WOAH Collaborative Centre Reports Activities 2023

Activities in 2023

This report has been submitted : 25 avril 2024 13:01

Centre Information

<table>
<thead>
<tr>
<th>Title of WOAH Collaborating Centre</th>
<th>School of Veterinary Medicine, Rakuno Gakuen University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of WOAH Collaborating Centre</td>
<td>582 Bunkyodai Midorimachi, Enetsu, 069-8501, Japan</td>
</tr>
<tr>
<td>Tel:</td>
<td>+81-11 388.47.61</td>
</tr>
<tr>
<td>E-mail address:</td>
<td><a href="mailto:kmakita@rakuno.ac.jp">kmakita@rakuno.ac.jp</a></td>
</tr>
<tr>
<td>Website:</td>
<td><a href="https://rakuno-woahcentre.org/en/">https://rakuno-woahcentre.org/en/</a></td>
</tr>
<tr>
<td>Name Director of Institute (Responsible Official):</td>
<td>Professor Yasukazu Muramatsu</td>
</tr>
<tr>
<td>Name (including Title and Position) of Head of the Collaborating Centre (WOAH Contact Point):</td>
<td>Professor Kohei Makita</td>
</tr>
<tr>
<td>Name of the writer:</td>
<td>Professor Kohei Makita</td>
</tr>
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</table>

TOR1 AND 2: SERVICES PROVIDED

1. Activities as a centre of research, expertise, standardisation and dissemination of techniques within the remit of the mandate given by WOAH

<table>
<thead>
<tr>
<th>Category</th>
<th>Title of activity</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epidemiology, surveillance, risk assessment, (true)</td>
<td>Epidemiology, surveillance and risk assessment associated with safe animal production and food safety</td>
<td>Epidemiology, surveillance and risk assessment are key components to maintain or improve human and animal health in the context of food safety. The WOAH Collaborating Centres consortium for Food Safety conducts these activities for the WOAH Members and also provides training and capacity development. The Centre supports the establishment of veterinary drug use and antimicrobial resistance monitoring.</td>
</tr>
<tr>
<td>Training, capacity building (true)</td>
<td>Seminars, hands on training, and postdoctoral training on safe animal production and food safety</td>
<td>The WOAH Collaborating Centres consortium for Food Safety conducts international and domestic seminars and training on safe animal production and food safety. The consortium comprises three institutes in Japan and Singapore, and joint seminars are regularly conducted inviting WOAH Members in the Asia and Pacific Region. Capacity development through postdoctoral education is conducted for the WOAH Members’ staff using external grants.</td>
</tr>
<tr>
<td>Zoonoses (true)</td>
<td>Training, capacity development and research on</td>
<td>In collaboration with other relevant WOAH Reference Centres, the WOAH Collaborating Centres consortium for Food Safety conducts training,</td>
</tr>
</tbody>
</table>

WOAH Collaborative Centre Reports Activities 2023
Food Safety

WOAH Collaborative Centre Reports Activities 2023

Food-borne zoonoses

capacity development and research on food-borne zoonoses including antimicrobial drug resistant bacteria.

Aquatic animal diseases (true)
Risk assessment for antimicrobial resistant bacteria of aquatic animal origin
Risk assessment for antimicrobial resistant bacteria of aquatic animal origin has been started to develop the method.

Diagnosis, biotechnology and laboratory (true)
Development of diagnostic and measurement methods
The laboratory experts in the WOAH Collaborating Centres consortium for Food Safety continuously develop new diagnostic and measurement methods for hazards in animals, foods and environment.

Food security (true)
Research and extension on safe animal production, and food safety
A variety of researches on food safety, such as microbiological and chemical hazards, cell-cultured food, and allergy are conducted, in addition to diagnosis, measurement, epidemiology and risk assessment. Safe animal production is achieved by transfer of on-farm techniques, and research, training and extension works are conducted involving staff of the WOAH Members.

TOR3: HARMONISATION OF STANDARDS

2. Proposal or development of any procedure that will facilitate harmonisation of international regulations applicable to the main fucus area for which you were designated

<table>
<thead>
<tr>
<th>Proposal title</th>
<th>Scope/Content</th>
<th>Applicable area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Meeting IAFP 2023</td>
<td>Annual Meeting IAFP 2023 was held in Toronto, Ontario, Canada at the Metro Toronto Convention Centre providing attendees with information on current and emerging food safety issues, the latest science, innovative solutions to new and recurring. The IAFP Annual Meeting is attended by more than 3,800 of the top industry, academic and governmental food safety professionals from six continents. The event was held for 4 days and topics discussed includes food toxicology, food fraud, animal safety and eggs, data sharing in digital age of food safety, Novel approaches to monitoring agricultural surface water quality and introduction of FDA-iRISK. The leading experts speaking on a variety of timely topics; or their contributions in the food safety field made the event fruitful to attend.</td>
<td>Laboratory expertise Training and education</td>
</tr>
<tr>
<td>Workshop on Whole Genome Sequencing</td>
<td>NCFS participated in a FAO workshop on “Whole Genome Sequencing (WGS) for food safety management” as trainers to guide government officials from low- and middle-income countries (LMICs) such as Bosnia and Herzegovina, Ethiopia, Ghana, Iraq, Lao People's Democratic Republic, Malaysia, Mexico, and Mongolia on implementing WGS to improve food safety.</td>
<td>Laboratory expertise Training and education</td>
</tr>
</tbody>
</table>

3. In exercising your activities, have you identified any regulatory research needs* relevant for WOAH?

No

4. Did your Collaborating Centre maintain a network with other WOAH Collaborating Centres (CC), Reference Laboratories (RL), or organisations designated for the same specialty, to coordinate scientific and technical studies?

Yes

<table>
<thead>
<tr>
<th>Name of WOAH CC/RL/other organisation(s)</th>
<th>Location</th>
<th>Region of networking Centre</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Tokyo Research Center for</td>
<td></td>
<td></td>
<td>To organize seminar series on</td>
</tr>
</tbody>
</table>
**TOR4 AND 5: NETWORKING AND COLLABORATION**

5. Did your Collaborating Centre maintain a network with other WOAH Collaborating Centres, Reference laboratories, or organisations in other disciplines, to coordinate scientific and technical studies?

Yes

<table>
<thead>
<tr>
<th>Name of WOAH CC/RL/other organisation(s)</th>
<th>Location</th>
<th>Region of networking Centre</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>IZSAM, WOAH Reference Laboratory for Brucellosis</td>
<td>Italy</td>
<td>Europe</td>
<td>Contacting for brucellosis control in Africa</td>
</tr>
<tr>
<td>National Veterinary Assay Laboratory</td>
<td>Japan</td>
<td>Asia and Pasific</td>
<td>To deepen the analysis of antimicrobial use pattern in the field</td>
</tr>
<tr>
<td>National Institute of Animal Health, Thailand WOAH Reference Laboratory for Brucellosis</td>
<td>Thailand</td>
<td>Asia and Pasific</td>
<td>Preparation for WOAH seminar on brucellosis in Asia and Pacific</td>
</tr>
</tbody>
</table>

**TOR6: EXPERT CONSULTANTS**

6. Did your Collaborating Centre place expert consultants at the disposal of WOAH?

Yes

<table>
<thead>
<tr>
<th>NAME OF EXPERT</th>
<th>KIND OF CONSULTANCY</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISHIBASHI Tomoko</td>
<td>Provision of advice and coordination of discussion</td>
<td>WOAH Working Group on Antimicrobial Resistance</td>
</tr>
</tbody>
</table>

**TOR7: SCIENTIFIC AND TECHNICAL TRAINING**

7. Did your Collaborating Centre provide advice/services to requests from Members in your main focus area?

Yes

*JICA Agri-Net MSc and PhD trainings on Epidemiology, Food Safety and AMR for the personnel from Thailand, Fiji, Indonesia, and Malawi at Rakuno Gakuen University.*

8. Did your Collaborating Centre provide scientific and technical training, within the remit of the mandate given by WOAH, to personnel from WOAH Members?

Yes

- a) Technical visit : 102
- b) Seminars : 188
- c) Hands-on training courses: 95
- d) Internships (>1 month) : 26

<table>
<thead>
<tr>
<th>TYPE OF TECHNICAL TRAINING PROVIDED (A, B, C OR D)</th>
<th>CONTENT</th>
<th>COUNTRY OF ORIGIN OF THE EXPERT(S) PROVIDED WITH TRAINING</th>
<th>NO. PARTICIPANTS FROM THE CORRESPONDING COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Technical Visit by FSANZ’s Regional Science and Food Safety Dialogue</td>
<td>Singapore</td>
<td>9</td>
</tr>
<tr>
<td>A</td>
<td>Technical Visit by Bilateral Cooperation Project on Application of Technology and Innovation for Water Utilization Efficiency in Vegetable Production</td>
<td>Singapore</td>
<td>4</td>
</tr>
<tr>
<td>A</td>
<td>Technical Visit by SFA Foundation Programme</td>
<td>Singapore</td>
<td>35</td>
</tr>
<tr>
<td>A</td>
<td>Technical Visit by Food Safety Training Programme for Vietnamese Officials</td>
<td>Vietnam</td>
<td>26</td>
</tr>
<tr>
<td>A</td>
<td>Technical Visit by Brazil State Rep. Goias on Novel Food</td>
<td>Brazil</td>
<td>2</td>
</tr>
<tr>
<td>A</td>
<td>Technical Visit by Jiang Su Food &amp; Pharmaceutical Science College</td>
<td>Singapore</td>
<td>20</td>
</tr>
<tr>
<td>A</td>
<td>Technical Visit by General Administration of Customs of the People’s Republic of China (GACC) Vice-Minister</td>
<td>People’s Republic of China</td>
<td>6</td>
</tr>
<tr>
<td>B</td>
<td>WOAH CCs Food Safety Seminar series titled “Emerging topics in our food environment” Webinar #1 “Production, evaluation and regulation of cultured meat”</td>
<td>17 Asia and Pacific countries/territories including 5 National Focal Points for Animal Production Food Safety</td>
<td>123</td>
</tr>
<tr>
<td>B</td>
<td>WOAH CCs Food Safety Seminar series titled “Emerging topics in our food environment” Webinar #2 “Understanding allergy of livestock products”</td>
<td>18 Asia and Pacific countries/territories including 2 National Focal Points for Animal Production Food Safety</td>
<td>65</td>
</tr>
<tr>
<td>C</td>
<td>IAEA Training Workshop</td>
<td>Singapore</td>
<td>12</td>
</tr>
<tr>
<td>C</td>
<td>Visitors from Promoting the Harmonisation of Food Regulations between Thailand &amp; Singapore 2023 Workshop</td>
<td>Singapore, Thailand</td>
<td>23</td>
</tr>
<tr>
<td>C</td>
<td>Hands on trainings on hoof trimming techniques, reproduction, and diagnosis and treatment of cattle diseases at RGU</td>
<td>Japan</td>
<td>50</td>
</tr>
<tr>
<td>C</td>
<td>Hands on training on university veterinary epidemiology teaching at RGU</td>
<td>Japan</td>
<td>10</td>
</tr>
<tr>
<td>D</td>
<td>JICA Agri-Net MSc (1) and PhD (3) training on AMR, epidemiology and microbiological risk assessment at RGU</td>
<td>Thailand, Indonesia, Fiji and Malawi</td>
<td>4</td>
</tr>
</tbody>
</table>
**TOR8: SCIENTIFIC MEETINGS**

9. Did your Collaborating Centre organise or participate in the organisation of scientific meetings related to your main focus area on behalf of WOAH?

Yes

<table>
<thead>
<tr>
<th>NATIONAL/INTERNATIONAL</th>
<th>TITLE OF EVENT</th>
<th>CO-ORGANISER</th>
<th>DATE (MM/YY)</th>
<th>LOCATION</th>
<th>NO. PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>Seminar series on Food Safety in Asia-Pacific “Emerging topics in our food environment” Webinar #1 “Production, evaluation and regulation of cultured meat”</td>
<td>RCFS, RGU, and NCFS joint seminar</td>
<td>2023-08-23</td>
<td>Zoom</td>
<td>123</td>
</tr>
<tr>
<td>International</td>
<td>Seminar series on Food Safety in Asia-Pacific “Emerging topics in our food environment” Webinar #2 “Understanding allergy of livestock products”</td>
<td>RCFS, RGU, and NCFS joint seminar</td>
<td>2023-10-23</td>
<td>Zoom</td>
<td>65</td>
</tr>
<tr>
<td>International</td>
<td>Pandemic preparedness: WOAH workshop on risk-based analysis of spill over events in wildlife in Japan</td>
<td>RGU provided an expert to the workshop.</td>
<td>2023-12-23</td>
<td>Yugawara, Japan</td>
<td>24</td>
</tr>
</tbody>
</table>

**TOR9: DATA AND INFORMATION DISSEMINATION**

10. Publication and dissemination of any information within the remit of the mandate given by WOAH that may be useful to Members of WOAH

a) Articles published in peer-reviewed journals:

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Kyoko Chisata, Takerou Yamazaki, Shunji Kayasaki, Rika Fukumori, Shin Okawa. Epidemiological features of postpartum subclinical ketosis in dairy herds in Hokkaido.


b) International conferences:

19

Makita K. FAVA Strategic Plan 2021-2025 on AMR and current situation of the Members. The 22nd Federation of Asian Veterinary Associations Congress 2023. 2023
November 3rd, Kuching, Malaysia [invited speech]. [https://fava2023.com/]


Imaizumi, N., Gondaira, S., Sugiura, T. and Higuchi, H. Synergism of bovine mammary epithelial cells and bovine peripheral blood mononuclear cells enhances immunological responses to Mycoplasma bovis. 24th Biennial Congress of the International Organization for Mycoplasmology (IOM), July 16th - 20th, 2023 Oral Presentation

Gondaira, S., Nishi, K., Imaizumi, N. and Higuchi, H. Mycoplasma (Mycoplasmopsis) bovis infections in veterinary medicine. 24th Biennial Congress of the International Organization for Mycoplasmology (IOM), July 16th - 20th, 2023 Oral Presentation


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c) National conferences:

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Yasuda Y, Makita K. Economic losses from total condemnation due to enzootic bovine leukemia in Hokkaido, Japan. 2023 March 25, Conference of Japanese Society of Veterinary Epidemiology, Tokyo, Japan.


Makita K. Economic loss due to the outbreaks of Highly Pathogenic Avian Influenza in Japan. 2023 July 1, The 97th Japan Society of Animal Hygiene Conference, online [invited speech].

Makita K. One Health for achieving solution of a problem. Symposium ‘One Health in Japan’. 2023 September 5, Conference of Japan Society of Veterinary Science, online [invited speech].


Makita K. The importance of epidemiology in One Health. 2023 December 3, Japan Veterinary Association symposium ‘a bridge for One Health: an outlook of zoonosis and education in Japan and Asia’, Kobe, Japan [invited speech].


Soga K. et al. Regulatory T cell inducing function of mesenteric lymph node dendritic cells from the inflammatory or desensitized phase of food-allergic enteropathy OVA 23-3 model mice. 19th Annual Meeting of the Japanese Association for Food Immunology, Tokyo, Nov. 2023.

Nishitsuji K. et al. Relationship of pathological condition and intestinal microbiota in food-allergic enteropathy model mice. 19th Annual Meeting of the Japanese Association for Food Immunology, Tokyo, Nov. 2023.


d) Other (Provide website address or link to appropriate information):

11

Makita K. Rabies and One Health from a veterinary view. 2023 September 3, Collaboration between physicians and veterinarians -Situation and future of One Health- J-Trops (medical) and JAVS (veterinary) student event, Tokyo [invited speech].

Makita K. Countermeasure against rabies outbreak -learning from the epidemiological records during epidemic, Japan, Vietnam, and South Africa-. Training for rabies preventive vaccination practitioners. 2023 November 15, Niigata Prefecture Veterinary Association, Japan, online [invited speech].

Makita K. The application of classical swine fever vaccination age estimation model. 2023 November 17, Ishikawa Prefecture Veterinary Association Animal Health Division training program, Kanazawa, Ishikawa, Japan [invited speech].


Veterinary Herd Health website: https://rgu-herdhealth.jp/

8th One health lecture series: Enhance Scientific Collaboration for Healthier Society, held at RGU and online 2023, Dec, 18-19.


11. What have you done in the past year to advance your area of focus, e.g. updated technology?

Makita K, Fukuda A, Usui M. A quantitative risk assessment framework for the use of antibiotics in fishery is being developed from a trial in Japan.

12. Additional comments regarding your report: