The Research Center for Zoonosis Control has established global network for the collaboration of research and education. We established the Hokkaido Center for Zoonosis Control in Zambia as a research base contributing to clarify the ecology of the causative agents of zoonoses by intensive surveillance in animal populations, and technical and educational inputs for zoonoses control not only in Zambia but also in African countries. Our contribution is not limited to the Asian countries but also worldwide, including African countries.

**Activities and achievements from 2014 to 2016**

**Development of seasonal influenza vaccine of global standard**

Control measures for pandemic influenza is based on the control measures for seasonal influenza and its implement. Dramatic improvement of immunogenicity of seasonal influenza vaccine is definitely useful for development of effective vaccine for pandemic influenza only by exchanging the seed vaccine strain.

For this purpose, we established a society of Seasonal Influenza Vaccine with five Japanese Vaccine Companies to develop the whole-particle seasonal influenza vaccine of global standard, which can confer immunity with higher titer and with less side effect than one by ether-split vaccine currently used in Japan. Each of the five companies developed the trial vaccines and their efficacies were evaluated in our Center.

**Research article publications from the Hokkaido University Research Center for Zoonosis Control**

Between 2008 to 2015, a total of 476 research articles were published in major international journals including Nature, Nature Med., Proc Natl Acad Sci USA, and the number of their citation is 6,723. The number was highest between 2011 and 2012, and then it decreased. A major reason is that the number of papers related to field medicine and animal medicine decreased. The number of their citation per researchers are outstanding compared to the famous research institutes all over the world.

**Work of the WHO Collaborating Centre relevant to delivery to country-specific support**

**Training course of diagnosis of tuberculosis in the countries**

Control of tuberculosis, especially, multidrug-resistant tuberculosis (MDR-TB) and extensively drug-resistant tuberculosis (XDR-TB) is one of our key activities. To raise up the capacity for TB diagnosis, our team had performed with collaboration to MoH in Member countries.

**Assist for field survey for Streptococcus suis in Vietnam**

In response to an offer from WHO Vietnam, we deployed the field investigation team to Vietnam to conduct collaborative filed work with National Institute of Epidemiology and Hygiene (NIHE) and Oxford University Clinical Research Unit in Vietnam (OUCRU) regarding Streptococcus suis infection in humans. The joint team collected field samples from pigs and residences. Samples were investigated in the laboratories of NIHE and OUCRU, and the results of data analyses were shared with the animal and public health sectors.

**History of Research Center for Zoonosis Control**

- 2005: Collaborating Centre for Zoonoses Control (WHO)
- 2012: Science and Technology Research Partnership for Sustainable Development (JICA/JST)
- 2016: Collaborating Centre for Zoonoses Control (WHO)

**The role of the WHO collaborating Centre relevant to the sustainable development goals**

In Dec 2010, Prof Hiroshi Kida hosted the Regional Workshop on Collaboration between Human and Animal Health Sectors on Zoonoses Prevention and Control, in which the members from World Health Organization (WHO), Food and Agriculture Organization (FAO), and World Organisation for Animal Health (OIE) got together for the first time.

In Nov 2011, WHO designated the Hokkaido University Research Center for Zoonosis Control as the “WHO Collaborating Centre for Zoonoses Control”, Prof Kida became the Head of the Center. In 2015, the Center was re-designated as WHOCC for 5 more years.

**One Health Workshop organized by WHO, FAO, OIE tripartite in C2C**

In Oct 2015, the 6th Asia-Pacific Workshop on Multi-Sectoral Collaboration for the Prevention and Control of Zoonoses was organized by World Health Organization (WHO), Food and Agriculture Organization of the United Nations (FAO), and World Health Organization for Animal Health (OIE) at the Hokkaido University Research Center for Zoonosis Control. This 1st of this workshop in 2010 was hosted by Prof. Kida at the Center and then, a series of this workshop has been annually held. In the 6th workshop, aiming to effective control for major zoonotic events in the Asia regions including highly pathogenic avian influenza, rabies, and antimicrobial resistance, we reached agreement for enhancement of cooperation between public and animal health sectors, and for sustainable implementation of capacity building in each of the member countries.

**Informal Consultation on Regional Development of the GOARN in the Western Pacific Region**

APSED Technical Advisory Group meeting in 2015 has provided expert advice and recommendations to enhance exchange of technical expertise and collaboration, and GOARN and WHO Western Pacific Region Support Team (WEST) mechanisms. The 1st APSED Technical Advisory Group meeting on Regional Development of GOARN in the Western Pacifiic Region was held to identify need and demand from recent GOARN deployments and to make recommendations for strengthening GOARN and WEST mechanisms, to efficiently support regional responses to health emergencies, consistent with future APSED and beyond EVDising.

Two professors were joined to this Informal Consultation to provide technical advice and recommendations.

**Internship of PhD students to build capacities for future assistance of human resources to WHO**

PhD course students of the HU Center were deployed to WHO Headquarter, Regional Office, and Country Offices to contribute WHO with their expertise in disease control as well as to learn how WHO support the Member countries. Our experts related to zoonotic events and laboratory techniques were provided at all of the three levels. Through these deployment, we succeeded to develop the human resource in the Center and interactive collaboration with WHO.