

Interview with the Co-founder of the One Health Initiative



Bruce Kaplan

For this interview, Dr. Bruce Kaplan, [1] the co-founder of the One Health Initiative (OHI), shares his training as a veterinarian and epidemiologist, his leadership on the development of the OHI (<https://onehealthinitiative.com/>), perspectives on emerging One Health challenges, and how World Medical Association (WMA) members can contribute to One Health initiatives, with Dr. Helena Chapman, the WMJ Editor in Chief.

Special Note: The OHI Autonomous pro bono Team includes: Laura H. Kahn, MD, MPH, MPP; Bruce Kaplan, DVM; Thomas P. Monath, MD; *Lisa A. Conti, DVM, MPH; Thomas M. Yuill, PhD; Helena J. Chapman, MD, MPH, PhD; Craig N. Carter, DVM, PhD; Becky Barrentine, MBA, and Richard Seifman, JD, MBA

*Deceased 6 November 2020

Please describe three key learning moments during your training in veterinary medicine and epidemiology.

My initial “One Medicine–One Health” enlightening-learning experiences came during the first two years of basic science curriculum at the Auburn University’s School of Veterinary Medicine (1959–1963). Between quarters, I returned

home to Louisville, Kentucky, and attended some classroom lectures and laboratory sessions in human anatomy and pharmacology at the University of Louisville School of Medicine with student friends and colleagues. After having completed veterinary medical oriented training (e.g. animal anatomy classroom lectures and laboratory sessions), it became apparent that basic science coursework (including pharmacodynamics and pharmacokinetics) in human and animal sciences were didactically similar. For example, I was also able to easily identify and translate most analogous anatomical structures (e.g. limb musculature names with origins and insertions) on the human cadaver vis-à-vis that of the canine species. The only caveat was the occasional notable technical scientific difference, such as species variations.

My subsequent epidemiology training as an Epidemic Intelligence Service Officer (1963–1965) at the U.S. Centers for Disease Prevention and Control (CDC) reinforced and corroborated the significant academic comparative features of human and animal science curricula. This training offered opportunities to network with physician and veterinarian colleagues, including two individuals who had earned doctorates in veterinary medicine (DVM) prior to receiving their doctorate in medicine (MD). For example, understanding and appreciating epizootic principles of herd health and herd immunity taught in veterinary school proved applicable and analogous to human epidemiologic public health prevention and control procedures [2].

What were the driving factors that led to your collaborative efforts to develop the One Health Initiative in 2006? Since this date, what challenges

has your team faced in leveraging One Health expertise across global networks?

As discussed in History of the OHI team and website, the following events transpired: “In April 2006, Dr. Laura H. Kahn [MD, MPH, MPP] published the CDC article, ‘Confronting Zoonoses, Linking Human and Veterinary Medicine’ (https://wwwnc.cdc.gov/eid/article/12/4/05-0956_article), which prompted [me] Dr. Bruce Kaplan [DVM] to contact her. Together they [we] started the One Health Initiative team, and Dr. Thomas P. Monath [MD] joined them [us] in March of 2007 to establish the OHI triumvirate. Dr. Kahn, Kaplan and Monath [One Health Initiative website owner and his “brainchild”] initiated the OHI website (www.archive.onehealthinitiative.com/) on October 1, 2008. Dr. Kaplan was designated as the primary OHI website contents manager/editor” [3].

Since 2006, the primary challenges to acceptance and implementation of the One Health concept have come from a commonly displayed tribalism, whereby some prominent global networks set up ‘*silo*’ oriented programs and websites that were reticent to acknowledge other One Health oriented individuals, groups, and organisations. More broadly, One Health leaders throughout history should be recognized for their scientific achievements [4]. Although this gap has been a major hindrance to elevating meaningful dialogue and cooperative participation, the One Health movement has become internationally recognized with exponential growth that continues expanding worldwide.

From the beginning, the OHI team members (<https://onehealthinitiative.com/contact/>) and our first-ever international OHI website embraced a strategic policy, asserting a concerted all-inclusive “ecumenical” educational effort to help promote each reputable supportive player in the nation and global One Health community. Frankly, international institutional implementation of the One Health concept and approach has been dangerously short-sighted, incredibly slow, and long overdue.

What are the four most significant contributions of the One Health Initiative for the global community?

The One Health movement per se has demonstrated numerous monumental documented societal clinical biomedical research, global public health, and environmental impacts. Since the early 21st century, the three most popular and prominent News and Publications of the One Medicine-One Health’s reignition [5] have included the webpages of the OHI (<https://onehealthinitiative.com/>), CDC One Health Office (<https://www.cdc.gov/onehealth/index.html>), and the One Health Commission (OHC) (<https://www.onehealthcommission.org/>).

The OHI team reported that “The One Health concept has been successfully applied to many clinical health and public health milieus during the 19th, 20th and early 21st centuries.” Over the past centuries, some significant examples of clinical health advancements were noted through comparative medical and surgical endeavors as well as academic journal issues (e.g. heart disease, cancer, obesity, anesthesiology, global

Infectious diseases, food safety, immunizations, antibiotic use and resistance, emergency and disaster preparedness [6].

The escalating detrimental climate changes occur within our global ecosystem, representing a threat to safe shelter, clean air, food security, and safe potable drinking water for humans and animals. Therefore, these issues are inseparable and fundamental prerequisites for insistently adopting a One Health approach for humans, animals, plants, and the environments in which they all co-exist.

What are three One Health challenges that WMA members should better understand?

First, multidisciplinary-interdisciplinary professional collaborations are critical towards achieving more expeditious and efficacious results in many clinical comparative medicine research issues and epidemiology. Second, it is important to build upon the momentum from the 2012 WMA and World Veterinary Association (WVA)’s One Health recognition statement and the 2015 WVA/WMA Global Conference on One Health [10,11]. This physician and veterinarian ‘meeting-of-the-minds’ represented essential building block elements to appreciate and understand the value of these robust collaborations. Third, WMA members are challenged to help promote, encourage, and educate current human health providers and their future medical school student colleagues [12].

As first steps, how can WMA members contribute their expertise to One Health collaborations and become more involved in local and national initiatives?

First, WMA members can contact and interact with health care professionals in other health-related disciplines. This sentiment is expressed in the One Health Initiative’s mission as follows: “forge co-equal, all-inclusive collaborations between physicians, osteopathic physicians, veterinarians, dentists, nurses and other scientific-health, and environmentally related disciplines” (<https://onehealthinitiative.com/mission-statement/>).

Second, consider joining university and national One Health clubs and organisations (e.g. OHI, OHC) as well as attending national and international One Health meetings to establish liaisons. Third, expand communication efforts with deans of various schools of medicine and public health. Fourth, prepare One Health op-eds in local and national newspapers and magazines. Finally, contact your local and national political representative and encourage their participation and support (e.g. grassroots standpoint).

It cannot be repeatedly emphasised enough that, without any doubt or reservations: “One Health is the collaborative efforts of multiple disciplines working locally, nationally, and globally to attain optimal health for people, animals, plants and our environment” and “One Health implementation will help protect and/or save untold millions of lives in our generation and for those to come.”

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