## **Beyond Pandemics and Global Instability: Cultivating Peripheral** Vision for Transformation

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**WALTNER-TOEWS, David** is founding president of Veterinarians without Borders/ Vétérinaires sans Frontières – Canada (www.vwb-vsf.ca) and of the Network for Ecosystem Sustainability and Health (www.nesh.ca). A recently retired Professor at the University of Guelph, he is also a founding member of Communities of Practice for Ecosystem Approaches to Health in Canada (www.copeh-canada.org) and internationally. He has worked on every continent except Antarctica on ecosystem approaches to health. In 2010, in London, England, the International Association for Ecology and Health presented him with the inaugural award for contributions to ecosystem approaches to health, and was a speaker in the "Speakers of Renown" series that celebrated the 40th anniversary of Canada's International Development Research Centre.

Besides more than 100 peer-reviewed papers, his texts include "Ecosystem Sustainability and Health: a practical approach" (Cambridge University Press, 2004), "The Ecosystem Approach: Complexity, Uncertainty, and Managing for Sustainability" (with Nina-Marie Lister and the late James Kay, Columbia University Press, 2008), and "Integrated Assessment of Health and Sustainability of Agroecosytems" (with Thomas Gitau and Margaret Gitau, Taylor and Francis/CRC Press, 2008.

He has also published half a dozen books of poetry, a collection of recipes and dramatic monologues ("*The Complete Tante Tina: Mennonite Blues and Recipes*"), an award-winning collection of short stories ("*One Foot in Heaven*"), a murder mystery ("*Fear of Landing*"), and three books of popular science, including a natural and cultural history of zoonoses, ("*The Chickens Fight Back: Pandemic Panics and Deadly Diseases that Jump from Animals to People*", 2007), and one on the ecological and cultural context for foodborne diseases, ("*Food, Sex and Salmonella: Why our Food is Making us Sick*", 2008)

**Abstract:** Since the late 1980s, the world has faced an apparent pandemic of pandemics – most originating in other animals, and disseminated through the complex eco-social systems we have created. These have included BSE (Mad Cow Disease), SARS, HIV-AIDS, Influenzas (including so-called bird flu and swine flu), Salmonellae (mostly foodborne), E.coli 0157:H7, radionuclides in food (post Chernobyl as well as post-Fukushima) and a plethora of smaller outbreaks and epidemics.

Both the characterization of these events, and the responses to them, have been shaped by narratives that reflect ways of thinking and responding that are no longer adaptive. These narratives are linear and statistical, and organizations struggle to package complex phenomena into "stages of pandemic", "animal disease," "human disease", "food-borne", "mosquito-borne", "zoonotic", "swine flu", or "bird flu" and to draw causal links to controllable antecedents.

Because the underlying reality is not so neatly parceled, we are surprised by unforeseen tipping points and catastrophes, or when the wave we are surfing strikes a shoreline and scatters. Local epidemics and global pandemics emerge from situations in which we appear to be surfing cross-currents of change in which many aspects of a good human society (enough to eat, meaningful work, freedom to act) conflict with other desirable outcomes (food security, ecological sustainability, social stability).

At the local level, profound transformations have occurred when collaborations ignore conventional boundaries of knowledge and action and root themselves in new paradigms of complexity. At regional and global scales, social media can facilitate powerful collaborations, counter-challenges, and story-telling across disciplinary, organizational, ideological, economic class and generational lines. In order to move beyond the multiple narratives in which we are entangled to weave a novel understanding of our place in the universe, we need to use these new networks to transform how we do science, arts and technology and, in so doing, achieve One Health for One World.

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