

Guest Editor

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I can only compare the experience to that of a child meeting his or her favorite superhero or sports star. She was my own personal professional hero, and I was getting to have dinner with her that night!

I first learned of Conservation through Public Health (CTPH), a non-profit, non-governmental organization based in Uganda, during my second year of veterinary school, while attending a presentation made by an upperclassman on her experience doing a research project with the center over the summer. That was my first introduction to Dr. Gladys Kalema-Zikusoka. She is the veterinarian that made the connection that cases of scabies in the mountain gorillas living in Bwindi Impenetrable National Park were associated with scabies illnesses in the human communities surrounding the forest. The first outbreak occurred in 1996 with a subsequent outbreak in 2001-2002. Fortunately for this endangered species, treatment with Ivermectin led to successful resolution of illness in the gorillas, aside from one fatal case in a gorilla infant. CTPH was founded upon this realization that the health of the gorillas was dependent on the health of humans – and vice-versa – as the species encroached on each other's habitats.¹ For the reader of this journal issue, it also serves as a textbook example of the One Health concept.

The Centers for Disease Control and Prevention (CDC) define One Health as “a collaborative, multi-sectoral, and transdisciplinary approach – working at the local, regional, national, and global levels – with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment.”² Classically, zoonotic diseases have served to exemplify the One Health concept, and indeed, several of these diseases and their collaborators will be highlighted in this issue. But the interrelationships between human, animal, and environmental health extend beyond hosts, pathogens, and their environments to issues concerning occupational health, mental health, chronic disease, and food security.²

The 2018 fatal case of rabies in a Delaware woman served as an impetus for the launch of a small One Health project here in the First State. A multi-agency educational committee consisting of representation from Delaware Departments of Agriculture, Natural Resources and Environmental Conservation/Division of Fish & Wildlife, Health and Social Services/Division of Public Health and the Public Health Laboratory was formed to address a perceived lack of public knowledge on the risk of rabies. The educational project debuted at the 2019 Delaware State Fair, where simple public messaging encouraging rabies vaccination of pets and keeping a safe distance from wildlife was shared through games, prizes, and informational materials.³ We believe that education such as this could have prevented the tragic death of the Delaware citizen the year prior, where neither interactions with domestic nor wild animals could be ruled out as routes of exposure for rabies. This was the first confirmed case of human rabies in Delaware since 1941. Plans to continue outreach at future Delaware State Fairs and other events in the state have been postponed at this time due to lack of personnel and financial resources for the endeavor due to COVID-19, but our intention is to resume activities once feasible.

How did I come to have the opportunity to meet my hero over dinner back in 2016? Well, I was coming to the end of my own One Health expedition as a volunteer with Veterinarians Without Borders during the last few months of my veterinary public health and preventive medicine residency. I had spent the last four weeks traveling throughout the West Nile region of Uganda with several other American veterinarians, educating local veterinarians, animal health technicians, cattle traders, butchers, and farmers on high consequence animal diseases and zoonotic disease prevention. I found myself in Kampala preparing to depart for my next destination, emailing with one of my mentors who was a personal friend of Dr. Kalema-Zikusoka. Knowing how exciting it would be for me to meet her while I was in country, phone calls were made, emails were sent, and the next thing I knew, Gladys was my dinner guest that evening. I giddily listened to her discuss CTPH projects: testing of gorilla fecal samples from night nests to evaluate for the presence of pathogens of concern to the gorillas and humans, family planning education and intervention with collaboration from local religious leaders, transport of human sputum samples by volunteers to regional hospitals to test for tuberculosis followed by initiation of treatment of case patients, and group livestock income-generating projects to support the Village Health and Conservation Team volunteers working in the community.^{4,5}

Perhaps you are a reader who has never previously heard of One Health. On the other hand, you may be a regular transdisciplinary collaborator who is well versed in the concept. Regardless, I hope that this issue brings to light some of the One Health issues facing our state and region, and draws attention to some of our outstanding colleagues dedicated to One Health issues. My wish, though... my wish would be that this issue reaches even one impressionable reader and lights a spark of realization in him/her that the grand health challenges that we face can only be solved by working together through a One Health approach. Dinner is on me.

References

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