WOAH Collaborative Centre Reports Activities 2022

Activities in 2022
This report has been submitted: 18 février 2023 15:24

Centre Information

<table>
<thead>
<tr>
<th>Title of WOAH Collaborating Centre</th>
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<tbody>
<tr>
<td>Address of WOAH Collaborating Centre</td>
<td>582 Bunkyodai Midorimachi, Ebetsu, 069-8501 Japan</td>
</tr>
<tr>
<td>Tel.:</td>
<td>+81-11-388-4761</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 Dr. Shin Oikawa</td>
</tr>
<tr>
<td>Name (including Title and Position) of Head of the Collaborating Centre (WOAH Contact Point):</td>
<td>Professor Dr. Kohei Makita, Head Division of Preventive Veterinary Medicine, Department of Veterinary Medicine</td>
</tr>
<tr>
<td>Name of the writer:</td>
<td>Dr. Kohei Makita</td>
</tr>
</tbody>
</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

TOR3: HARMONISATION OF STANDARDS

2. Proposal or development of any procedure that will facilitate harmonisation of international regulations applicable to the main focus
<table>
<thead>
<tr>
<th>Proposal title</th>
<th>Scope/Content</th>
<th>Applicable area</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAO/WHO/WHOAH One Health Field Epidemiology Competency Framework and Training Manuals Technical Advisory Group</td>
<td>Dr. Makita at RGU contributed to meetings as an expert.</td>
<td>Training and education</td>
</tr>
<tr>
<td>21st Federation of Asian Veterinary Associations (FAVA) Congress</td>
<td>RGU contributed as a chairperson and a member of Pharmaceutical Stewardship Standing Committee held November 12, 2022.</td>
<td>Laboratory expertise Veterinary products</td>
</tr>
<tr>
<td>Antimicrobial Drug Resistance Working Group for the Food Safety Commission of Japan</td>
<td>Dr. Makita at RGU contributed as a member of the AMR Working Group for the Food Safety Commission of Japan.</td>
<td>Laboratory expertise Veterinary products</td>
</tr>
<tr>
<td>FAO Expert Meeting on Microplastics</td>
<td>NCFS participated in the meeting between 10-20 January 2022, as part of an expert review of a draft document titled “Microplastics in foods: current status and future perspectives”.</td>
<td>Laboratory expertise Training and education</td>
</tr>
<tr>
<td>ASEAN Training Workshop on Food Sampling</td>
<td>Training Workshop on Food Safety Sampling held between 21 and 25 February 2022. The workshop is organised with the objective to increase the capacity of the ASEAN Member States’ national competent authorities in establishing and enhancing food safety sampling practices for preventive surveillance and foodborne outbreak investigations.</td>
<td>Laboratory expertise Training and education</td>
</tr>
<tr>
<td>Workshop on Microbiological Risk Assessment</td>
<td>Workshop on Microbiological Risk Assessment held on 17 March 2022. NCFS participated in the workshop to: a) To enhance knowledge on food safety risk analysis among risk managers and risk assessors b) To provide the latest updates on microbiological risk analysis c) To strengthen interactions and communication between risk managers and risk assessors</td>
<td>Laboratory expertise Training and education</td>
</tr>
<tr>
<td>20th International Akademie Fresenius Online Conference on “Food Safety and Dietary Risk Assessment”</td>
<td>NCFS participated in the conference on 24 and 25 March 2022, to further understand insights on: a) Regulatory Framework and Guideline Developments b) Dietary Risk Assessment and Evaluation of Metabolites c) Cumulative Dietary Risk Assessment.</td>
<td>Laboratory expertise Training and education</td>
</tr>
<tr>
<td>Workshop on Food Safety Risk</td>
<td>NCFS participated this workshop between 25 - 28 March 2022, to further understand food safety risk</td>
<td>Laboratory expertise</td>
</tr>
<tr>
<td>Communication</td>
<td>Training and education</td>
<td></td>
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<tr>
<td>-----------------------------------------------------------------------------</td>
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<tr>
<td><strong>Codex Committee on Contaminants in Food</strong></td>
<td>15th Session of the Codex Committee on Contaminants in Food held from 4-25 May 2022. NCFS participated in the Session to: a) establish or endorse permitted maximum levels or guidelines levels for contaminants and naturally occurring toxicants in food and feed b) prepare priority lists of contaminants and naturally occurring toxicants for risk assessment by the Joint FAO/WHO Expert Committee on Food Additives c) consider methods of analysis and sampling for the determination of contaminants and naturally occurring toxicants in food and feed d) consider and elaborate standards or codes of practice for related subjects; and e) consider other matters assigned to it by the Commission in relation to contaminants and naturally occurring toxicants in food and feed.*</td>
<td></td>
</tr>
<tr>
<td><strong>Codex Committee on Pesticide Residues</strong></td>
<td>53th Session of the Codex Committee on Pesticide Residues held between 4-8 July and on 13 July 2022. NCFS participated in the Session to: NCFS contributed actively to the deliberation of several important topics of the 53rd CCPR, including the feasible ways of management of unsupported compounds without public health concern scheduled for periodic review by JMPR, possible options for addressing Codex MRLs for the legacy pesticide chlorpyrifos and chlorpyrifos methyl amid public health concerns raised by some countries, and setting of Codex guidelines for monitoring the purity and stability of certified reference materials during prolonged storage, among other matters.</td>
<td></td>
</tr>
<tr>
<td><strong>2nd International Electronic Conference on Antibiotics-Drugs for Superbugs: Antibiotic Discovery, Modes of Action and Mechanisms of Resistance</strong></td>
<td>NCFS participated in the event between 15 and 30 June 2022, which provided a common platform for the discussion and sharing on the latest research for the advancement on antimicrobial resistance.</td>
<td></td>
</tr>
<tr>
<td><strong>3rd Meeting of the AMU/AMR Technical Advisory Group (TAG) for Southeast Asia</strong></td>
<td>NCFS co-hosted with FAO the 3rd Meeting of the AMU/AMR Technical Advisory Group (TAG) for Southeast Asia between 20-22 September 2022.</td>
<td></td>
</tr>
<tr>
<td><strong>Recent Advances in Food Analysis (RAFA 2021)</strong></td>
<td>NCFS participated in the RAFA 2021 symposium between 3-4 November 2022, to gain insights into contemporary trends in analytical &amp; bioanalytical strategies in food quality and safety control and</td>
<td></td>
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</table>
APEC Whole Genomic Sequencing (WGS) training workshop  
NCFS participated in the workshop held between 15 and 17 August 2022, to understand how WGS data were generally used in tandem with epidemiological data for inference.  
Laboratory expertise  
Training and education

21st IUFoST World Congress of Food Science and Technology  
NCFS was one of the Jury for 21st IUFoST “Food Safety Without Borders Paper Competition”  
Training and education

Development of food allergy diagnosis technology  
UT developed a technology for quantitative evaluation of allergy symptoms using urine from patients and animals. This technology can be applied not only to the diagnosis of patients and affected animals, but also to the antigenic evaluation of foods.  
Laboratory expertise

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 OIE CC/RL/other organisation(s)</th>
<th>Location</th>
<th>Region of networking Centre</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOAH CC for Food Safety Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise (IZSAM)</td>
<td>Italy</td>
<td>Europe</td>
<td>Planning joint online workshop by RGU. IZSAM directed to WOAH RL for Brucellosis within the institute.</td>
</tr>
<tr>
<td>WOAH CC for Food Safety Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise (IZSAM)</td>
<td>Italy</td>
<td>Europe</td>
<td>UT visited to investigate AMU monitoring system in livestock in Italy</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

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<td>WOAH CC for Food Safety Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise (IZSAM)</td>
<td>Italy</td>
<td>Europe</td>
<td>UT visited to investigate AMU monitoring system in livestock in Italy</td>
</tr>
</tbody>
</table>
### WOAH RL for Brucellosis Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise (IZSAM)
- **Location**: Italy
- **Region**: Europe
- **Activity**: Organizing Virtual Workshop on Brucellosis Control in the Asia Pacific Region, 2022 December 15 by WOAH in collaboration with RGU

### WOAH RL for Brucellosis National Institute of Animal Health
- **Location**: Thailand
- **Region**: Asia and Pacific
- **Activity**: Organizing Virtual Workshop on Brucellosis Control in the Asia Pacific Region, 2022 December 15 by WOAH in collaboration with RGU

### WOAH RL for Brucellosis Animal and Plant Quarantine Agency
- **Location**: South Korea
- **Region**: Asia and Pacific
- **Activity**: Organizing Virtual Workshop on Brucellosis Control in the Asia Pacific Region, 2022 December 15 by WOAH in collaboration with RGU

### WOAH CC for Diagnosis and Control of Animal Diseases and Related Veterinary Product Assessment in Asia National Veterinary Assay Laboratory
- **Location**: Japan
- **Region**: Asia and Pacific
- **Activity**: UT and RGU: Collaborative research on antimicrobial use and drug resistance in livestock and companion animals

### WOAH CC for Diagnosis and Control of Animal Diseases and Related Veterinary Product Assessment in Asia National Institute of Animal Health
- **Location**: Japan
- **Region**: Asia and Pacific
- **Activity**: Collaborative research on classical swine fever by RGU

### WOAH RL for Rabies Onderstepoort Veterinary Research
- **Location**: Republic of South Africa
- **Region**: Africa
- **Activity**: Research and publication on epidemiology of dog, human and wildlife rabies

### 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>Kohei MAKITA (RGU)</td>
<td>Facilitation of WOAH virtual workshop</td>
<td>WOAH Virtual Workshop on Brucellosis Control in the Asia Pacific Region, 2022 December 15</td>
</tr>
</tbody>
</table>
Tomoko ISHIBASHI (UT)  | Provision of advice and coordination of discussion  | WOAH Working Group on Antimicrobial Resistance

## TOR7: SCIENTIFIC AND TECHNICAL TRAINING

7. Did your Collaborating Centre provide advice/services to requests from Members in your main focus area?
   Yes
   *RGU provided advice and technical service to researchers from the Central Laboratory, Veterinary Research Institute, and Life Science University of Mongolia for epidemiology, infectious disease modelling and dairy herd health, upon request from Mongolia.*

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: 136
   b) Seminars: 293
   c) Hands-on training courses: 8
   d) Internships (>1 month): 31

<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 Nestle Head of Regulatory and Scientific Affairs</td>
<td>Singapore</td>
<td>5</td>
</tr>
<tr>
<td>a</td>
<td>Technical visit from participants at the 21st IUFoST World Congress of Food Science &amp; Technology 2022</td>
<td>Singapore</td>
<td>30</td>
</tr>
<tr>
<td>a</td>
<td>Technical visit by delegates from India Food Safety and Standards Authority</td>
<td>Singapore</td>
<td>11</td>
</tr>
<tr>
<td>a</td>
<td>Technical visit by ILSI SEA and government delegation from Fiji</td>
<td>Fiji</td>
<td>8</td>
</tr>
<tr>
<td>a</td>
<td>Technical visit by participants from the SFA Foundation Programme</td>
<td>Singapore</td>
<td>30</td>
</tr>
<tr>
<td>a</td>
<td>Technical visit by participants from Vietnam National Institute of Food Control (NIFC)</td>
<td>Singapore</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Event Description</td>
<td>Location</td>
<td></td>
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</tr>
<tr>
<td>a</td>
<td>Technical visit by participants from the Laboratory Recognition Programme</td>
<td>Singapore</td>
<td>28</td>
</tr>
<tr>
<td>b</td>
<td>JICA seminar on the use of epidemiology for controlling animal infectious and zoonotic diseases, 2022 May, Ulaanbaatar, Mongolia</td>
<td>Mongolia</td>
<td>80</td>
</tr>
<tr>
<td>b</td>
<td>WOAH virtual Workshop on Brucellosis Control in the Asia Pacific Region, 2022 December 15</td>
<td>Asia and Pacific</td>
<td>110</td>
</tr>
<tr>
<td>b</td>
<td>A follow-up event of the Veterinary Education Twinning Project 2018-2021</td>
<td>Cambodia</td>
<td>50</td>
</tr>
<tr>
<td>b</td>
<td>Bridging Clinical Findings to Basic Research: Connecting UT and NTU</td>
<td>Taiwan</td>
<td>53</td>
</tr>
<tr>
<td>c</td>
<td>JICA hands on training course for herd health and epidemiology, 2022 November</td>
<td>Mongolia</td>
<td>5</td>
</tr>
<tr>
<td>c</td>
<td>Training of veterinary drugs testing in eggs</td>
<td>Singapore</td>
<td>3</td>
</tr>
<tr>
<td>d</td>
<td>Provided JICA training on epidemiology, 2022 October - December</td>
<td>Mongolia</td>
<td>2</td>
</tr>
<tr>
<td>d</td>
<td>Internships at NCFS</td>
<td>Singapore</td>
<td>29</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?

**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:

69


b) International conferences:
39


11. Makita K, Medical, veterinary, and economics collaborations for controlling brucellosis, One Health seminar Hokkaido University, 29 November, 2022 (Invited).


23. Alex Ng Yu Zhe. 2022. Leveraging data science towards smarter food safety system in Singapore. 21st IUFoST World Congress of Food Science and Technology. Oral Presentation.


27. Tan Yang Quan. 2022. Developing an agile food safety regulatory framework for cultured meat. 21st IUFoST World Congress of Food Science and Technology. Poster Presentation.


29. Bay Lian Jie. 2022. The Simultaneous Detection of Multiple Food Allergens via LC-MS/MS Technique. 21st IUFoST World Congress of Food Science and Technology. Poster Presentation.


31. Ong Jun Xiang. 2022. A Study on the Background Radioactivity Levels in Domestic Food Produce in Singapore. 21st IUFoST World Congress of Food Science and Technology. Poster Presentation.


33. Teo Guat Shing. 2022. Monitoring illegal antibiotics in honey on Singapore market to safeguard public health. 21st IUFoST World Congress of Food Science and Technology. Poster Presentation.

34. Chin Kek Foo. 2022. Sensitive detection of Ethylene-thiourea (ETU) and Propylene-thiourea (PTU) in fruits and vegetables. 21st IUFoST World Congress of Food Science and Technology. Poster Presentation.

35. Raymond Shi Rong Sheng. 2022. Sensitive detection of food processing contaminants-heterocyclic aromatic amines (HAAs) in cooked food. 21st IUFoST World Congress of Food Science and Technology. Poster Presentation.


37. Ang Wei Min. 2022. A focus study on migration of harmful chemical contaminants from reusable bamboo fibre cups. 21st IUFoST World Congress of Food Science and Technology. Poster Presentation.


c) National conferences:

44


2. Usui M, AMR Issues at One Health. The 10th Medical Epidemiology Workshop. 2022. 7/2.


43. Uchida Koji. Immune Memory of Food via Protein Modification. The 49th Annual Meeting of the Japanese Society of Toxicology. 2022/6/30—2022/7/2.


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

11. What have you done in the past year to advance your area of focus, e.g. updated technology?
   UT established a laboratory for research on immunity and biological functions of animals. RGU improved curriculum, facility, and quality assurance system to meet the standards for European Association of Establishments of Veterinary Education (EAEVE). RGU expanded the capacity of infectious disease modelling by new recruitment.

12. Additional comments regarding your report: