



# Global One Health Research Symposium

## Identifying Global One Health Research Priorities

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Tuesday 14<sup>th</sup> March, 2023

Rangimarie Rooms 2 & 3  
Te Papa National Museum  
Wellington



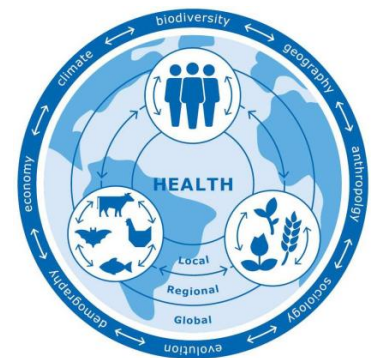
## Global One Health Trends

The current novel coronavirus outbreak is a stark reminder of the threat of novel zoonotic diseases spilling over from animals to people and rapidly spreading around the globe, potentially infecting millions, causing serious mortality and disrupting economies. The increasing incidence of antimicrobial resistant organisms is impacting the health of millions of people and animals at a global scale. Climate change is contributing to increased exposure to pathogens through increased temperatures, environmental disruption and more extreme climatic events. Changing dietary patterns are influencing food production systems.

Human health, animal health, food production and environmental management systems must respond to these global trends to protect the health and livelihoods of people, animals and our environment.

## Global One Health Research

The One Health approach recognises that the health of people, animals, microbes and their environments are inter-connected within individual, local, national, regional and global ecosystems. Global One Health research engages multi-, inter- and trans-disciplinary collaborators from around the globe seeking transnational solutions to improve the health of humans, animals, and plants, and the sustainability of planetary ecosystems.



## Global One Health Research Partnership

Massey University is partnering with Wageningen University & Research, University of California Davis and Nanjing Agricultural University in the Global One Health Research Partnership.

The central priority of the Global One Health Research Partnership is to:

- leverage existing relationships, complementary strengths and geographical spread of the consortium partners, to
- implement multilateral global inter- and trans-disciplinary research programmes, to
- address high-priority global health challenges.

Massey University is hosting collaborators from the Global One Health Research Partnership in a visit to New Zealand from 14-17<sup>th</sup> March, 2023, with the aim of sharing research outcomes and building future research programmes.

## Global One Health Research Symposium

We are organising a one-day forum to bring together prominent One Health researchers from the Netherlands, California, China and New Zealand with government leaders to exchange perspectives on trends that impact the health of people, animals and their environment, and identify global One Health research priorities.

The programme will include:

- leading One Health researchers from each of the Global One Health Partnership universities presenting on global trends that impact health;
- leaders from government ministries presenting their perspectives on global health issues and One Health research priorities;
- Massey and collaborating One Health researchers showcasing a range of One Health research programmes.

Monday, 13 <sup>th</sup> March 2023 – Pōwhiri (Welcome) and dinner		
Time	Activity	
4.00 – 5.00pm	Pōwhiri (Welcome)	TBC
5.30 – 8.00pm	Dinner	TBC

Tuesday 14 <sup>th</sup> March 2023. TE PAPA, WELLINGTON		
Time	Title	Speakers
9.00 – 9.30	Registration & coffee	
9.30 – 9.40	Welcome	Prof Giselle Byrnes, Provost Massey University
9.40 – 9.50	Introduction to the symposium (background about the GOHRP, objectives, collaborative research programme)	Joanna McKenzie, MU
<b>Global One Health issues</b> <b>Presentations from the Global One Health Research Partnership Universities</b>		
9.55 – 10.15	Antimicrobial resistance and the genomic sequencing revolution	Nigel French, Massey University (MU)
10.18 – 10.38	Trends in Infectious Disease Ecology related to Global One Health Challenges	Wim van der Poel, Wageningen Research & University (WUR)
10.40 – 11.00	Emerging infectious diseases and pathogen emergence	Yingjuan Qian, Nanjing Agriculture University (NAU)
11.00 – 11.20	The role of plants as a vehicle for transmission of infectious agents	Bennie Osburn, University of California Davis (UCD)
11.20 – 11.45	Discussion	
<b>Global One Health issues impacting New Zealand and One Health research needs</b> <b>Presentations from leading NZ government scientists</b>		
11.45 – 12.00	Global One Health issues impacting NZ & One Health research needs	Juliet Gerrard, Prime Ministers Chief Science Advisor
12.00 – 1.00	Lunch	
1.00 – 1.15	Global One Health issues impacting NZ & One Health research needs	Mary van Andel, CVO, Ministry of Primary Industries

1.15 – 1.30	Global One Health issues impacting NZ & One Health research needs	Ian Town, CSA, Ministry of Health
1.30 – 1.45	Global One Health issues impacting NZ & One Health research needs	Alison Collins, CSA, Ministry for the Environment
1.45 – 2.00	Discussion	
<b>One Health Research in New Zealand</b> <b>Presentations from leading NZ One Health researchers</b>		
2.00 – 2.15	One Health Aotearoa	Iain Lamont, Otago University
2.15 – 2.30	One Health research at Otago University (OU)	Patricia Priest, OU
2.30 – 2.45	One Health Research in College of Health, Massey University 'Non-communicable disease, environment and microbiome'	Jeroen Douwes, College of Health, MU
2.45 – 3.00	One Health research in Institute of Environmental Sciences & Research (ESR)	Brent Gilpin, (ESR)
3.00 – 3.15	One Health research in College of Science, Massey University	Jackie Benschop, College of Science, MU
3.15 – 3.30	Discussion	
3.30 – 3.45	Afternoon tea	
5.15 – 7.20	GOHRP visitors - train to Palmerston North	

# Global One Health Research Partnership

Exchange with Massey University One Health Researchers

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15 – 16<sup>th</sup> March, 2023

SSTE3.43 | Social Science Tower Extension  
Massey University, Palmerston North

Wednesday, 15 <sup>th</sup> March 2023 – MASSEY UNIVERSITY PALMERSTON NORTH		
Time	Activity	Speakers
8.45 – 9.00	Welcome and introduction to the programme	Jo McKenzie, mEpiLab, School of Veterinary Science
9.00 – 9.15	Modelling emerging infection risk	Renata de Lara Muylaert, mEpiLab, School of Veterinary Science
9.15 – 9.30	Climate change and animal health	Emilie Vallee, Masako Wada EpiCentre, School of Veterinary Science
9.30 – 9.45	Leptospirosis research programme	Sha Nisa, mEpiLab, School of Veterinary Science
9.45 – 10.00	Messages from people with leptospirosis to help officials and insurers	Gerard Prinsen, School of People Environment and Planning
10.00 – 10.20	Social determinants of epidemiology	Spencer Moore, Wageningen University & Research
10.20– 10.30	Discussion	
10.30 – 11.00	Morning tea	
11.00 – 11.40	<p>Introduction to the School of Agriculture and Environment</p> <p>Partnership with Indigenous communities. Exploring how the consideration of One Health from different cultural perspectives will lead to greater benefits</p> <p>The opportunity of pastoral-based farming systems to contribute to global one health research priorities</p> <p>Using water footprinting and variable nutrient attenuation land capacity to help inform productive and environmentally sustainable food production systems</p>	<p>Chris Anderson</p> <p>Jonathan Procter</p> <p>Lucy Burkitt</p> <p>Ranvir Singh</p> <p>School of Agriculture and Environment</p>
11.40 – 12.15	<p>Presentations from Our Land and Water - Healthy Diets programme</p> <p>Aid donors, food security and nutrition in the Pacific</p>	<p>Carolyn, Sita, Matt, School of People Environment and Planning</p> <p>Glenn Banks</p>
12.15 – 12.30	Discussion	
12.30 – 1.30	Lunch	
1.30 – 1.45	Application of metagenomics for water quality monitoring	Rose Collis, AgResearch, Hopkirk Institute
1.45 – 2.00	Chlamydiaceae at the interface of shorebirds and people	Soon Xue Qi, School of Veterinary Medicine
2.00 – 2.15	Review of brucellosis in cattle and humans in China	Yu Wang , EpiCentre
2.15 – 2.25	Discussion	
2.25 – 2.40	One Health research/capacity building at WUR	Wim van der Poel, WUR

2.40 – 2.55	One Health research/capacity building at UCD	Bennie Osburn, UCD
3.00 – 3.30	Afternoon tea	
3.30 – 3.45	One Health research/capacity building at NAU	Yingjuan Qian, NAU
3.45 – 4.05	One Health research/capacity building at MU	Jo McKenzie & Art Subharat, MU
4.05 – 4.15	Discussion and wrap-up	
4.15 – 5.15	Tour of veterinary clinical teaching facilities (TBC)	

Thursday, 16 <sup>th</sup> March 2023 – MASSEY UNIVERSITY PALMERSTON NORTH		
Time	Activity	Speakers
9.00 – 9.20	AMR research at Massey University	Sara Burgess, mEpiLab
9.20 – 9.40	AMR research at University of California Davis	Richard van Vleck-Pereira, Adriana Garzon
9.40 – 10.00	AMR research at Nanjing Agriculture University	Liping Wang, Zongfu Wu
10.00 – 10.20	AMR research at Wageningen University & Research	Mike Brouwer
10.20 – 10.30	Discussion	
10.30 – 11.00	Morning tea	
11.00 – 12.30	Discussion regarding project to investigate genetic comparison of ESBL+ E coli in livestock from the four countries	
12.30 – 1.30	Lunch	
1.30 – 3.30	Meet with researchers at Massey University	
3.30 – 3.50	Afternoon tea	
3.50 – 4.30	Wrap-up session – discuss collaborative research opportunities	

Friday, 17 <sup>th</sup> March 2023 – TOURIST DAY – SOUTH WAIRARAPA		
Time	Activity	
9.30	Bus departs Palmerston North	
10.45 – 12.00	Visit Pūkaha Mt Bruce wildlife centre	
12.00 – 1.00	Lunch at Pūkaha	
1.30 – 3.00	Visit Massey's Riverside sheep and beef farm	
3.00 – 4.30	Return to Palmerston North	
	Final dinner	