World Organisation for Animal Health

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WOAH Collaborative Centre Reports Activities 2025

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CENTRE INFORMATION

***Title of WOAH Collaborating Centre**	Food Safety
***Address of WOAH Collaborating Centre**	NCFS-SFA National Centre for Food Science (NCFS), Singapore Food Agency (SFA) 7 International Business Park Singapore 609919 | RCFS Research Center for Food Safety (RCFS), Graduate School of Agricultural and Life Sciences, The University of Tokyo Yayoi 1-1-1, Bunkyo-ku, Tokyo 113-8657, Japan | SVM-RGU School of Veterinary Medicine, Rakuno Gakuen University (SVM-RGU) 582 Bunkyodai Midorimachi, Ebetsu, Hokkaido, 069-8501, Japan
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***Name Director of Institute (Responsible Official):**	NCFS-SFA Associate Professor Joanne Chan Sheot Harn, Centre Director | RCFS Professor Kazuhiro Hirayama, Professor | SVM-RGU Professor Kohei Makita, Professor of Veterinary Epidemiology
***Name (including Title and Position) of Head of the Collaborating Centre (WOAH Contact Point):**	NCFS-SFA Associate Professor Joanne Chan Sheot Harn, Centre Director | RCFS Professor Kazuhiro Hirayama, Professor | SVM-RGU Professor Kohei Makita, Professor of Veterinary Epidemiology
***Name of the writer:**	NCFS-SFA Marshall Ong | RCFS Satoshi Hachimura | SVM-RGU Kohei Makita

TOR 1 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

Category	Title of activity	Scope
Epidemiology, surveillance, risk assessment, (true)	a. Epidemiological, Animal Health and Economics Studies b. Society of Asian Veterinary Epidemiology and One Health (SAVE-OH)	SVM-RGU a. Epidemiological, animal health, and economic studies were conducted on AMR, bovine leukosis, bovine mastitis, bovine salmonellosis, bovine tuberculosis, brucellosis, classical swine fever (CSF), foot-and-mouth disease (FMD), highly pathogenic avian influenza (HPAI), and other diseases affecting terrestrial and aquatic animals, insects, the environment, and humans. Quantitative risk assessment for AMR in aquaculture was continued. Behavioural "nudges" to improve biosecurity practices in pig farms were also studied in Japan. b. Dr Makita contributed to the establishment of the Society of Asian Veterinary Epidemiology and One Health (SAVE-OH), which will greatly facilitate technical exchange on epidemiology and transdisciplinary solutions in Asia and the Pacific.
		NCFS-SFA a. Under the auspices of the Food Safety Working Group (FSWG) Singapore–Brunei Joint Committee, capacity-building training was conducted for scientists from the Brunei Department of Agriculture and Agrifood (DoAA), Ministry of Primary Resources and Tourism (MPRT), from 29 July to 1 August 2025. The training covered the Analysis of Pesticide Residues (Chlorpyrifos, Cypermethrin) in Poultry Products and Feedstuffs using LC–MS/MS for both fresh and finished products, as well as the Isolation and Identification of Campylobacter Species in Raw Poultry Meat. b. NCFS-SFA, as the ASEAN Food Reference Laboratory (AFRL) for Marine Biotoxins and Scombrotoxin, , organised an online training session on 12 November 2025 for participants from ASEAN Member States. The workshop aims to strengthen regional analytical capabilities and harmonise testing methods for

Training, capacity building (true)	a. Analysis of Pesticide Residues in Poultry Meat and Feeds, and Microbiology in Raw Poultry Meat b. ASEAN Online Workshop on Marine Biotoxins c. Knowledge Sharing with NPPO Officers d. Hands-on Training of Epidemiology, Diagnosis, AMR Surveillance, Tuberculosis, and Food Safety	marine biotoxins. c. Under the auspices of the German Corporation for International Cooperation (GIZ), NCFS-SFA conducted a three-day training session from 9 to 11 December 2025 in Phnom Penh, Cambodia, for officers from the National Plant Protection Organisation (NPPO). The training focused on pesticide residue maximum residue limit (MRL) setting based on supervised field trial data, with the objective of enhancing participants' capability in evaluating residue data and updating them on current risk assessment methodologies adopted by the Joint FAO/WHO Meeting on Pesticide Residues (JMPR). SVM-RGU d. Various seminars on animal health, epidemiology, AMR, and One Health were conducted for 3,862 participants from 25 countries. SVM-RGU also provided hands-on training in epidemiology, diagnostics, AMR surveillance, tuberculosis, and food safety to 143 participants from 17 countries. In addition, postgraduate education in animal health, AMR, and food safety was provided to 11 students from 6 countries. An internship programme was conducted for two undergraduate veterinary students from Thailand.
Zoonoses (true)	a. Human and Animal Brucellosis and Zoonotic TB Research	SVM-RGU a. Research on human and animal brucellosis and zoonotic tuberculosis was conducted in Tanzania. Studies on echinococcosis were carried out in Japan. The teaching hospital established an emergency response system for SFTS. Information on AMR is provided under "Others."
Diagnosis, biotechnology and laboratory (true)	a. Analysis of Mycotoxins b. Proficiency Testing of Aflatoxin B1 in Maize c. Calf Pneumoniae Diagnosis	NCFS-SFA a. A two-day online training programme was jointly organised by NCFS-SFA and the Physikalisch-Technische Bundesanstalt (PTB) on 13–14 August 2025, attracting approximately 100 participants from 10 ASEAN Member States. The workshop provided comprehensive training on mycotoxin analysis and food safety, covering topics such as the fundamentals of mycotoxin contamination, control measures, risk assessment strategies, laboratory detection methods, and quality control and assurance practices. b. As the ASEAN Food Reference Laboratory (AFRL) for Mycotoxins, NCFS-SFA conducted a proficiency testing programme on Aflatoxin B1 in maize from March to August 2025, involving 26 participating laboratories across ASEAN. This capacity-building initiative aimed to evaluate laboratory performance and strengthen analytical capabilities in mycotoxin testing across the region. SVM-RGU c. Ultrasonography for the diagnosis of calf pneumonia was adapted and introduced to Japanese veterinarians. Bovine herd health monitoring methods were updated. A DNA extraction method from archived formalin-fixed samples was established to elucidate historical trematode prevalence.
Food Safety (true)	a. Training Course on Assuring Food Safety and Food Security b. Singapore Food Toxicology Conference and Workshop c. 3rd Regulator's Forum and 6th Roundtable on Novel Food Regulations d. KAP Study on Food Safety	NCFS-SFA a. Funded under the auspices of the Singapore Cooperation Programme, this one-week training course was organised by the NCFS-SFA from 21–25 July 2025. The course highlighted Singapore's comprehensive approach to food safety and food security, covering areas such as food safety legislation and regulations, accreditation of overseas food sources, import control, supervision of local farms and food establishments, risk assessment, national food safety monitoring, and food safety testing capabilities. The training was attended by 25 participants from ASEAN (Cambodia, Indonesia, Philippines, and Thailand) as well as from North Africa, South Asia, and Europe. b. The inaugural Singapore Food Toxicology Conference and Workshop was jointly organised by NCFS-SFA and the Singapore Food Toxicology Network on 8–9 October 2025. The event attracted 185 local and international participants from academia, industry, and regulatory agencies. The conference (Day 1) provided a scientific platform to share advances in New Approach Methodologies (NAMs), while the workshop (Day 2) facilitated in-depth discussions on the implementation of NAMs and Next Generation Risk Assessment (NGRA)—focusing on challenges, opportunities, and future directions for food safety evaluation in Singapore. c. NCFS-SFA organised the 3rd Regulator's Forum and 6th Roundtable on Novel Food regulations in conjunction with the Singapore International Agri-Food Week on 3 – 4 November 2025. The Regulators' Forum brought together 13 agencies to share regulatory

		updates and discuss technical topics, including applicability of animal studies in safety assessment of cultivated meat and data requirements for assessment of food/food ingredients produced from precision fermentation. The Roundtable on Novel Food Regulations was attended by over 240 participants from food safety agencies, industry, and academia. The event featured successful novel food regulatory approval and the ecosystem approach in Singapore for the novel food development. Attendees also learnt about the novel food regulatory framework from UK and China, and the event concluded with a panel discussion on the future of novel food safety assessment. SVM-RGU d. A knowledge, attitudes, and practices (KAP) study on food safety along poultry value chains was conducted in Thailand. An antimicrobial resistance (AMR) risk assessment in aquaculture was conducted in Japan.
Antimicrobial Resistance (true)	a. ASEAN Regional Training on FAO-Assessment Tool for Laboratory and Antimicrobial Resistance Surveillance System (ATLASS) b. AMR Research in Terrestrial Livestock and Wildlife, Sea Water Aquaculture, and Fresh Water Wild Fish	NCFS-SFA a. National Parks Board (NParks)he Singapore Cooperation Programme (SCP) as part of Singapore's commitment to the Plan of Action (POA) for ASEAN Cooperation in Combating Antimicrobial Resistance (AMR) in the Aquaculture Sector (2021–2025), NCFS-SFA, in collaboration with the Singapore National Parks Board (NParks), organised an ASEAN Regional Training Course on the FAO-Assessment Tool for Laboratory and AMR Surveillance System (ATLASS) from 5 – 8 May 2025. The course aimed to strengthen regional capacity in AMR surveillance and laboratory assessment in the food and agriculture sector and was attended by 16 participants from ASEAN Member States and Timor-Leste. SVM-RGU b. Antimicrobial resistance (AMR) research was conducted in terrestrial livestock and wildlife, seawater aquaculture, and freshwater wild fish. Alternative materials to reduce antimicrobial use were identified, with some progressing to commercialisation.

TOR 3: 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

Proposal title	Scope/Content	Applicable Area
[Food Safety] New work proposals on cell-based foods at Codex • Code of hygienic practice for the manufacture of cell-based foods • Guideline for the conduct of food safety assessment of cell culture media components	NCFS-SFA continues to promote greater international awareness and dialogue on food safety issues related to novel foods and aims to contribute to the development of internationally standardised evaluation criteria for their safety assessment at platforms such as the Codex Alimentarius. Singapore and China drafted a discussion paper for the development of a guideline for the safety assessment of cell culture media components that was discussed at the 55th session of the Codex Committee on Food Additives and an electronic working group chaired by Singapore, China, Republic of Korea and Saudi Arabia was formed to further improve this work. Singapore, in collaboration with China, Republic of Korea, Saudi Arabia and United Kingdom, developed a discussion paper on the development of a Code of hygienic practice for the manufacture of cell-based food discussed at the 55th session of the Codex Committee on Food Hygiene.	Training and Education
Maintaining A Statistical Package for the Use in Analyzing Consumers' Preferences for Food Safety and Other Related Issues	RCFS have developed and continue to maintain an add-on package, DCchoice, for the open-source statistical environment R. This package can be used to analyse consumers' preferences for various attributes of goods and services, including food safety and related issues. A typical application of this analysis is the investigation of consumers' willingness to pay for animal products produced under strict food safety controls.	Veterinary Products
Patent Application: Data Processing Device, Data Processing Method, Program, and Measuring Instrument	RCFS developed a data processing device, data processing method, program, and measuring instrument for measuring animal vital signs to support non-clinical toxicity testing and have filed a patent application for this invention in Japan (Patent Application No. 2025-107563).	Health Management
Research Project "Development of Model Animal Production Systems Using Non-experimental Animal Species"	A project concerning the establishment of induced pluripotent stem (iPS) cells derived from non-model animals and the generation of interspecies chimeras with mice, with the aim of enabling genetic research in animal species that are not commonly used as experimental models.	Health Management
	In December 2025, the Society of Asian Veterinary Epidemiology and One	

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Establishment of Society of Asian Veterinary Epidemiology and One Health (SAVE-OH)	Health (SAVE-OH) was established, with RGU contributing to the process. SAVE-OH organises regional conferences to facilitate collaboration and knowledge exchange in veterinary epidemiology and One Health.	Training and Education

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

Name of WOAH CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
National Centre for Food Science and Research Center for Food Safety at University of Tokyo	Singapore and Japan	Asia y el Pacífico	Joint Workshop on Food Safety

TOR 4 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

Name of WOAH CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
German Federal Institute for Risk Assessment (BfR)	Germany	Europe	Research and Workshop on relevant topics under Food Safety and Risk Assessment
China National Center for Food Safety Risk Assessment (CFSA)	China	Asia and Pacific	Research and Workshop on relevant topics under Food Safety and Risk Assessment
Food Standards Australia New Zealand (FSANZ)	Australia New Zealand	Asia and Pacific	Research and Workshop on relevant topics under Food Safety and Risk Assessment
Ministry of Agriculture, Forestry and Fisheries of Japan (MAFF)	Japan	Asia and Pacific	Research and Workshop on relevant topics under Food Safety (PFAS)
Ministry of Food and Drug Safety (MFDS)	Korea	Asia and Pacific	Research and Workshop on relevant topics under Food Safety and Risk Assessment (New Foods)
United Kingdom Food Standards Agency (UK FSA)	United Kingdom Food Standards Agency (UK FSA)	Europe	Research and Workshop on relevant topics under Food Safety and Behavioural Science
French Agency for Food, Environmental and Occupational Health & Safety (ANSES)	France	Europe	Research on relevant topics under Food Safety (New Approach Methodologies in Chemical Risk Assessments)
United States of America Food and Drug Administration (US FDA)	United States of America	Americas	Research on relevant topics under Food Safety (WGS)

Hungary's National Food Chain Safety Office (NEBIH)	Hungary	Europe	Research on relevant topics under Food Safety (WGS on Salmonella spp.)
University of Malaya (UM)	Malaysia	Asia and Pacific	Research and Workshop in the area of Antimicrobial Resistance surveillance and testing
Technical University of Denmark (DTU)	Denmark	Europe	Research and Workshop in the area of Antimicrobial Resistance surveillance and testing
Agency for Science, Technology and Research (A*STAR)	Singapore	Asia and Pacific	Research and Workshop on relevant topics under Food Safety
National University of Singapore (NUS)	Singapore	Asia and Pacific	Research, Workshop and Education on relevant topics under Food Safety
Singapore University of Social Sciences (SUSS)	Singapore	Asia and Pacific	Research, Workshop and Education on relevant topics under Food Safety
ASEAN Food Reference Laboratories	ASEAN Countries	Asia and Pacific	Capacity Building and Workshop on relevant topics under Food Safety
National Veterinary Assay Laboratory, Japan	Japan	Asia and Pacific	Research and Training on AMR
National Institute of Animal Health, Japan	Japan	Asia and Pacific	Research on Classical Swine Fever
Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale"	Italy	Europe	Research on Brucellosis
EpiCentre and mEpiLab, Massey University	New Zealand	Asia and Pacific	Research and Workshop on Epidemiology
Melbourne University	Australia	Asia and Pacific	Research, Workshop and Education on Epidemiology
International Livestock Research Institute	Kenya	Africa	Workshop on Food Safety Risk Assessment

TOR 6: EXPERT CONSULTANTS

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

Yes

Name of expert	Kind of consultancy	Subject
NCFS-SFA has experts in different fields.	Advisory, Technical, Scientific	Food Safety, Mycotoxins, Pesticide Residues, Environmental Contaminants, Marine Biotoxins and Scombrotoxins, Radionuclides
Ryota Tochinai	WOAH fellow, Department of Veterinary Medical Sciences, The University of Tokyo	As part of the support for WOAH activities, the staff had assisted the Asian Association of Veterinary Schools (AAVS) Office in organising a seminar. The staff also served as a member of the Editorial Board for the AAVS Newsletter.
Masaru Usui	Workshop	Teaching AMR Lab Work in the WOAH Workshop
Akira Fukuda	Workshop	Teaching AMR Lab Work in the WOAH Workshop
Kohei Makita	Workshop	Teaching Surveillance and Risk Assessment on AMR in the WOAH Workshop
Kohei Makita	Workshop Design	Designing a Joint WOAH CC Workshop with WOAH CC on Epidemiology

TOR 7: SCIENTIFIC AND TECHNICAL TRAINING

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

Yes

RCFS

Fostering Future Leaders in One Health: Short-Term Internship Program for University of the Philippines Students at the University of Tokyo (16 June – 8 July 2025)

A short-term internship program was conducted for five undergraduate biology students from the University of the Philippines Manila (UPM) who aspire to careers in medicine and food safety. The curriculum included mandatory animal ethics training and hands-on exposure to advanced pre-clinical techniques such as small animal clinical diagnostics and molecular biological analyses that are often not accessible at their home institution. The training also covered data analysis and scientific communication.

By providing high-level research exposure, the program supports students' career development, strengthens regional partnerships in Asia, and advances the "One Health" philosophy. The internship fulfils UPM's external practicum requirements, enabling students to earn academic credit upon submission of their final reports.

SVM-RGU

The Japan International Cooperation Agency (JICA) receives requests for technical services from WOAH Members, and RGU responds to these needs by providing workshops and training programmes. RGU has conducted research for development under the JICA–AMED SATREPS project on the Co-design of neglected zoonosis control through One Health, education, and public–private partnerships, as well as under JICA Agri-Net projects. RGU has also contributed to the evaluation of the Northern Namibia Small-Scale Farmers' Livelihood Enhancement Project.

RGU has maintained a long-term collaboration with the International Livestock Research Institute (ILRI) since 2010. In 2025, ILRI was designated as a WOAH Collaborating Centre (CC) for One Health. In collaboration with ILRI, ASEAN–CGIAR, Khon Kaen University, and the WOAH CC, RGU supported the delivery of a risk assessment training programme in Thailand in September 2025.

RGU also provides annual epidemiology workshops in Japan. In addition, seminars were conducted to meet the needs of various organisations, particularly in Japan. A seminar was also delivered at Massey University as part of collaborative activities with the WOAH Collaborating Centre for Epidemiology.

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 : 21

b) Seminars : 4707

c) Hands-on training courses: 185

d) Internships (>1 month) : 13

Type of technical training provided (a, b,		Country of origin of the expert(s) provided with	

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c or d)	Content	training	No. participants from the corresponding country
A	Knowledge Sharing with NPPO Officers	Cambodia	20
B	Mycotoxins Analysis and Food Safety	ASEAN Member States	100
B	Singapore Food Toxicology Conference and Workshop	Regional and International	185
B	3rd Regulator's Forum and 6th Roundtable on Novel Food Regulations	Regional and International	240
B	ASEAN Online Workshop on Marine Biotoxins	ASEAN Member States	170
B	AJFVC Online Seminar Sessions: Advancing Food Safety and Sustainable Agriculture in ASEAN	ASEAN Member States	150
C	FAO-Assessment Tool for Laboratories and Antimicrobial Resistance Surveillance Systems (FAO-ATLASS)	ASEAN Member States	16
C	Assuring Food Safety and Food Security	ASEAN (Cambodia, Indonesia, Philippines and Thailand) as well as from other regions (North Africa, South Asia, and Europe)	24
C	1) Analysis of Pesticide Residues in Poultry Products and Feedstuffs. Using LCMS/MS for Fresh and Finished Product 2) Isolation and Identification of Campylobacter Species in Raw Poultry Meat.	Brunei	2
A	Research Collaboration Between RGU and EpiCentre, Massey University. Dr. Wada at the EpiCentre Visited RGU in January 2025.	New Zealand	1
B	JICA Training “Improving Safety and Quality Control of Livestock Products Focusing on Milk, Meat and Eggs”, Seminar on 17 March 2025 at RGU “JICA Safe Milk Promotion in Mbarara Project.”	JICA Training “Improving Safety and Quality Control of Livestock Products Focusing on Milk, Meat and Eggs”, Seminar on 17 March 2025 at RGU “JICA Safe Milk Promotion in Mbarara Project.”	9
B	Factors Associated with the Use of Important Human Antimicrobials in Japanese Small-animal Clinics. Evening Seminar for the Society of Veterinary Clinical Infectious Diseases (Japanese) by Dr. Makita, RGU, 10 June 2025.	Japan	20
B	Massey University School of Veterinary Science Monthly Research Seminar “Co-designing Neglected Zoonosis Intervention through One Health, Education, and Public-private Partnership” by Dr. Makita, RGU, Massey University, New Zealand, 18th June 2025.	New Zealand	15
B	One Health Symposium ‘Nutrition and health -think about future body-’ RGU, 4 July 2025.	Japan	100

B	The 13th One World One Health Research Forum, RGU, 5 July 2025.	Japan	20
B	Okayama Prefecture Livestock Hygiene Service Center Training, 'The Significance of and How-To-Use the Classical Swine Fever Vaccination Timing Assessing Model' by Dr. Makita, RGU, online, 28 July 2025.	Japan	15
B	Seminar 'Toward Sustainable Dairy Systems: Advancing Nutrition, Emission Mitigation, and Animal Welfare Through Interdisciplinary Research' in RGU. Lecturer: Dr. Niu Mutian from ETH Zurich, 29 July 2025	Japan	60
B	Protecting Food, Health, and the Environment from Infectious Diseases – Challenges and Prospects in Veterinary Epidemiology. The 137th HGPI Seminar, by Dr. Makita, online, Health and Global Policy Institute, 27 August 2025.	Japan, Thailand, Nigeria, USA, UNICEF	75
B	Hokkaido Veterinary Association Seminar "Early Diagnosis of Calf Pneumonia Using Thoracic Ultrasonography — Herd Management Practices for Pre-weaning Calves at the University of Wisconsin" by Dr. Gondaira, Obihiro, Japan, 29 August 2025.	Japan	5
B	Hokkaido Veterinary Association Third Hokkaido One Health Fair. Co-organised by RGU. Access Sapporo, Japan, 23 September 2025.	Japan	3092
B	Aomori Prefecture Veterinary Association Large Animal Clinic Training, "Situation of Zoonotic Diseases in Japan – Roles of Veterinarians in Society-", by Dr. Makita, RGU, Aomori, Japan, 18 October 2025.	Japan	30
B	'Respiratory Diseases and Their Potential Long-term Impacts on Productivity' by Dr. Gondaira at Hokkaido Milk Summit 2025, Sapporo, 21 November 2025.	Japan	200
B	Rakuno Gakuen University and Snow Brand Seed Co., Ltd Dairy Seminar 'Calf Immunity and Pneumonia', Ebetsu, Japan, 5 December 2025.	Japan	400
B	'Practical Example of One Health Approach – Medical, Veterinary, and Economics Collaborations for Controlling Brucellosis', by Dr. Makita, Hokkaido University One Health Seminar, online, 24 December 2025.	China, DR Congo, Ghana, India, Indonesia, Japan, Kenya, Korea, Malawi, Philippines, Republic of Mauritius, Republic of Sierra Leone, Sri Lanka, Taiwan, Thailand, Zambia	49
C	WOAH Laboratory Training on AMR Surveillance in Terrestrial / Aquatic Food Animals, with NVAL at RGU, Japan, 7-10 July 2025.	Cambodia, Malaysia, Nepal, Taiwan	4
C	RGU Veterinary Epidemiology Workshop "Hands-on Training of Basic Epidemiology and Statistics", RGU, Japan, 8-10 August 2025.	Japan	15
C	VR for Meat Inspection Training in RGU. VR Workshop. The 168th Conference of Veterinary Medical Science, Miyazaki, Japan, 3 September 2025.	Japan	50
C	ILRI/ASEAN-CGIAR/Khon Kaen University/WOAH Collaborating Centre for Food Safety, RGU Training "Food safety Risk Assessment for Informal value Chains under a One Health Perspective", Khon Kaen, Thailand, 23-24 September 2025.	China, Indonesia, Lao PDR, Philippines, Thailand, Vietnam	26

C	JICA-AMED SATREPS Training on Laboratory Management and Molecular Diagnosis, RGU, 1-7 October 2025.	Tanzania	2
C	JICA Training "Upgrading Practical Skills for Veterinary Officers in Livestock Health Services." Pre-Online-Program: From 4 to 31 August 2025. Main Program in JICA Obihiro and RGU, Japan, 11 September – 8 October 2025.	Namibia, Pakistan, Palestine, Paraguay, Senegal and Tanzania	7
C	JICA-AMED SATREPS Regional and District Medical and Veterinary Officers Training on One Health, Education and Public-private Partnerships, RGU, 11-14 November 2025.	Tanzania	15
C	JICA-AMED SATREPS Workshop on Sampling Suspected Tuberculosis Legion from Bovine and Small Ruminant Carcasses. By RGU. Morogoro, Tanzania, 27-28 November 2025.	Tanzania	34
D	RGU Internship for Khon Kaen University Veterinary Students on Epidemiology and Herd Health	Thailand	2
D	JICA-AMED SATREPS Co-designing Neglected Zoonosis Control Through One Health, Education, and Public-Private Partnerships	Tanzania, Japan	7
D	JICA Agri-Net Long-term Training at RGU on AMR	Fiji	1
D	JICA Agri-Net Long-term Training at RGU on Epidemiology of FMD	Indonesia	1
D	JICA Agri-Net Long-term Training at RGU on Food Safety	Thailand	1
D	JICA Agri-Net Long-term Training at RGU on East Coast Fever	Malawi	1

TOR 8: 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

National/International	Title of event	Co-organiser	Date	Location	No. Participants
Internationally	Quadripartite One Health Workshop for Asia	Quadripartite	2025-11-25	Bangkok, Thailand	250
Internationally	Roundtable on Novel Food Regulations	In conjunction with the Singapore International Agri-Food Week (SIAW) from 3 to 6 November 2025	2025-11-03	Singapore	240
Nationally	Forum by Research Centers concerning Food Safety of Six Universities 'Current Status and Future Prospects of Smart Livestock Farming'	Iwata Univ. Tohoku Univ. Osaka Metropolitan Univ. Kobe Univ. Miyazaki Univ.	2025-09-22	Morioka	100
Internationally	WOAH Laboratory Training on AMR Surveillance in Terrestrial/Aquatic Food Animals	National Veterinary Assay Laboratory	2025-07-07	RGU, Ebetsu, Japan	4

TOR 9: 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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NCFS-SFA

1. Angela Li, Jun Cheng Er, Wei Ching Khor, Mei Hui Liu, Valerie Sin, Sheot Harn Chan, Kyaw Thu Aung (2 January 2025): Integration of National Chemical Hazards Monitoring, Total Diet Study, and Human Biomonitoring Programmes for Food Safety Exposure Assessment in Singapore. Journal of Food Protection, 88 (1). DOI: 10.1016/j.jfp.2024.100414
2. Bay Lian Jie (15 January 2025): Efficient Protein Extraction for Assessing Food Allergy Risk in Complex Alternative Protein Matrices. Food Chemistry, 463. DOI: 10.1016/j.foodchem.2024.141221
3. Xin Li, Ker Lew, Yu Lee Leyau, Ping Shen, Joachim Chua, Kung Ju Lin, Yuansheng Wu, Sheot Harn Chan (11 February 2025): Application of High-Resolution Mass Spectrometry for Ciguatoxin Detection in Fish from the Asia-Pacific Region. Toxins, 17 (100). DOI: 10.3390/toxins17030100
4. Nian Yian Lee, Joanna Wei Lingg Lee, Michelle Lee Shin Wong, Sheena Wee, Ping Shen, Yuansheng Wu, Kern Rei Chng, Joanne Sheot Harn Chan (21 March 2025): Ethylene Oxide Residues in Spices, Herbs, and Related Processed Foods. Food Additives & Contaminants: Part B. DOI: 10.1080/19393210.2025.2479232
5. Suat Moi Puah, Wei Ching Khor, Yen Ching Lim, Kyaw Thu Aung, Tien-Tien Vicky Lau, Chen Chen Yong, Po Teen Lim, Chui Pin Leaw, Kek Heng Chua (29 March 2025): Development of a colorimetric loop-mediated isothermal amplification (cLAMP) assay for the rapid and visual detection of Aeromonas dhakensis infection in aquaculture. Aquaculture, 605. DOI: 10.1016/j.aquaculture.2025.742483
6. Qiyi Yuan, Charmaine Ng, Shin Giek Goh, Wei Ching Khor, Glendon Hong Ming Ong, Kyaw Thu Aung, Karina Yew-Hoong Gin (10 April 2025): Evaluation of public health impact risks associated with bacterial antimicrobial resistome in tropical coastal environments. Water Research, 282. DOI: 10.1016/j.watres.2025.123621
7. Ye Htut Zwe, Roshini Devi Mohan, Si Jia Lim, Wai Ching Lai, Kae Hwan Sim, Yu Lee Leyau, Ker Lew, Joachim Mun Choy Chua, Kyaw Thu Aung, Kern Rei Chng, Yuan Sheng Wu, Joanne Sheot Harn Chan, Li Kiang Tan (15 April 2025): Occurrence & Characterization of Staphylococcus aureus from Ready-to-Eat (RTE), and Cooked Food in Singapore: A Retrospective Analysis. International Journal of Food Microbiology, 436 (2025). DOI: 10.1016/j.ijfoodmicro.2025.111213
8. Sook Ling Lim, Suat Moi Puah, Siti Nursyuhada Baharudin, Nur Insyirah Mohd Razalan, Kieng Soon Hii, Wei Ching Khor, Yen Ching Lim, Kyaw Thu Aung, Kek Heng Chua, Po Teen Lim, Chui Pin Leaw (1 May 2025): Bacterial Community Composition and Prevalence of Aeromonas dhakensis in Four Tilapia Freshwater Aquaculture Systems in Malaysia. Fishes 2025, 10(5). DOI: 10.3390/fishes10050204
9. Xuneng Tong, Zhixin Xiang, Shin Giek Goh, Luhua You, Sanjeeb Mohapatra, Glendon Ong, Wei Ching Khor, Kyaw Thu Aung, Karina Yew-Hoong Gin (19 June 2025): A Hybrid Modeling Framework for Predicting Spatiotemporal Dynamics of Antimicrobial Resistance in Coastal Waters. Environmental Science & Technology. DOI: 10.1021/acs.est.5c01927
10. Ker Lew, Yu Lee Leyau, Ping Shen, Xin Li, Sherine Liew, Joachim Chua, Hui Yi Lim, Yuansheng Wu, Kern Rei Chng, Sheot Harn Chan (25 June 2025): First Total Diet Study of Aflatoxins in Singapore: Exposure Risk, High-Risk Foods, and Public Health Implications. Toxins 2025, 17 (324). DOI: 10.3390/toxins17070324
11. Xiaowei Lou, Jared Lim, Bin Li, Dingyi Yu, Jayantha Gunaratne (29 June 2025): Mass spectrometry-based proteomics pipeline for screening hazardous proteins in alternative protein-based foods. Food Chemistry. DOI: 10.1016/j.foodchem.2025.145395
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33. Kurumisawa T, Kazama K, Gondaira S, Higuchi H, Eguchi A, Onda K, Roh SG, Kawai K. (2025) Evaluating the impact of honey inclusion in drinking water on the semen quality, immunological response, and haematology of naked neck cocks. Polish Journal of Veterinary Sciences 28(1):43-49, doi: 10.24425/pjvs.2025.154012.

b) International conferences:
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NCFS-SFA
1. Li Haiyan (January 2025) Method for the Identification, Characterization, and Quantification of Microplastics and Nanoplastics in Water/Food. ASTM cross-committee meeting for microparticles (microplastics)
2. Francesca Ong (March 2025) Overview on cell-based foods and food safety challenges. 55th session on the Codex Committee on Food Additives
3. Francesca Ong (May 2025) Alternative Proteins in Singapore. New international opportunities for Cameroonian gastronomy: What strategy for valorising Cameroonian cuisine
4. Li Xin (June 2025) Advancing Food Allergen Detection with Integrated Higer-Order Confirmation - Enhancing Reliability Beyond ELISA with High-resolution Mass Spectrometry. Food Allergen Asia Conference
5. Wang Yanwen (July 2025) SFA's implementation of the GEd crop regulatory framework. Asia-Pacific Seed Association (APSA) 2025 Regional Plant Breeding Innovation Expert Consultation
6. Wu Yuansheng (July 2025) Determination of Pesticide Residues in Poultry Products and Animal Feed Using LC-Orbitrap HRMS. A Laboratory Training Provided by National Centre for Food Science to Veterinary Laboratory Services of DOAA, MPRT, Brunei Darussalam
7. Lew Ker (August 2025) Determination of Aflatoxins B&G in Food using HPLC with Immunoaffinity Clean-up. AFTLC-PTB ASEAN Project IV: Technical Training on Mycotoxins Analysis
8. Joachim Chua (August 2025) Determination of Patulin in Juices using LC-MSMS. AFTLC-PTB ASEAN Project IV: Technical Training on Mycotoxins Analysis
9. Lim Hui Yi (August 2025) Introduction to the ASEAN Food Reference Laboratory for Mycotoxins. AFTLC-PTB ASEAN Project IV: Technical Training on Mycotoxins Analysis
10. Lee Leyau (August 2025) Key Elements of Method Validation & Expression of Measurement Uncertainty for Chemical Testing. AFTLC-PTB ASEAN Project IV: Technical Training on Mycotoxins Analysis
11. Lee Leyau (August 2025) Overview of Mycotoxins & the Effects of Climate Change on their Occurrence in Food. AFTLC-PTB ASEAN Project IV: Technical Training on Mycotoxins Analysis
12. Lew Ker (August 2025) The First Total Diet Study of Aflatoxins in Singapore. AFTLC-PTB ASEAN Project IV: Technical Training on Mycotoxins Analysis
13. Lim Hui Yi (August 2025) The Global Landscape of Mycotoxin Regulations. AFTLC-PTB ASEAN Project IV: Technical Training on Mycotoxins Analysis
14. Angela Li (September 2025) Assessment of human exposure to chemical hazards and their association with food consumption in the Singapore population. 13th International symposium on biological monitoring, Milan, Italy
15. Wang Yanwen (September 2025) Updates on GM and Gene Editing R&D and Regulatory Overview in Singapore. Asian Short Course on Agribiotechnology, Biosafety Regulation, and Communication
16. Calvin Yeo (September 2025) Landscape Scan of New Approach Methodologies in Asia: Machine Learning Models for Safety Assessment as a Case Study. Eurotox 2025
17. Li Haiyan (September 2025) Microplastics and nanoplastics monitoring in water and food: Analytical Adcances to support risk assessment. 15th Global Summit on Regulatory Science (GSRS25) Annual Conference
18. Jasmine Li (November 2025) Food Toxicology Research to Meet Food Safety Challenges in Novel Foods. Global Agri-food Scientific Symposium 2025
19. Lim Hui Yi (November 2025) Overview of AFRL for Marine Biotoxins and Scombrotoxin. ASEAN Training Workshop on Marine Biotoxins (Virtual)
20. Yu Lee (November 2025) Marine Biotoxins and their Detection Approaches. ASEAN Training Workshop on Marine Biotoxins (Virtual)
21. Lew Ker (November 2025) Analysis of Domoic Acid (ASP) In Seafood. ASEAN Training Workshop on Marine Biotoxins (Virtual)
22. Li Xin (November 2025) Application of High-Resolution Mass Spectrometry for Ciguatoxin Detection in Fish from the Asia-Pacific Region. ASEAN Training Workshop on Marine Biotoxins (Virtual)
23. Li Xin (November 2025) Advancing Food Allergen Detection with Integrated Higer-Order Confirmation. 5th International Conference on Food Analysis (Allergen Testing Special Interest Group)
24. Sheena Wee (December 2025) SG Presentation_MRL setting for consumer health protection and trade facilitation-Singapore experience. USDA - ASEAN MEMBER STATES COOPERATION ON GLOBAL PESTICIDE MRL HARMONISATION

RCFS
1. Keita Amano、Kazuhiro Hirayama. Significance of the dog gut microbiota in excessive anxiety and fear. Bilateral Symposium with NTU
2. Tochinai R. The Impact of Novel Wearable Technology on the 3Rs in Preclinical Safety Studies. NCHU Symposium: Next-Gen Biomedical Strategies: From Molecular Insights to Preclinical Innovations. 2025. (Taichung, Taiwan)
3. Nagashima Y, Tochinai R, Kuwahara M, Sekizawa S. Pre- and post-natal exposure to nicotine affects glycinergic inhibitory neuronal mechanisms in the nucleus tractus solitarius of rats. IUPS 2025 a joint meeting with europhysiology. 2025. (Frankfurt, Germany)
4. Koishikawa A, Takano M, Ma M, Okubo Y, Tochinai R, Ota H. Wearable Device with Multimodal Sensor for Experimental Small Animals in Toxicity Study. 47th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. 2025. (Copenhagen, Denmark)
5. Naoaki Matsuda, Aoi Koishikawa, Tamami Takano, Yusuke Okubo, Shin-ichi Sekizawa, Hiroki Ota, Ryota Tochinai. Advancing Cage-Side Observation: Quantitative Behavioral Assessment in Rats via Novel Wearable Technology. NTU 2025 NTU–UT Joint Symposium. 2025. (Taipei, Taiwan)
6. Kamiya Y, Shiga T, Tochinai R, Aihara N, Kamiie J. Investigation of systemic skeletal and cardiac pathology and the mechanism of anesthesia-induced arrhythmia in porcine dystrophinopathy. American College of Veterinary Pathologists (ACVP) Annual Meeting. 2025. (New Orleans, US)
7. Naoaki Sakamoto, Keina Suzuki, Kiwako Yamamoto-Hanada, Akane Hayashi, Nanae Nagata, Hisako Ogasawara, Sayaka Hamaguchi, Kotaro Umezawa, Tatsuki Fukuie, Yukihiro Ohya, Takahisa Murata. Dysbiosis Promotes IgE Sensitization Accompanied by Increased Intestinal PGD_2 Production. EAACI Congress 2025, June 13, 2025
8. Misato Kida, Tatsuro Nakamura, Nanae Nagata, Takahisa Murata. Unveiling the Role of PGD_2/CRTH2 Signaling in Antigen-Specific IgE Production. EAACI Congress 2025, 15 June 2025
9. Toa Okawara, Akane Hayashi, Takahisa Murata. NSAID Administration Promotes Allergic Sensitization by Altering Lipid Mediator Production. EAACI Congress 2025, 13 June 2025
10. Takeshi Haga, Asmita Gaire, Tomoharu Sakakura, Kazuya Haganuma, Eri Uchida-Fujii, James Chambers, Kazuyki Uchida, Dai Ishiyama, Ichiro Yasutomi. INVOLVEMENT OF BOVINE PAPILLOMAVIRUS IN ANOGENITAL LESIONS OF CATTLE. The 37th Annual Conference of the International Papillomavirus Society, Bangkok Thailand, 23-26 October 2025

SVM-RGU
1. Furumoto H, Ukita M, Asakura S, Watarai M, Mathew C, Karimuribo E, Makita K. (2025) Herd level sero-prevalence of bovine brucellosis in Morogoro Region, Tanzania. The One Health Lecture Series 10th Anniversary Symposium. 2 December, Hokkaido University, Sapporo, Japan.
2. Makita K. (2025) Co-designing Neglected Zoonosis Intervention through One Health, Education, and Public-private partnership. The One Health Lecture Series 10th Anniversary Symposium. 1 December, Hokkaido University, Sapporo, Japan.
3. Putri R, Utomo BN, Noor SM, Widjaja E, Kusumaningtyas E, Ekawasti F, Wibisono FJ, Nuradji H, Asakura S, Makita K. (2025) Knowledge, attitudes, and practices (KAP) related to foot and mouth disease (FMD) in the implementation of Qurban on Eid al-Adha. The One Health Lecture Series 10th Anniversary Symposium. 2 December, Hokkaido University, Sapporo, Japan.
4. Arshad U, Johnson SJ, Fukumori R, Bowers AJ, Kendall SJ, Brown-Crowder I, Malacco V, Sun F, White HM. (2025) Effects of replacing porcine blood meal with rumenprotected lysine on performance and N use efficiency in highproducing dairy cows. ADSA 2025.
5. Arshad U, Fernandez-Wallace T, Fukumori R, Johnson SJ, Kendall SJ, Cangiano LR, Brown-Crowder I, Malacco V, Sun F, Heather HM. (2025) Effects of metabolizable protein supply on metabolic function of CD4+ T cells in dairy cows. ADSA 2025.
6. Praisler GF, France TL, Wallace TF, Fukumori R, Arshad U, Kendall SJ, White HM. (2025) Impacts of peripartum comorbid development of fatty liver and hyperketonemia on performance and health. ADSA

2025.
7. Harada H, Tamura M, Kawabata M, Oishi N, Deguchi T, Fukuda A, Yamazaki H, Usui M, Ohta H. (2025) The minimal impact of rifaximin on the gut microbiota of healthy dogs. Asian Meeting of Animal Medicine Specialties (AMAMS).
8. Usui M. (2025) One Health Approach to understanding and managing animal derived antimicrobial resistant bacteria. The Asian Pig Veterinary Society (APVS) 2025.
9. Usui M. (2025) Current status of global AMR measures and new strategies including flavophospholipol's impact. The Asian Pig Veterinary Society (APVS) 2025.
10. Usui M. (2025) Vermicomposting reduces antimicrobial resistance in livestock waste. Tokyo AMR One Health Conference.
11. Ishizaki T. (2025) Unlocking archived trematode specimens; Optimized DNA extraction from formalin fixed rumen fluke. The One Health Lecture Series 10th Anniversary Symposium. 1 December, Hokkaido University, Sapporo, Japan.
12. Noda J, Ando T, Takahara H, Nitta H, Maki T, Okuda T, Morimoto K, Mitarai S. (2025) Characterizing and Detecting Bioaerosols: An Environmental Health Perspective on Infectious Diseases. The One Health Lecture Series 10th Anniversary Symposium. 1 December, Hokkaido University, Sapporo, Japan.

c) National conferences:
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NCFS-SFA
1. Desmond Teo (January 2025) Non-Targeted Analysis (NTA) Strategy: Development and Applications. Joint Food Scientific Seminar (Co-organized by NUS and SFA)
2. Li Bin (January 2025) Panel discussion "Research Advances in Food Proteomics and Policy Regulations". Joint Food Scientific Seminar (Co-organized by NUS and SFA)
3. Bay Lian Jie (January 2025) Singapore's Regulatory Framework for Novel Foods. Joint Food Scientific Seminar (Co-organized by NUS and SFA)
4. Ivan Zwe (January 2025) Food Safety Testing for Microbiological Hazards and Toxicology. LSM4352: Sustainable Urban Production for Food Security/ NUS
5. Ivan Zwe (April 2025) Impact of Climate Change on Bacterial Foodborne Diseases. SFA Journal Club
6. Raymond Shi (April 2025) MSE Family's Response to Oil Spills. MSE Family Connects x AI Fest 2025
7. Hazel Lau (April 2025) AI-promoted Non-targeted Analysis Strategy: Development and Applications (Proof-of-Concept Study). MSE Family Connects x AI Fest 2025
8. Wesley Yu (May 2025) NCFS Rapid Response to Food Safety Emergency. Diplomat Corps Visit to NCFS
9. Ron Kow (April 2025) Online Food Safety News Monitoring System Prototype. MSE Family Connects x AI Fest 2025
10. Xu Yalei (May 2025) Transforming for Tomorrow: Revolutionising SFA's Recognition Programmes. PST IdeasFest 2025
11. Raymond Shi (May 2025) Rapid Response to Oil Spills. PST IdeasFest 2025
12. Chin Yee Soon (May 2025) Analytical Methods for Halogenated Persistent Organic Pollutants (POPs) in Food: PCDD/Fs & PCBs. SFA-BfR Sharing Sessions 2025 (Virtual)
13. Tan Yong Quan (May 2025) SFA's testing capabilties for GM food and meat fraud. SFA-SAMR Meeting
14. Bay Lian Jie (June 2025) SFA's Role in Keeping Singapore's Food Safe. Food Allergy Awareness Roadshow 2025
15. Ignatius Lim (August 2025) Analytical method for per- and polyfluoroalkyl substances (PFAS) in food. SFA-BfR Sharing Sessions 2025 (Virtual)
16. Li Bin (August 2025) Evolving Food Safety Hazards Profiling: Enhanced Characterization and Detection of Unknown Foodborne Hazards in Novel Foods using Non-Targeted Analysis (NTA) Strategies. Singapore Food Story Symposium
17. Raymond Shi (September 2025) Rapid Response to Oil Spills. PSC and Public Sector Scholarship Fair
18. Raymond Shi (September 2025) Overview of the functions of Organic Contaminants Team, Drugs and Residues Team, Food Contact Material Team. SCP Course on Assuring Food Safety and Security
19. Wesley Yu (September 2025) NCFS Rapid Response to Food Safety Emergency. AlphaSoc Visit to NCFS
20. Angela Li (October 2025) Assessment of human exposure to PFAS and their association with food consumption in the Singapore population. Singapore Food Toxicology Conference and Workshop 2025

RCFS
1. Hirayama K. Relationship between Intestinal microbiota and health. Forum for risk communication in food safety "Reduction of health risk by intestinal microbiota"
2. Hirayama K. Germfree animals and their application in the study of human intestinal microbiota. 58th Annual Meeting of the Japanese Association of Germfree Life and Gnotobiology
3. Tamura M, Hirayama K. The effects of fructoorigosaccharides on serum concentration of quercetin in gnotobiotic mice associated with quercetin degrading bacterial strains. 58th Annual Meeting of the Japanese Association of Germfree Life and Gnotobiology
4. Hachimura S. Recent Topics on Food Allergy. SFSS Food Safety and Security Forum No. 29: Risk Reduction Measures for Food Allergies. 27 July 2025, Tokyo
5. Ryo Isogaki, Shota Nakamura, Kosuke Nishitsuji, Tomohiro Hoshino, Yoshiyo Baba, Arisa Yoshida, Masatoshi Hori, Daiki Mihara, Shuji Matsuoka, Satoshi Hachimura, Haruyo Nakajima-Adachi. Investigation of the Suppressive Effects of α-Lactalbumin on Allergic Inflammation and Bone Mass Reduction. Annual Meeting of JSBBA 2025, 4-6 March 2025 (Sapporo)
6. Kosuke Nishitsuji, Tomohiro Hoshino, Ryo Isogaki, Yoshiyo Baba, Kohei Soga, Yusa Yoshida, Shigeru Kakuta, Kazuhiro Hirayama, Satoshi Hachimura, Haruyo Nakajima-Adachi. Influence of Gut Microbes on Tissue and Immune Responses in a Gastrointestinal Allergy Model. Annual Meeting of JSBBA 2025, 4-6 March 2025 (Sapporo)
7. Yoshiyo Baba, Kosuke Nishitsuji, Tomohiro Hoshino, Arisa Yoshida, Ryo Isogaki, Shigeru Kakuta, Shuji Matsuoka, Satoshi Hachimura, Haruyo Nakajima-Adachi. Effects of Gut Bacteria on Intestinal Immune System T Cells and Their Function in a Food Allergy-Induced Enteritis Mouse Model. Annual Meeting of JSBBA 2025, 4-6 March 2025 (Sapporo)
8. Tomohiro Hoshino, Kyoko Shibahara, Haruka Nakanishi, Kosuke Nishitsuji, Yoshiyo Baba, Kohei Soga, Toshiki Hachimura, Haruyo Nakajima-Adachi. Antigen-Dependent Stimulation Involved in Suppression of Treg Induction and Functional Impairment During Food Allergy Response. Annual Meeting of JSBBA 2025, 4-6 March 2025 (Sapporo)
9. Kosuke Nishitsuji, Tomohiro Hoshino, Masato Tsuda, Yoshiyo Baba, Akira Hosono, Satoshi Hachimura, Haruyo Nakajima-Adachi. Gut bacteria exacerbate enteritis in a gastrointestinal allergy model by altering the Th1/Th2 balance. 21st Annual Meeting of the Japanese Association for Food Immunology. 2 Oct 2025, Tokyo
10. Yoshiyo Baba, Kosuke Nishitsuji, Tomohiro Hoshino, Arisa Yoshida, Ryo Isogaki, Masaaki Hashiguchi, Satoshi Hachimura, Haruyo Nakajima-Adachi. Gut Microbe-Dependent Dynamics of Regulatory T Cells During the Onset of Gastrointestinal Allergic Enteritis. 21st Annual Meeting of the Japanese Association for Food Immunology. 2 Oct 2025, Tokyo
11. Tomohiro Hoshino, Kyoko Shibahara, Haruka Nakanishi, Kohei Soga, Kosuke Nishitsuji, Yoshiyo Bamba, Satoshi Hachimura, Haruyo Nakajima-Adachi. Antigen-specific stimulation regulates impaired induction and dysfunction of regulatory T cell in food allergy. The 54th Annual Meeting of the Japanese Society for Immunology, 12 December 2025, Himeji.
12. Matsuda N, Okubo Y, Ohara I, Koishikawa A, Ma M, Takano T Nishimura T, Takahashi Y, Kitajima S, Hirabayashi Y, Sekizawa S, Kuwahara M、Ota H, Tochinai R. Development of a wearable device system for rats to enable long-term, continuous, automated behavioral diagnosis. The 52nd Annual Meeting of the Japanese Society of Toxicology. 2025.
13. Nagashima Y, Sekizawa S, Tochinai R, Kuwahara M, Pinkerton KE. Both pre- and post-natal exposure to secondhand smoke affects inhibitory neuronal mechanisms in the nucleus tractus solitarius of rats. The 52nd Annual Meeting of the Japanese Society of Toxicology. 2025.
14. Koishikawa A, Takano T, Ma M, Okubo Y, Tochinai R, Ota H. Wearable Device with Multimodal Sensors for Small Laboratory Animals. The 16th Symposium on Micro-Nano Science and Technology. 2025.
15. Takahisa Murata. Frontiers in the Development and Social Implementation of Technologies for the Diagnosis, Prevention, and Treatment of Allergic Diseases. Sumitomo Chemical Analysis Center Seminar, 8 January 2025.
16. Takahisa Murata. Current Status of Diagnostic Technology Development for Bovine Mastitis. The 3rd Workshop on Translational Research in Veterinary Medicine, 22 February 2025
17. Takahisa Murata Current Status of Allergy Testing Technology Development. The 3rd Workshop on Translational Research in Veterinary Medicine, 22 February 2025
18. Takahisa Murata. Current Status of Anti-Allergic Supplement Development for Dogs. The 3rd Workshop on Translational Research in Veterinary Medicine, 22 February 2025.
19. Takahisa Murata. Why Environmental Changes Increase Allergic Diseases: Adaptive Immunity from the Perspective of Bioactive Lipid Production. The 95th Annual Meeting of the Japanese Society of Hygiene, 10 March 2025
20. Takahisa Murata. Establishment of a Quantitative Method for Measuring the Food Allergy Biomarker tetranor-PGDM. The 3rd iPark Membership Day, 24 March 2025
21. Takahisa Murata. Elucidation of the Pathogenesis of Food Allergy and Development of Therapeutic Strategies. Graduate Seminar, Ibaraki University, 17 April 2025
22. Takahisa Murata. Development of Technologies to "Diagnose, Treat, and Prevent" Allergies and Enteritis through Diet and Observation. Symposium, The 30th International Food Ingredients & Additives Exhibition and Conference, 22 May 2025
23. Takahisa Murata. Development of Diagnostic and Therapeutic Technologies Using Bioactive Lipids. Symposium, The 30th International Food Ingredients & Additives Exhibition and Conference, 22 May

2025

24. Takeru Ishii, Nanae Nagata, Takahisa Murata.Establishment of a Quantitative Method for Measuring Urinary tetranor-PGDM, a Biomarker of Food Allergy. The 67th Annual Meeting of the Japanese Society of Lipid Biochemistry, 7 March 2025

25. Misa Kawakita, Shinya Takenouchi, Akane Hayashi, Nanae Nagata, Takahisa Murata. Suppressive Effects of 5,6-Dihydroxy-8Z,11Z,14Z,17Z-Eicosatetraenoic Acid on Visceral Hypersensitivity in Irritable Bowel Syndrome. The 67th Annual Meeting of the Japanese Society of Lipid Biochemistry, 7 March 2025

26. Toa Okawara, Akane Hayashi, Takahisa Murata Stress-Induced Gastric Injury Enhances the Risk of Allergic Sensitization by Altering Lipid Mediator Production. The 67th Annual Meeting of the Japanese Society of Lipid Biochemistry, 7 March 2025

27. Yukihiro Namura, Yusuke Miyazaki, Akane Hayashi, Makoto Arita, Takahisa Murata. Impact of Elevated ω-3 PUFA Levels on the Exacerbation of Food Allergy Symptoms in Mice and Its Underlying Mechanisms. The 67th Annual Meeting of the Japanese Society of Lipid Biochemistry, 7 March 2025

28. Takahisa Murata. Diagnose, Treat, and Prevent Pet Disorders: Applications of Bioactive Lipids. Symposium, Pet Supplement Research Association, 28 June 2025

29. Keisuke Omori, Yui Kobayashi, Shinya Takenouchi, Takahisa Murata. Proposal for a New Generation of "Effective Supplements" The University of Tokyo GTIE Research Proposal Meeting, 12 July 2025

30. Takahisa Murata. Applications of Bioactive Lipids to Realize "Diagnose, Treat, and Prevent" Strategies in Companion Animals. Symposium, Japanese Society of Pet Nutrition, 13 July 2025

31. Takahisa Murata. Applications of Bioactive Lipids for Integrated Diagnosis, Dietary Intervention, and Treatment. Functional Food Research Association, 29 August 2025

32. Akane Hayashi, Miki Sakatani, Takahisa Murata. Identification of Lipid Mediators Secreted into Milk from Cows with Mastitis. The 133rd Annual Meeting of the Japanese Society of Animal Science, 4 September 2025

33. Naoaki Sakamoto, Keina Suzuki, Kiwako Yamamoto-Hanada, Sae Yamamoto, Akane Hayashi, Nanae Nagata, Hisako Ogasawara, Sayaka Hamaguchi, Kotaro Umezawa, Tatsuki Fukuie, Yukihiro Ohya, Takahisa Murata. Dysbiosis Increases the Risk of Allergic Sensitization by Altering Intestinal Lipid Metabolism. The 74th Annual Meeting of the Japanese Society of Allergology, 20 October 2025

34. Ken Ishii, Nanae Nagata, Sakura Mashiko, Hisako Ogasawara, Mami Shimada, Yusuke Inuzuka, Kotaro Umezawa, Sayaka Hamaguchi, Tatsuki Fukuie, Tatsuo Shimosawa, Tatsuro Nakamura, Yukihiro Ohya, Kiwako Yamamoto-Hanada, Takahisa Murata. Establishment and Application of a Quantitative Method for Measuring Urinary PGDM as a Biomarker of Food Allergy. The 74th Annual Meeting of the Japanese Society of Allergology, 20 October 2025.

35. Toa Okawara, Akane Hayashi, Takahisa Murata. The 74th Annual Meeting of the Japanese Society of Allergology, 20 October 2025

36. Kosuke Namura, Yusuke Miyazaki, Akane Hayashi, Makoto Arita, Takahisa Murata. Effects of Omega-3 PUFA on Allergic Inflammation. The 74th Annual Meeting of the Japanese Society of Allergology, 20 October 2025

37. Ken Ishii, Nanae Nagata, Sakura Mashiko, Hisako Ogasawara, Mami Shimada, Yusuke Inuzuka, Kotaro Umezawa, Sayaka Hamaguchi, Tatsuki Fukuie, Tatsuo Shimosawa, Tatsuro Nakamura, Masaki Fujishiro, Yukihiro Ohya, Kiwako Yamamoto-Hanada, Takahisa Murata. Urinary PGDM Levels as Indicators for the Diagnosis and Treatment of Food Allergy. The 153rd Kanto Regional Meeting of the Japanese Pharmacological Society, 23 October 2025

38. Sota Nagase, Naoaki Sakamoto, Yiping Luo, Koji Kobayashi, Wataru Fujii, Takahisa Murata. Hydroxyoctadecadienoic Acids and Hydroxyeicosatetraenoic Acids Promote Epicutaneous Sensitization to Food Antigens via G2A Receptor Activation. The 153rd Kanto Regional Meeting of the Japanese Pharmacological Society, 23 October 2025

39. Takeshi Haga. The Concept of One Health and Livestock Infectious Diseases: Aiming for a Happy and Sustainable Society; Keynote Address at the 20th Anniversary Symposium of the Japanese Society for Livestock Infectious Diseases "The Future of Livestock Infectious Disease Control". Kudan Kaikan Terrace, Tokyo, 14 June 2025.

40. Sayoko Hanamoto, Yuri Fujimoto, Eri Fujii, Yuko Endo, Takeshi Haga, Katsuaki Sugiura; Analysis of Antimicrobial Usage Volume and Antimicrobial Classes by Farm in the Domestic Swine Industry; The 168th Annual Meeting of the Japan Veterinary Medical Association, Miyazaki, 4 September 2025.

41. Masatoshi Hori. Health Foods from an ELSI-Science Perspective. Japan Anti-Aging Medical Association Basic/Exam Preparation Seminar Lecturer Nihonbashi Life Science Hub 9 February 2025 (Tokyo)

42. Masatoshi Hori. Health Foods from the Perspective of ELSI & Science. ifia JAPAN 2025 (30th International Food Ingredients/Additives Exhibition & Conference)/HFE/JAPAN 2025 (23rd Health Food Expo) Functional Food Society Seminar Lecturer Big Sight 22 May 2025 (Tokyo)

SVM-RGU

1. Koike K, Shimazaki H, Ukita M, Fujimoto Y, Nakada S, Wada M, Makita K. (2025) Does hygiene practice have economic profitability? The 65th Japanese Veterinary Epidemiology Conference, 9 March 2025, Tokyo.

2. Kuyama R, Numa H, Kouguchi H, Makita K. (2025) Descriptive epidemiology of echinococcosis in red fox between 1993 and 2021. The 65th Japanese Veterinary Epidemiology Conference, 9 March 2025, Tokyo.

3. Kayira G, Ishizaki T, Matsuyama R, Hayashida K, Hirata H, Makita K. (2025) Prevalence of East Coast fever (ECF) and efficacy of a traditional medicine in northern Malawi. The 65th Japanese Veterinary Epidemiology Conference, 9 March 2025, Tokyo.

4. Makita K, Fukuda A, Asai T, Usui M. (2025) Release assessment for antimicrobial resistant bacteria of farmed yellowtail and sea bream origin. The 65th Japanese Veterinary Epidemiology Conference, 9 March 2025, Tokyo.

5. Mizuno K, Nakada S, Kohara J, Makita K. (2025) The impact of bovine leukemia virus on dairy reproduction. The 65th Japanese Veterinary Epidemiology Conference, 9 March 2025, Tokyo.

6. Nakata M, Usui M, Asai T, Makita K. (2025) Ecological factors associated with the distribution of antimicrobial resistant bacteria in fox feces in Hokkaido. The 65th Japanese Veterinary Epidemiology Conference, 9 March 2025, Tokyo.

7. Putri R, Utomo BN, Wiyono A, Noor SM, Widjaja E, Kusumaningtyas E, Ekaswati F, Suseno PP, Nuradji H, Matsuyama R, Makita K. (2025) Spatio-temporal analysis of foot-and-mouth disease in Java and surrounding islands. The 65th Japanese Veterinary Epidemiology Conference, 9 March 2025, Tokyo.

8. Saensukjaroenphon K, Pitchayasati M, Makita K. (2025) Food safety perception in chicken meat value chain in Thailand. The 65th Japanese Veterinary Epidemiology Conference, 9 March 2025, Tokyo.

9. Yonezawa Y, Taira O, Kato A, Takai R, Matsuyama R, Makita K. (2025) Genetic diversity of porcine reproductive and respiratory syndrome virus in Japan from 2020 to 2023. The 65th Japanese Veterinary Epidemiology Conference, 9 March 2025, Tokyo.

10. Katada Y, Ukita M, Makita K. (2025) Socio-economic factors that can influence the implementation of biosecurity measures by pig producers. The 65th Japanese Veterinary Epidemiology Conference, 9 March 2025, Tokyo.

11. Wada K, Matsuyama R, Asakura S, Imura K, Makita K. (2025) Questionnaire survey on the incidence and prevention of fractures and dislocations in rabbits in small animal clinical settings. The 74th Hokkaido Veterinary Association Conference, 29 August 2025, Obihiro.

12. Noda A, Fukuda A, Makita K, Usui M. (2025) Detection of drug-resistant Escherichia coli in river environments in Hokkaido using wild Japanese dace fish. The 74th Hokkaido Veterinary Association Conference, 29 August 2025, Obihiro.

13. Kohara J, Morii Y, Asakura S, Osa Y. (2025) Wildlife around poultry houses and farm biosecurity. Hokkaido District Conference of Hokkaido Veterinary Medical Association, 29 August 2025, Obihiro, Japan.

14. Iwamoto J, Omori R, Makita K. (2025) Estimation of sample size for diagnostic tests during highly avian influenza outbreaks. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.

15. Chisato K, Uchida L, Iwaya T, Narisawa A, Makita K. (2025) Bovine meat inspection practice using virtual reality technology. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.

16. Nakada S, Mizuno K, Kohara J, Makita K. (2025) Bovine leukemia virus reduces dairy reproduction performance. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.

17. Furumoto H, Ukita M, Asakura S, Usui M, Suzuki T, Watarai M, Umezaki M, Kubota S, Mathew C, Karimuribo E, Makita K. (2025) Co-designing neglected zoonosis intervention through One Health, education, and public-private partnerships. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.

18. Hoashi K, Asakura S, Makita K, Matsuyama R. (2025) Descriptive epidemiology of sparrow hawks rescued from a Japanese animal rescue facility and their characteristics regarding release into the wild. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.

19. Katagi Y, Fukuda A, Asai T, Usui M, Makita K. (2025) Quantitative release assessment of antimicrobial resistant bacteria of farmed yellowtail and red sea bream origin. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.

20. Igarashi T, Ukita M, Matsuyama R, Asakura S, Murakami T, Makita K. (2025) Quantitative evaluation of bovine hoof treatment. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.

21. Nakata M, Usui M, Fukuda A, Kawabata Y, Asai T, Asakura S, Makita K. (2025) Association between antimicrobial resistance Escherichia coli in red fox in Hokkaido and the environmental factors. The

168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.
22. Makita K. (2025) The history of Japanese veterinary epidemiology education left behind the world. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.
23. Asakura S, Sakurai Y. (2025) Exploration of farm-level factors associated with bovine salmonellosis in dairy farms in Hokkaido. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.
24. Kawamura N, Satoh H, Fukumori R, Shimada K, Harada R, Izumi K, Chisato K, Oikawa S. (2025) Relationships between growth rate, feed intake, diarrhea frequency and blood parameters in dairy calves. Annual meeting of Japanese Animal Science
25. Mitani T, Kunimoto M, Komatsu M, Shinoda Y, Asakuma S, Ueda Y, Kobayashi K, Sanenari N, Doi K, Fukumori R, Morita S, Ueda K. (2025) Evaluation of balk milk tank and estimation of feeding method. Annual meeting of Japanese Animal Science
26. Kayasaki S, Watanabe N, Ikuta Y, Naito A, Aikawa T, Takeda A, Chisato K, Fukumori R, Oikawa S. (2025) Evaluation of milking status and colostrum components which affect colostrum IgG concentration. The 74th Hokkaido Veterinary Association Conference, 29 August 2025, Obihiro.
27. Yayo S, Chisato K, Yamazaki T, Kayasaki S, Funakoshi S, Fukumori R, Oikawa S. (2025) Evaluation for monitoring scores related to energy status and association of postpartum diseases for recent 10 years. The 74th Hokkaido Veterinary Association Conference, 29 August 2025, Obihiro.
28. Harada D, Tamura M, Tanaka M, Deguchi T, Fukuda A, Usui M, Ohta H. (2025) Effects of a low-protein diet combined with lactulose on the fecal microbiota of dogs with hyperammonemia. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.
29. Tanaka M, Tamura M, Harada D, Deguchi T, Fukuda A, Usui M, Ohta H. (2025) Meta-16S analysis of fecal microbiota in dogs with congenital portosystemic shunt. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.
30. Okamura S, Fukuda A, Usui M. (2025) Impact of discontinuing prophylactic antimicrobial use in calves on susceptibility of BRD-causing bacteria. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.
31. Fukuda A., Saito S., Usui M. (2025) Potential for controlling antimicrobial-resistant Escherichia coli in poultry houses through flavophospholipol administration. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.
32. Usui M. (2025) Current status and challenges of antimicrobial resistance (AMR) in the environment (soil and vegetables). The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.
33. Imaizumi N, Kuroda M, Nakahara A, Kobayashi K, Matsuda K, Sano Y, Gondaira S, Higuchi H. (2025) Effect of Mycoplasma bovis on the Milk-Synthesizing Capacity of Bovine Mammary Epithelial Cells. The 168th Conference of Veterinary Medical Science, 5 September 2025, Miyazaki.
34. Terao K, Fukuda A, Suzuki S, Nakajima C, Asai T, Usui M. (2025) Effects of chromosomally encoded ESBL gene blaCTX-M-14 on environmental fitness of Escherichia coli. Japanese Society for Bacteriology (Hokkaido Branch), 89th Annual Meeting.
35. Takeda R, Fukuda A, Maeda A, Sato T, Nakajima C, Suzuki S, Usui M. (2025) Distribution and characterization of fosfomycin-resistant Escherichia coli and resistance genes from animal and environmental sources. Japanese Society for Bacteriology (Hokkaido Branch), 89th Annual Meeting.
36. Abe N., Oku K., Ochiai Y., Fukuda A. Environmental investigation and countermeasures on a dairy farm with a high incidence of hoof disease, and trends in disease occurrence. The 74th Hokkaido Veterinary Association Conference, 29 August 2025, Obihiro.
37. Maeda A, Sato T, Okubo T, Fukuda A, Toyting J, Usui M, Suzuki A, Hoshino Y, Torigoe S, Sakakibara K, Tamai S, Tachibana T, Horiuchi M. (2025) Molecular epidemiological analysis of fluoroquinolone-resistant Escherichia coli ST131 isolated from Sapporo and surrounding areas based on the One Health concept. The 74th Hokkaido Veterinary Association Conference, 29 August 2025, Obihiro.
38. Toriyama K, Fukuda A, Nakaya Y, Sato H, Usui M. (2025) Contamination of Clostridioides difficile in a wastewater treatment plant and isolation of hypervirulent ribotype 078. The 74th Hokkaido Veterinary Association Conference, 29 August 2025, Obihiro.
39. Matsuo T, Imaizumi N, Taharaguchi S, Takeda S, Kobayashi M, Ogami M, Nishi K, Gondaira S, Higuchi H. (2025) Investigation of an Outbreak of Mycoplasma Infection in Calves and Evaluation of Control Measures at a Japanese Black Breeding Farm — Temporal Changes in Serum Mycoplasma bovis-Specific Antibodies —. The 74th Hokkaido Veterinary Association Conference, 29 August 2025, Obihiro.
40. Abe N, Oku K, Ochiai Y, Fukuda A. (2025) Environmental investigation, countermeasures, and changes in hoof disease incidence in a high-incidence dairy farm, with additional insights from field observations. Hoof Care Research Society, 25th Annual Meeting.
41. Harada D, Tamura M, Tanaka M, Deguchi T, Fukuda A, Usui M, Ohta H. (2025) Rifaximin, a treatment for hepatic encephalopathy, does not affect the diversity of the intestinal microbiota in dogs. (Invited) Japanese Society of Veterinary Internal Medicine Academy 2025.
42. Usui M. (2025) How can we prevent the emergence and spread of antimicrobial-resistant bacteria originating from animals? (Invited) The 99th Annual Meeting of the Japanese Association for Infectious Diseases.
43. Usui M. (2005) Understanding and controlling antimicrobial-resistant bacteria from food-producing animals through a One Health approach. (Invited) The 40th Annual Meeting of the Japanese Society for Environmental Infectious Diseases.
44. Sato A, Takahashi N, Ishiguro Y, Sano Y, Matsuda K, Fukuda S, Kosenda K. (2025) Histological characteristics of bovine omental milk spots. The 168th Conference of Veterinary Medical Science, 3 September 2025, Miyazaki, Japan.
45. Kosenda K, Yamashita Y, Fukuda S, Ichii O. (2025) Verification of intramammary distribution of bovine Staphylococcus aureus mastitis by comprehensive tissue analysis. The 168th Conference of Veterinary Medical Science, 4 September 2025, Miyazaki, Japan.
46. Takumi K, Imaizumi N, Taharaguchi S, Takeda S, Wakama Y, Kim S, Gondaira S, Higuchi H. (2025) Antibacterial Activity of Titanium Phosphate against Bovine Pathogenic Microorganisms. The 102nd Annual Meeting of the Japanese Society of Animal Hygiene, Tokyo, Japan.
47. Himi W, Imaizumi N, Gondaira S, Higuchi H. (2025) Effect of Free Amino Acids on the Regulatory Mechanism of Reactive Oxygen Species Production in Bovine Neutrophils. The 102nd Annual Meeting of the Japanese Society of Animal Hygiene, Tokyo, Japan.

d) Other (Provide website address or link to appropriate information):
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RCFS
1. Hsu JCN. Tochinai R. Embedding the 3Rs in research education and practice from classroom to laboratory. AAVS POST. 7:18-19. 2025
2. Tochinai R, Sekizawa S, Vitor RSJ, Flores M. Fostering future leaders in One Health: Short-term internship program for university of the Philippines students at the University of Tokyo. AAVS Post. 7:9-15. 2025
3. Masatoshi Hori, Health Foods from an ELSI-S Perspective. Functional Food Research (2025) 21: 175-181

SVM-RGU
1. Makita K. (2025) JICA Training "Improving Safety and Quality Control of Livestock Products Focusing on Milk, Meat and Eggs", online seminar on 17 March 2025, "JICA Safe Milk Promotion in Mbarara Project." (Invited)
2. Gondaira S. (2025) Early diagnosis of bovine Mycoplasma pneumonia using lung ultrasonography. Symposium session, 52nd Annual Meeting of the Japanese Society for Mycoplasmology. Kurashiki, 23 May 2025.
3. Noda J. (2025) "Bioaerosol and Fomite", (Invited) 100th Annual Meeting of the Japanese Society for Tuberculosis and Nontuberculous Mycobacterial Diseases, Symposium 6 "Bioaerosols and Infectious Diseases" (Japanese), 6 June 2025.
4. Makita K. (2025) Factors associated with the use of important human antimicrobials in Japanese small-animal clinics. (Invited) Evening seminar for the Society of Veterinary Clinical Infectious Diseases (Japanese), 10 June 2025.
5. Makita K. (2025) Massey University School of Veterinary Science Monthly Research Seminar "Co-designing Neglected Zoonosis Intervention through One Health, Education, and Public-private Partnership", (Invited) Massey University, New Zealand, 18th June 2025.
6. Usui M, Fukuda A, Makita K, Hosoi Y, Kawanishi M. (2025) WOAH Laboratory Training on AMR Surveillance in Terrestrial / Aquatic Food Animals, participants from Cambodia, Malaysia, Nepal, Taiwan, Rakuno Gakuen University, Japan, 7-10 July 2025.
7. Makita K. (2025) Okayama Prefecture Livestock Hygiene Service Center training, 'The significance of and how-to-use the classical swine fever vaccination timing assessing model', (Invited) online, 28 July 2025.

8. Makita K, Asakura S. (2025) Rakuno Gakuen University veterinary epidemiology workshop "Hands-on training of basic epidemiology and statistics", Rakuno Gakuen University, Japan, 8-10 August 2025.
9. Makita K. (2025) Protecting Food, Health, and the Environment from Infectious Diseases – Challenges and prospects in veterinary epidemiology. (Invited) The 137th HGPI Seminar, online, Health and Global Policy Institute, 27 August 2025.
10. Gondaira S. (2025) Early diagnosis of calf pneumonia using thoracic ultrasonography — herd management practices for pre-weaning calves at the University of Wisconsin–Madison. Hokkaido Veterinary Medical Association Luncheon Seminar. Obihiro, Japan, 29 August 2025.
11. Makita K. (2025) Meat inspection training and application of VR in Rakuno Gakuen University. (Invited) Veterinary medicine education symposium and workshop, The 168th Conference of Veterinary Medical Science, Miyazaki, Japan, 3 September 2025.
12. Noda J. (2025) Bioaerosol sampling towards pathogen detection. (Invited) Symposium: Farm Animal Disease Prevention in a New Era, The 168th Conference of Veterinary Medical Science, Miyazaki, Japan, 5 September 2025.
13. Makita K, Unger F, Dang-Xuan S, Tangkawattana S. (2025) ILRI/ASEAN-CGIAR/Khon Kaen University/WOAH Collaborating Centre for Food Safety, RGU Training "Food safety risk assessment for informal value chains under a One Health perspective", Khon Kaen, Thailand, 23-24 September 2025.
14. Asakura S, Makita K. (2025) JICA training "Upgrading Practical Skills for Veterinary Officers in Livestock Health Services", 7 participants from Namibia, Pakistan, Palestine (2), Paraguay, Senegal and Tanzania, JICA Obihiro and Rakuno Gakuen University, Japan, 11 September – 8 October 2025.
15. Usui M, Fukuda A, Makita K. (2025) JICA-AMED SATREPS training on laboratory management and molecular diagnosis. RGU, 1-7 October 2025.
16. Makita K. (2025) Aomori Prefecture Veterinary Association large animal clinic training, "Situation of zoonotic diseases in Japan -Roles of veterinarians in society-", (Invited) Aomori, Japan, 18 October 2025.
17. Gondaira S. (2025) A new clinical guideline for pneumonia using ultrasound imaging devices. The 46th Annual Meeting of the Japanese Society of Clinical Veterinary Medicine (Industry Animal Medicine Forum). Osaka, Japan, 19 October 2025.
18. Gondaira S. (2025) Ultrasonographic diagnostic methods — lung ultrasonography. The 49th Large Animal Clinical Research Symposium. Ebetsu, Japan, 8 November 2025.
19. Makita K, Ukita M, Furumoto H. (2025) JICA-AMED SATREPS Regional and district medical and veterinary officers training on One Health, education and public-private partnerships, RGU, 11-14 November 2025.
20. Gondaira S. (2025) Respiratory diseases and their potential long-term impacts on productivity. Hokkaido Milk Summit 2025. Sapporo, Japan, 21 November 2025.
21. Gondaira S. (2025) Rakuno Gakuen University and Snow Brand Seed Co., Ltd. Hybrid seminar "Calf immunity and pneumonia". Ebetsu, Japan, 5 December 2025.
22. Ukita M. (2025) JICA-AMED SATREPS workshop on sampling suspected tuberculosis legion from bovine and small ruminant carcasses. Morogoro, Tanzania.
23. Makita K. (2025) Practical example of One Health approach -Medical, veterinary, and economics collaborations for controlling brucellosis-. Hokkaido University One Health Seminar, online, 24 December 2025.
24. Usui M. (2005) International trends in antimicrobial resistance countermeasures and challenges in Japan's livestock sector. (Invited) 2025 Meat Science Academic Forum.
25. Usui M. (2005) AMR Countermeasures through a One Health Approach. (Invited) 2025 Infection Control Specialist Pharmacist Training Course.
26. Asakawa M. (2025) Zoonoses in view of One Health. (Invited) The 13th One World One Health research forum, RGU, 5 July 2025.

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

NCFS-SFA

In 2025, NCFS-SFA has achieved ISO/IEC 17025 accreditation for non-targeted analysis using high-resolution mass spectrometry, demonstrating our technical expertise in detecting unknown compounds in complex food matrices. We expanded our capabilities to include detection of hazardous proteins and peptides in alternative protein-based foods such as alternative meats, insects, and animal-free dairy through a non-targeted proteomics platform. These advancements have significantly enhanced our ability to identify unknown and emerging hazards, expanding SFA's food safety monitoring to cover a wide range of small molecule and proteinaceous hazards.

Our microbiological safety programme has been strengthened through the expansion of in-house bioinformatics pipelines designed for whole genome sequencing analysis of foodborne pathogens. This development enhances our ability to perform source tracing during foodborne outbreaks, while also supporting Singapore's One Health initiative, enabling a more integrated approach to effective identification of pathogen sources and transmission pathways across the food supply chain.

NCFS-SFA also leverages AI to strengthen food safety horizon scanning surveillance capability through two innovative approaches developed in partnership with Institutes of Higher Learning (IHLs) in Singapore such as Nanyang Technological University (NTU). The first approach utilises language models to automatically retrieve, categorise and analyse international food safety news articles, extracting key information about affected products, contaminants and source countries to enable systematic tracking of emerging threats and support more targeted testing priorities. The second approach addresses the labour-intensive process of pathogen surveillance by using Large Language Models to scan scientific literature and systematically curate pathogen data into a comprehensive database, enabling efficient comparison between local and global pathogen characteristics. Together, these automated platforms and approaches significantly reduce manual processing efforts whilst strengthening SFA's ability to rapidly detect food safety incidents worldwide, identify emerging risks, and protect Singapore's food supply chain through enhanced data analysis and proactive surveillance.
Citation:
1. van Meer, F., van der Velden, B. & Takeuchi, M. 2025. Artificial intelligence for food safety – A literature synthesis, real-world applications and regulatory frameworks. Rome, FAO. https://doi.org/10.4060/cd7242en
2. Siligato, R., Trieb, J., Di Martino, M., Fattori, V. & Lipp, M. 2025. Food safety foresight: approaches to identify future food safety issues. Rome, FAO. https://doi.org/10.4060/cd6798en

RCFS
1. A full-time Associate Professor, Dr. Ryota Tochinai was appointed.
2. We co-hosted a forum by six Research Centers of domestic Universities concerning food safety (22 September 2025).
3. We advanced research on the mechanisms of food allergy, use of urinary lipid metabolites and published 6 relevant papers (Satoshi Hachimura, Haruyo Nakajima-Adachi and Takahisa Murata).
4. We advanced research on commensal bacteria and food safety (Kazuhiro Hirayama).
5. We have developed animal vital sign measurement devices and analysis technologies that can be utilized for food safety assessment (Ryota Tochinai).
6. We published a paper elucidating the relationship between laying hen management systems, hen physiology, and egg characteristics, thereby advancing current knowledge of management techniques (Ryota Tochinai).
7. We advanced research on the use of intestinal organoid systems for evaluation of food safety (Yoshio Yamauchi).
8. We reviewed the issues on food safety of health foods (Masatoshi Hori).
9. We participated in the creation of the "Statement of Intent Regarding Issues Concerning Japan's Functional Food System" by the Subcommittee on Food Safety, Committee on Food Science, Science Council of Japan. (Masatoshi Hori)
10. We have developed a statistical package for the use in analyzing consumers' preferences for food safety (Tomoaki Nakatani).

SVM-RGU

Dr. Gondaira introduced ultrasound-based diagnosis of calf pneumonia in dairy farms in Japan, which significantly advanced early therapeutic intervention and reduced unnecessary antimicrobial use. Dr. Higuchi contributed to a dramatic reduction in Mycoplasma bovis mastitis in Japan through the application and dissemination of his diagnostic technologies.

Dr. Ishizaki and his team generated research outputs in veterinary epidemiology, including studies on the prevalence of coccidiosis and piroplasmosis in cattle farms in Japan. They also elucidated the molecular mechanisms of sexual replication in malaria parasites—an issue of major public health concern—and established CRISPR-based screening methods for these parasites. In addition, the team developed DNA extraction methods from archived formalin-fixed samples to retrospectively determine trematode prevalence.

Dr. Kosenda provided evidence on the effectiveness of probiotics in calf management for Japanese Black beef cattle farms. Dr. Noda implemented novel aerosol sampling methodologies to monitor airborne pathogens in agricultural and clinical settings.

Dr. Oikawa and Dr. Fukumori have advanced evidence-based dairy herd health management in Japan, with a focus on nutrition, infectious diseases, monitoring systems, and farm environments.

Dr. Makita and Dr. Asakura generated epidemiological and economic evidence to support policies on surveillance and disease control in terrestrial and aquatic animal health, as well as public health, including antimicrobial resistance (AMR) and zoonoses, across Asia and the Pacific, and Africa. They have also developed an integrated approach combining system-dynamics modelling, virtual reality–based education tools, and public–private partnerships to address neglected zoonoses in resource-limited settings. Mathematical modelling and risk assessment tools have been flexibly applied across a wide range of issues. The Society of Asian Veterinary Epidemiology and One Health (SAVE-OH) was established by Asian veterinary epidemiologists, including Dr. Makita, to facilitate regional exchange of epidemiological expertise and transdisciplinary solutions.

Dr. Usui developed rapid diagnostic protocols for several AMR bacteria, as well as AMR reduction tools using organic materials, some of which have been commercialised. Dr. Usui and Dr. Fukuda have contributed to expanding knowledge on AMR in livestock and aquaculture farms, wildlife (including mammals, freshwater fish, and insects), and animal-origin, vegetable, and seafood products in Japan, as well as across Asia and the Pacific, and Africa.

12. Additional comments regarding your report: