

FIRST CHAPTER 2016-2019 :

# MUHTA

Mahidol University Health Technology Assessment  
Graduate Program







# 01 OUR HISTORY



A Memorandum of Understanding (MOU) between the National Institute for Health and Care Excellence (NICE) and Mahidol University (MU) was established on July 17, 2015 under the auspice of the International Decisions Support Initiative (iDSI).



**Clinical Professor Dr. Udom Kachintorn, President of Mahidol University, Thailand, and Sir Andrew Dillon, Chief Executive of the National Institute for Health and Care Excellence (NICE), United Kingdom, signed the MOU for the collaboration to support capacity building in low- and middle-income countries (LMICs) for priority setting to achieve universal health coverage (UHC).**

*Prof. Udom Kachintorn (left) and Sir Andrew Dillon(right) during the MOU signing in July 2015*

This collaboration paved the way for the establishment of the **“Mahidol University Health Technology Assessment Program”** or **MUHTA** graduate program.

This collaboration also initiated provision of scholarships to candidates from HTA- related organizations in LMICs such as Vietnam, Malaysia, Indonesia, Philippines, Bangladesh, India, and Thailand.

The MUHTA program was approved by Mahidol University Council since 15 July 2016. The first semester started in January 2017. It is a joint collaboration of 6 faculties and 1 institute, namely:

- (1) Faculty of Medicine Ramathibodi Hospital
- (2) Faculty of Medicine Siriraj Hospital
- (3) Faculty of Pharmacy
- (4) Faculty of Public Health
- (5) Faculty of Social Sciences and Humanities
- (6) Institute for Population and Social Research, and
- (7) Faculty of Graduate Studies

Aside from the collaboration within MU, the program is linked with the Ministry of Public Health (MoPH), Health Intervention and Technology Assessment Program (HITAP), and academic institutions in Thailand. MUHTA also receives support from national and international networks and vcommittees.

#### National and International Advisory Committee members supporting the MUHTA Graduate Program

##### International Advisory Committee



Prof. Dr. John Cairns  
*Professor of Health Economics,  
Faculty of Public Health and Policy,  
London School of Hygiene and  
Tropical Medicine (LSHTM), UK*



Prof. Dr. Mark Sculpher  
*Professor of Health Economics,  
Center of Health Economics  
(CHE), University of York, UK*



Prof. Dr. Olivia Wu  
*Director, Health Economics and  
Health Technology Assessment  
(HEHTA), Institute of Health & Well-  
being, University of Glasgow, UK*



Prof. Dr. Peter C. Smith  
*Emeritus Professor, Centre for  
Health Policy in the Institute  
of Global Health Innovation,  
Imperial College, UK*



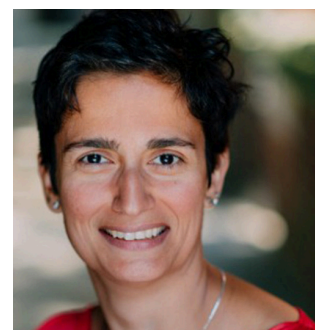
Prof. Dr. Anthony Culyer  
*Emeritus Professor of Economics,  
Center for Health Economics,  
University of York, UK*



Assoc. Prof. Dr. Karen Hofman  
*Director, Priority Cost Effective lessons  
for Systems Strengthening (PRICE-  
LESS), School of Public Health, Uni-  
versity of Witwatersrand, South Africa*



Assoc. Prof. Dr. Rob Baltussen  
*Head of Research, Nijmegen  
International Center for Health  
Systems Research and Education*



Dr. Kalipso Chalkidou  
*Director of iDSI and Professor  
of Practice in Global Health,  
Imperial College, UK*



## National Advisory Committee



Prof. Dr. Banchong Mahaisavariya  
*Acting President, MU*



Prof. Dr. Vicharn Panich  
*Past Chairman, MU Council*



Dr. Suwit Wibulpolprasert  
*Senior Advisor on Disease Control, MoPH*



Prof. Dr. Churnrurtai Kanchanachitra  
*Past Director, MU Global Health*



Dr. Yot Teerawattananon  
*Founding Leader of Health Intervention and Technology Assessment (HITAP)*



Prof. Dr. Patcharee Lertrit  
*Dean, Faculty of Graduate Studies, MU*



Prof. Dr. Piyamitr Sritara  
*Dean, Faculty of Medicine Ramathibodi Hospital, MU*



Prof. Dr. Prasit Watanapa  
*Dean, Faculty of Medicine Siriraj Hospital, MU*



Assoc. Prof. Dr. Chanuantong Tanasugarn  
*Dean, Faculty of Public Health, MU*



Assoc. Prof. Dr. Suvatna Chulavatnatol  
*Dean, Faculty of Pharmacy, MU*



Assoc. Prof. Dr. Luechai Sringernyuang  
*Dean, Faculty of Social Science and Humanities, MU*



Assoc. Prof. Dr. Rossarin Gray  
*Director, Institute for Population and Social Research, MU*

MUHTA graduate program received financial support from International Decision Support Initiative (iDSI) of 150,000 USD per year (2016 - 2018) with a matching fund from Mahidol University of 5 million baht per year (2016 - 2019). The program have a collaborative network with the following organizations i.e., HITAP, HEHTA, LSHTM, CHE, PRICELESS, NICE, and HTAsiaLink.

## 02

## “ABOUT US”

**Our vision**

To be a world-class graduate program in HTA for LMICs

**Our mission**

To build up social and intellectual capital on HTA for LMICs to support priority setting in achieving UHC

**Our goals**

1. To provide graduates with a critical understanding of the entire process of HTA using multidisciplinary fields
2. To produce graduates who are able to evaluate the social, economic, organizational and ethical impact of a health intervention, health policy or health technology and its role in support priority setting and universal health coverage especially in LMICs
3. To provide students with real-world knowledge and research skills relevant to the principles and techniques needed by those involved in HTA, especially for priority setting in LMICs (designing, commissioning, and critical appraisal of HTA study)

**Our teaching and learning strategies**

1. Experiential learning and hands-on experience using real-world examples
2. Experiences exchanged through seminars and discussions guided by international experts
3. Using real world examples emphasizing LMIC case studies, compared with High Income Countries(HIC) lessons
4. Thesis and dissertation topics, which address current policy questions concerning resource allocation in LMICs



## Course requirement

Our program focuses on a range of areas including economic evaluation for HTA, evidence-based medicine, health policy and health systems, health technology and social impact, and effectiveness and efficiency of health technology.

The course requirements, study plan and curriculum for both MSc and PhD degree of the MUHTA Graduate Program are summarized in the table below (see Tables 1, 2, 3 and 4).

**Table 1.** Course requirements for the MUHTA Graduate Program

PROGRAM	PhD (Credits)			MSc (Credits)
	Plan 1 from MSc (3 years)	Plan 2.1 from MSc (3 years)	Plan 2.2 from BSc (4 years)	(2 years)
Core Courses	---	7	18	12
Elective Courses	---	5	6	12
Thesis	48	36	48	12
Total	48	48	72	36

**Table 2.** Curriculum for the MUHTA Graduate Program

Course ID	Course	Credit
GRHA 620	Economic Evaluation for HTA	3
GRHA 621	Research Methodology for HTA	2
GRHA 622	Statistic Method and Evidence-Based Medicine for HTA	2
GRHA 623	Principle and Concept of HTA	2
GRHA 624	Principle and Concept of Health Policy and Health Systems	2
GRHA 625	Seminar in HTA I	1
GRHA 675	Health Technology and Social Impact	3
GRHA 676	Effectiveness and Efficiency of Health Technology	3
GRHA 677	Seminar in HTA II	1
GRHA 628	Principle of Economic for HTA	2
GRHA 626	Priority Setting in Universal Health Coverage	2
PYPY 679	Cost Analysis in Health Care	3
PYPY 683	Cost-effectiveness Modelling in Health	3
RACE 618	Systematic Reviews & Meta-analysis	3



**Table 3.** Study Plan for the MUHTA Graduate Program (MSc Program)

Year	Semester I	Semester 2	Summer
1	GRHA 622 2(2-0-4)*	GRHA 620 3(3-0-6)*	RACE 618 2(1-2-3)**
	GRHA 623 2(2-0-4)*	GRHA 621 2(2-0-4)*	
	GRHA 624 2(2-0-4)*	GRHA 677 1(1-0-2)*	
	GRHA 626 2(2-0-4)**	PYPY 679 3(2-2-5)**	
	GRHA 628 2(2-0-4)**	PYPY 683 3(3-0-6)**	
	Total 10 credits	Total 12 credits	Total 2 credits
2	GRHA 698 6(0-18-0)	GRHA 698 6(0-18-0)	
	Total 6 credits	Total 6 credits	
*Required courses			
**Elective courses			

**Table 4.** Study Plan for the MUHTA Graduate Program (PhD Program)

Year	Semester I	Semester 2	Summer
1	GRHA 622 2(2-0-4)*	GRHA 620 3(3-0-6)*	GRHA 675 3(3-0-6)*
	GRHA 623 2(2-0-4)*	GRHA 621 2(2-0-4)*	GRHA 676 3(3-0-6)*
	GRHA 624 2(2-0-4)*	GRHA 677 1(1-0-2)*	RACE 618 2(1-2-3)**
	GRHA 626 2(2-0-4)**	PYPY 679 3(2-2-5)**	
	GRHA 628 2(2-0-4)**	PYPY 683 3(3-0-6)**	
	Total 10 credits	Total 12 credits	Total 8 credits
2	Qualifying Examination	GRHA 699 9(0-27-0)	
	GRHA 699 9(0-27-0)		
	Total 9 credits	Total 9 credits	
3	GRHA 699 9(0-27-0)	GRHA 699 9(0-27-0)	
	Total 9 credits	Total 9 credits	
*Required courses			
**Elective courses			

# OUR TEAM

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## PhD. Program:

Assoc. Prof. Dr. Usa Chaikledkaew (Director)

Prof. Dr. Ammarin Thakkinstian (Co-program director)

Assist. Prof. Dr. Pattarawalai Talungchit (Secretariat)

## MSc. Program:

Assoc. Prof. Dr. Usa Chaikledkaew (Director)

Assoc. Prof. Dr. Montarat Thavorncharoensap (Co-program director)

Assist. Prof. Dr. Pattarawalai Talungchit (Secretariat)

## Curriculum Management Committee Members

### *Faculty of Medicine Ramathibodi Hospital*



Prof. Dr. Ammarin Thakkinstian  
ammarin.tha@mahidol.ac.th



Assoc. Prof. Dr. Thunyarat Anothaisintawee  
thunyarat.ano@mahidol.ac.th



Assist. Prof. Dr. Borwornsom Leerapan  
borwornsom.lee@mahidol.ac.th

### *Faculty of Medicine Siriraj Hospital*



Assoc. Prof. Dr. Varalak Srinonprasert  
varalak.sri@mahidol.ac.th



Assist. Prof. Dr. Pattarawalai Talungchit  
pattarawalai.tal@mahidol.ac.th

### *Faculty of Pharmacy*



Assoc. Prof. Dr. Usa Chaikledkaew  
usa.chi@mahidol.ac.th



Assoc. Prof. Dr. Montarat Thavorncharoensap  
montarat.tha@mahidol.ac.th



Assist. Prof. Dr. Sitaporn Youngkong  
sitaporn.you@mahidol.edu



## Curriculum Management Committee Members

### *Faculty of Public Health*



Assoc. Prof. Dr. Aronrag Cooper Meeyai  
a.meeyai@gmail.com



Assoc. Prof. Dr. Sukhontha Kongsin  
sukhontha.kon@mahidol.ac.th



Assoc. Prof. Dr. Nithat Sirichotiratana  
nithats@gmail.com



Assist. Prof. Dr. Suthee U-sathaporn  
suthee3711@gmail.com

### *Faculty of Social Sciences and Humanities*

### *Institute for Population and Social Research*



Assist. Prof. Dr. Natthani Meemon  
natthani.mee@mahidol.ac.th



Assist. Prof. Dr. Pojjana Hunchangsith  
pojjana.hun@mahidol.edu

## OUR ADMINISTRATIVE STAFFS



Ruchda Malisorn



Thakatkaw Piwluang

## ASSISTANT PROFESSOR WANRUDEE ISARANUWATCHAI, PHD UNIVERSITY OF TORONTO, CANADA

Assist. Prof. Wanrudee Isaranuwatchai, a Visiting Professor, Director at the Centre for Excellence in Economic Analysis Research (CLEAR), St. Michael's Hospital, and Assistant Professor at the University of Toronto - Institute of Health Policy, Management and Evaluation, delivered a series of lectures for our MUHTA students under the coursework GRHA 676: Effectiveness and Efficiency of Health Technology.

Her lecture series centered on the methods for estimation and uncertainty of cost-effectiveness statistics using person-level data.

Visiting period:

1. July 17 to 27, 2017, with the special lecture entitled "Approach to efficiency assessment of health technology: Potential Roles of HTA in Canada"
2. October 24 to 25, 2019, with the special lecture entitled "Approach to efficiency assessment of health technology: Economic evaluations using person-level data"



*Prof. Isaranuwatchai with selected faculty members and post-graduate students from the MUHTA program, and the Social, Economic and Administrative Pharmacy (SEAP) Program*



*Left photo: Prof. Isaranuwatchai with selected faculty members and post-graduate students from the HTA program, and the Social, Economic and Administrative Pharmacy Program*



*Right photo: Assoc. Prof. Suvatna Chulavatnatol, Dean of the Faculty of Pharmacy, welcomes Prof. Isaranuwatchai*



**PROFESSOR ANTHONY J. CULYER, CBE, BA, HON DECON, HON FRCP, FRSA, FMEDSCI  
UNIVERSITY OF YORK, UK AND UNIVERSITY OF TORONTO, CANADA**



*Faculty members of Mahidol University officially welcomes Prof. Culyer*



*Prof. Culyer with selected faculty members and post-graduate students from the MUHTA program, and the SEAP Program*



*Prof. Culyer during the seminar with selected faculty members and post-graduate students from the MUHTA program, and the SEAP Program*

Prof. Anthony Culyer, a world-renowned expert on health economics and health policy, was our visiting professor from the University of York - Centre for Health Economics. He is also affiliated with the Institute of Health Policy, Management and Evaluation of the University of Toronto - Faculty of Medicine.

Visiting period: November 6 to 10, 2017.

With the theme "Ideas and arguments in Health Economics", he delivered a short course for our MUHTA students under the course work GRHA 625: Seminar in HTA.

**PROFESSOR OLIVIA WU, PHD**  
**UNIVERSITY OF GLASGOW, UK**

Prof. Olivia Wu was our visiting professor for a short course on Evidence Synthesis. She currently serves as the Director of the Health Economics and Health Technology Assessment (HEHTA) Unit of the University of Glasgow. Her lecture series centered on the principles and methods of conducting evidence synthesis.

**Visiting period:**

1. June 6, 2017, with the special lecture entitled "Current Challenges in Health Technology Assessment: a Researcher/ Decision - Maker Perspective".
2. January 29 to February 9, 2018 with the special lecture entitled "Evidence Synthesis to inform Health Benefits Package".
3. November 25 to 27, 2019, with the special lecture entitled "Real world Evidence for HTA: Friend or Foe?".



*Prof. Wu delivers her special lecture on "Evidence Synthesis to inform Health Benefits Package"*



*Prof. Wu with selected faculty members and post-graduate students from the MUHTA program, and the Social, Economic and Administrative Pharmacy Program*

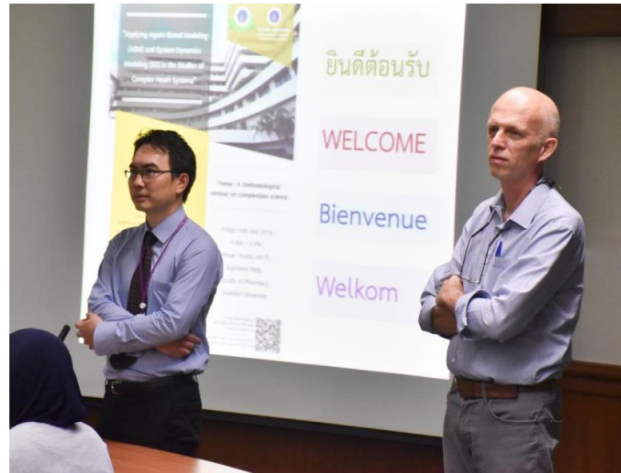


*Prof. Wu and Prof. Chaikledkaew provide comments and suggestions for MUHTA students.*



**PROFESSOR JEAN MACQ, PHD****UNIVERSITY OF LEUVEN, BELGIUM**

*Left photo: Prof. Macq (left) and Asst. Prof. Leerapan (right) shares a hearty laughter to end the workshop on agent-based modelling*



*Right photo: Asst. Prof. Leerapan (left) welcomes Prof. Macq (right) in his two-day seminar*

Prof. Macq from the Faculty of Public Health and Institute for Health Research and Society of Catholic University of Leuven, Belgium, held a two-day seminar on health system science in the ongoing health system reform for our MUHTA students and staff during July 25 and 26, 2018. The program highlighted on the comparison of the reforms of people-centered and integrated health care systems in Belgium and Thailand. A workshop on agent-based and dynamic modelling and on systems thinking was also held during this seminar.

**Visiting period:**

July 13, 2018, with the special lecture entitled "A methodological seminar on complexities science: Applying Agent-Based Modeling (ABM) and System Dynamics Modeling (SD) in the studies of Complex Health Systems"



*Attendees during the workshop for agent-based modeling*



**PROFESSOR DEAN JAMISON, PHD**  
**UNIVERSITY OF WASHINGTON, USA**

Prof. Jamison, a Principal Investigator of Disease Control Priorities Network, discussed on their group's findings from the Disease Control Priorities (DCP) project essential for developing health benefits packages for Universal Health Coverage (UHC) last September 18, 2018.



*Prof. Jamison together with Mahidol University officials and faculty members*



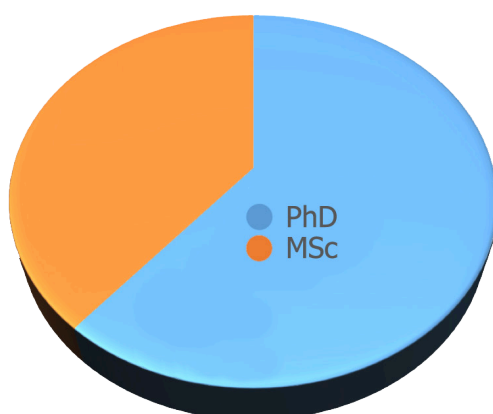
*Prof. Jamison together with the Faculty members and Students of Mahidol University and relevant HTA stakeholders at the public lecture*

Visiting period:

September 18 to 19, 2018, with the special lecture entitled "Disease control priorities: findings from the Third Edition and the unfinished agenda".

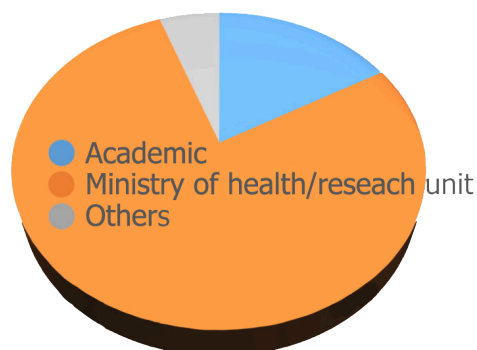


## Program



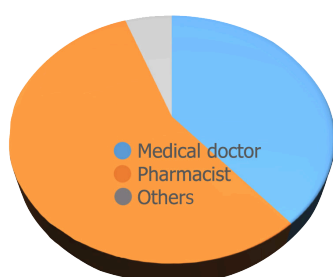
Program: PhD (11) MSc (7)

## Prior work environment



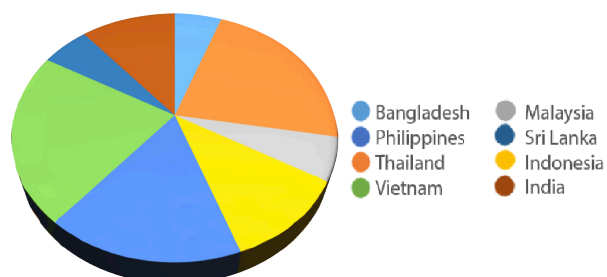
Prior work environment: Academic (3), Ministry of health/research unit (14), others (1)

## Background



Background: Medical doctor (7), Pharmacist (10), Others (1)

## Country



Country: Bangladesh (1), Thailand (4), Malaysia (1), Indonesia (2), Philippines (3), Vietnam (4), Sri-Lanka (1), India (2)

# 03

## OUR FACILITIES

Our office is physically established on the 4th floor of Pradit Hutangura Research building, Faculty of Pharmacy, Mahidol University. We currently have facilities such as students' study room, meeting room, academic staff's room and visiting professor's room.

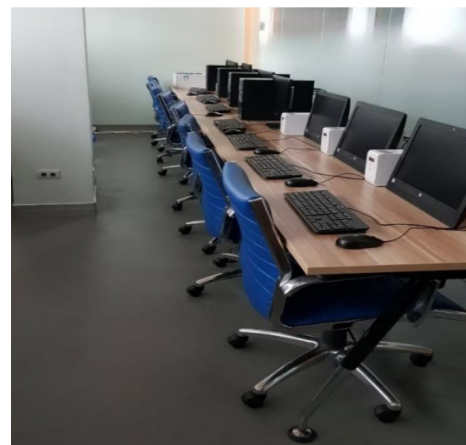
Our conference room is well equipped with video conference system to facilitate teaching and discussion with the international experts. Computers and required software are also available for students at the computer room.



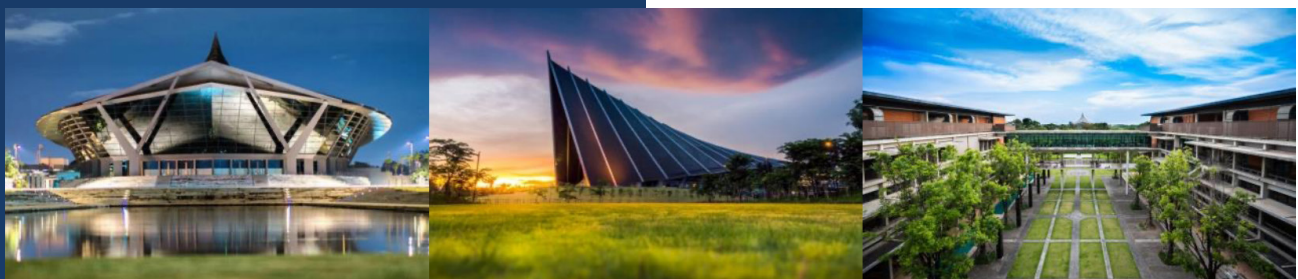
*MUHTA office located on the 4th floor of Pradit Hutangura Research building*



*Small meeting room*



*Study room for MUHTA students*



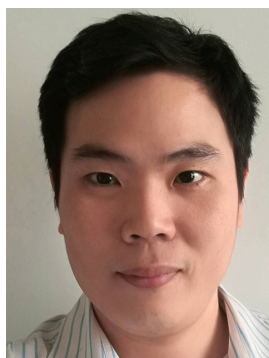



*Mahidol University, main campus at Salaya, Nakhon Pathom*



# 04 TEACHING AND SUPERVISION

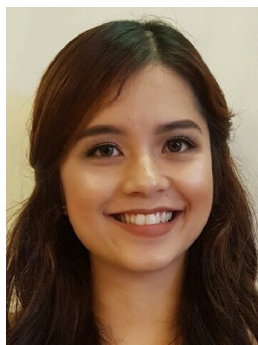
## Entering class 2016

<p>Mohammad Sabbir Haider</p> 	<p><b>Country:</b> Bangladesh  <b>Program:</b> PhD  <b>Supervision team:</b>            Assist.Prof. Dr. Sitaporn Youngkong            Assoc.Prof. Dr. Montarat Thavorncharoensap.            Dr. Praveen Thokala  <b>Thesis topic:</b>            MULTI-CRITERIA DECISION ANALYSIS FOR PRIORITY SETTING OF VACCINE INTRODUCTION IN BANGLADESH</p>
<p>Ong The Due</p> 	<p><b>Country:</b> Vietnam  <b>Program:</b> PhD  <b>Supervision team:</b>            Assoc. Prof. Dr. Usa Chaikledkaew            Prof. Dr. Ammarin Thakkinstian            Assoc. Professor Dr. Abhasnee Sobhonslidsuk            Assoc. Professor Dr. Montarat Thavorncharoensap            Dr. Nguyen Khanh Phuong            Prof. Dr. Olivia Wu  <b>Thesis topic:</b>            COST-UTILITY ANALYSIS OF DIRECT ACTING ANTIVIRALS FOR TREATMENT OF CHRONIC HEPATITIS C GENOTYPE 1 AND 6 IN VIETNAM</p>
<p>Auttakiat Karnjanapiboonwoong</p> 	<p><b>Country:</b> Thailand  <b>Program:</b> PhD  <b>Supervision team:</b>            Assoc. Prof. Dr. Thunyarat Anothaisintawee            Assoc. Prof. Dr. Usa Chaikledkaew            Prof. Dr. Ammarin Thakkinstian            Assist. Prof. Dr. Charungthai Dejthevaporn  <b>Thesis topic:</b>            COST-EFFECTIVENESS OF APPLYING HOME BLOOD PRESSURE MEASUREMENT AND CLINIC BLOOD PRESSURE MEASUREMENT FOR SINGLE OR SERIAL SCREENING AND DIAGNOSIS OF HYPERTENSION</p>
<p>Ulyy Adhie Mulyani</p> 	<p><b>Country:</b> Indonesia  <b>Program:</b> MSc  <b>Supervision team:</b>            Assoc. Prof. Dr. Thunyarat Anothaisintawee            Prof. Dr. Ammarin Thakkinstian            Lecturer Dr. Pawin Numthavaj  <b>Thesis topic:</b>            SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS: ANTIBIOTIC PROPHYLAXIS OF CATHETER-ASSOCIATED URINARY TRACT INFECTION IN ELECTIVE ABDOMINAL SURGERY</p>

## Entering class 2016

18

Anne Julienne M. Genuino



**Country:** Philippines

**Program:** Msc

**Supervision team:**

Assoc. Prof. Dr. Usa Chaikledkaew

Prof. Dr. Ammarin Thakkestian

Assist. Prof. Thanyanan Reungwetwattana

**Thesis topic:**

COST-UTILITY ANALYSIS OF ADJUVANT TRASTUZUMAB FOR HER2-POSITIVE EARLY BREAST CANCER PATIENTS IN THE PHILIPPINES

Ana Fizalinda Binti Abdullah Sani



**Country:** Malaysia

**Program:** Msc

**Supervision team:**

Assoc. Prof. Dr. Dr. Montarat Thavorncharoensap

Prof. Dr. Ammarin Thakkestian

Assist. Prof. Dr. Sakda Arj-ong Vallipakorn

**Thesis topic:**

SYSTEMATIC REVIEW OF TRIAGE SYSTEM FOR MANAGING OVERCROWDING IN EMERGENCY DEPARTMENT: A NETWORK META ANALYSIS

## Entering class 2017

Phung Lam Toi



**Country:** Vietnam

**Program:** PhD

**Supervision team:**

Assoc. Prof. Dr. Usa Chaikledkaew

Prof. Dr. Ammarin Thakkestian

Assoc. Prof. Dr. Montarat Thavorncharoensap

Assoc. Prof. Dr. Varalak Srinonprasert

**Thesis topic:**

ECONOMIC EVALUATION OF SCREENING FOR TYPE 2 DIABETES MELLITUS IN VIETNAM

Prapaporn Noparatayaporn



**Country:** Thailand

**Program:** PhD

**Supervision team:**

Assoc. Prof. Dr. Montarat Thavorncharoensap

Assoc. Prof. Prapimporn Chattranukulchai

Asst. Prof. Preeda Sumritpradit

**Thesis Topic:**

COST-UTILITY ANALYSIS OF LAPAROSCOPIC BARIATRIC SURGERY FOR OBESE PATIENTS WITH TYPE II DIABETES

Montira Assanatham

**Country:** Thailand**Program:** PhD**Supervision team:**

Assoc. Prof. Dr. Usa Chaikledkaew

Prof. Dr. Ammarin Thakkinstian

Prof. Dr. Atiporn Ingsathit

**Thesis Topic:**

COST-UTILITY ANALYSIS OF RENAL REPLACEMENT THERAPY IN THAILAND

Jamaica Roanne V. Briones

**Country:** Philippines**Program:** Msc**Supervision team:**

Assoc. Prof. Dr. Usa Chaikledkaew

Assoc. Prof. Dr. Montarat Thavorncharoensap

Assist. Prof. Dr. Pattarawalai Talungchit

**Thesis topic:**

ECONOMIC EVALUATION OF CARBETOCIN AS PROPHYLAXIS AGAINST POSTPARTUM HEMORRHAGE IN THE PHILIPPINES

Bhavani Shankara Bagepally

**Country:** India**Program:** Msc**Supervision team:**

Assoc. Prof. Dr. Thunyarat Anothaisintawee

Assoc. Prof. Dr. Usa Chaikledkaew

Prof. Dr. Ammarin Thakkinstian

**Thesis topic:**

COST-EFFECTIVENESS OF TYPE 2 DIABETES MELLITUS TREATMENT WITH SODIUM GLUCOSE CO-TRANSPORTER-2 INHIBITORS AND GLUCAGON LIKE PEPTIDE 1 AGONISTS: A SYSTEMATIC REVIEW AND META-ANALYSIS

Yogesh Krisnarao Gurav

**Country:** India**Program:** MSc**Supervision team:**

Assoc. Prof. Dr. Montarat Thavorncharoensap

Assoc. Prof. Dr. Usa Chaikledkaew

Prof. Dr. Ammarin Thakkinstian

Assoc. Prof. Dr. Abhasnee Sobhonslidsuk

Prof. Emeritus Dr. Mohan Gupte




**Thesis topic:**

COST-EFFECTIVENESS ANALYSIS OF HEPATITIS A VACCINATION IN KERALA STATE, INDIA






## Entering class 2018

20

<p>Rini Noviyani</p> 	<p><b>Country:</b> Indonesia  <b>Program:</b> PhD  <b>Supervision team:</b>            Assist. Prof. Dr. Sitaporn Youngkong            Assoc. Prof. Dr. Usa Chaikledkaew            Prof. Dr. Ammarin Thakkinstian            Assoc. Prof. Dr. Sukontha Kongsin  <b>Thesis Topic:</b>            COST-UTILITY ANALYSIS OF NOAC VERSUS WARFARIN FOR STROKE PREVENTION IN ATRIAL FIBRILLATION PATIENTS IN INDONESIA</p>
<p>Mac Ardy Junio Gloria</p> 	<p><b>Country:</b> Philippines  <b>Program:</b> PhD  <b>Supervision team:</b>            Assoc. Prof. Dr. Montarat Thavorncharoensap            Assoc. Prof. Dr. Usa Chaikledkaew            Assoc. Prof. Dr. Nithat Sirichotiratana            Assist. Prof. Dr. Sitaporn Youngkong  <b>Thesis Topic:</b>            ESTIMATION OF COST-EFFECTIVENESS THRESHOLD IN THE PHILIPPINES</p>
<p>Duong Ngoc Cong Khanh</p> 	<p><b>Country:</b> Vietnam  <b>Program:</b> MSc  <b>Supervision team:</b>            Assoc. Prof. Dr. Usa Chaikledkaew            Prof. Dr. Ammarin Thakkinstian            Assoc. Prof. Dr. Sasivimol Rattanasiri            Assist. Prof. Dr. Jiraphun Jittikoon  <b>Thesis topic:</b>            ASSOCIATION BETWEEN NAT2 POLYMORPHISMS AND DRUG-INDUCED LIVER INJURIES IN TUBERCULOSIS TREATMENT: A SYSTEMATIC REVIEW AND META-ANALYSIS</p>

## Entering class 2019

<p>Ha Thi Nguyen</p> 	<p>Panida Yoopetch</p> 	<p>Agampodi Danushi Mendis Gunasekara</p> 
<p><b>Country:</b> Vietnam  <b>Program:</b> PhD</p>	<p><b>Country:</b> Thailand  <b>Program:</b> PhD</p>	<p><b>Country:</b> Sri Lanka  <b>Program:</b> PhD</p>

# 21 05 OUR ACTIVITIES

## 5.1 Capacity Building Activities with Partner Academic Institutions: Short-course Trainings and Curriculum Development

Since the establishment of the MUHTA Graduate Program, Mahidol University has continuously provided support to academic institutions and HTA-related organizations.

The goals of which are to conduct trainings toward HTA strengthening and to help develop the academic institution's curriculum which integrates concepts and applications on HTA.

Notably, the trainings provided by MU aimed to capacitate more people in conducting assessments of health technologies.

To build capacity, some of the topics included in the training events are: (1) principles and concepts on HTA, (2) evidence retrieval and appraisal, and, (3) methods for economic evaluations.

### Some of our short-courses training and curriculum development activities

Workshop on Retrieve & Critical Appraisal of Economic Evaluation Studies related to hospital based HTA at Aston Priority Simantupang Hotel and Conference Center, Jakarta Indonesia organized by University of Indonesia (UI), October 31 to November 2, 2017.

Workshop on Hospital based HTA-Costing Methods, training for UI academic staff at Aston Priority Simatupang Hotel & Conference Center (November 2, 2017).



*MUHTA workshop trainers with the attendees*



*MUHTA and UI discuss about the MUHTA support for curricula development at UI*

Workshop on cost-effectiveness modelling (Monte Carlo Simulation and CE acceptability curve) organized by University of the Philippines, College of Pharmacy (UPCP), Manila, the Philippines (February 19 -21, 2018)



*MUHTA trainers and workshop attendees from UPCP*

Health technology Assessment (HTA) and pharmacoeconomics meeting and training organized by Hanoi University of Pharmacy (HUP), Hanoi, Vietnam during April 18-20, 2018.



*MUHTA trainers and workshop attendees from HUP*



*Assoc. Prof. Chaikedkaew delivers her lecture on economic evaluation methods at HUP*



## 23 5.2 Public Lectures organized by MUHTA Graduate Program

Title	Speaker	Details
Current Challenges in Health Technology Assessment: a Researcher/ Decision-Maker Perspective	Prof. Olivia Wu	<b>Date &amp; Time:</b> 6 June 2017, 10.00 am-12.00 pm <b>Venue:</b> Room 409, Rajcharat Building, Faculty of Pharmacy, Mahidol University
Approach to Efficiency Assessment of Health Technology: Potential Roles of HTA in Canada	Prof. Wanrudee Isaranuwatthai	<b>Date &amp; Time:</b> 21 July 2017, 10.00 am-12.00 pm <b>Venue:</b> Room 409, Rajcharat Building, Faculty of Pharmacy, Mahidol University
Health Technology Assessment: Do we really have to do it?	Prof. Anthony J. Culyer	<b>Date &amp; Time:</b> 9 November 2017, 10.00 am – 12.00 pm <b>Venue:</b> Room 606, Rajcharat Bldg., Faculty of Pharmacy, Mahidol University
Evidence Synthesis to inform Health Benefits Package	Prof. Olivia Wu	<b>Date &amp; Time:</b> 9 February 2018, 1.00-3.00 pm <b>Venue:</b> Room 606, Rajcharat Bldg., Faculty of Pharmacy, Mahidol University
A methodological seminar on complexities science: Applying Agent-Based Modeling (ABM) and System Dynamics Modeling (SD) in the studies of Complex Health Systems	Prof. Jean Macq	<b>Date &amp; Time:</b> 13 July 2018, 9.00 am – 4.00 pm <b>Venue:</b> Room 606, Rajcharat Bldg., Faculty of Pharmacy, Mahidol University
Disease control priorities: findings from the Third Edition and the unfinished agenda	Prof. Dean T. Jamison	<b>Date &amp; Time:</b> 18 September 2018, 2.00-4.00 pm <b>Venue:</b> Room 606, Rajcharat Bldg., Faculty of Pharmacy, Mahidol University
Approach to efficiency assessment of health technology: Economic evaluations using person-level data	Prof. Wanrudee Isaranuwatthai	<b>Date &amp; Time:</b> 24-25 October 2019, 9.00 am - 4.00 pm <b>Venue:</b> Clin.Prof. Udom Kachintorn, M.D. conference room, 4th fl., Pradit Hutangura bldg., Faculty of Pharmacy, Mahidol University
Real world Evidence for HTA: Friend or Foe?	Prof. Olivia Wu	<b>Date &amp; Time:</b> 26 November 2019, 9.00 am - 12.00 pm <b>Venue:</b> Sukondha Poonpatana conference room, 5th fl., Pradit Hutangura bldg., Faculty of Pharmacy, Mahidol University

MAHIDOL UNIVERSITY  
www.mahidol.ac.th

MAHIDOL UNIVERSITY CORDIALLY INVITES YOU TO ATTEND A SPECIAL LECTURE ENTITLED

**Approach to Efficiency Assessment of Health Technology : Potential Roles of HTA in Canada**

Date & Time: 21 July 2017 at 10.00 AM - 12.00 PM (with coffee break)  
Venue: Room 409, 4th Floor, Rajcharat Bldg., Faculty of Pharmacy, Mahidol University  
Please reserve seats at [khuu.ruchda@mahidol.ac.th](mailto:khuu.ruchda@mahidol.ac.th) or 02-354-3747 or 1131 Email: [khuu.ruchda@mahidol.ac.th](mailto:khuu.ruchda@mahidol.ac.th)

  
Assist. Prof. Wanrudee Isaranuwatthai, Ph.D.  
• Interim Director - Centre for Excellence in Economic Analysis Research (CLEAR), the HUB, Li Ka Shing Knowledge Institute, St. Michael's Hospital  
• Assistant Professor - Institute of Health Policy.


Public lecture by Prof. Isaranuwatthai

MAHIDOL UNIVERSITY  
www.mahidol.ac.th

Mahidol University cordially invite you to join a special lecture entitled

**Health Technology Assessment – Do we really have to do it?**

Thursday 9 November 2017 at 10.00 AM - 12.00 PM (with coffee break)  
Room 606, 6th Floor, Rajcharat Bldg., Faculty of Pharmacy, Mahidol University

  
Prof. Anthony J. Culyer  
Emeritus Professor of Health Economics, University of York, UK  
Founding Vice Chair of the National Institute for Health & Clinical Excellence (NICE)  
Founding Editor of the Journal of Health Economics

Please reserve seats at [khuu.ruchda@mahidol.ac.th](mailto:khuu.ruchda@mahidol.ac.th) or 02-354-3747 or 1131 Email: [khuu.ruchda@mahidol.ac.th](mailto:khuu.ruchda@mahidol.ac.th) or register online using the QR Code.

Public lecture by Prof. Culyer

MAHIDOL UNIVERSITY  
www.mahidol.ac.th

Mahidol University cordially invites you to attend a special lecture entitled

**Evidence Synthesis to Inform Health Benefits Package**

Friday 9th February 2018 at 1-3 PM (with coffee break)  
Room 606, 6th fl, Rajcharat Bldg., Faculty of Pharmacy, Mahidol University

  
PROF. OLIVIA WU  
ScD(Pharm), MSc (Clinical Pharmacology), PhD (Public Health and Health Economics)  
Director, Health Economics and Health Technology Assessment (HEHTA) Unit, the University of Glasgow, UK

Please reserve seats by [free registration](mailto:khuu.ruchda@mahidol.ac.th) using the QR Code or contact directly to  
Khuu Ruchda, Tel: 02-354-3747 ext 1131 Email: [khuu.ruchda@mahidol.ac.th](mailto:khuu.ruchda@mahidol.ac.th) or  
Khuu Ruchda, Tel: 02-354-3747 ext 1131 Email: [khuu.ruchda@mahidol.ac.th](mailto:khuu.ruchda@mahidol.ac.th)

Public lecture by Prof. Wu

Last October 30 to November 1 2018, HTA graduate students and experts from Mahidol University, Bangkok, Thailand went to Taipei, Taiwan for a study visit.

Graduate students came from India, Thailand, Philippines, Indonesia, Malaysia, Vietnam, and Bangladesh. Experts were from various faculties, such as Faculty of Medicine, Faculty of Pharmacy, and Faculty of Public Health. This study visit is a part of GRHA623: Principle and concept of HTA course.

The study visit involved:

- (1) Research and academic discussions in HTA
- (2) Industry and patient experiences in HTA in Taiwan
- (3) Taiwan's National Health Insurance (NHI) system
- (4) Taiwan's Center for Drug Evaluation (CDE), which is responsible for conducting HTA and
- (5) Taiwan's National Hepatitis C Program experiences

Furthermore, the role and impact of HTA were emphasized. Through this study visit, all were able to see how the different key stakeholders (e.g., academic institutions, industry, national drug authority, NHI, CDE, patient groups) are interrelated with each other, and what their significant responsibilities are in relation to HTA. The process and role of HTA in Taiwan was also discussed.



*The faculty members and graduate students of the MUHTA Program in their study visit in National Taiwan University*



*The faculty members and graduate students of the MUHTA Program in their study visit at Taiwan - National Health Insurance*

## 25 5.4 Networking : HTA Participation in Regional Networks

Since 2016, the MUHTA program has been engaging in the regional level networks on HTA through its participation in the annual conference of the HTAsiaLink, as detailed below;

### The 5th Annual HTAsiaLink Conference

**Theme:** The role of health technology assessment in ensuring value for public investment

**Venue:** Duke-NUS Graduate School, Singapore, hosted by the Ministry of Health, Singapore, the Health Services Research Department of the Eastern Health Alliance and the Health Services Research Institute of SingHealth

**Date:** 3 to 6 May 2016

### The 6th Annual HTAsiaLink Conference:

**Theme:** Health Technology Assessment in designing and implementing Benefit Package for Universal Health Coverage (UHC)

**Venue:** La Than Hotel, Hanoi, Vietnam hosted by Health Strategy and Planning Institute (HSPI), Ministry of Health

**Date:** 17 to 19 April 2017

### The 7th Annual HTAsiaLink Conference:

**Theme:** Testing Treatments: Strengthening HTA for better healthcare

**Venue:** Le Meridian, Hotel Chiang Mai, Thailand hosted by Health Intervention and Technology Assessment Program (HITAP)

**Date:** 8 to 11 May 2018

### The 8th Annual HTAsiaLink Conference:

**Theme:** Priority Setting for Universal Health Coverage (UHC)

**Venue:** Seoul National University Hoam Faculty House, Seoul, South Korea hosted by the National Evidence-based Healthcare Collaborating Agency (NECA)

**Date:** 24 to 26 April 2019



*Assoc. Prof. Chaikledkaew and Assoc. Prof. Thavorncharoensap during HTA-sialink 2016*



*The Faculty members and graduate students of the MUHTA Program during the awarding session of the HTAsialink 2017*



*The Faculty members and graduate students of the MUHTA Program during the awarding session of the HTAsialink 2018*

## 5.5 Training Support for Academic Staff from LMICs

1. Ms Septiara Putri, a lecturer from the Faculty of Public Health, Universitas Indonesia, Indonesia (period of exchange: 30 October – 3 December 2017)
2. Phạm Nữ Hạnh Vân, MSc, a lecturer from Department of Pharmaceutical administration and Pharmaco economics, Hanoi University of Pharmacy, Vietnam (period of exchange: 14 January – 17 February 2019)
3. Santi Purnasani, MSi. Apt., a lecturer from Faculty of Pharmacy, Clinical Pharmacy and Social Pharmacy Laboratory, Universitas Indonesia (period of exchange: 14 January – 17 February 2019)



# 06 OUR PUBLICATIONS

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1. Anothaisintawee T, **Genuino AJ**, Thavorncharoensap M, Youngkong S, Rattanavipapong W, Meeyai A, Chaikledkaew U. Cost-effectiveness modelling studies of all preventive measures against rabies: A systematic review. *Vaccine*. 2019 Oct 3;37:A146-53.
2. Rattanavipapong W, Thavorncharoensap M, Youngkong S, **Genuino AJ**, Anothaisintawee T, Chaikledkaew U, Meeyai A. The impact of transmission dynamics of rabies control: Systematic review. *Vaccine*. 2019 Oct 3;37:A154-65.
3. **Genuino AJ**, Guerrero AM, Reungwetwattana T, Thakkinstant A. Cost-utility analysis of adjuvant trastuzumab therapy for HER2-positive early-stage breast cancer in the Philippines. *BMC health services research*. 2019 Dec 1;19(1):874.
4. **Genuino AJ**, Chaikledkaew U, **Due OT**, Reungwetwattana T, Thakkinstant A. Adjuvant trastuzumab regimen for HER 2-positive early-stage breast cancer: a systematic review and meta-analysis. *Expert review of clinical pharmacology*. 2019 Aug 3;12(8):815-24.
5. **Due OT**, Chaikledkaew U, **Genuino AJM**, Sobhonslidsuk A, Thakkinstant A. Systematic Review with Meta-analysis: Efficacy and Safety of Direct-Acting Antivirals for Chronic Hepatitis C Genotypes 5 and 6. *BioMed Research International*. 2019. Article ID 2301291.
6. **Haider S**, Chaikledkaew U, Thavorncharoensap M, Youngkong S, Islam MA, Thakkinstant A. Systematic Review and Meta-Analysis of Cost-effectiveness of Rotavirus Vaccine in Low-Income and Lower-Middle-Income Countries. *Open Forum Infectious Disease*. 2019 Mar 8;6(4):ofz117.
7. **Bagepally BS**, **Gurav YK**, Anothaisintawee T, Youngkong S, Chaikledkaew U, Thakkinstant A. Cost utility of sodium-glucose co-transporter 2 inhibitors in the treatment of metformin monotherapy failed type 2 diabetes patients: a systematic review and meta-analysis. *ValueHealth*. 2019 Dec;22(12):1458-1469. doi: 10.1016/j.jval.2019.09.2750.
8. **Due OT**, Thakkinstant A, Thavorncharoensap M, Sobhonslidsuk A, Wu O, Phuong NP, Chaikledkaew U. Cost-Utility Analysis of Direct Acting Antivirals for treatment of Chronic Hepatitis C genotype 1 and 6 in Vietnam. *Value Health* [submitted]
9. **Toi PL**, Anothaisintawee T, Chaikledkaew U, Briones J, Thakkinstant A. The role of lifestyle modification in prevention for type-2 diabetes mellitus: an umbrella review. *Nutrition and Diabetes*. [Submitted]
10. **Bagepally BS**, **Gurav Y**, Anothaisintawee T, Youngkong S, Usa Chaikledkaew, Thakkinstant A. Glucagon Like Peptide 1 Agonists for Treatment of Metformin Monotherapy Failed Type 2 Diabetes Patients: A Systematic Review and Meta-Analysis of Economic Evaluation Studies. *BMJ Open Diabetes Research & Care*. [Submitted]
11. **Karnjanapiboonwong A**, Thakkinstant A, Anothaisintawee T, Chaikledkaew U. Diagnostic performances of clinic and home blood pressure measurements comparing with ambulatory blood pressure measurements: a systematic review and meta-analysis. *BMC Family Practice*. [Submitted]
12. **Genuino AJ**, **Gloria MAJ**, Chaikledkaew U, Reungwetwattana T, Thakkinstant A. Systematic review of economic evaluation of adjuvant trastuzumab therapy for HER2-positive early-stage breast cancer. *Breast Cancer Research and Treatment*. [Submitted]

**1. Gurav YK, Bagepally BS,**

Thavorncharoensap M, Thakkinstian A.  
Cost-effectiveness analysis of hepatitis A  
vaccination in India. Health Technology  
Assessment International (HTAi) 2019  
Annual, Cologne, Germany. 14-19 June 2019.  
(Poster presentation)

**2. Due OT,** Thavorncharoensap M,  
Sobhonslidsuk A, Nguyen KP,  
Chaikledkaew U, Thakkinstian A.

Cost-utility analysis of direct-acting antivirals  
for treatment of Chronic Hepatitis C in  
Vietnam. The 8<sup>th</sup> HTAsiaLink Annual Conference.  
Seoul National University, Seoul, Korea,  
24 - 27 April, 2019. (Oral presentation)

**3. Genuino, A.J.,** Chaikledkaew U.,  
Guerrero, A.M., Thakkinstian, A.

Cost-utility analysis of adjuvant trastuzumab  
therapy for HER2-positive early-stage breast  
cancer in the Philippines. The 8<sup>th</sup> HTAsiaLink  
Annual Conference. Seoul National University,  
Seoul, Korea, 24 - 27 April, 2019. (Oral  
presentation)

**4. Mulyani UA,** Anothaisintawee T,  
Numthavaj P, Thakkinstian, A.  
Systematic Review and Network Meta-  
Analysis: Antibiotic Prophylaxis of  
Catheter-Associated Urinary Tract  
Infection in Elective Abdominal Surgery.  
Seoul National University, Seoul, Korea,  
24 - 27 April, 2019. (Poster presentation)

**5. Toi PL,** Anothaisintawee T,  
Chaikledkaew U, **Briones J,**  
Thakkinstian A.

The role of lifestyle modification in  
prevention for type-2 diabetes mellitus:  
an umbrella review. The 8<sup>th</sup> HTAsiaLink  
Annual Conference. Seoul National  
University, Seoul, Korea, 24 - 27 April,  
2019. (Oral presentation)

**6. Gurav YK, Bagepally BS,**  
Thavorncharoensap M,  
Thakkinstian A.

Economic evaluation of hepatitis A  
vaccines by the level of income country:  
A systematic review. The 8<sup>th</sup> HTAsiaLink  
Annual Conference. Seoul National  
University, Seoul, Korea, 24 - 27 April,  
2019. (Poster presentation)

**7. Bagepally BS, Gurav YK,**

Anothaisintawee T, Youngkong S,  
Chaikledkaew U, Thakkestian A.

Cost-effectiveness of sodium - glucose cotransporter 2 inhibitors in the treatment of metformin monotherapy failed type 2 diabetes patients: A systematic review and meta-analysis of cost utility analyses. The 8<sup>th</sup> HTAsiaLink Annual Conference. Seoul National University, Seoul, Korea, 24 - 27 April, 2019. (Oral presentation)

**8. Noparatayaporn P,**

Thavorncharoensap M,  
Chaikledkaew U.

Cost utility of HPV DNA testing and colposcopy with biopsy for cervical cancer diagnostic in women with ASC-US. The 8<sup>th</sup> HTAsiaLink Annual Conference. Seoul National University, Seoul, Korea, 24 - 27 April, 2019. (Oral presentation)

**9. Assanatham M,** Ingsathit A,

Thakkestian A, Chaikledkaew U.

Cost-utility analysis of different renal replacement therapy modalities for end stage renal disease patients in Thailand. The 8<sup>th</sup> HTAsiaLink Annual Conference. Seoul National University, Seoul, Korea, 24 - 27 April, 2019. (Poster presentation)

**10. Haider S,** Chaikledkaew U,

Thavorncharoensap M, Youngkong S,  
Islam A, Thakkestian A.

The cost-effectiveness analysis of rotavirus vaccine in low- and low-middle income countries: a systematic review and meta-analysis. 8 – 10 May, 2018, 7<sup>th</sup> HTAsiaLink Conference, Chiang Mai, Thailand. (Oral presentation)

**11. Karnjanapiboonwong A,**

Thavorncharoensap M, Chaikledkaew U,  
Ingsathit A, Thakkestian A.

Effectiveness of salt reduction intervention for large-scale population: Systematic reviews and meta-analysis. 8 – 11 May, 2018, 7<sup>th</sup> HTAsiaLink Conference, Chiang Mai, Thailand. (Oral presentation)

**12. Due OT,** Chaikledkaew U, **Genuino AJ,**

Sobhonslidsuk A, Thakkestian A.

Sustained Virological Response and Safety of Direct-Acting Antivirals for Hepatitis C Genotype 5 and 6: A Systematic Review And Meta-analysis. 8-11 May 2018, 7<sup>th</sup> HTAsiaLink Conference, Chiang Mai, Thailand. (Oral presentation)



### 1. Mr. Ong The Due

3<sup>rd</sup> prize for excellence in oral presentation on economic evaluation with entitled "Sustained virological response and safety of direct-acting antivirals for hepatitis C genotype 5 and 6: a systematic review and meta-analysis". The 7<sup>th</sup> HTAsialink Annual Conference, Chiang Mai, Thailand, 8-11 May 2018.

*The Faculty members and graduate students of the MUHTA Program during the awarding session of the HTAsialink 2018*



*Mr. Ong The Due received the 3<sup>rd</sup> prize for excellence in oral presentation award during the 7<sup>th</sup> HTAsialink conference, 2018*

## 2. Ms. Anne Julienne Marcelo Genuino

2<sup>nd</sup> prize for excellence in oral presentation on economic evaluation with entitled "Cost-utility analysis of adjuvant trastuzumab therapy for HER2-positive early stage breast cancer in the Philippines". The 8<sup>th</sup> HTAsiaLink Annual Conference, Seoul National University, Seoul, Korea, 24 - 27 April, 2019

*Mr. Anne Julienne Marcelo Genuino recieved the 2<sup>nd</sup> prize for excellence in oval presentation award during the 8<sup>th</sup> HTAsiaLink conference, 2019*



## 3. Dr. Montira Assanatham

1<sup>st</sup> prize for excellence in poster presentation On Economic Evaluation with entitled "Cost-utility analysis of different renal replacement therapy modalities for end stage renal disease patients in Thailand". The 8<sup>th</sup> HTAsiaLink Annual Conference, Seoul National University, Seoul, Korea, 24 - 27 April, 2019

*Dr.Montira Assanatham received the 1st prize for excellence in poster presentation award during the 8th HTAsiaLink conference, 2018*

## 4. Mr.Yogesh Krisnarao Gurav

Best student poster presentation award in poster with entitled, "Cost-effectiveness analysis of hepatitis A vaccination in India". Health Technology Assessment International(HTAi) 2019 Annual Meeting, Cologne, Germany, 14-19 June 2019.

*Mr.Yogesh Krisnarao Gurav recieved best student presentation award during HTAi 2019 Annual conference*



# 09 WHAT PEOPLE THINK ABOUT MUHTA ?

## 9.1 Voice from VISITING PROFESSORS

### **PROFESSOR OLIVIA WU, PHD**

*DIRECTOR,  
HEALTH ECONOMICS AND HEALTH TECHNOLOGY  
ASSESSMENT (HEHTA) UNIT,*

*UNIVERSITY OF GLASGOW, UK*

*"I would like to congratulate Assoc. Prof Chaikledkaew and her colleagues on delivering a very successful HTA Graduate Program. The MUHTA Program is well-structured, providing teachings on underlying principles and technical skills relevant to HTA.*

*During my visit in 2018, I had the opportunity to teach the students as a group and to discuss their research proposals on a one-to-one basis. Overall, I was impressed by the knowledge the students have already gained through the Program.*



*In particular, the quality of the research proposals were very good-all students presented clear justification of the research questions and proposed methodological approaches; this is a clear reflection on the quality of the teaching.*

*Currently, the MUHTA programme is on its third cohort, and is already proving to be a successful and important initiative for HTA capacity building in the region."*

### **ASSISTANT PROFESSOR WANRUDEE ISARANUWATCHAI, PHD**

*DIRECTOR,  
CENTER FOR EXCELLENCE IN ECONOMIC ANALYSIS RESEARCH  
(CLEAR), ST. MICHAEL'S HOSPITAL*

*UNIVERSITY OF TORONTO, CANADA*



*"I had the opportunity to join the MUHTA graduate program as a visiting professor in 2017. In my opinion, this program represents one of the most successful HTA graduate programs in the region.*

*It is building capacity on HTA skills and experiences which can assist decision- and policy-makers in their real-world current challenges (such as sustainability and universal health coverage).*

*The program offers a wide range of opportunities for learning using various formats (e.g., seminars, lectures, and group activities) from reputable faculty members. The students (from various background and specialty) were very engaged and brought to the discussion real-world scenarios of where HTA could contribute.*

*The program certainly equips graduates with skills and experiences to apply HTA in the real world. It has been a great experience being a part of the program, a part of this HTA community which the MUHTA graduate program has helped to create."*



Policy-makers from the home country institutions of selected students working in relevant government agencies were interviewed in relation to the impact of the MUHTA program on the HTA capacity building of their countries.

**ANNA MELISSA GUERRERO, MD, MPH (HTA)**

HEAD, HEALTH TECHNOLOGY ASSESSMENT UNIT  
DEPARTMENT OF HEALTH PHILIPPINES



*"This partnership to build country capacity on HTA is timely and important for the Philippines especially now that the government is aiming to provide Universal Health Coverage for all Filipinos.*

*Our country has been trying to build and sustain capacity on HTA since the 1990s to make sure the treatments and health interventions are cost-effective, equitable, affordable and sustainable for the health system.*

*We are thankful to the iDSI and Mahidol University for contributing to our agenda on Universal Health Coverage through the scholarships provided to our young researchers.*

*Their education will certainly have a huge impact on how future decisions on coverage are made by the government so that they rely on the best available evidence."*

**TRAN THI MAI OANH, MD, PHD**

DIRECTOR, HEALTH STRATEGY AND POLICY INSTITUTE  
MINISTRY OF HEALTH VIETNAM



*"Thank you Mahidol University and iDSI for supporting our HSPI staff to be trained in the area of health technology assessment. I expect to send our staff to study in this area because health technology assessment is one of the priority areas of research of HSPI in the coming years.*

*In the recent years, there is high demand of evidence for development of health service package for health insurance and reimbursement because I think it is not only for Viet Nam, but also in other countries, especially in the context of limited resources. We need to have the HTA evidence for setting priorities.*

*What is the impact of our students and our staff when they come back to Vietnam? I am sure that they can provide valuable contribution for the policy development in our country because at the moment, HSPI is one of the members of national health insurance council. Also, we are a member of the drug bidding committee.*

*I am sure that when they come back, they will conduct the HTA research to provide evidence to inform for health policy development. Thank you very much!"*

### 33 9.3 Voice from ACADEMIC INSTITUTIONS IN LMICS (HTA Training and Curriculum Development to the Academe)



**MONET M. LOQUIAS, MHPED, PHD**  
PROFESSOR AND DEAN COLLEGE OF PHARMACY,  
UNIVERSITY OF THE PHILIPPINES MANILA

*"The HTA Training Workshop held last February 19 to 21, 2018 by Mahidol University proved to be a very successful event. Our participants gave very positive feedback about the event. They said that it is very useful to them.*

*It gave them very good foundation about health technology assessment. I would like to specially mention that we received very good feedback from the faculty members that we invited to join in the said activity because health technology assessment is part of the pharmacy curriculum here in the Philippines.*

*This gave them the idea on how to teach health technology assessment to students very effectively. They even said that this event or this kind of activity should be continuously implemented. We have been receiving various requests for us to hold another training workshop. This training workshop also served as a start for a collaborative activity between the University of the Philippines and Mahidol University.*

*We, at the University of the Philippines College of Pharmacy, look forward to more collaborative activities with Mahidol University. Again, thank you!"*

### 9.4 Voice from ACADEMIC STAFFS FROM LMICS



**SEPTIARA PUTRI**  
CENTER FOR HEALTH ECONOMICS AND POLICY STUDIES (CHEPS)  
FACULTY OF PUBLIC HEALTH, UNIVERSITAS INDONESIA

*"First of all, I would like to thank to Mahidol University for the training opportunity. As junior staff and researcher in Universitas Indonesia, I was fortunately-received one-month HTA training in Mahidol University during November-December 2017.*

*I have learnt a lot about the curriculums, class management, as well as course materials. As leading university for HTA degree in Asia, Mahidol University delivered well-conducted class activity, specific courses sequence for HTA competency, and sufficient ratio between lecturer/supervisor. Personally, my favourite section was the discussion activities in the class, including guest lecturers and weekly report on research progress'.*

*All lecturers were very committed and consistently provided valuable input to students. We do not have HTA degree in UI, however, we have graduate program in public health with health economics major. The interests of HTA topics was increasing in the past few years, while the challenges of our faculty remain exist such as: integration between course and department as well as limited credits in our degree Program.*

*We have limited knowledge and experience to provide the structured course that can accommodate the demand of HTA topic. During the Program, Mahidol University indeed provided me substantial input for HTA curriculum in UI, the training has provided beneficial insight and capacity, and also generated potential input for further curriculum development.*

*Several substantial topics also have been considered in our sections in health economics and economic evaluation class."*



### **PHẠM NỮ HẠNH VÂN, MSC**

LECTURER

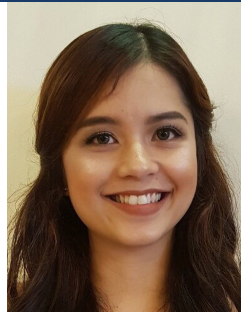
HANOI UNIVERSITY OF PHARMACY, VIETNAM

*"Hello, my name is Van. I am from Hanoi University of Pharmacy. I am very happy today to be interviewed, and talk about how Mahidol University supports us in HTA training and curriculums in Hanoi University of Pharmacy.*

*All the students and lecturers agreed that the result of the course helped them a lot to review the knowledge. Also, they increase the need to have more knowledge in the future of the HTA. They want to have more knowledge on the HTA training. Above all, I think all the activities from the support from Mahidol University helped a lot in both training and also in curriculum building.*

*We really hope that in the future we have more support from University of Pharmacy of Mahidol to give more courses in HTA for Hanoi University of Pharmacy. And also about the curriculum, we hope that in the future, we have more time and more chance to build, to have time and to have to face-to-face with Mahidol University to build new curriculum in HTA for Hanoi University of Pharmacy. We need a lot of support and advice from Mahidol. We really like and we really want to have more support from them in the future to help us build new curriculum. In conclusion, I am very happy as a lecturer in Hanoi University of Pharmacy to get support from University of Mahidol on HTA training and curriculum building. Thank you very much!"*

## **9.5 Voice from MUHTA STUDENTS AND ALUMNI**



### **ANNE JULIENNE M. GENUINO, RPH**

SENIOR HEALTH PROGRAM OFFICER, PHARMACEUTICAL DIVISION,  
DEPARTMENT OF HEALTH, PHILIPPINES  
MSC STUDENT

*"Hi, my name is Anne Julianne Genuino from the Philippines. I work for the Pharmaceutical Access and Management Office of the Department of Health Philippines. I belong to the 1<sup>st</sup> batch of Mahidol HTA program and I am now about to reach the end of my 2<sup>nd</sup> year as a master student. I believe that all the knowledge and skills I have learned and acquired in this multidisciplinary program will definitely have a huge impact in the HTA capacity building of my country.*

*From all the coursework lectures and discussions, research presentations, skills I have learned from hands on experience on conducting research thru coursework requirements and thesis, real world learning from the recent trip to Taiwan – all of these different learning methods provided by the program will definitely equip me as I return back home as I assume my new post to as a researcher in the new HTA Office of the DOH PHL that will be created upon the signing of our UHC Bill within the year. I am looking forward to lead the evidence generation unit of this new HTA office and be able to share my knowledge and skills to my colleagues.*

*Through this program I was able to build good international links through my classmates which gave me an opportunity to build a network for future research collaboration. So with that, thank you iDSI and Mahidol University for this scholarship support. I commit to pay it forward by contributing to the achievement of UHC through HTA."*





### **ONG THE DUE, MD**

HEALTH STRATEGY AND POLICY INSTITUTE, MINISTRY OF HEALTH VIETNAM, VIETNAM  
PHD STUDENT

*"I am currently a PhD student of HTA international program, Mahidol University. In my country - Vietnam, I work as a researcher of the Health Strategy and Policy Institute (HSPI), Vietnam's Ministry of Health. HSPI has been conducting HTA researches in Vietnam since 2014, when HTA was officially introduced to Vietnam's Ministry of Health. Being part of the HSPI, I have been assigned by the Health Minister as the focal point of doing and coordinating HTA researches in Vietnam. So far, our group has conducted several HTA researches and coordinated with organizations in Vietnam, including leading universities (Hanoi Medical University, Hanoi University of Pharmacy, Hanoi University of Public Health, Ho Chi Minh City Medicine and Pharmacy University), professional associations (Vietnam Health Economics Association), hospitals, and Departments/ Administrations in Vietnam's Ministry of Health. We have also been receiving and helpful technical supports from international organizations such as NICE (UK) or HITAP (Thailand).*

*I have been involved in doing HTA researches since its beginning. According to the capacity building strategy of HSPI, I have been assigned to specialize in HTA researches. As I finish my PhD program and return to Vietnam, I will be responsible for running a new department in HSPI, named "Department of Pharmacy and Medical Devices Policy", which would mainly focus on HTA researches. This department will be the first unit in the Vietnam's Ministry of Health that has full-time HTA researchers, who specialize in HTA researches, and has legal function in providing HTA evidence for policy-making. Currently, I have come back to Vietnam to collect primary data for my PhD thesis. During my time in Vietnam, thanks to the knowledge and practical experience gained from HTA program in Mahidol University, I have made several initial contributions for HTA development in the country.*

*First, my PhD thesis proposal, which aims to assess the cost-effectiveness of direct-acting antivirals (DAAs) in treatment of Hepatitis C patients in Vietnam, has been consulted and received positive supports from various stakeholders, including policymakers, academia, and clinician. All stakeholders agreed that results of my thesis will provide helpful evidence for policymaking in Vietnam. In particular, DAAs have been proposed by many provincial departments of health and hospitals for inclusion in the revised health insurance drug list. However, according to the Decision 2701/QĐ-BYT issued in 22 June 2017 by the Health Minister, to be considered for inclusion in the drug list, the proposed new drugs are required to have the evidence of their cost-effectiveness and impact on budget. Therefore, to respond to policy and treatment demand, my study will be conducted to generate such evidence, thereby providing scientific information to help policy-makers to make decision whether to include these new regimens in the revised health insurance drug list. Second, as assigned by the Vice Minister of Health, the HSPI is developing the HTA methodological guideline for Vietnam. I have been assigned to write a chapter in the guideline, and to conduct peer-review several chapters written by the others. Currently, the first draft of the guideline has been completed, and we are in the peer-reviewing stage. The guideline is expected to be accomplished at the end of 2018, and will be issued by the Vietnam's Ministry of Health in the form of a legal document. Third, I was assigned by the HSPI's Director to develop the statute and development plan of the "Department of Pharmacy and Medical Devices Policy", which is expected to be operated when I finish the PhD program and come back Vietnam. The first draft of the statute has been completed and submitted to the Director for further review. All in all, HTA has been increasingly received attention from various stakeholders in Vietnam and gradually played an important role in policy making. HTA capacity-building is very crucial for Vietnam at this beginning stage, and Mahidol University has been providing invaluable opportunities, knowledge, and experience, in both long-term and shortterm training, to help them to fulfill this need."*



**MOHAMMAD SABBIR HAIDER, MD, MBBS, MPH(EPID), MPS, MHE, DHE**  
 DEPUTY DIRECTOR,  
 HEALTH ECONOMICS UNIT, MINISTRY OF HEALTH AND FAMILY WELFARE, BANGLADESH  
 PHD STUDENT

*"My name is Mohammad Sabbir Haider. I am part of the first batch of students of Health Technology Assessment course in Mahidol University. I am taking the PhD program. I am from Bangladesh, where I worked in the government services in Ministry of health and family welfare. Bangladesh is a lower middle-income country where the resource is limited.*

*We live more than 160 million people in the country in a small piece of land. Despite many limitations, economy of our country is improving. HTA is a multi-disciplinary course and I gain a lot of knowledge from this course. This knowledge will bring benefits to public and society.*

*After completion my course, I will return to my government service in Bangladesh, where I will apply the knowledge what I gain from the course. I will also work to establish Health Technology Assessment unit in the country.*

*The knowledge will be applied on selecting appropriate topics, raising awareness, ensure evidence based medicine, proper resource allocation in a fair and equitably, in scientific way. I will disseminate my knowledge to the researchers, clinicians, academicians, policy makers.*

*Will also train to new researchers the knowledge I gain, so that they can apply in their field. Will also feed policy makers with evidence-based information, which will aid decision makers to take proper decision on prioritize areas or interventions.*

*I will utilize my knowledge on the way to take better decisions, which will improve care, improve the health of the country, benefiting both the society and improve the economy. This will help to achieve the sustainable development goals and to achieve the goal of universal health coverage in Bangladesh."*



**BHAVANI BAGEPALLY, MBBS, PHD**  
 ICMR-NATIONAL INSTITUTE OF EPIDEMIOLOGY, INDIA  
 MSC STUDENT

*"Currently two of scientists from Indian council of Medical Research (ICMR) are getting trained in various Health Technology Assessment topics under MUHTA master's program. They are working on research topics such as Economic modelling in Hepatitis A infection in India and systematic review and meta-analysis of economic studies on pharmacotherapy of Type 2 diabetes with sodium glucose co-transport inhibitors & Glucagon like peptide inhibitors for their Master Thesis.*

*This program gives an opportunity to interact and learn the HTA methods and experiences of experts from Thailand as well as from other part of the country through lectures, seminars, workshops and attending the study tours as well as in International conferences during the MU-HTA program.*

*In future MU-HTA program creates a strong bonding between the budding HTA researchers/trainees from lower economic countries for collaboration and future opportunity for sharing of HTA information across these countries as well as with the HTA experts from Thailand.*

*These collaborations will also build opportunities for collaborative HTA research as well as future HTA training with man-power development with a positive impact on HTA implementation process in India."*







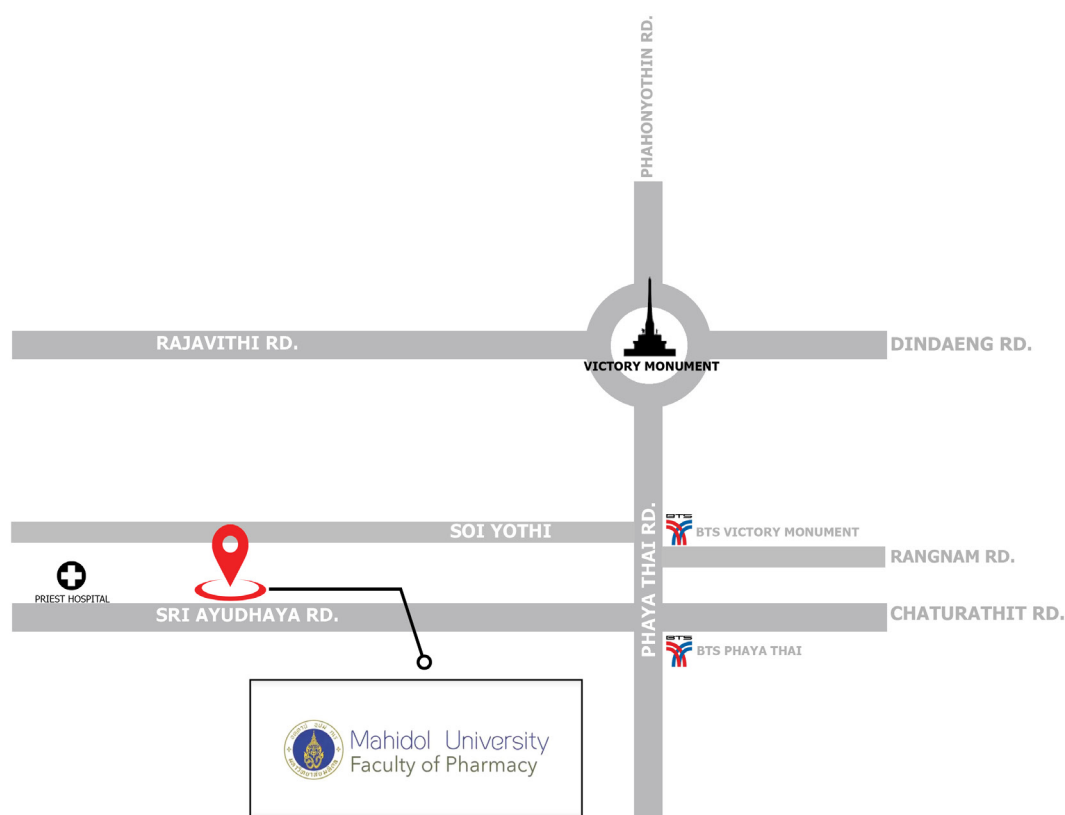




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# MUHTA

*Mahidol University Health Technology Assessment*

Mahidol University, Health Technology Assessment (MUHTA) Graduate Program: Bring together worldwide potential HTA practitioners into inspiring learning and research environment with the world-class multidisciplinary experts.

**WE ARE READY FOR THE NEXT CHAPTER!**