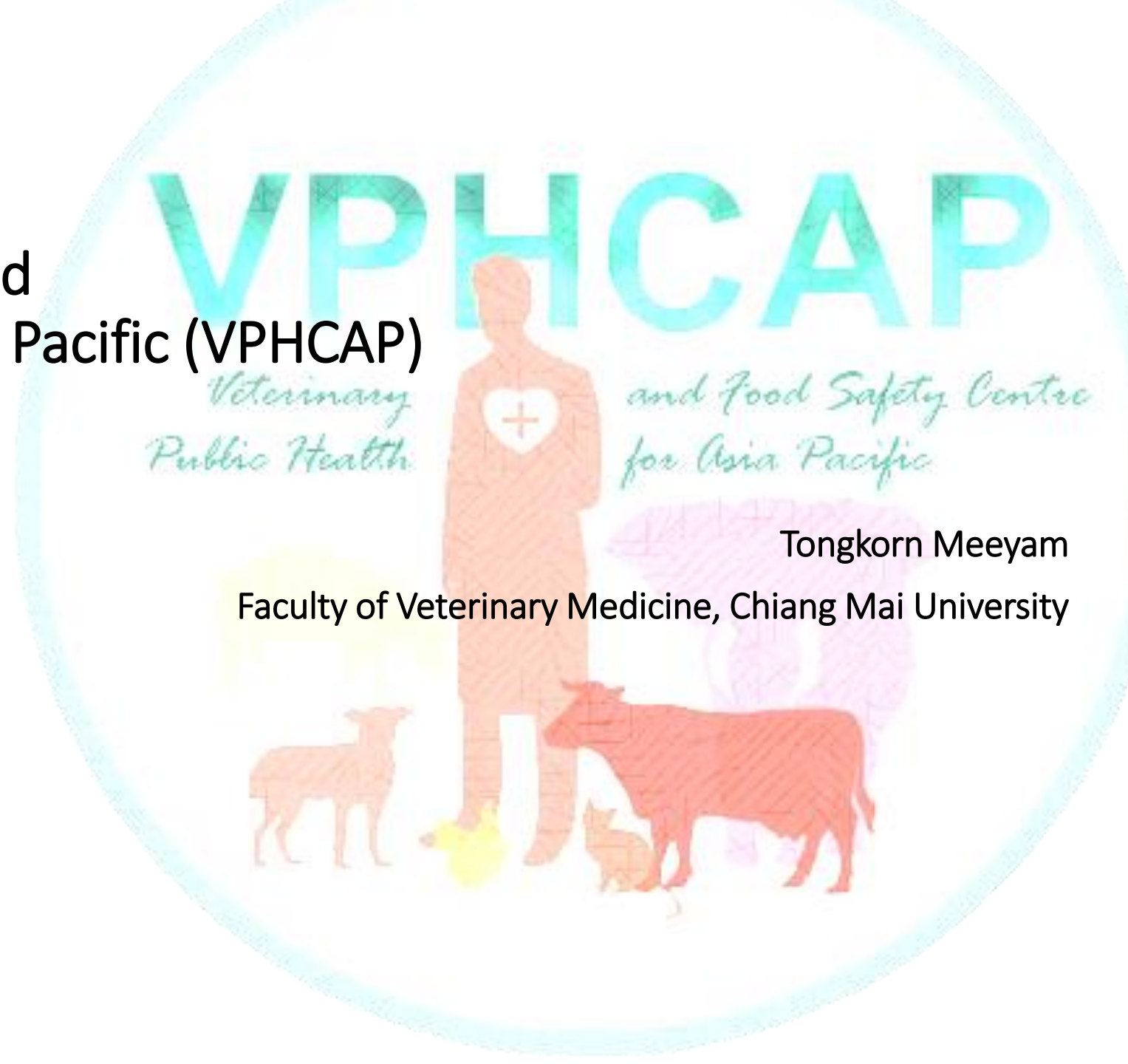


Experience sharing:  
Veterinary Public Health and  
Food Safety Centre for Asia Pacific (VPHCAP)



Tongkorn Meeyam  
Faculty of Veterinary Medicine, Chiang Mai University



# Veterinary Public Health and Food Safety Centre for Asia Pacific (VPHCAP)

Further information: <https://vphcap.vet.cmu.ac.th/>

VPHCAP at a glance: <https://youtu.be/MRmn247NFfY>

# VPHCAP: About us



- Under Faculty of Veterinary Medicine, Chiang Mai University
- Collaborative center for Veterinary Public Health
- Since 2003, the joint-international master program in Veterinary Public Health FU-Univarsität Berlin
- 81 alumni from 15 countries 15 countries  
(Bhutan, China, Pakistan, India, Bangladesh, Sri Lanka, Nepal, Philippines, Indonesia, Malaysia, Lao PDR, Myanmar, Vietnam, Cambodia, and Thailand)

# VPHCAP: What we do



## Capacity building

Global Health Institute:  
Intensive professional  
training course

Short training course:  
Risk analysis,  
Participatory  
Epidemiology, Food  
safety, OneHealth

Online program: OIE  
educational platform,  
Food security

## International degree program:

Master of Science in  
Veterinary Public  
Health (former MVPH)

Master of Science in  
Veterinary Science

Master of Public  
Health in OneHealth  
(establishment)

## Research

Food safety

Antimicrobial  
resistance

Zoonoses and  
Transboundary disease



Why/how VPHCAP became involved in collaboration with international organisations?



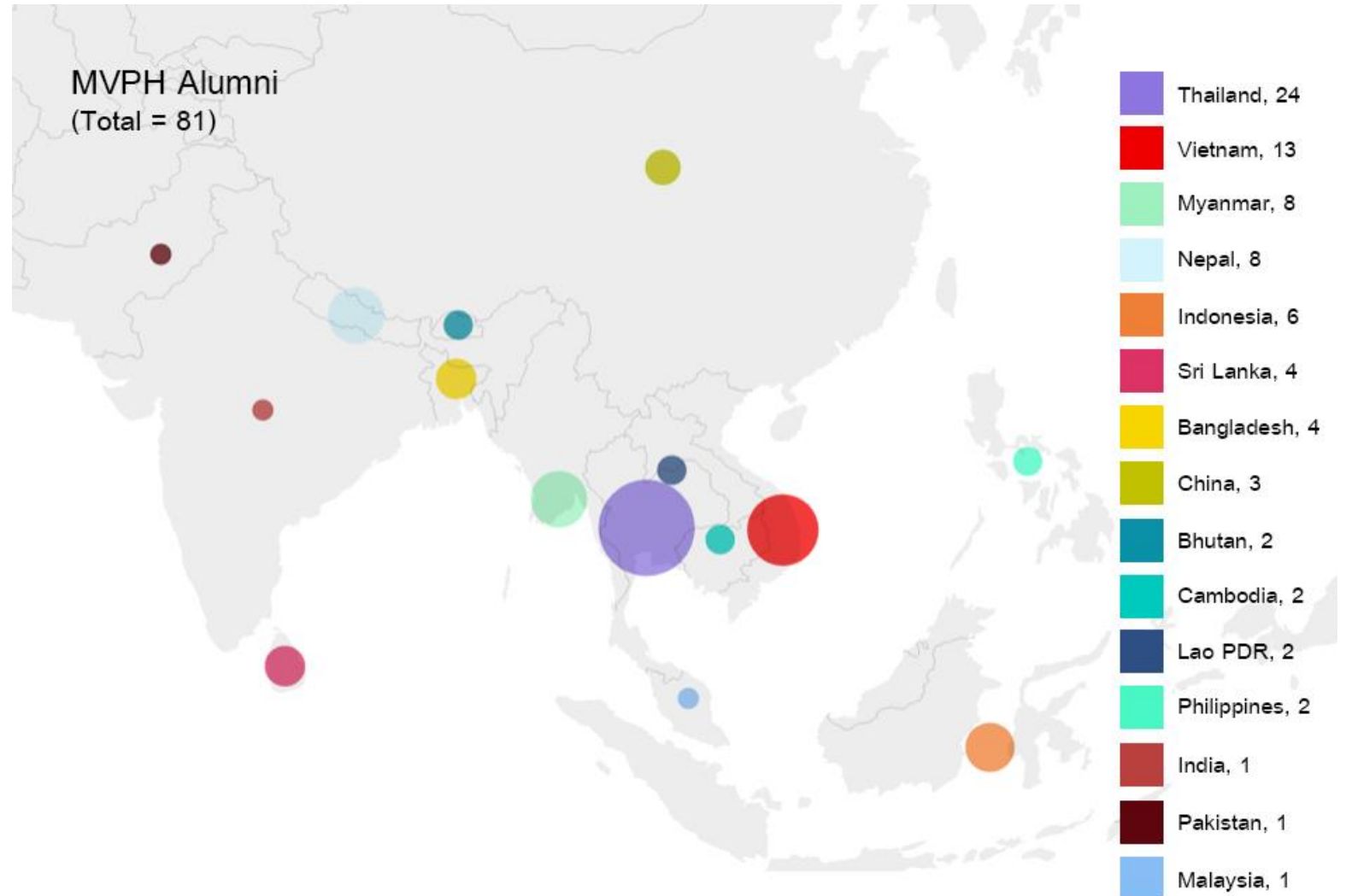
# Clear vision:

“the knowledge and collaborative centre for harmonizing the capacity of veterinary service in the region



# Opportunities:

- Regional and international network from alumni, trainees and partners





# Master of Science in Veterinary Public Health (International Program)



**MASTER OF SCIENCE  
in Veterinary Public Health**

**Available Scholarship Academic Year 2021**

**STUDY PLAN**  
Minimum of 36 credits:  
[Coursework 24 credits & Thesis 12 credits]

**TUITION FEE**  
600,000 THB per program

- ✓ Apply epidemiological approach to safety of food from animal-origin
- ✓ Analyze and assess the risk of epidemic, zoonotic, infectious diseases and understand the import goods condition and food hygiene
- ✓ Apply the rules and international regulations of Veterinary Public Health with ethics and integrity, and capable to adjust with the dynamic world
- ✓ Apply Veterinary Public Health discipline to resolve regional/global problems

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vphcap.cmu  
vphcap.vet.cmu.ac.th

FOR MORE INFORMATION

ONLINE ADMISSION



# Activities conducted under collaboration



1. OIE educational twinning project
2. OIE collaborating centre in  
Veterinary Service Capacity Building

# Chiang Mai-Minnesota Veterinary Education Twinning project :

## principal objectives



- Strengthen effective veterinary services by **aligning veterinary education within the framework of the OIE PVS pathway**
- Improve the veterinary workforce by ensuring that **new veterinary graduates demonstrate compliance with OIE Recommendations** on the Competencies of Graduating Veterinarians ('Day 1 Graduates') to assure the high quality of national Veterinary Services (Day 1 competencies)
- **Deliver continuing professional development** for veterinarians working in both public and private components of National Veterinary Services in order to advance knowledge and skills as outlined in the advanced competencies developed by OIE
- **Promote the One Health approach** for interdisciplinary collaboration in addressing health issues at the human, animal, and environmental interface

# CMU-UMN Twinning Program



1. Curriculum Development

2. Faculty Development

3. Student Exchange



# 1. Curriculum Development

1. OIE model core curriculum comparison

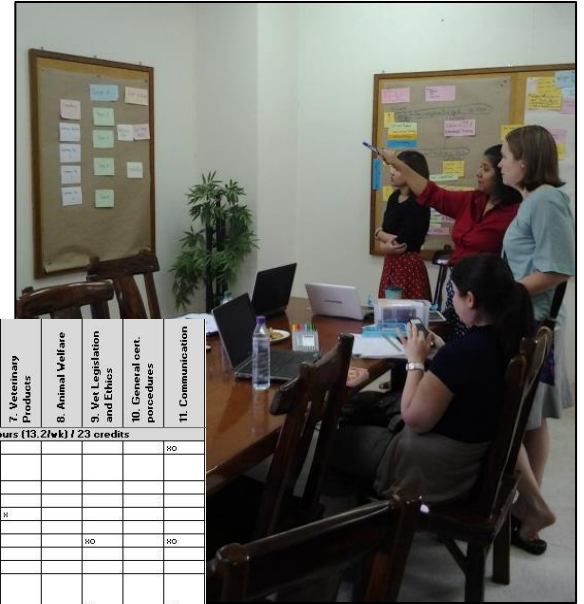
2. OIE Day 1 Competencies

- Gap analysis
- Module development
- Student survey
- Faculty Interviews

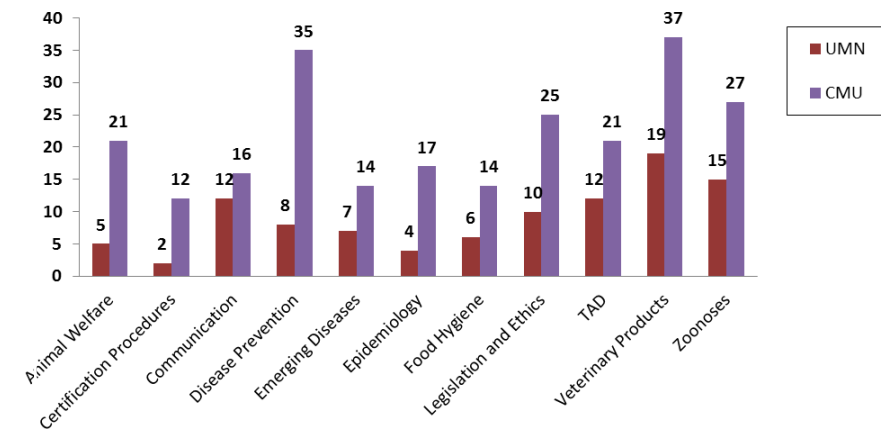
3. Advance Competencies

Graduate degrees, residencies, specialty training

Same approach as Day One competency mapping



	Course title	Course code	1. Epidemiology	2. Transboundary Animal Diseases	3. Zoonoses (incl. Foodborne Dz)	4. Emerging and Re-emerging Diseases	5. Disease Prevention and Control	6. Food Hygiene	7. Veterinary Products	8. Animal Welfare	9. Vet Legislation and Ethics	10. General cert. procedures	11. Communication
2													
3	Year 1 Fall Semester: 239 lecture hours (15.9 hr/wk) / 198 laboratory hours (13.2 hr/wk) / 23 credits												
4	GOALE	6000											HO
5	Veterinary physiological chemistry	6110											
6	Overview of animal populations	6021											
7	Harology	6111											
8	Principles of veterinary nutrition	6134											
9	Clinical skills I	6301					X		X				
10	Professional development I	6011									HO		HO
11	Normal radiographic anatomy	6101											
12	Veterinary Anatomy	6100											
13	FIPCC: Foundations of Interprofessional Communication and Collaboration	6005									HO		HO
14	Year 1 Spring Semester: 341 lecture hours (22.7 hr/wk) / 142 laboratory hours (9.4 hr/wk) / 27 credits												
15	Clinical Skills II	6302							X				HO
16	Veterinary Physiology	6130											
17	Professional Development II	6012						O		HO			HO
18	Host Defenses	6201				O			O				
19	Basic Pathology	6298					X						
20	Cytology	6112											
21	Veterinary Neurobiology	6120				O			O				
22	Applied Veterinary Genetics	6211							O				
23	Infectious Agents: Virology	6204											X
24	Pharmacology I	6141	HO	HO	HO	HO			HO				
25	Behavior core	6441							HO				
26	Year 2 Fall Semester: 304 lecture hours (20.3 hr/wk) / 156 laboratory hours (10.4 hr/wk) / 26 credits												
27	Systemic Pathology	6239		O	O								



Hamilton, K., Middleton, J.L., Pattamakaew, S., Khattiya, R., Chalita Jainonthee, Meeyam, T., Hueston, W., 2020. Mapping Veterinary Curricula to Enhance World Organisation for Animal Health (OIE) Day 1 Competence of Veterinary Graduates. Journal of Veterinary Medical Education 47, 74-82.



## 2. Faculty Development

- Teaching workshops (Feb and August 2014)
  - Teaching methods
  - Mapping
  - Modules based on gap analysis
  - Evaluation



## 2. Faculty Development

- Exchanges
  - CMU July, October 2013; February, August 2014
    - Veterinary public health, epidemiology, food safety, communications
  - UMN September 2013; January, March, April-May, and May-June 2014
    - Swine, animal welfare, veterinary public health, food safety, aquatics, dairy
- Teaching methods





# 3. Student Exchanges

- 1 group of 14 together for 6 weeks in 2 countries
  - CMU: 5 students, 1 resident, 1 professor
  - UMN: 5 students, 1 resident, 1 professor



For student feedback, please visit  
<https://www.youtube.com/watch?v=aCMnpQ5C9aA>



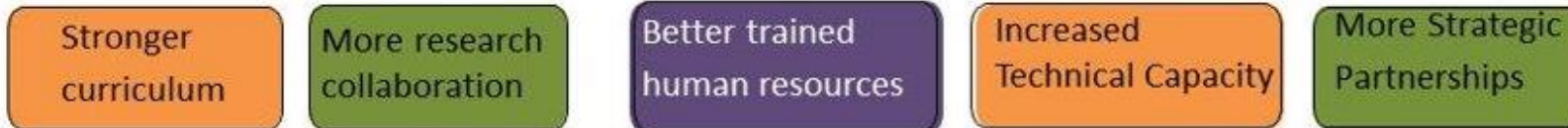
Impact of collaboration:  
OIE educational twining project



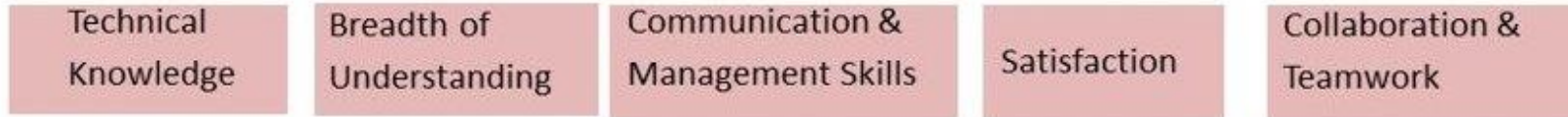
# OIE Veterinary Educational Twinning Impact Model



*Systems Level Impact*



*Organizational Level Outcomes: Veterinary Faculty and National Veterinary Services*



*Individual Level Outcomes: teaching staff, veterinary and graduate students, professionals*



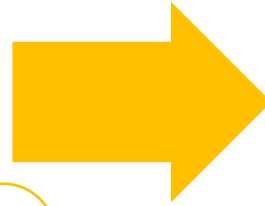
*Twinning Project Outputs*

# Impact: stronger curriculum

**Curriculum Revision:** Every curriculum must be revised and approved every 5-7 years

Before:

- Animal welfare issues were unofficially interpolated within subjects



After:

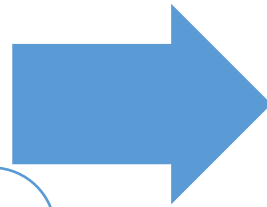
- Animal welfare issues are directly visible in the curriculum and number of study hours is assigned.

# Impact: stronger curriculum

**Teaching technique development:** Some CMU teaching staff were trained by UMN staff about active learning and implemented the technique in a pilot class “Swine Transboundary Diseases”

Before:

- More than 90% passive learning
- Teaching staff were not competent in facilitation of active learning
- The students were good in recognition but not systemic thinking or critical thinking



After:

- The students felt positive about the pilot class but there is a lot to improve
- Implementing more active learning using the model above

# Impact: stronger curriculum

**Online Course Development:** Develop on platform such as Moodle and Focused on OIE day-1 competencies and gaps identified

Communication skill: <https://youtu.be/U6KOrR0aLmg>

Animal welfare: <https://youtu.be/gTk9WUfYoJo>

Application of risk analysis: <https://youtu.be/sciaPf7AfgE>

Emerging and re-emerging diseases: <https://youtu.be/MX7DLCIDGfi>

Epidemiology determinants of diseases: <https://youtu.be/508nh6Qurgw>

Zoonoses: <https://youtu.be/YbML4gQXMOM>

International trade framework: <https://youtu.be/MKqJFTUcLHs>



# Impact: Enhance active learning



# Impact: collaborative research

## 1<sup>st</sup> Year-Joint Project Phase 1: 2016

- Antibiotic Stewardship in Companion Animal Practice
- Epidemiology of bovine tuberculosis in Chiang Mai and Chiang Rai provinces, Thailand
- Risk assessment of *Campylobacter jejuni* in chicken meat production in Northern Thailand

## 2<sup>nd</sup> Year-Joint Project Phase 1: 2017

- Cattle movement and zoonotic potential associated with bovine tuberculosis in Chiang Mai, Thailand
- Antimicrobial resistance in poultry production in Chiang Mai, Thailand and effect of prebiotics on gut microbiota and antimicrobial resistance genes
- Functional, Immunological, and Biological Characterization of Canine Transmissible Venereal Tumor

# OIE Collaborating Centre in Veterinary Services Capacity Building



# Partnership and collaborating centre establishment

- **Center for Animal Health and Food Safety (CAHFS)**, University of Minnesota  
as a Collaborating Center for Capacity Building in Veterinary Services
- CAHFS supports the VPHCAP to pursue an OIE Collaborating Center for Capacity Building in Veterinary Services in Asia





- The officially opening ceremony of the OIE Collaborating Centre was on 18 August 2016
- Thailand's **Department of Livestock Development** in collaboration with the **Veterinary Public Health Centre for Asia Pacific**, Faculty of Veterinary Medicine, Chiang Mai University

*“ A center for developing and increasing capacity of veterinarian in country and international level ”*



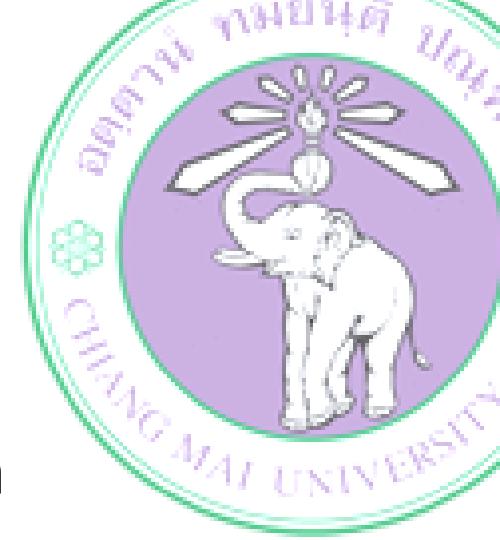
# Meeting of 5 OIE Collaborating Centre for Veterinary Services Capacity Building

- Aim to develop the “**global training program**” for online-training course
- Collaboration among 5 OIE collaborating center in Veterinary Services Capacity Building around the world;
  - France, Argentina, USA, Thailand, Senegal



# OIE educational platform

- Network of OIE collaborating centre in Veterinary service in capacity building
- Training portal for e-modules of 14 training package
- E-moodle development and review



# Summary

- Vision and strategies of institution
- Partnership as a key of success
- Synergizing the outcome and impact with collaboration
- Appreciation of different culture

