

# The One Health Approach – A Holistic Perspective for an Ever More Complex Future –

### **DIRK U. PFEIFFER**

Dr.med.vet, PhD, MANZCVSc, DipECVPH, FHEA

Chair Professor of One Health College of Veterinary Medicine and Life Sciences, City University of Hong Kong, Hong Kong

Professor Veterinary Epidemiology Royal Veterinary College, London, UK

"The future of science is in interdisciplinarity"

Keywords:



Date: November 29<sup>th</sup> (Wed), 2017 Time: 16:00 – 18:00 Venue: Lecture Hall

> Organizer: Nguyen Thanh LAM (D3), Laboratory of Microbiology, ntlam@vetmed.hokudai.ac.jp

#### BIOGRAPHY

| EDUCATION  |
|--|
| Ph.D. 1992 Massey University, New Zealand (Veterinary Epidemiology)  |
| Dr.med.vet. 1986 Justus Liebig University, Giessen, Germany (Postgraduate degree in Veterinary Medicine)         |
| B.Vet.Med 1984 Justus Liebig University, Giessen, Germany (Undergraduate degree in Veterinary Medicine)          |
| ACADEMIC APPOINTMENTS  |
| 1992 – 1999: Lecturer/Senior Lecturer in Veterinary Epidemiology, Massey University, New Zealand                 |
| 1999 – present: Professor of Veterinary Epidemiology, The Royal Veterinary College, UK                           |
| 2016 – present: Chair Professor of One Health, City University of Hong Kong, Hong Kong                           |
| OTHER EMPLOYMENT/HONORARY POSITIONS  |
| 2002 – present: International Advisory Committee for Review of Food Safety and Biosecurity Programs              |
| of Singapore's Agri-food and Veterinary Authority  |
| 2009 – present: Associate editor of the international scientific journal Spatial and Spatiotemporal Epidemiology |
| 2011: Member of international scientific peer review panel for National Institute of Animal Health               |
| for National Agriculture and Food Research Organization (NARO), Japan  |
| 2012 – present: Head of The Royal Veterinary College's United Nations FAO Reference Centre for                   |
| Veterinary Epidemiology  |
| 2014 – present: Adjunct Professorship at the China Animal Health & Epidemiology Centre, Qingdao, China           |
| 2016 – present: Director of Centre for Applied One Health Research and Policy Advice,                            |
| City University of Hong Kong   |
| 2016 – present: Chair of Applied Epidemiology Sub-Group of OIE/FAO Network on Avian Influenza (OFFLU)            |
| 2017 – present: Associate Dean (Research), College of Veterinary Medicine and Life Sciences,                     |
| City University of Hong Kong, Hong Kong  |
| RESEARCH INTERESTS   |

- ESEARCH INTERESTS
  - 1. Veterinary epidemiology
  - 2. One Health approach
  - 3. Animal and public health policy
  - 4. Ecological research methods
  - 5. Advanced epidemiological analysis, spatial and temporal analysis, computer modelling of animal diseases and development of animal health surveillance systems

## The One Health Approach – A Holistic Perspective for an Ever More Complex Future –

The "**One Health**" approach was formally established less than 10 years ago, although its roots can be traced back for over a 100 years. It is based on the principle that the health of **humans**, **animals** and **ecosystems** is interconnected and it is therefore important for all actors involved in these fields to work together whenever relevant. The One Health approach is increasingly recognized worldwide by academic institutions as well as national/international organizations and has influenced **education** and **research** through promoting an integrated perspective on human, animal and environmental health. <u>This has already resulted in more effective management of infectious diseases</u>, such as avian influenza, MERS and Ebola virus.

As a consequence of the combined effects of globalization, environmental change and modern society's changing lifestyle expectations, the widespread implementation of the One Health approach is a matter of urgency. Its translation into policy and societal impact requires more effective intersectoral collaboration, and indeed the adoption of truly interdisciplinary research and the translation of generated scientific evidence into policy. In fact, while science endeavors have resulted in much improved understanding of disease risks at the biological level, the importance of integrating that knowledge with that generated through social and environmental science is rarely recognised and even less often translated into action.

The challenges in our ever more connected and therefore more complex world requires for future generations of scientists to acquire the skills for conducting truly interdisciplinary research which means that <u>they should aim</u> **for excellence in their own scientific discipline**, while being able to effectively **contribute to interdisciplinary research activities**, in particular through linking natural with social sciences.

#### "The future of science is in interdisciplinarity"