



Student Free Design Activities (One Health on-site Training)

報告書 Report

報告者 [Reporter]

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活動報告 [Activity Report]

※活動内容が判る様な写真や図表を加えて下さい。 / Provide photos, tables and figures that clearly show the activities during the period.

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| タイトル [Course Title] | One Health Ally Course (Module 4): "WOAH (OIE) Regional Avian Disease Expert Group Network Meeting for Asia and the Pacific" |
| 実施期間 [Periods] | 31 st October - 2 nd November 2022 |
| 共同実施者 [Other participants] | Patrick Reteng |
| 言語 [Language] | English |
| 実施場所 [Location] | The Australian Centre for Disease Preparedness, Geelong, Australia |

申請時計画の実施報告 [Report how you carried out your plan in the application form]

1. Description

This WOA (OIE) Regional Avian disease expert group network meeting for Asia and the Pacific was held by following from previous WOA Regional Workshops on influenza – i.e. Tokyo, Japan, in 2014; Paro, Bhutan, in 2016; Sapporo, Japan in 2017; Ulaanbaatar, Mongolia, 2018; Sapporo, Japan 2019 and several virtual consultations that have been held in the past 3 years. This meeting focused more on the collection and sharing of relevant data, sequences, and adapted ways of working across the region with all the global changes that have occurred in the past 3 years in order to control the outbreak of avian influenza and related poultry diseases in the Asian region.

2. Research activities

The avian diseases all impact animal and public health, trade, economy, and livelihoods in affected countries and can pose a threat to other neighboring countries, particularly as wild birds may be involved in the transmission and spread of disease. Considering the nature of influenza viruses and their ability to evolve over time, it is important to regularly share and update information on circulating strains. In this meeting, our research activities (myself and Patrick Reteng) mainly focused on meeting attendance with the lecture on the global and regional situation of influenza in animals; attending the technical session: recent outbreaks and response activities undertaken

or preparedness; joining the group discussion: how to detect silent infection in poultry for the control of highly pathogenic avian influenza and laboratory networking and cooperation for diagnosis: current situation and prospects; finally, wrapping up the recommendations for the control of avian influenza in Asia. In addition, we have a great chance to discuss among researchers and experts the current and future work for disease control and communicate with other experts on their work for future work cooperation.

目的達成状況報告 [Report how you achieved your goal/objectives listed in the application form]

The meeting provided an opportunity for all the regional reference laboratories on Avian diseases to meet in person and share scientific data and research on avian influenza and other avian diseases present in the region. Through this meeting, I have a great chance to (i) understand information sharing of the latest avian influenza and related diseases, as well as the characterization antigenic and genetic data of isolated viruses in Asia; (ii), understand strengthening collaboration among member countries in collaboration with the four OIE Reference Laboratories in Asia. (iii) understand harmonizing the control policies and measures, enhancing surveillance, and joint risk assessments.

In addition, I have learned many valuable recommendations were proposed which are crucial for control measures and collaboration, information sharing, collaboration, as well as the improvement of diagnostics. There are many points that should be concentrated such as new technologies should be considered along with appropriate validation and verification to ensure tests are fit for purpose and results are correctly interpreted. Impact of vaccination for control and consider the implication of stamping out and finding alternatives; An information-sharing platform in the Asia Pacific continues to be considered to enable the improvement of molecular diagnosis, antigenic characterization, and identification of co-infection with multiple pathogens; Diagnostic capacity for avian diseases is continually evaluated and updated as novel strains and new diseases emerge; The regional expert network continues to meet physically at least once a year and to maintain regular digital communications between physical meeting.

One Health Approach実践報告 [Report how your activity could link to One Health Approach]

Outbreaks of avian influenza, including highly pathogenic avian influenza (HPAI) sub-types such as H5N1, H5N2, H5N6, H5N8 have been continuing over the years and the detection of the highly pathogenic H7N9 sub-type in birds occurred in 2017 in China for the first time. It impacts animal and public health, trade, the economy and livelihoods. Importantly, highly pathogenic avian influenza (HPAI) viruses and low pathogenic avian influenza (LPAI) viruses have the potential for mutations including those that facilitate host adaptation and silent infections, and should be considered significant as avian and potentially zoonotic diseases.

Therefore, it is an important and great opportunity for me from this meeting to understand and clarify factors that may influence the spread of avian influenza and other poultry diseases such as environmental factors wild bird migration live bird market, consumer references, formal and informal trade, festival period, farming, and bio-security practices.

In addition, I have a great chance to connect with many experts from the information sharing and discussion among researchers, from that I can understand and develop effective networks, which have effectively contributed to multilateral cross-border collaboration for improved early warning and outbreak preparedness for avian diseases and influenza in the Asia Pacific region.

Through this meeting, I understand that the regular information sharing and discussion that includes representatives from environmental, wildlife, livestock, and agriculture, and human health sectors as well as experts in international law and agreements such as Nagoya protocol allows for improved understanding and better practice for sharing biological material and sample information.

In conclusion, for future work, regular information sharing and discussion among researchers, public and private sectors as well as other stakeholders working on avian diseases and influenza in the Asia Pacific region allows for improved understanding and develops effective networks, which have effectively contributed to multilateral cross-border collaborations for improved early warning and outbreak preparedness.

備考 [Remarks]



Figure 1. Group photo

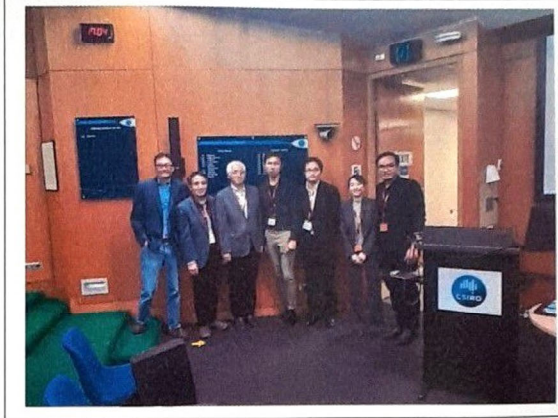


Figure 2. Photo with expert after meeting



Figure 3. Discussion session with experts



Figure 4. Lecture on the global and regional situation of influenza in animals

- ※ 報告書を作成後、担当教員に確認をお願いし署名をもらってください。PDFファイルとしてVetLog上の提出書類「Student Free Design Activities報告書」としてアップロードして下さい。
- ※ Please ask your instructor to check this report and get his/her signature before you submit to WISE Office. The scanned report is to be submitted strictly through VetLog.