in burdens of disease.
11. To discover the best means of communicating with villagers or farmers regarding WASH and zoonoses.

### **Student Outcomes**

1. Each student will submit their daily journal at the end of the program.
2. Each student will submit all original observation and interview surveys at the end of the program.
3. Each group will submit a final report collating, analyzing, and summarizing all questions and data. Each group will submit a final report containing:

- a. Title page, 1 page.
  - b. Summary/abstract of the project and results, 1 page (approximately 250-300 words)
  - c. Background: survey type, location, number of villages/farms, number of households, number of people in the areas studied, needs (why doing this survey?). 1-2 pages.
  - d. The results of surveys in sentence/paragraph manner with supporting tables, 3-5 pages.
  - e. A list of prioritized needs and actionable next steps to improve zoonoses awareness or WASH, 2-3 pages.
  - f. Conclusions of what was learned, 1page.
  - g. This report should be approximately 10-14 single-spaced pages, with a separate page for citations (10 minimum).
7. While in Kamuli, each group should attempt to identify at least three additional issues/concerns in their visits that can be explored by future students. These additional items may or may not be directly related to the current project.
    - a. These ideas should be summarized in 1-2 pages and provide insight into your reasons why you selected these.

### **Expectations of Students (pre-departure and in-country components)**

1. Attendance of all pre-departure meetings is mandatory for successful completion of the course. If you need to miss a class due to an emergency or another unforeseen circumstance, please contact Dr. Davis prior to the class.
2. Students will monitor Promed Mail, internet, and social media for news on Uganda and share quickly what you have learned in pre-departure meetings and in our Canvas website.
3. Conduct a literature search (Dr. Davis has many citations already that he will share) to learn more about WASH and zoonotic disease education of communities. Students must collect a minimum of 10 peer-reviewed citations and, as a group, use these to help guide their design of questionnaires and observational survey.
4. Two finished surveys (1 observational, 1 questionnaire) for WASH and two for zoonotic education must be completed by April 26, 2023.
5. Each student will submit 3 questions for each of the following: Ministry of Agriculture, Ministry of Health, and USAID.
6. Each student will keep a daily journal while in Kamuli and document the following:
  - a. Where you went and with whom
  - b. Time you left/arrived from one place to the next
  - c. What you did
  - d. The number of community members you interacted with that day
  - e. At least 3 accomplishments for the day
  - f. Something new about the culture and people that you learned that day
  - g. One standout item of the day
  - h. Next steps on your project (like a to do list...)
  - i. What's working, what's not (as needed)
  - j. Other as desired (photos? Story?)
7. Attend daily meetings with Dr. Davis and other students while in Uganda
8. Adhere to the rules and customs of the ISU-UP campus
9. Interact professionally with ISU and Makerere University staff, faculty, and students
10. Each student will complete a evaluation about this study abroad experience

### **Grading**

Letter grade (A-F)

## Uganda Itinerary

May 28

- Depart from the U.S.

May 29

- Arrive Entebbe, Uganda, evening
- Hotel in Entebbe - Best Western Premier Garden Hotel, Berkely Road +256417219800
- Airport transportation to & from hotel provided by hotel

May 30

- 1 pm – Entebbe, Ministry of Ag – overview of animal health and veterinary services
- 3 pm - Drive from Entebbe to Kampala
- Hotel in Kampala - Best Western Plus The Athena Hotel Plot 21 Faraday Road, Kampala.

May 31

- 9 am – meet with USAID & Embassy staff U.S. Mission Compound-South Wing, Plot 1577 Ggaba Road, (USAID = +2560414306001 Embassy = 0312-306-001)
- 11 am - Ministry of Health (overview, challenges, future). Plot 6, Lourdel Road, Kampala Uganda
- Lunch
- 2:15 pm - meet veterinary students & faculty, Makerere University, tour (MU not far from Min. of Health)
- 3:30 pm – leave for Kamuli
- 6:00 pm – arrive ISU-UP, Kamuli, settle into housing

June 1-10 – live at the ISU-UP, Kamuli campus. All meals included.

- Daily group meetings in the mornings with Dr. Davis and other ISU-UP staff to review plans for the day.
- Van with driver, interpreter to accompany students & Dr. Davis to villages to conduct surveys, visit clinics & schools, learn about water, sanitation, hygiene and zoonotic awareness.
- Visit with ISU faculty as needed and participate in ISU-UP activities as appropriate.
- Evening meeting with Dr. Davis: review of the day's activities, successes, concerns, problems, make changes, discuss next day schedule.
- Breakfast on campus, take-away lunch, dinner on campus
- Meetings and visits to arrange (tentative): District vet, district vet lab, health clinics, physicians, k-12 schools, nutrition education centers, learn about ISU-UP outreach programs in health, animal health, others as possible

June 11

- 1 pm - Drive to Entebbe
- Hotel, Entebbe - Best Western Premier Garden Hotel, Berkely Road

June 12

- Fly back to the U.S.

## **Pre-departure course**

8 weeks (1 hour per week)

TBD (possibly Wednesdays 4-5 pm, room 2226)

March 1 – April 26, 2023

This course is designed to prepare the student for safe travel to and working within the Kamuli District, Uganda, living at the ISU-UP campus, and carrying out health-related surveys. The course will be a mixture of lectures, student presentations, readings, and outside work to conduct literature searches and construct questionnaires.

Students will be divided into 2 groups.

Each group will prepare three 10-15-minute presentations (details provided later) and a 1.5-2-page, single-spaced concise summary of the information in the presentation, plus a list of at least 5 references on a third page.

Group 1 presentations

- History of Uganda
- Current picture of Uganda: population levels, country economy, poverty rate, literacy rate, languages, religions, political structure, major exports, gender issues
- Burden of diseases (communicable, noncommunicable), maternal and child health/mortality, life expectancy in Uganda

Group 2 presentations

- Livestock diseases in Uganda
- Zoonoses of concern in Uganda
- One Health in Uganda – examples, what is known/published (government efforts, One Health initiatives, research, OIE-WHO-FAO, etc.)

March 1 (Week 1)

- Overview of the program, predeparture schedule, daily schedule while in Uganda, expectations of students, review the projects and student group assignments around WASH and zoonoses education.
- What to expect, what to pack, make plans
- Initial survey designs so far by Dr. Davis and where to go from here

March 8 (Week 2)

- ISU, CSRL faculty – overview of Kamuli District, demographics, region layout, ISU-UP campus housing, cultural dos and don'ts, how to educate and communicate to villagers, suggestions how to dress and act. Location of villages?
- Study abroad staff – discussion on safety, risk, health

March 22 (Week 3)

- Dr. Davis – WASH presentation
- Administering the surveys: approaches, how to...
- Group survey updates version 2 due

March 29 (Week 4)

- Dr. Dorothy Masinde – Overview of Uganda medical system and public health.
- Group survey updates version 3 due
- Groups review each other's surveys and give input on how to improve

April 5 (Week 5)

- Group presentations

- Dr. Davis – soil helminths, malaria, zoonoses
- Group survey updates version 4 due – submit to others for review

April 12 (Week 6)

- Group presentations

April 19 (Week 7)

- Group 3 presentations
- TBD: Possible video by Dr. Gideon Nadiope – structure of veterinary medicine in Uganda and Kamuli, challenges, successes, areas of need for students to work on, the future. TBD
- Group survey updates version 5 due

April 26 (Week 8)

- Wrap up business
- Final revisions of surveys due