

# WHO Collaborating Centres

Generating evidence-based information for  
Global Health Security

Gyanendra Gongal

Regional Advisor

WHO Regional Office for South East Asia

[gongalg@who.int](mailto:gongalg@who.int)



World Health  
Organization

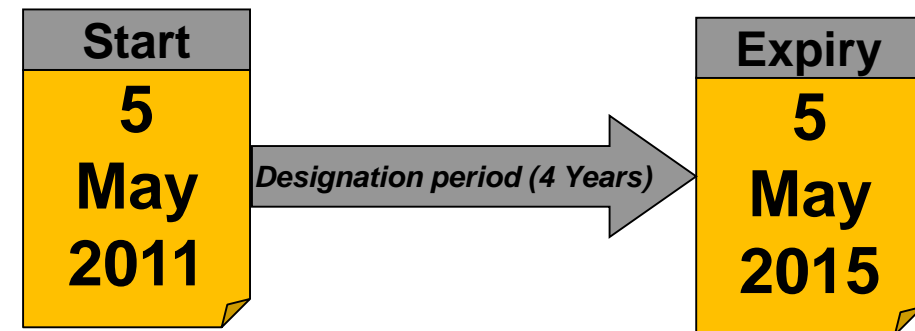
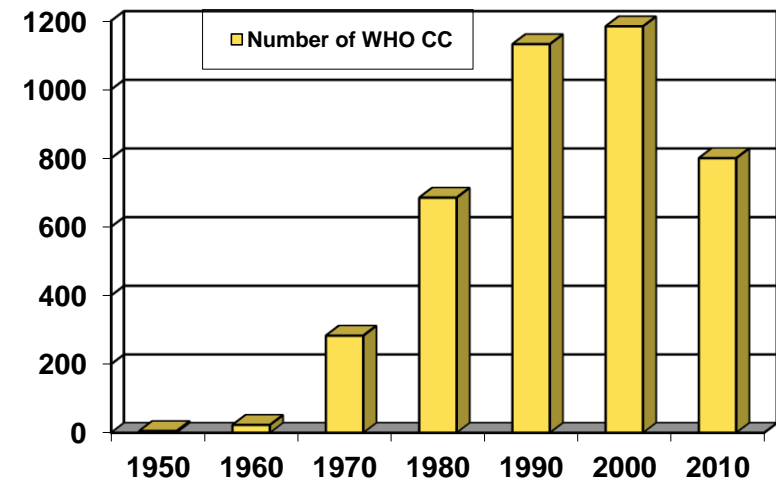
# An early model of collaboration

- 1949 Second **World Health Assembly**: "research in the field of **health** is best advanced by assisting, coordinating and making use of the activities of existing institutions"
- Many prestigious research institutes are working as WHO Collaborating centers and contributing in securing global health security



# One mechanism: four definitions

- 783 institutions in 80 Member States **supporting WHO's programmes** with activities that have been specially planned with and tailored for WHO;
- Largest **in-kind resource** mobilization mechanism of WHO;
- A **formal mechanism** for collaboration with institutions;
- An international collaborative **network**.



# Influenza at the human-animal interface

## WHO Collaborating Centers for influenza

Victorian Infectious Diseases Reference Laboratory	Melbourne	Australia
China Center for Disease Prevention and Control	Beijing	China
Guangdong Provincial Center for Disease Prevention and Control	Guangzhou	China
The University of Hongkong	Hongkong	China
National Institute of Infectious Diseases	Musashi-Muayama	Japan
Hokkaido University	Sapporo	Japan
The Francis Crick Institute	London	UK
Imperial College London	London	UK
Centers for Disease Control and Prevention (CDC)	Atlanta	USA
St. Jude Children's Research Hospital, University of Tennessee	Memphis	USA

## OIE Reference Laboratory for animal influenza

Australian Centre for Disease Preparedness (CSIRO)	Geelong	Australia
Laboratório Federal de Defesa Agropecuária em Sao Paulo	Campinas	Brazil
National Centre for Foreign Animal Disease	Winnipeg	Canada
National Avian Influenza Reference Laboratory	Harbin	China
Friedrich Loeffler Institute	Insel Riems	Germany
National Institute of High Security Animal Diseases	Bhopal	India
Istituto Zooprofilattico Sperimentale delle Venezie	Legnaro	Italy
Hokkaido University	Sapporo	Japan
Animal and Plant Quarantine Agency	Gimcheon	Korea
National Ref. Lab. for Avian Influenza and Newcastle Disease	Vladimir	Russia
Animal and Plant Health Agency+	Weybridge	UK
National Veterinary Services Laboratories	Ames	USA
Istituto Zooprofilattico Sperimentale della Lombardia	Brescia	Italy
National Institute of Animal Health	Tsukuba	Japan

## WHO

**Global Influenza Surveillance and Response System (FluID and FluNet)**



## FAO/OIE

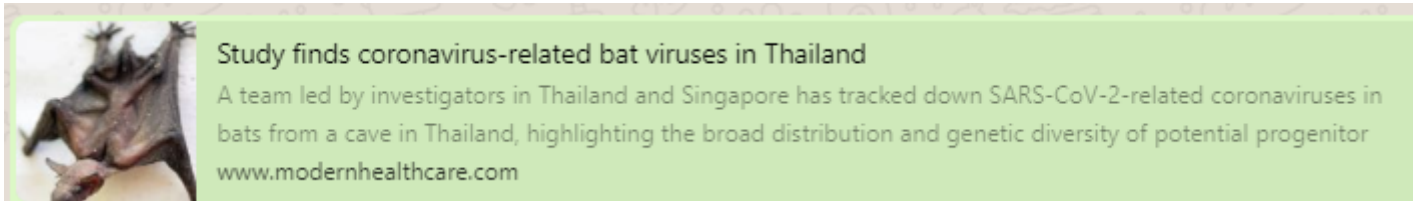
**OFFLU network animal influenza laboratories**



**One Health Influenza Surveillance System**



# WHO Collaborating Centers for zoonoses, AMR and food safety



## ASIA

- Hokkaido University Sapporo (Zoonoses Control)
- Chulalongkorn University Bangkok (Viral Zoonoses)
- Queen Saovabha Memorial Institute Bangkok (Rabies)
- NIMHANS Bangalore (Rabies diagnostics)
- NCDC Delhi (Rabies epidemiology)
- RMRC Port Blair (Leptospirosis)
- Khon Kaen University (Ophisthorchiasis)
- Xinjiang Medical University (Echinococcosis)

## EUROPE

- Pasteur Institute Paris (Rabies)
- Friedrich-Loeffler-Institut Insel Riems (Rabies)
- Animal and Plant Health Agency UK (Rabies)
- University of Veterinary Medicine Hannover (One Health)
- University of Copenhagen, Vet Faculty (Parasitic zoonoses)
- Technical University of Denmark (AMR and genomics)
- University of Utrecht, Vet Faculty (AMR and One Health)
- Universidad de Valencia (Fascioliasis)
- Stavropol Research Anti-plague Institute (Plague)

## AMERICA

- Ottawa Laboratory Fallowfield, CFIA (Rabies)
- North Carolina State University, Vet Faculty (AMR)
- Secretaria de Estado da Saude de Sao Paulo (Rabies)
- Prefeitura de Sao Paulo, Brazil (Urban zoonoses control)
- Fundação Oswaldo Cruz, Brazil (Leptospirosis)
- Administración Nacional de Laboratorios e Institutos de Salud (Arbovirus and Hemorrhagic Fevers)
- Centers for Disease Control and Prevention (CDC) - Rabies, Bacterial vector-borne diseases, Viral haemorrhagic fever, Biosafety and biosecurity

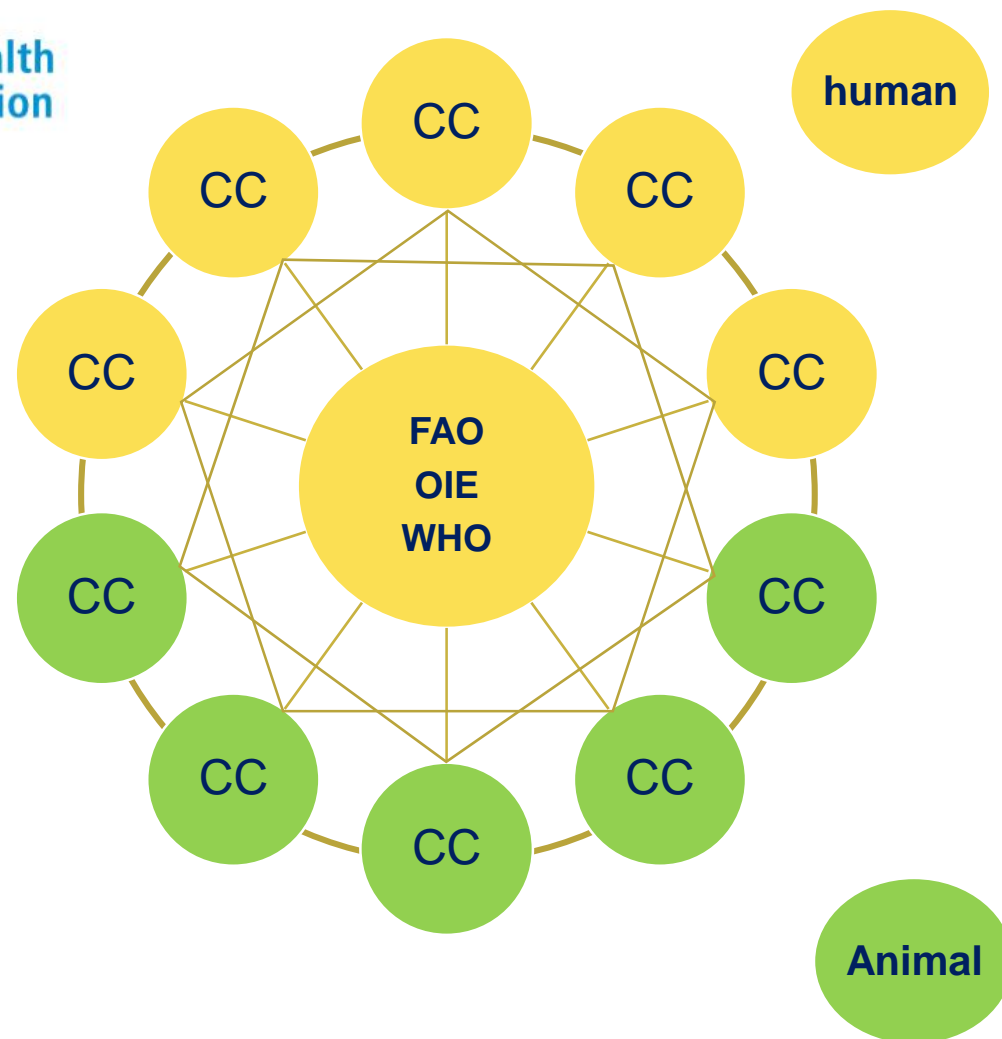




# Regional Forum of Collaborating/ Reference Centres on Emerging Infectious Diseases and Zoonoses, Sapporo (2011)



**Key message of FAO/OIE/WHO centers of excellence:** Help Asian countries in capacity building for laboratory diagnosis, strengthening biosafety and promoting EQA system and technology transfer.



# Global Foodborne Infection Network (GFN): Multidisciplinary platform for capacity building

A network of professionals working in veterinary, food and public health disciplines committed to enhancing capacity of countries to conduct integrated surveillance of foodborne and other enteric infections



## GFN Steering Committee



Public Health  
Agency of Canada

Agence de la santé  
publique du Canada



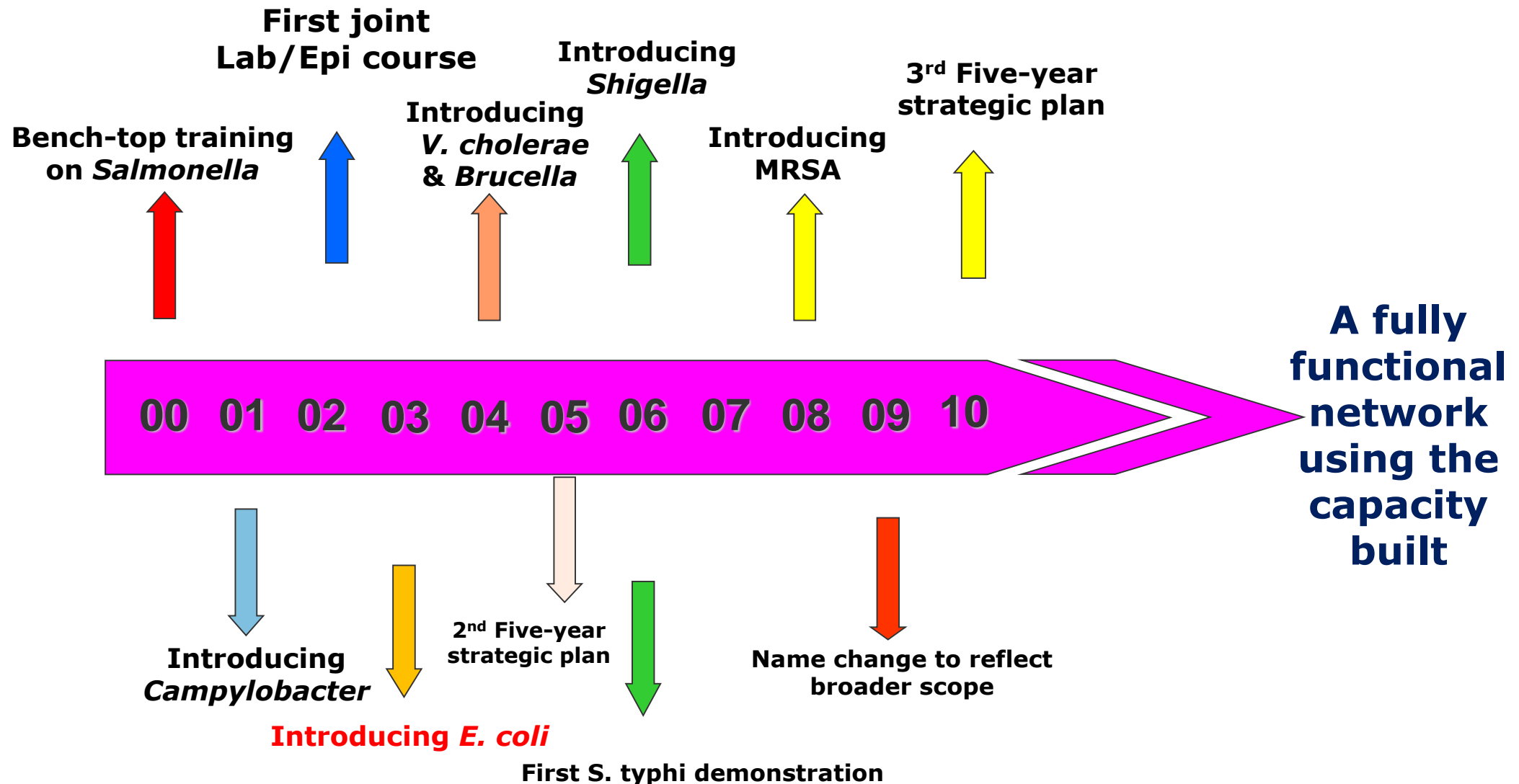
University of Utrecht



World Health  
Organization

# Evolution of WHO GSS ► GFN

Single pathogen programme ► multi-issue platform





# (Inter)national Training Courses

## Microbiology training

- Global/Region-specific pathogens  
(e.g. *Salmonella*, *Campylobacter*, *E. coli*, *V. cholerae*, *S. Typhi*, *Brucella*, *Shigella*, *Listeria*, *C. botulinum*)
- Quality assurance
- Biosafety
- Antimicrobial Susceptibility Testing

## Epidemiology training

- Outbreak detection and response
- Evaluation of surveillance systems
- Study design
- Source attribution
- Burden of disease

## Joint Epidemiology and Laboratory

- Integrated surveillance
- Risk assessment
- Country Plans of Action
- Advocacy and communication
- Information sharing networks



# FAO/OIE/WHO commitment for One Health

