ISOHA Mentorship Program

FIRST ANNUAL

ORGANIZED BY
Emily Hardgrove
Vice President for Education

ISOHA
International Student One Health Alliance
PILOT ISOHA MENTORSHIP PROGRAM

We were so excited to launch this pilot mentorship program for members of ISOHA. The goal of the program is to provide a platform for students interested in One Health to connect with an established One Health professional who has similar One Health-related interests. This partnership between students and professionals provides students with opportunities to expand their network, gain career guidance, and to engage and lead in One Health thinking. For mentors it yields fulfillment, inspiration, and a connection to rising One Health leaders.

We are so grateful for the enthusiastic guidance and encouragement of our mentors and the dedication and enthusiasm of our mentees.

It has been so inspirational hearing about the international connections, meaningful conversations, and professional relationships that have developed, we wanted to share some of the experiences of our mentors and mentees with this special newsletter.

Areas of guidance:
- Educational Resources
- Internship/ job opportunities
- Networking
- Answering research questions
- Insight into One Health Topics
Who's who in the mentorship program?

Mentees

Over 230 students from 34 countries

- Undergraduate
  - Zoology
  - Engineering
  - Environmental Health
  - Nutrition
  - Biomedical Laboratory Training
- Masters
  - Public Health
  - Pharmacy
  - Microbiology
  - Epidemiology
  - Economics

Mentors

Over 150 professionals from 41 countries

- Veterinarians
- Doctors
- Microbiologists
- Epidemiologists
- Virologists
- Wildlife biologists
- Economists
- Dentists
- Toxicologists
- Food Safety Officers
- Anthropologists
- Nurses
- Ecologists
- Public Health Officials
- Business Administrators
- Environmental Biologists
- Parasitologists
- Engineers
- Social Scientists
When I saw ISOHA’s call for mentors in its pilot mentorship program, I was eager to be a part of a close community that values information sharing among future and current public health professionals. When I was a veterinary student, I often felt like the only one of my peers interested in a non-traditional career path. I often rallied my peers to recognize the application of One Health frameworks in each of their careers and found myself frustrated by the lack of enthusiasm from our instructors in teaching these concepts. I looked to non-academic, clinical veterinary mentors to help me navigate veterinary school. As a new graduate who wanted to build an early foundation in private practice, I sought a first job that would provide solid mentoring in client communication and staff management. Now in the public sector, I have found a mentor in research, leadership, and risk communication. The value of well-matched, supportive mentoring cannot be understated, especially in the veterinary profession.

ISOHA matched me with a pre-veterinary undergraduate mentee whose career interests and general view of the world are nearly identical to mine. In our first meeting, I felt like I was reconnecting with an old friend and seasoned colleague. My mentee reminds me a lot of myself at that stage of my academic career—tediously explaining to peers the relevance of public health to veterinary medicine (and vice versa), eager to consume as much information as possible, and enthusiastic to gain a breadth of useful experience not to build a competitive resume, but to simply understand where her interests could take her.

Our monthly meetings are conversational, but efficient. My mentee comes prepared with specific talking points or questions; her engagement in this mentee-driven partnership has helped us cover a lot of ground. In preparation for her vet school applications, we’ve spoken about developing succinct resumes, writing personal statements, and preparing for interviews. I revised her resume and asked her to send me her personal statement when it is complete. I have written a letter of recommendation for a summer program and plan to write another for her vet school applications. I think it speaks highly of her maturity and professionalism to have already recognized the need for a One Health mentor even before she enters veterinary school.

We have also spoken about career, externship, and internship opportunities in policy, regulatory medicine, and preventive medicine. Often, we talk about our shared passion for other topics or current events in One Health. I’m both excited and reassured to know that someone so early in her career is already so connected to the breadth of current events under the One Health umbrella—and not just connected, but passionate enough to advocate for these among her peers and faculty members. Although the pilot mentoring period has ended, my mentee and I have decided to continue our mentorship and have already set up our next meeting. I’m looking forward to working with her as a colleague in five years.
This mentorship exercise was very helpful and Inspirational since we shared a lot of experiences with the mentees as they were coming from different countries and we have realised the challenges of solid waste management and water sanitation and hygiene are cross cutting issues across the entire continent. After creating a WhatsApp group and group emailing list for the four of us to have our sessions, we had the idea of developing a device/app called CamUg and another one called AmoAB App which will be used in assessing the quality of drinking water in communities and informing the people about the Solid waste getting full, locating a service provider respectively. For both these two innovations, we are at the design stage and we feel this will be a breakthrough in improving health of our communities in Uganda, Cameroon, Nigeria as it will be published and rolled out to the market and all this was possible courtesy of ISOHA. Our biggest challenges remains that we need a physical meeting to better have this discussion, technical support like an IT software and funding for our innovation, which we are struggling to raise.

My experience as an ISOHA mentor has been very good and it was enriched as an African Union Youth Leader on Disaster Risk Reduction representing Uganda. I have been writing many online articles on the One Health approach to mitigating epidemics/floods in Africa. I look forward to more opportunities to be an ISOHA mentor and using my current position as African Union youth advisor on Disaster Risk Reduction to support ISOHA more.
My mentor and I shared a common ground which helped better facilitate our communication. Him being a graduate from veterinary medicine and myself, an undergraduate in the same field, we understood the basis of our role in One Health. I shared a lot about my experience in the abattoir in my country and how much there is to be done in management to foster One Health practices there. Dr. Junaid is a meat science expert in his country. Putting our thoughts together, I was able to come to the conclusion that the One Health concept is gaining ground in other areas of the world. My mentor was benevolent enough to even provide me with graduate programs and training I can undertake to learn the core of One Health. This really inspired me that as a veterinarian, I should be on the forefront of the One Health campaign in my country and give myself to learning and implementing One Health policies. I’m pivotal to this change and I must get involved. One Health is achievable in Nigeria.
The mentorship program was a very interesting chance to gain experience in international networking regarding One Health understanding, education and sharing experiences with my mentee, who was very interested and enthusiastic in understanding One Health but did not have enough sources to get deeper information. Since my mentee has never been involved in any One Health activities, I shared with him my experiences in One Health as a One Health Club member, advisor to the University of Rwanda School of Animal Sciences and Veterinary Medicine Students One Health Club, One Health Fellow, and volunteer in the One Health Central and Eastern Africa (OHCEA) Rwanda Country Head Office. I have also worked with the One Health Club summer research students on ‘Utilizing a One-Health Approach to Identify Food Safety Challenges and Evidence based Solutions in the Milk Value Chain in the Nyagatare District, Rwanda’.

Since my mentee has never been involved in One Health activities, he was so curious about what One Health means, where can he get more information and how he can get involved in student One Health innovation club(s). I will make sure that I follow up and keep networking so that if he faces challenges or if he needs more information I can still support him with ideas. Based on my experience, I mentored him on One Health education, infectious disease management, networking, and how to arrange meetings despite geographical time differences. Due to the positive impact of One Health knowledge and skills, through this mentorship, I realized that the earth is thirsty for One Health knowledge. I am also happy that my mentorship was successful because afterwards, my mentee decided to launch a One Health Club at his university in Nigeria June 2019.
After my experience with my mentor, I've decided to create a legal corporation with my classmates. The corporation is focused on One Health approaches in tackling problems like AMR, environmental health, and zoonoses. We have also created a One Health club in our university to start at the beginning of the next academic year i.e. September 2019.
It was a very different and interesting experience. I was very excited to provide guidance to a student from another country using a social media platform. At the start, we faced difficulty understanding each other because our English speaking style and pronunciation were not familiar to each other, but in a few minutes we overcame this obstacle. She asked me about the One Health concept and its application to mitigate public health challenges, ways and means to broaden her knowledge in this field, how to spread information in student communities and general policies and practices regarding One Health in Pakistan. I answered her questions and was very happy to know that she understood all my points, and showed a strong commitment to work on the spread of information and knowledge about One Health in the student community and the general public. I told her that she can also contact me any time after completion of mentorship program, and I will be very happy to help her. My mentee was a great learner and was a very committed student. I wish her all the best for her future endeavors.
The ISOHA mentorship program was the beginning of a new dawn for me. I am grateful for the mentorship I received from Prof. Jean-Paul Gonzales, his great insight into the field, and the guidance I received. Most of our discussions were based on what is currently implemented in the field of One Health globally, and what can be done to improve the outcomes. Emphasis was placed on the role of communities in the One Health approach, the establishment of a "trust" relationship between communities, researchers, policy makers, and clinicians in the veterinary and medical fields. We looked at several establishments across Africa, such as the collaboration between the University of Pretoria and Mnisi community in rural Kruger National Park and the Transfrontier Parks in South Africa and the One Health awareness programme in Dakar that is focused at the community level. We devised ways to bridge the gap between the stakeholders involved and I decided to contribute by writing weekly reports for the local newspaper on One Health and the establishment of a curriculum for One Health pedagogy in schools as a basis of awareness at the community level.
Both of these professional students provided a perfect platform to share views on the importance of a ‘One-Health’ framework, especially in the context of emerging and re-emerging zoonoses, vector-borne diseases, food safety and the burgeoning danger of antimicrobial resistance.

We discussed different ongoing policies venturing the conceptualization of ‘One Health’ in our respective countries, scopes for future strengthening and various constraints in its implementation. I could exemplify the One Health system in India by citing various examples such as the success of the One Health approach in tackling the recent Nipah Outbreak in Kerala, India in 2018 and the National Action plan to curb antimicrobial resistance. The platform also provided me with the unique opportunity to have insight into the public health system of two more developing nations, Bangladesh and Uganda. The exchange of views strengthened our understanding on the problems addressed by the human, animal and environmental sectors in these countries.

Altogether, we found the existing surveillance system regarding zoonoses and antimicrobial resistance, is in its infancy in developing countries, and food security is still the main concern in policies instead of food safety.

We also discussed the various ongoing epidemiological research projects in our respective countries and other existing evidence-based policies, especially on the control of emerging zoonoses and antimicrobial resistance.

Finally, I was impressed with the basic knowledge and curiosity of both of the students on various contemporary One Health topics and we exchanged a lot of information regarding the status of our respective countries on ‘One Health’ issues. Such a platform helped me improve my insight about the ongoing public health issues and the challenges faced, especially in two more developing nations. Although there is a boom in the understanding of ‘One Health’ across the world in this decade, still a lot more progress needs to be made in tackling various public health issues, which can be strengthened by these kinds of platforms and training public health volunteers in better understanding the ‘One Health’ approach.
First of all, I would like to thank the International Student One Health Alliance (ISOHA) for providing me an opportunity to get connected to, interact with, and learn from a researcher working on cutting-edge research pertinent to both animal and human health in a developed country. Dr. Santosh Dhakal (DVM, MS, PhD) works on the universal influenza vaccine project at Johns Hopkins Bloomberg School of Public Health. He has been courteous with his time, advice and perspectives on numerous One Health issues of mutual concern. His positive and ambitious attitude makes me yearn to work towards acquiring a veterinary science degree to serve in developing countries. His postgraduate studies also delved into the plight of smallholder pig producers in Nepal, and the health constraints impeding their livelihood including Japanese encephalitis and other diseases. Having worked with rural pig farmers for a Masters project, I really did relate his experiences with mine and understood that animal and human health challenges in rural settings remain nearly identical.

His compelling and reverberating stance on epidemiological research for policy guidance remains captivating: “Disease prioritization and research should be based on local data and evidence, not always (and not necessarily) as guided by global perspectives”. Dr. Dhakal has also enlightened me with some invaluable advice pertaining to academia, research ethics/integrity, project opportunities, and staying focused but yet humble.

This mentorship program came at the right time for me as I am battling channeling my focus and thoughts into something more tangible and impactful. I used to regret missed chances and lost time while also suffering from an imposter syndrome, but he made me realize that I am actually accumulating experience yet to be refined into a career and service. We never really appreciate mentorship until we encounter one, especially of this standard. I found his advice for me to write more, even if it is for non-academic forums or blogs, crucial and worth reflecting on daily. Through this program, I now have a lifelong mentor, a friend and a well-wisher. I would like to thank the organizers of this program once again for this short yet great opportunity and look forward to participating in upcoming events.
First, I would like to say that I was happy to be part of the ISOHA mentor pilot program and that this was a valuable experience for me. I am grateful that I had the opportunity to talk to my mentees, who expressed great interest in the One Health Initiative and the desire for a better understanding. After our first conversation, my mentees understood the importance of One Health Initiative and the need for the teamwork of experts of various profiles in solving potential problems. Only by the joint action of experts of different profiles can we solve a problem before it comes, or how they like to say in my region "Better to Prevent than Treat".

One of my mentees works as a veterinarian, and after our conversation, he contacted doctors in his region to try to work together on the problem of zoonoses, especially those transmitted through poultry meat. My second mentee is a student at the One Health Master Study and is currently conducting a research project in the field of dairy farming. He had difficulty in setting up the project but I believe that I have managed to direct my advice and help him in further research.

My work within the framework of One Health Initiative consists in the study of the appearance of brucellosis in humans and animals with fellow doctors (epidemiology specialists), with the aim of faster flow of information in both directions, action, and prevention of the spread of the epidemic. In the past year we prepared and published joint articles for public health (for example, risks from ticks bites, etc.). In the field of environmental protection, I work on the research of manure from poultry farms (broiler farms), due to the increase in the number of these farms. Also, I formed a team of 5 experts of different profiles (doctor, veterinarian, food technologist, chemistry engineer, nutritionist) with whom I plan to work on research in the field of food safety in the coming period.

I would like to emphasize that this pilot program is a fantastic experience for mentors and our young mentees, whose time is coming. Through this kind of communication, may they feel the need to include other experts of the same or different fields in their future work. I think the importance of the One Health Initiative will be reflected in some emergent situations, but it is far more important that scientists around the world open their minds to other experts because only by working together can we prevent the occurrence of such incidents.
The ISOHA Mentorship program has been a very profound experience. I have gained new insights about the One Health topic and more responsibility on how to address this issue to the general public. My mentee and I both were concerned about One Health and social science and almost all our online meetings were discussions about One Health and developing sustainable goals. Her main worry was about the promotion of One Health in communities (farmers and livestock) while mine was One Health and education. We both are veterinarians with an International Masters. My mentee is working for an NGO and I am in academia. We both perceived that the response from the government and the Ministry of Health is poor and not using the One Health concept to address health issues (especially for neglected zoonotic diseases). We also compared the response (scientific mainly) from the neighboring countries, in how they normally take action towards zoonotic diseases and environment.

An inspiring mentee. My mentee was from Nigeria, and at the moment of the program she was pregnant, which was something to admire. She had time for the One Health meetings (via skype), her professional obligations and her family time. My mentee has inspired me in so many ways. She studied in the UK and now is back in her country growing her career. She is an independent and empowered woman, as she manages her own internet platform (www.myanimalmyhealth.org) about One Health where you can find information regarding this concept. Our main constraint was the time difference. Nevertheless, we could have the time to share experiences, goals and challenges to achieve in the near future.

One Health courses and Networking. While I got involved in the concept of One Health when I was an undergraduate student, she heard about this concept while attending a conference post-university. We have discussed what kind of work we have done about One Health, how to promote the concept, and how to gain more experience. After meeting each other and discovering the direction of One Health we wanted to work on, we had the time to discuss online free courses, summer schools and international congress about One Health. Moreover, I connected her with the leader of the One Health Latinoamerica group (OHLA), who is a very proactive and enthusiastic veterinarian. She put my mentee in contact with a group of researchers from Nigeria.

Finally, I would recommend anyone to take the chance to follow this kind of program, since you will benefit from meeting a person who is interested in the topic and it will be a pleasure to talk with. I want to continue being involved as a mentor in One Health, especially to get in touch with international people, learning about other cultures and understanding what approach they follow on zoonotic diseases and education in One Health.
Once again, many thanks to our mentors and mentees for making our first mentorship program so successful! We look forward making this program annual and using the feedback from this pilot program to make future cycles even better! Be on the lookout for the call for mentor and mentee applications in the upcoming months. In the meantime, stay up to date on ISOHA happenings with our listserv, newsletter, Twitter and FaceBook page. If you have any questions or additional feedback, please contact isohaexeco@gmail.com