



ANNUAL REPORT 2017

MALAYSIA ONE HEALTH UNIVERSITY NETWORK

MyOHUN

Foreword from Chairman

It is my great pleasure to present you with the Malaysia One Health University Network (MyOHUN)'s 2017 Annual Report. It has been a productive year with many accomplishments and some new opportunities. I would like to take this opportunity to congratulate MyOHUN members for the endless dedication, hard work and teamwork.

2017 witnessed that MyOHUN had successfully organized 36 main activities and many other sub-activities under MyOHUN funds that met our 5 strategic objectives and outcomes. I take great pride in the work that MyOHUN does through these activities in meeting our vision as a network of social and intellectual excellence on One Health against infectious and zoonotic diseases of national and global concern. It is our mission to link and enable universities, government and relevant agencies to generate social and intellectual capital on One Health.

We have also successfully published our Strategic Plan 2016-2020, a Problem-based Learning Approach to One Health Cases, One Health Manual on Handling Zoonotic Disease Outbreaks in Malaysia and Manual for Laboratory Diagnosis of Leptospirosis: One Health Approach, in 2017. These manuals were written and prepared by experts from universities, governments and related agencies through a multi-disciplinary collaborative approach. It is hoped that more manuals will be published in the near future, a common manual to all agencies in managing and responding to the global health threats posed by infectious and zoonotic diseases.

2017 also witnessed an impactful finding from our research team, a pilot One Health research which can be useful for future government decision-making. MyOHUN members are also actively involved in the National Antimicrobial Resistance (AMR) Committee established recently in Malaysia. The establishment of One Health Student Clubs in 7 universities further strengthen our future One Health Workforce education and training. In ensuring efficient and sustainable network, the good management practice of the network is witnessed through the Quality Management System (QMS) ISO MS9001:2008 certification which will be upgraded to ISO MS9001:2015 that focuses on the strategic plan, risk management, and client satisfaction. The new QMS certification ensures the success and sustainability of our network.

Indeed, it has been a great privilege for me to work with the dedicated staff of MyOHUN and all of our network members and partners. I strongly believe that a greater success and impact will be made in the future. I am convinced that I can count on your support and co-operation. I look forward to continue serving the network in my capacity as Chairman of MyOHUN.



Professor Dr. Mohd Hair Bejo

Chairman
Malaysia One Health University Network (MyOHUN)

Dean
Faculty of Veterinary Medicine
Universiti Putra Malaysia

Message from Coordinator

We are young! Barely touching 5 years-old and yet we have done so much to create awareness and expanded the knowledge of One Health. In 4 years we have executed a solid 98 training activities and have improved the pool of One Health Workforce to about 1200 among ministerial officers, academicians, and students from multiple disciplines and fields.

So great job everyone and salutes to all our members who worked so hard to achieve this milestone.

Are we making a difference? We certainly hope we are. Enriching training and learning experiences for workers and students are never wasteful. Making an actual impact on the society is an added deeply-satisfying bonus. As the world gets smaller, human and animal transit becomes faster which made the, as a conflict between humans and animals accelerates., as As humans encroach further and further into wildlife habitats,, as the climatic behaviour becomes more erratic, and as industrial agriculture becomes the norm, the world will continue to face infections previously unknown.. Closer to home we came face to face with rabies after decades of freedom. This was some 30 years after the discovery of Nipah disease right here in our homeland. There is no knowing when the next epidemic or pandemic will be. Just know that it will come and that we need to be better prepared the next time it happens. When it does, it is not the job of one ministry or agency to manage it and minimize

the crisis. It is the job of everyone. One Health is not the panacea for all ailments but just an approach to managing complex problems. Whether or not One Health works depends on the real players; the people and their ability to put aside differences, red tape, and bureaucratic procedures or protocols, the real reason for it is that actions can be implemented timely and fluently.

This network aims to strengthen the One Health concept through education, training, cross-sectoral skills and knowledge through the collaborative efforts of multidisciplinary people working together to respond to new and emerging diseases. We have achieved so much in terms of promoting One Health through our publications, activities, training, seminar and also workshops. We will strive to do better and serve the workforce community with more mature training programs to increase our capacity to detect, respond and control emerging diseases. We do hope that through One Health we can spread its benefit to everyone

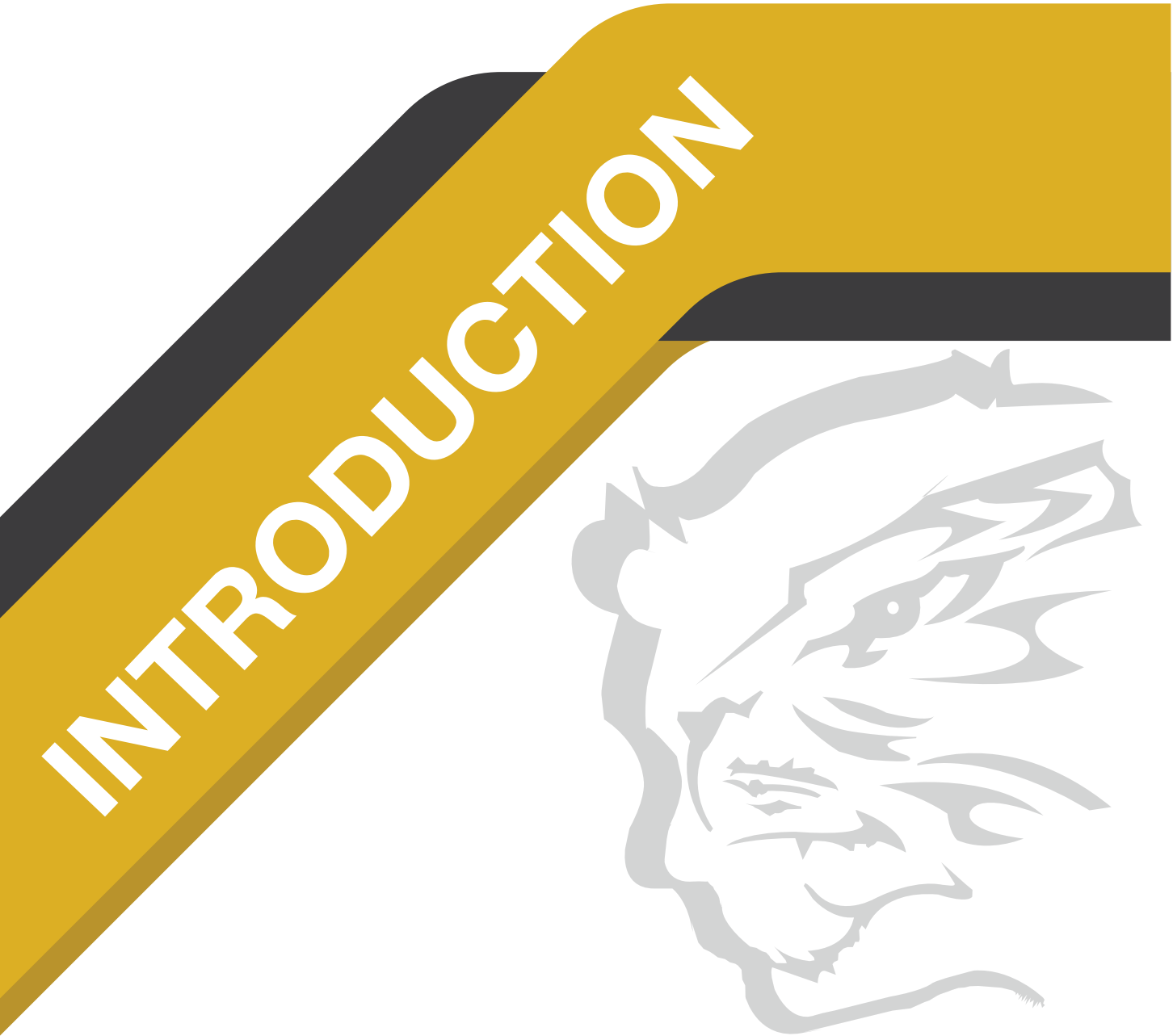


**Professor
Dr. Latiffah Hassan**

Coordinator
Malaysia One Health University Network (MyOHUN)

Table of Contents

About MyOHUN	1
About OHW and USAID	1
MyOHUN Structure	2
Executive Board	3
NCO's Structure	4
Numbers in 2017	5
Strategic Objectives	5
Activities	
MyOHUN Executive Board Meeting	6
One Health Antimicrobial Resistance Surveillance Seminar and Workshop	7
One Health Problem Based Case Development Workshop	8
MyOHUN National One Health Workforce Strategic Planning Meeting	9
Training on the Prevention of Wildlife Zoonoses and Tropical Ecosystem Health	10
Table Top Exercise on Zoonotic Disease: Application of the One Health Approach	11
One Health Young Leaders and Communicators	12
One Health Core Competence-centric Teaching	13
Regional Training of Trainers (ToT): One Health Problem Based Book	14
Management of Zoonotic Diseases: Application of the One Health Approach	15
One Health Field Epidemiology Training	16
Field Simulation on Handling Disease Outbreak	17
IN-SITU One Health Problem-Based Learning	18
MyOHUN Annual Meeting	19
MyOHUN Management Review Meeting	20



INTRODUCTION



About MyOHUN

Malaysia One Health University Network (MyOHUN) was built to promote the philosophy and spirit of One Health in working together to respond to new and emerging diseases. It was initiated in 2012

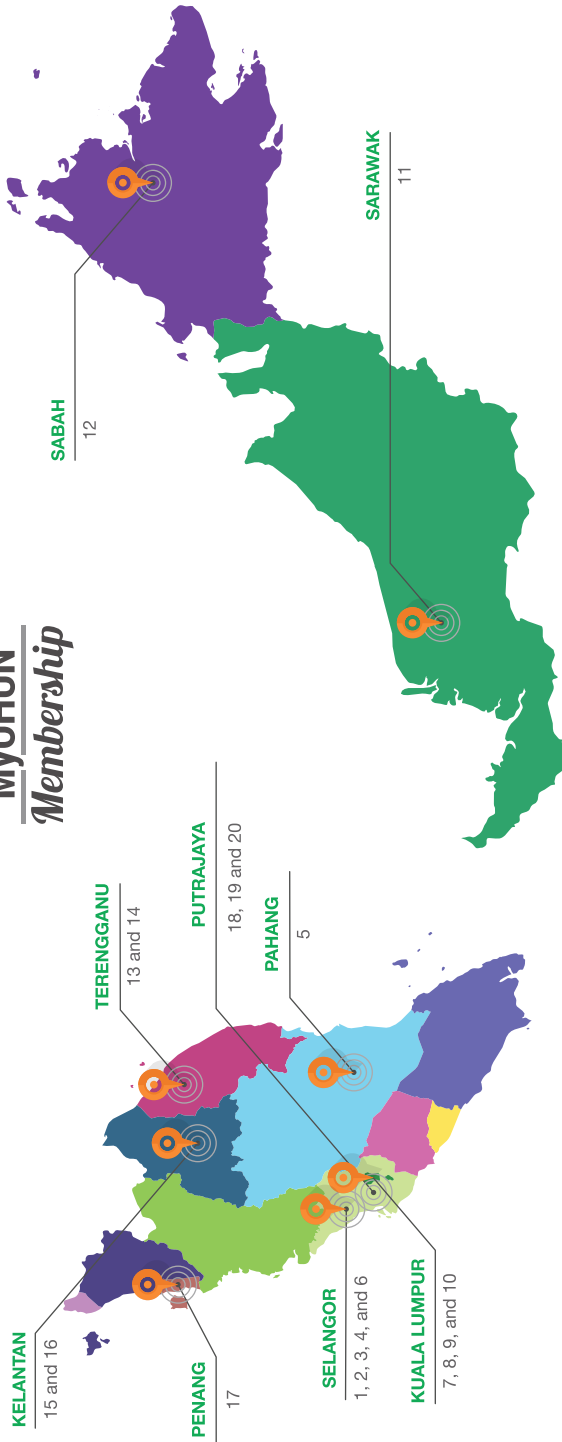
as part of the Southeast Asia One Health University Network (SEAHOHUN). MyOHUN at present comprises of 17 universities and 3 ministries under it wings.

About OHW

The One Health Workforce (OHW) project is developing a health workforce that is prepared to detect, respond and prevent to the threat of infectious diseases around the world. The project is part of the United States Agency for International Development (USAID) Emerging Pandemic Threat 2 (EPT2) program, which focuses on cross-sectoral disease surveillance, training, and outbreak response. Teams at

the University of Minnesota and Tufts University provide support for the Southeast Asia One Health University Network which also directly supports Malaysia One Health University Network. OHW is able to leverage these established university networks to create a sustainable transformation in the country's health workforces.

MyOHUN Membership

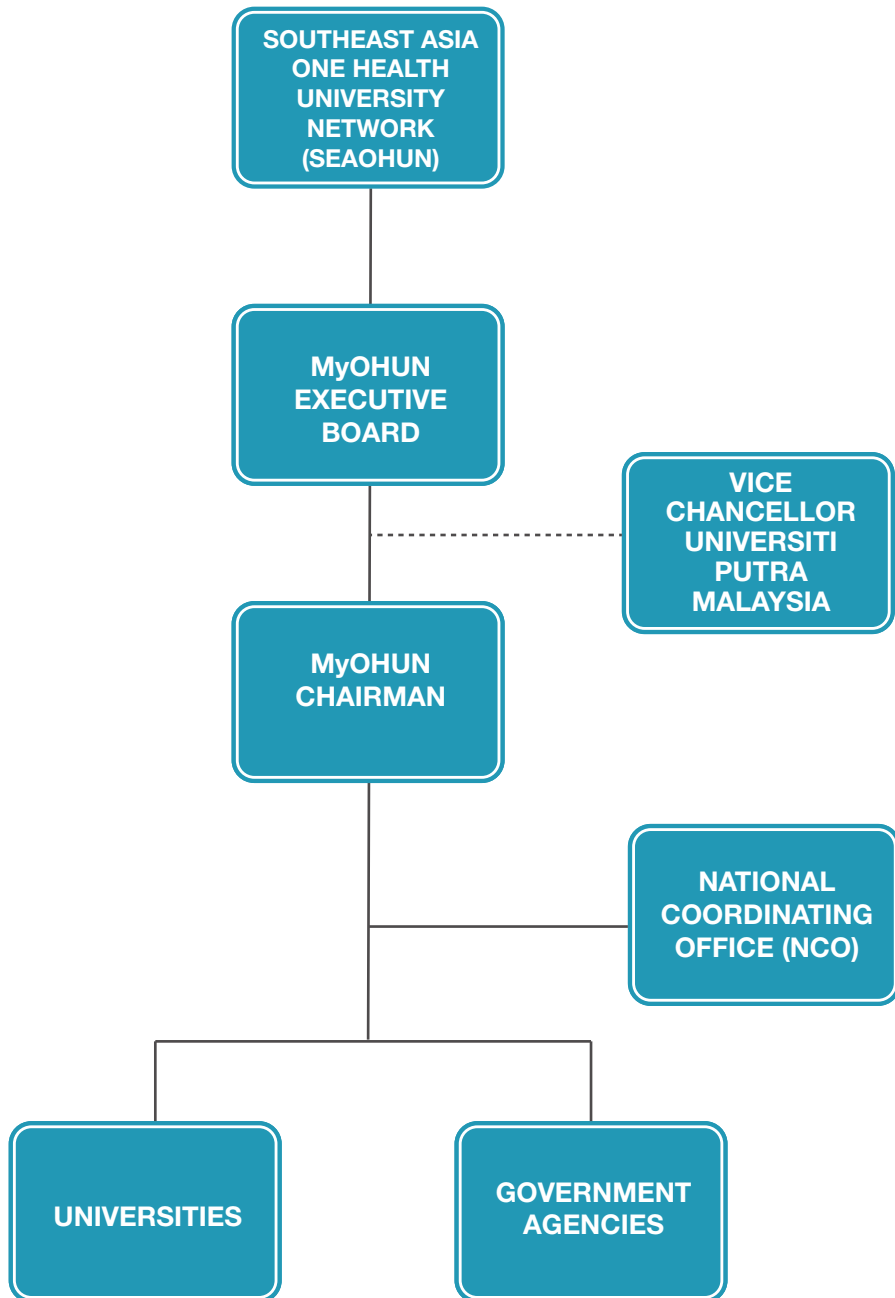


1	UNIVERSITI PUTRA MALAYSIA • Faculty of Veterinary Medicine • Faculty of Medicine and Health Sciences • Faculty of Environmental Studies	7	UNIVERSITI SAINS ISLAM MALAYSIA • Faculty of Medicine and Health Sciences	13	UNIVERSITI MALAYSIA TERENGGANU • School of Fundamental Sciences
2	UNIVERSITI KEBANGSAAN MALAYSIA • Faculty of Health Sciences • Faculty of Social Science and Humanities	8	UNIVERSITI TUNKU ABDUL RAHMAN • Faculty of Medicine & Health Sciences	14	UNIVERSITI SULTAN ZAINAL ABIDIN • Faculty of Medicine and Health Sciences
3	CYBERJAYA UNIVERSITY COLLEGE OF MEDICAL SCIENCE • Faculty of Medicine	9	UNIVERSITI MALAYA • Faculty of Medicine	15	UNIVERSITI SAINS MALAYSIA • School of Medical Science • School of Health Sciences
4	UNIVERSITI TEKNOLOGI MARA • Faculty of Medicine	10	INTERNATIONAL MEDICAL UNIVERSITY • School of Medicine	16	UNIVERSITI MALAYSIA KELANTAN • Faculty of Veterinary Medicine
5	INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA • Faculty of Medicine	11	UNIVERSITI MALAYSIA SARAWAK • Faculty of Medicine and Health Sciences	17	PENANG MEDICAL COLLEGE • Faculty of Medicine
6	MANAGEMENT SCIENCE UNIVERSITY • Faculty of Health and Life Sciences	12	UNIVERSITI MALAYSIA SABAH • School of Medicine		

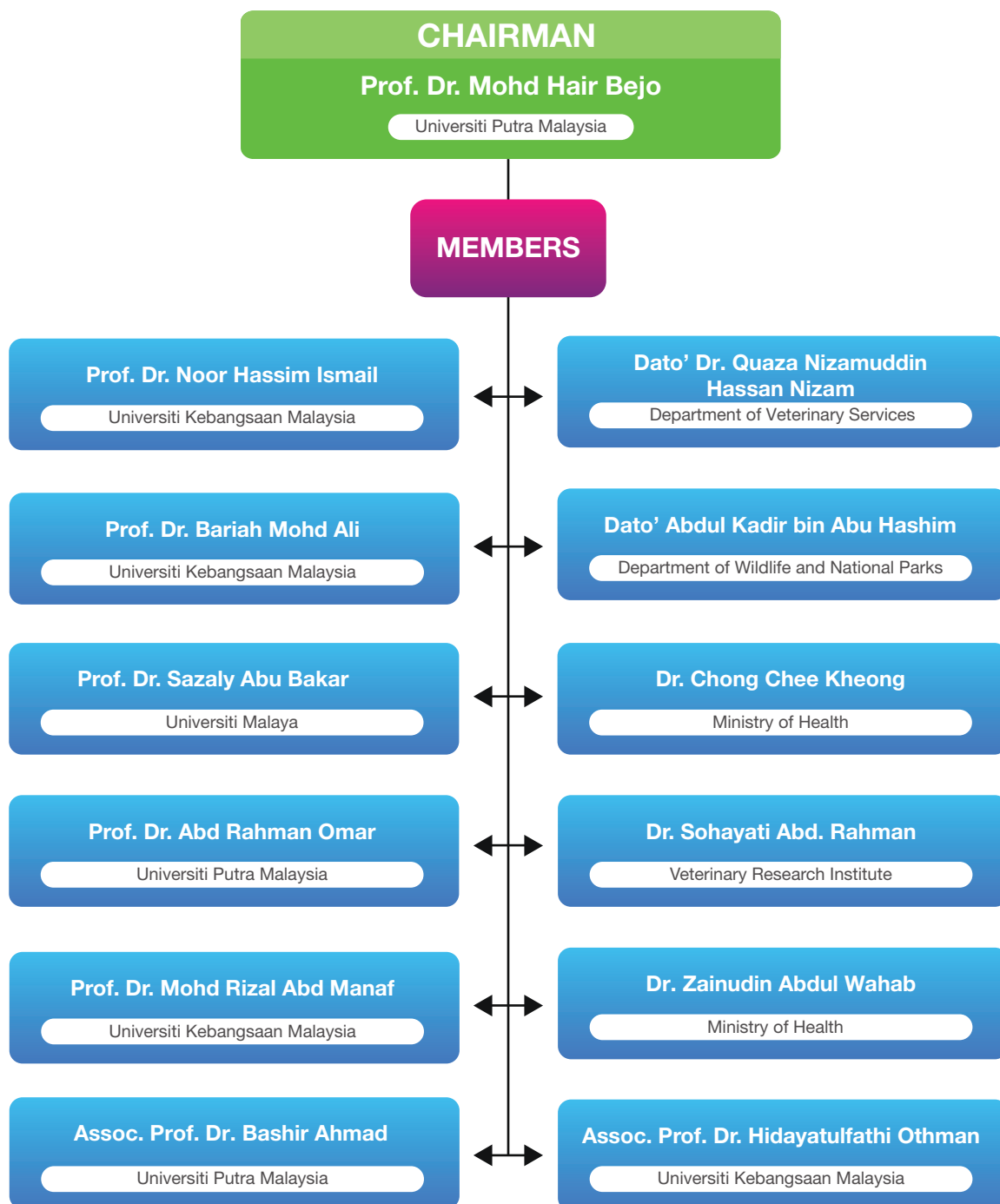
MYOHUN AFFILIATED GOVERNMENT MINISTRIES AND ORGANIZATIONS

18	MINISTRY OF HEALTH • Institute of Medical Research • National Public Health Laboratory
19	MINISTRY OF AGRICULTURE AND AGRO-BASED INDUSTRY MALAYSIA • Department of Veterinary Services • Veterinary Research Institute
20	MINISTRY OF NATIONAL RESOURCES AND ENVIRONMENT • Department of Wildlife and National Park

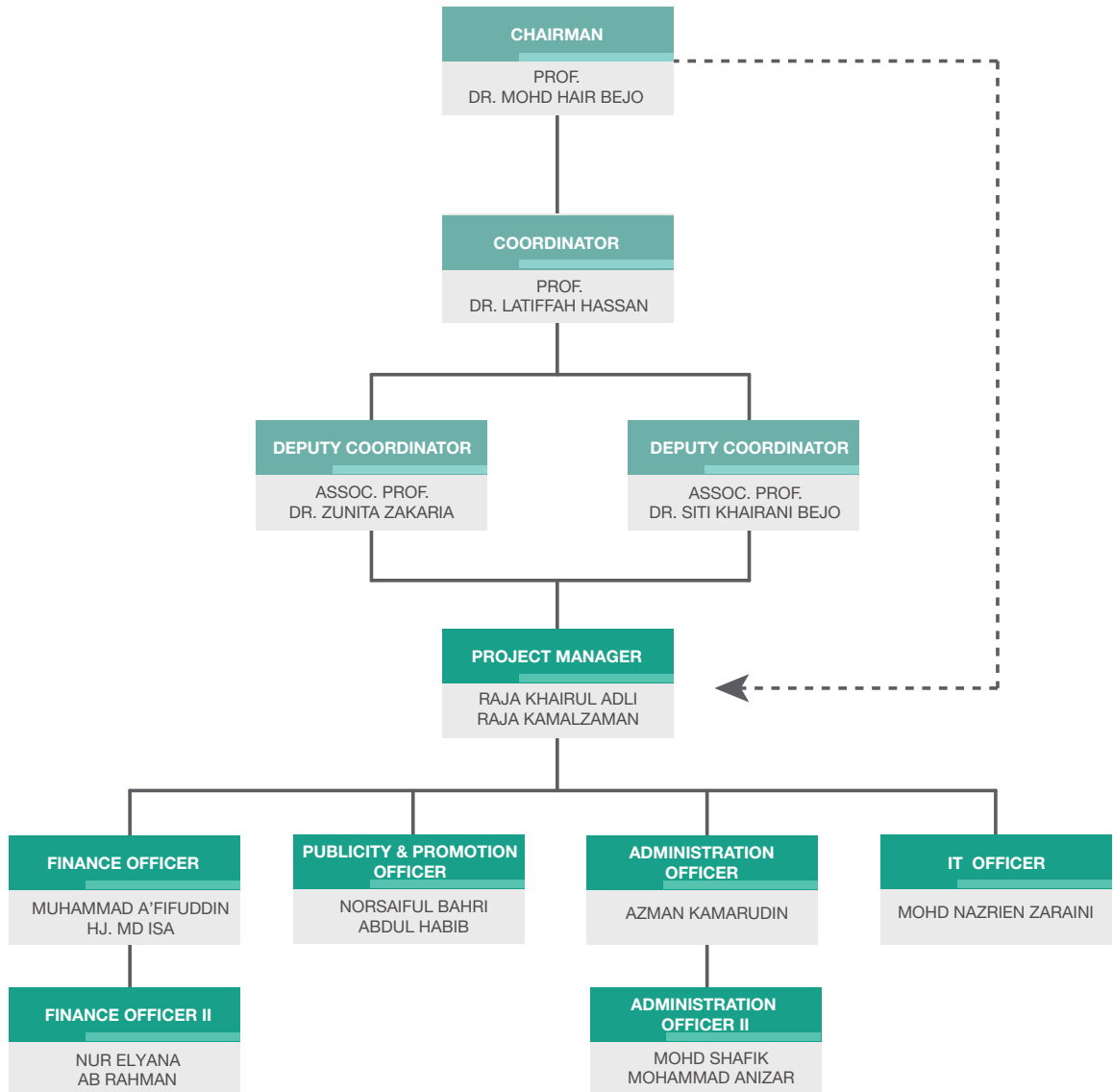
MyOHUN STRUCTURE



MyOHUN EXECUTIVE BOARD MEMBERS



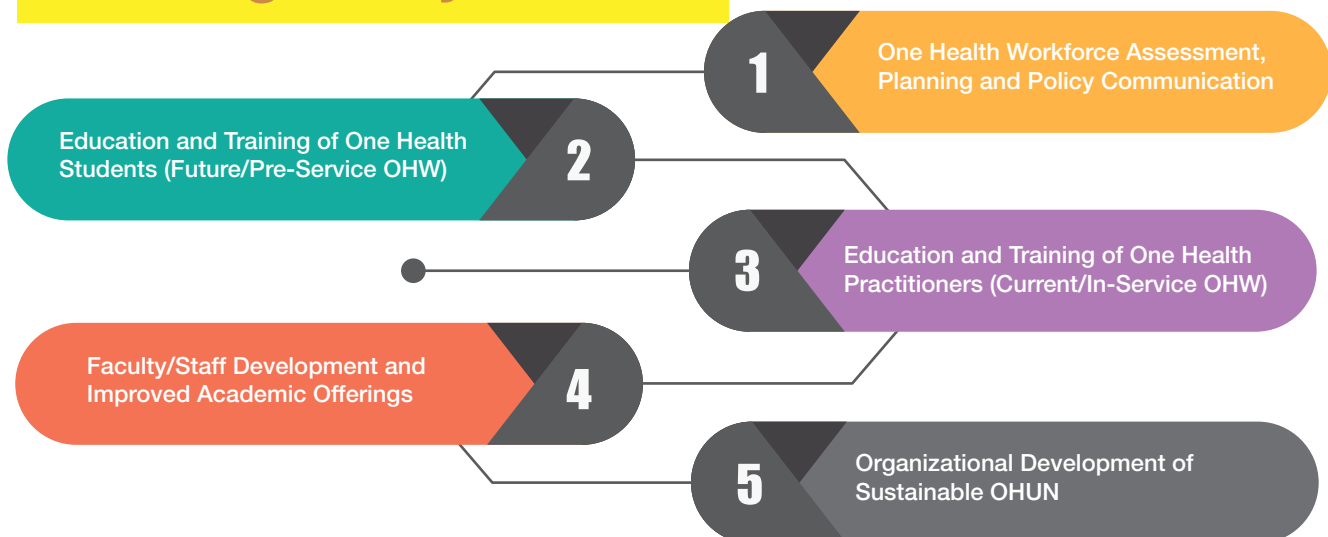
MyOHUN NATIONAL COORDINATING OFFICE



Numbers in 2017



Strategic Objectives



Education and Training of One Health Students (Future/Pre-Service OHW)

2

1

One Health Workforce Assessment, Planning and Policy Communication

3

Education and Training of One Health Practitioners (Current/In-Service OHW)

4

Faculty/Staff Development and Improved Academic Offerings

5

Organizational Development of Sustainable OHUN



CERTIFIED TO ISO 9001:2008
CERT. NO. : AR 6478

Quality Policy

“National Coordinating Office (NCO) – MyOHUN is committed to achieve excellence in providing its services in One Health activities through a quality management system that is constantly improved upon to satisfy the needs of our customers in accordance with MS ISO 9001:2015”



ACTIVITIES





MyOHUN Executive Board Meeting

MyOHUN Executive Board Meeting I and II was held on 25th January 2017 and 13th September 2017. The meetings were held to approve and endorse the activities for Year 3 on One Health Workforce Project and discussed MyOHUN future direction after Year 5 of One Health Workforce (OHW) project ended



One Health

Antimicrobial Resistance Surveillance Seminar and Workshop

The One Health Antimicrobial Resistance Surveillance Seminar and Workshop was held from 6th to 9th March 2017 in Pullman Putrajaya Lakeside led by the project leader, Dr. Suraya Amir Husin from the Ministry of Health. A total of 151 participants from 7 government departments, 9 private agencies, 11 hospitals and 4 universities attended the seminar and participated in the workshop. The invited speakers/facilitators for both seminar and workshop were Dr. Amanda Beaudoin and Dr. Julio Alvarez from the University of Minnesota, United States. The workshop aimed to establish a Malaysian Antimicrobial Resistance Surveillance System (MARSS) and develop the Manual on Integrated AMR Surveillance for interagency application and use.





One Health

Problem-Based Case Development Workshop

Assoc. Prof. Dr. Jalila Abu from Universiti Putra Malaysia (UPM) led the One Health Problem-Based Case Development Workshop in Ramada Plaza Melaka from 14th to 17th April 2017. Thirty-five participants from one government department, and 11 universities attended the activity. Prof. Dr. Janetrix Hellen Amuguni from Tufts University, and Prof. Dr.

Gregory C. Sales from the University of Minnesota, United States, were the invited trainers for the activity along with six local facilitators from UPM and UNIMAS. The activity developed scenarios and cases based on zoonotic diseases of Southeast Asia to be published as the second One Health Problem-Based Learning book



MyOHUN

National One Health Workforce Strategic Planning Meeting

MyOHUN National One Health Workforce Strategic Planning Meeting was held from 11th to 14th May 2017 in Ramada Plaza, Melaka chaired by MyOHUN Chairman, Prof. Dr. Mohd Hair Bejo. This meeting was held to pre-plan the activities to be executed in Year-4 One Health Workforce project. MyOHUN members were divided into several groups to brainstorm activities and its programme. The groups then presented their plan and submitted pre-planning activity form to the NCO for refinement and follow up.



Training

on the Prevention of Wildlife Zoonoses and Tropical Ecosystem Health

Training on the Prevention of Wildlife Zoonoses and Tropical Ecosystem Health was held in Sepilok Orang Hutan Rehabilitation Centre (SORC) Sandakan, Sabah from 17th to 21st May 2017. Dr. Tengku Rinalfi Putra Tengku Azizan from Universiti Putra Malaysia (UPM) and team of facilitators from multiple MyOHUN universities. The activity trained 40 students from UPM, UKM, UNIMAS, UMS, and UM. The invited trainers from Tufts University Dr. Stanley Gordon Fenwick and Dr. Chris Whittier help facilitated the activities along with 8 MyOHUN facilitators from UPM, UKM, UNIMAS, Perhilitan, and SORC. The activity aims to train future OHW in preparing to face diseases that can be transmitted from wildlife to human and vice versa and the importance of ecosystem health in ensuring human and animal health.



Table Top Exercise

on Zoonotic Disease: Application of the One Health Approach

From 17th to 19th July 2017, Assoc. Prof. Dr. Rozita Hod from Universiti Kebangsaan Malaysia (UKM) led the Table Top Exercise on Zoonotic Disease: Application of the One Health Approach in Kolej Tun Syed Nasir, UKM. Sixty-six postgraduate students from medical and veterinary backgrounds went through in-class simulation exercise as part of the training to ensure quick and rapid detection and response of zoonotic disease outbreaks such as avian influenza





One Health Young Leaders & Communicators

One Health Young Leaders and Communicators was held in the Nilai Spring Resort Hotel in Nilai, Negeri Sembilan from 17th to 20th July 2017. Assoc. Prof. Dr. Aziah Daud from Universiti Sains Malaysia (USM) as the project leader and her team of local and international facilitator (Prof Stan Fenwick of Tufts University) trained 46 students from UPM, UKM, UM, UiTM, USM, USIM, IIUM, CUCMS, and UTAR. The activity aimed too polish and refine the leadership and communication skills among the participants. These two skills have been identified as among the top one health competencies necessary to ensure good collaboration and partnership for one health efforts in managing infectious diseases.

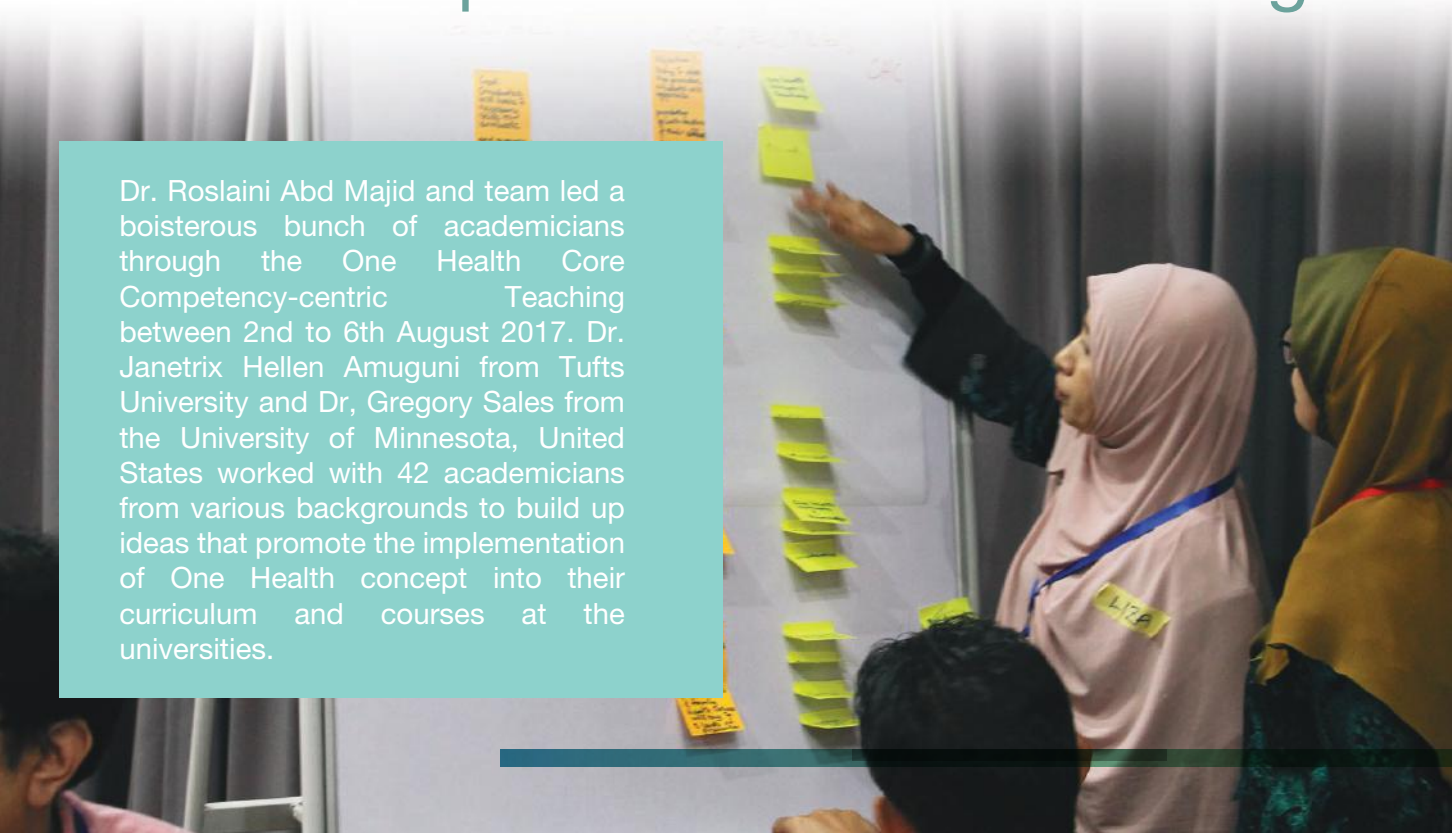




One Health

Core Competence-centric Teaching

Dr. Roslaini Abd Majid and team led a boisterous bunch of academicians through the One Health Core Competency-centric Teaching between 2nd to 6th August 2017. Dr. Janetrix Hellen Amuguni from Tufts University and Dr. Gregory Sales from the University of Minnesota, United States worked with 42 academicians from various backgrounds to build up ideas that promote the implementation of One Health concept into their curriculum and courses at the universities.



Regional Training of Trainers (ToT): One Health Problem Based Book

From the 9th to 12th August 2017, Prof. Dr. Siti Suri Arshad and Assoc Prof Dr Jalila Abu from Universiti Putra Malaysia (UPM) led the Regional Training of Trainers (ToT): One Health Problem Based Book in Kota Kinabalu, Sabah. The activity was attended by 25 academicians and ministerial officers from Malaysia and other countries under SEAHOHUN; Indonesia, Thailand, and

Vietnam. Prof. Dr. Janetrix Hellen Amuguni from Tufts University and Prof. Dr Gregory Sales from the University of Minnesota, United States facilitate the training session. PBL is an innovative teaching and learning method used to ensure active student learning and this training introduced the MyOHUN One Health PBL cases developed in the first year of the OHW Project.





Management

of Zoonotic Diseases: Application of the One Health Approach



Management of Zoonotic Diseases: Application of the One Health Approach was held in Hilton Kuching, Sarawak from 21st to 22nd August 2017. The activity was led by Assoc. Prof. Dr. Rozita Hod from Universiti Kebangsaan Malaysia (UKM) and was a continuation of Table Top Exercise on Zoonotic Disease: Application of the One Health Approach that was held in July. In total, 54 postgraduate students from various fields and universities attended the activity. A site visit to Centre for Malaria Research in UNIMAS was scheduled as part of the program. The activity aims to train future One Health workforce in handling disease outbreak using tabletop simulation.

Epidemiology is a major technical One Health competency in managing emerging infections. The One Health Field Epidemiology Training was led by Assoc. Prof. Dr. Razitasham from Universiti Malaysia Sarawak (UNIMAS) with the aim of providing field epidemiology basics in One Health zoonotic disease outbreaks. Sixty officers from the Ministry of Health, Department of

Veterinary Services and universities participated along with trainer from Tufts University, Prof. Dr. Stanley Fenwick. This activity was developed and shaped in collaboration with the Epidemic Intelligence Programme under the Ministry of Health. However, part of the program cannot be executed due to the ongoing rabies outbreak in Sarawak at the time.

One Health

Field Epidemiology Training



Field Simulation on Handling Disease Outbreak

Field Simulation on Handling Rabies Outbreak was held from 5th to 6th September 2017 in Wilayah Persekutuan Labuan as a collaboration between UNIMAS and Health Department of Federal Territory Labuan. Sixty-four ministerial officers from health and veterinary backgrounds, academicians, doctors and nurses took part

in this activity. The activity was timely in the face of rabies at the neighbouring state of Sarawak. The training aims to improve skills among the workforce in managing an emerging diseases and to formulate a preparedness plan based on the One Health concept.



IN-SITU

One Health Problem-Based Learning

Two sessions of IN-SITU One Health Problem-Based Learning was held from 15th to 17th September and 22nd to 24th September 2017 at the Centre of Livestock Farming Lenggong, Perak led by Assoc. Prof. Dr. Mohd Hezmee Mohd Nor and team from Universiti Putra Malaysia (UPM) and facilitated by Prof.

Dr. Stanley Fenwick from Tufts University, United States. A total of 147 students had a lot of learning fun participating in this activity. The activity exposed the students to the application of the theories learned in class at the pre-clinical level to the problem investigation using One Health concept.





MyOHUN Annual Meeting

MyOHUN Annual Meeting was held from 26th to 27th September 2017 in Shangri-La Golden Sands, Penang chaired by MyOHUN Chairman, Prof. Dr. Mohd Hair Bejo. Project Leaders, Lead Researchers, and Advisors of university student clubs presented the activities that they have conducted through year 3. The second half of the meeting was used to create detailed programme for Year 4 planned activities of the One Health Workforce project.



One Health Student Club Activity Grant

Seven universities have established the OH Student Clubs. Below are the universities and advisors.

No	University	Advisor	Title of the Activity
1	Universiti Putra Malaysia	Prof. Dr. Latiffah Hassan	One Health Ambassadors Phase 1: The Change, and Phase 2: The Movement
2	Universiti Kebangsaan Malaysia	Prof. Dr. Mohd Rizal Abdul Manaf	Have Fun, Get Dirty with Germies and Beasts
3	Universiti Malaysia Sarawak	Assoc. Prof. Dr. Ashley Soosay	UNIMAS One Health Student Club MyOHUN Explorace 2017
4	Universiti Sains Malaysia	Assoc. Prof. Dr. Aziah Daud	Getting to Know H5N1
5	Universiti Islam Antarabangsa	Assoc. Prof. Dr. Ridhwan Abdul Wahab	One Environment, One Health, One Mission – In-Situ PBL
6	Universiti Malaysia Kelantan	Dr. Sandie Choong Siew Shean	Raising One Health Awareness in Avian Influenza (H5N1) Outbreak
7	Universiti Teknologi MARA	Assoc. Prof. Dr. Ariza Adnan	Seminar and Field Trip on Environment Health Risk Assessment



UPM

UKM

UNIMAS

UMK

UiTM

FAKULTI PERUBATAN VETERINAR
UNIVERSITI PUTRA MALAYSIA

Zoo Negara
MALAYSIA

Taman Negara Gunung Gading



ONE HEALTH
FOR THE PEOPLE, PLANET AND THE FUTURE

AgriTel - Human - Environment
ONE HEALTH
ONE PLANET ONE FUTURE
USAID
OneHealth
MyHUN

ONE HEALTH
APPROACH TO HPAI

MyOHUN Management Review Meeting

MyOHUN Management Review Meeting was held on the 11th October 2017 in Le Meridien, Putrajaya chaired by Prof. Dr. Mohd Hair Bejo. The meeting aims to review administration issues and management of MyOHUN's National Coordinating Office (NCO) for Year 3 including finances, Quality Management System (QMS), achievement of Year 3, and the plan for Year 4. The meeting was attended by the MyOHUN Coordinator, Deputy Coordinator, Project Manager, and NCO's officers.



Quality Management System (QMS)

NCO-MyOHUN Surveillance Audit, MyOHUN Internal Audit, ISO Awareness Workshop, and NCO's Meetings were carried out in the year 2017 to prepare MyOHUN to be certified with Quality Management System (QMS) ISO 9001:2015. MyOHUN staffs attended all the activities listed as part of the requirement for (QMS) ISO 9001:2015.



Community-based Extension Project Fund

Community-based Extension Project Fund for Year 3 has been awarded to 17 researches. Below is the list of grantees and title of project

No	Grant Title	Grant Project Leader
1	Application of E-Learning on Prevention of Pets Origin Zoonotic Disease among One Health Future Leaders in Selangor	Prof. Dr. Hidayatulfathi Othman
2	Assessing the Roles of Blackflies in the Transmission of Zoonotic Filarial Parasites	Dr. Low Van Lun
3	Assessment of Zoonotic Diseases Awareness among School Students in Bintulu, Sarawak	Dr. Mohd Mokrish Md. Ajat
4	Development of Tailor-Made Emergency Response Plan Procedure	Dr. Emilia Zainal Abidin
5	Health Education and Promotion on the Importance of Good Hygiene Practices	Dr. Siti Fatimah Kader Maideen
6	Human, Swine and Fruit Bats Antibodies Against <i>Pteropine Orthoreovirus</i>	Dr. Kenny Voon Gah Leong
7	Instilling Good Knowledge, Better Attitudes, and Practices on Dog Associated Zoonotic Diseases among a Jahai Community	Prof. Dato' Dr. Abdul Rashid Khan
8	<i>Japanese Encephalitis</i> in Sarawak: Human-Animal Interphase Study	Assoc. Prof. Dr. Razitasham Safii
9	Knowledge, Attitudes, and Practices Towards <i>Leptospirosis</i> among University Students	Assoc. Prof. Dr. Syafinaz Amin Nordin
10	<i>Leptospirosis</i> : Screening and Awareness Study among Dog Handlers in Malaysia	Dr. Lau Seng Fong
11	Malaysia Teens' One Health	Assoc. Prof. Dr. Rosnah Sutan
12	Risk factors for <i>Leptospirosis</i> among Urban Service Workers in Sabah	Prof. Dr. Mohammad Saffree Jeffree
13	Seroprevalence of <i>Pteropine Orthoreovirus</i> and Awareness of Bat Transmitted Zoonotic Disease in Tioman Island	Dr. Nurul Azmawati Mohamed
14	Surveillance of Zika Virus in Long-Tailed Macaques	Frankie Thomas Sitam
15	Surveillance of Zoonotic Viruses in Bats	Assoc. Prof. Dr. Vijay Kumar
16	Understanding the Perception and Knowledge on Antimicrobial Usage and Antimicrobial Resistance	Dr. Rozaihan Mansor
17	Zoonotic Disease from Ticks and the Associated Animal Hosts in Malaysia	Prof. Dr. Sazaly Abu Bakar

PUBLICATIONS



Publication

The One Health Manual on Handling Disease Outbreaks in Malaysia

This manual was prepared by a multidisciplinary team consist of members of (MyOHUN) which provides us with the opportunity to understand each other's invaluable role in zoonotic disease prevention and control. It is hoped that this Manual will address, to some extent, the numerous issues and barriers related to the implementation of One Health, thereby bridging the gap between concept and implementation. This manual can be used by a novice and also act as the reference for the experts in the -field during the management of an outbreak.



Publication

A Problem-Based Learning Approach: One Health Cases

One Health is an approach to manage complex or 'wicked' problems such as emerging zoonoses. This book contains cases on emerging zoonosis innovatively crafted in a Problem-Based Learning (PBL) format to address the disease problems while exploring the relevant technical and core competencies necessary to efficiently solve the problems. This One Health Problem-Based Learning book utilizes student-centered approaches to assist students in achieving their learning goals through self-directed learning, self-motivation, and reflection through open-ended trigger materials.



Publication

Manual for Laboratory Diagnosis of Leptospirosis: One Health Approach


Leptospirosis is an emerging global public health concern and is a recognized occupational hazard among medical and veterinary personnel and those engaged in agricultural and livestock activities. Malaysia is highly endemic to leptospirosis and leptospires are widely detected in the local environment and animal reservoirs. Leptospirosis is often misdiagnosed as its symptoms are diverse and can mimic other infections such as influenza, dengue, and viral hemorrhagic fevers. Therefore, diagnosis of this disease can only be made with certainty with the support of laboratory results.





National Coordinating Office (NCO)
Malaysia One Health University Network (MyOHUN)
Faculty of Veterinary Medicine
Universiti Putra Malaysia
43400 Serdang, Selangor
Malaysia

+6 03 8609 3476/77178 nco@myohun.com

 www.myohun.com



@myohun.malaysia @myohun.malaysia @My_OHUN



USAID
FROM THE AMERICAN PEOPLE



OneHealth
WORKFORCE