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FROM THE AMERICAN PEOPLE

# *University Networks on the Front Lines for Community Engagement and One Health Innovation*

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# What if you were just a phone call or email away from talking with colleagues on every continent?



# What if your students were in class regularly with students based in other countries?


 Dele Ogunseitan	 Woutrina Smith	 Ava Sullivan - EcoHealth...	 Federico Castillo
Sam Wanjohi	 Kennedy Joseph	Brian Misunga	Yaaser Hamza
 Amadiva Kibisu	Brenda kimetto	 Mary Juma	Sonali Thakkar
 Michele Mayuba	ambrose kipyegon	Sandra Boyani	 Esther Akoth



# What if we had more competitions for students crafting innovative One Health solutions?

USAID One Health SEA/HUN

## COVID-19



Since the first reports of COVID-19, the infection has spread to contain more than 81,552 cases in China and growing cases (>1,400,000) worldwide, prompting the World Health Organization (WHO) to announce a public health emergency in late January 2020 and describe it as a pandemic in March 2020

### What is COVID-19?

COVID-19 (Coronavirus Disease 2019) is a new respiratory virus disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2).

### The Incubation of COVID-19

The incubation period of SARS-CoV-2 infection is assumed to be in 14 days succeeding exposure.

### Clinical Characteristic

- Fever
- Dry cough
- Pharyngeal pain
- Nasal congestion
- Headache
- Pneumonia

The clinical symptoms of the COVID-19 disease by the severity

- Mild disease (81%)
- Severe disease (was observed in 14%)
- Critical disease (5%)

### HOW is COVID-19 transmitted?

The major route transmission of COVID-19 is droplet and close contact. Coughing and sneezing by symptomatic infected droplets can travel 1–2 meters and later put down on surfaces. The virus could stay viable on surfaces for days in desirable environmental conditions. COVID-19 also can be transmitted by touching object and other people.

### Prevention of COVID-19

1. Frequently clean hands by using alcohol-based hand rub or soap and water.
2. Avoid touching your eyes, mouth and nose.
3. Practice good respiratory hygiene.
4. Avoid close contact with anyone that has fever and cough.
5. Keep at least 1 metre distance from others and disinfect surfaces that are touched frequently.
6. Covering the mouth and the nose with masks.
7. Cover mouth and nose when coughing or sneezing.

## I SAVE YOU, YOU SAVE ME

Following all the suggestion to prevent COVID-19 transmission, is the way to save each other. It's for Me, You and Us, Together.

**Reference**  
Ostroski, D., 2020. Coronavirus Disease 2019 (COVID-19): Diagnosis and Management (Narrative Review). *Baylor Med J* 4: 421(3). pp.00-00.  
Wang, S., 2020. A review of coronavirus disease 2019 (COVID-19). *The Indian Journal of Pediatrics*, pp.1-4.  
Hu, F., Deng, Y. and Li, W., 2020. Coronavirus disease 2019: What we know? *Journal of medical virology*.



# What if team-based problem solving was the norm?





What if finding and working with colleagues from government, academia, and the private sector was easy?



# COVID-19 pandemic is a wake-up call



COVID-19 Dashboard by the Center for Systems Science and Engineering

Global Cases

**111,203,978**

Cases by  
Country/Region/Sovereignty

**28,085,723** US

**10,991,651** India

**10,139,148** Brazil

**4,127,573** United  
Kingdom

**4,117,992** Russia

**3,597,113** France



Johns Hopkins Coronavirus Resource Center, February 21, 2021

# A One Health approach considers connections among humans, animals, plants, and their shared environments







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# One Health Workforce – Next Generation Project 2019-2024, \$85m



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**UC DAVIS**  
**One Health Institute**  
School of Veterinary Medicine

**AFROHUN**  
Advancing One Health

**SEA HUN**  
Southeast Asia One Health  
University Network

**EcoHealth  
Alliance**



Ata Health Strategies

**ICAP**  
Columbia University  
Mailman School  
of Public Health

**Berkeley**  
UNIVERSITY OF CALIFORNIA

**ECHO**  
Project

**UCI** University of  
California, Irvine



## **OHW-NG Goal**

*Empower One Health university networks to sustainably develop and deliver world-leading model programs for equipping professionals with transdisciplinary skills to address complex global health issues.*

The USAID One Health Workforce - Next Generation Project  
supports SEAOHUN, AFROHUN, and the member universities in:



**WORKFORCE  
EMPOWERMENT:**

DEVELOP AND DELIVER  
TRAININGS IN  
ALIGNMENT WITH  
PRIORITIZED ONE  
HEALTH CORE  
COMPETENCIES AND  
TECHNICAL SKILLS



**KNOWLEDGE  
MANAGEMENT:**

ESTABLISH SYSTEMS  
AND STRATEGIES TO  
EVALUATE  
PERFORMANCE AND  
TRACK WORKFORCE  
PLACEMENTS



**ORGANIZATIONAL  
SUSTAINABILITY:**

STRENGTHEN CAPACITIES OF  
THE REGIONAL ONE HEALTH  
UNIVERSITY NETWORKS FOR  
ACQUISITION AND  
MANAGEMENT OF DIRECT  
DONOR FUNDING

**GENDER:**

SUPPORT GENDER  
INTEGRATION AS A  
CORE COMPETENCY  
AND INCLUDE  
GENDER  
CONSIDERATIONS AS A  
CROSS-CUTTING  
THEME





# SEA OHUN

SOUTHEAST ASIA ONE HEALTH UNIVERSITY NETWORK

## OUR NETWORK



**87**

MEMBER  
UNIVERSITIES



**28**

ONE HEALTH  
STUDENT CLUBS\*



**8**

COUNTRIES



**200**

INDIVIDUALS  
REACHED VIA  
COVID-19 RCCE  
ACTIVITIES



# AFROHUN

AFRICA ONE HEALTH UNIVERSITY NETWORK

## OUR NETWORK



**18**

MEMBER  
UNIVERSITIES



**16**

STUDENT ONE  
HEALTH CLUBS



**9**

COUNTRIES



**1,043**

INDIVIDUALS  
REACHED VIA RCCE  
ACTIVITIES RELATED  
TO COVID-19



*Personal protective equipment, distancing, and group size standards in this video were consistent with local public health guidance and COVID-19 status in the specific country and time it was taken. This may not reflect best practices for all locations where COVID-19 is still spreading.*

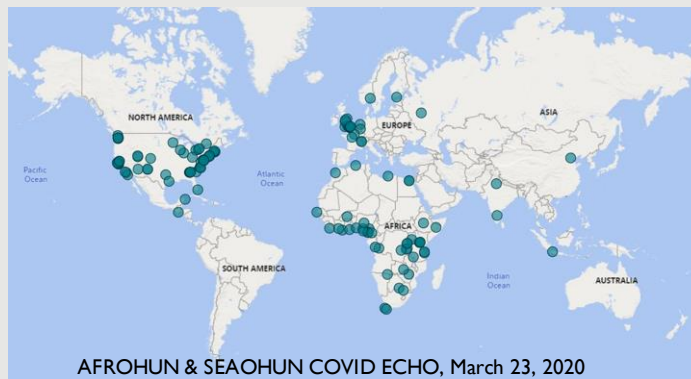


# Building a Global One Health Community of Practice

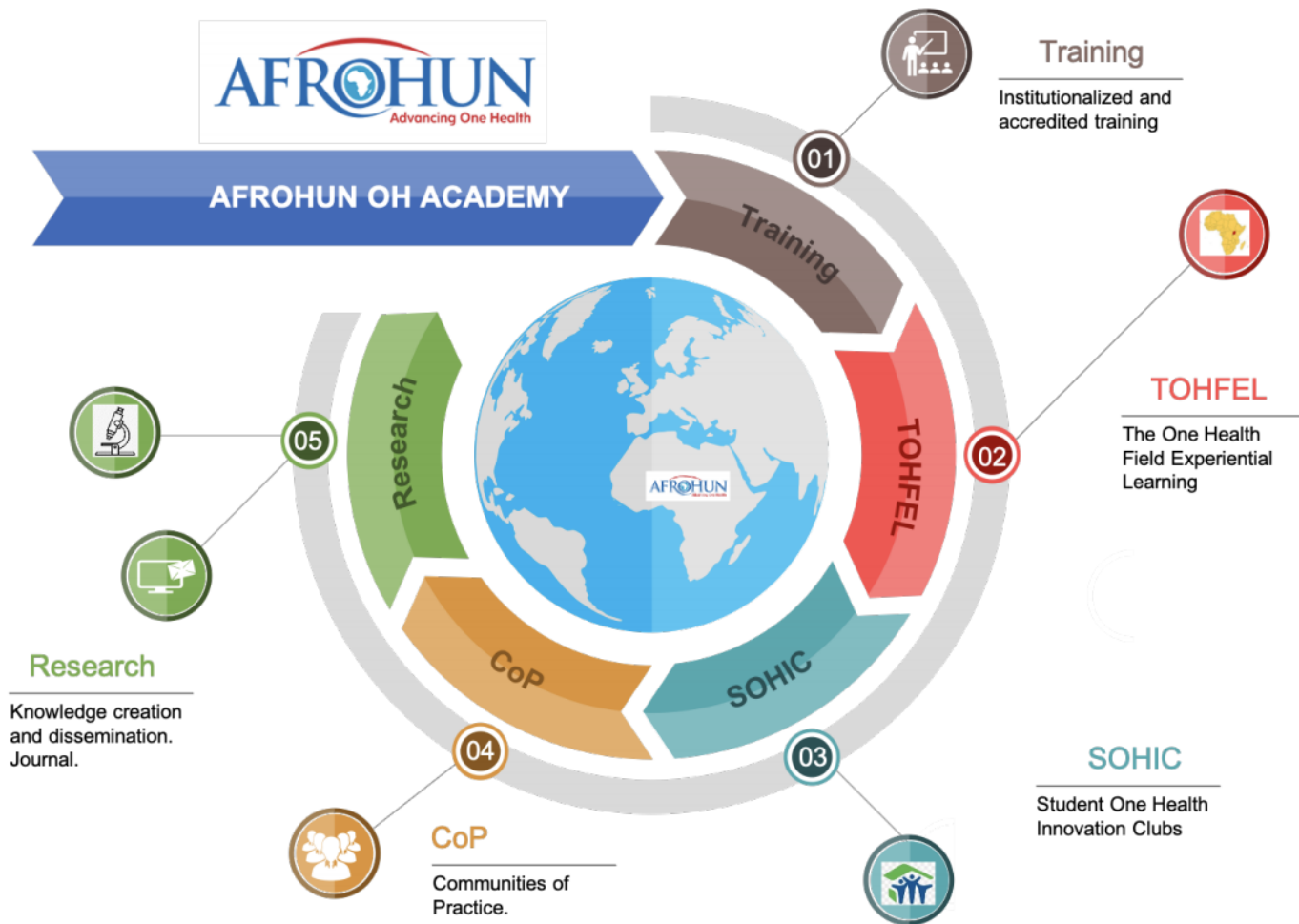
## Interactive COVID-19 ECHO online sessions



Sharing experiences and best  
practices around the world



**AFROHUN OH ACADEMY**





## RWANDA

The country has obtained robots that will be used by Ministry of Health and especially (but not limited to) COVID-19 quarantine centers. These robots will be used to monitor patients' temperatures, distribute medicine, food and other supplies in order to reduce as much as possible direct contact between patients and health attendants.



*Some of the robots that have been brought in to reduce contact between patients and health workers*



*Training of the voluntary service providers*

## OHCEA – Ethiopia facilitates creation of country-wide SOHIC through Telegram

The newly-established Ethiopian Students One Health Innovations Club (E-SOHIC) Telegram group which is being guided and hosted under the umbrella of OHCEA- Ethiopia is now very active. So far the group has 3250 members



# Training the Next Generation of One Health Leaders

APPLIED INNOVATIONS IN E-LEARNING TO EXTEND TRAINING  
OPPORTUNITIES IN THE CLASSROOM AND THE FIELD



- Teams used online platforms to continue teaching and training in the face of COVID-19
  - Platforms used for classroom instruction and field-based experiential learning

# Training the Next Generation of One Health Leaders

STUDENTS OBTAINED HANDS-ON TRAINING ON THE FRONTLINES OF THE COVID-19 RESPONSE THROUGH STUDENT ONE HEALTH CLUBS



- Student One Health Clubs led COVID-19 risk communication and community engagement campaigns

# Training the Next Generation of One Health Leaders

STUDENTS GAINED REAL-WORLD EXPERIENCE WORKING WITH COVID-19 RESPONSE TEAMS THROUGH FELLOWSHIPS AND INTERNSHIPS



- Uganda FAO, Amref Health Africa, Infectious Disease Institute, and Ministry of Health
- Put knowledge and skills in outbreak response, communication, and leadership into practice



- DRC Ministry of Health
- Gained experience in COVID-19 surveillance, contact tracing, and case investigation



# Training the Next Generation of One Health Leaders



STUDENTS ENGAGE COMMUNITIES ON COVID-19, PROMOTE RISK-REDUCING BEHAVIOR THROUGH DIGITAL PLATFORMS



*"We learned to be opened minded to the opinion of others, to collaborate with each other. We also learned a lot about COVID-19 and how to influence others through on-line platforms."*

– Ainaa, COVID-19 Digital Awareness Challenge, One Health Student Competitor, Universiti Sultan Zainal Abidin, currently in her 4th year of Bachelor of Animal Production & Health.

- Estungkara team, COVID-19 Digital Awareness Challenge, One health Student Competitor.

# Training the Next Generation of One Health Leaders

Vietnamese lecturer Tuyen Ha Van received **fellowship support**, gaining hands-on experience with International Livestock Research Institute (ILRI)



Offered **6 scholarships** to health professionals in pursuit of master's degrees incorporating One Health

Awarded **small grants to 8 projects from 7 countries**: Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Thailand, and Vietnam

# ONE HEALTH CHAMPION

## PROFESSOR DATO' Dr. ABDUL RASHID KHAN

*Head of the Department of Public Health  
Medicine at the RCSI (Royal College of Surgeons in  
Ireland) and UCD (UC Dublin) – Malaysia Campus  
in George Town.*



“I was content working alone with Indigenous people in Malaysia before becoming involved in the Malaysian One Health chapter – since I started working within the One Health Workforce – Next Generation group, I have now realised how much more rewarding it is working with a group of people with different professional backgrounds. It is rewarding not only for my personal development but also to the Indigenous people we work with. I have benefited so much from this experience and now I take every opportunity to remind others how rewarding it is and how much easier it is to accomplish goals when you work in a multidisciplinary One Health team.”





*Rwanda is adopting a new strategic plan envisioning to promote and strengthen interdisciplinary collaboration and partnerships in a One Health approach and strengthen surveillance, early detection, rapid response, prevention and control of zoonoses, antimicrobial resistance and other public health threats. Furthermore, the One Health Strategic plan will build capacity and promote applied research at the human-animal-ecosystem interface.”*

# ONE HEALTH CHAMPION



# KABASINGA INNOCENTE

***Student, SOHIC Coordinator, University of  
Rwanda***



**46**

MENTORED STUDENT  
ONE HEALTH CLUBS



**9**

AFROHUN COUNTRY  
CHAPTERS



**8**

SEAOHUN COUNTRY  
NETWORKS (OHUNs)



**51**

ACTIVITIES INCREASING  
CAPACITY TO RESPOND  
TO COVID-19



**2**

SECRETARIATS



**7**

GLOBAL TEAM  
PARTNERS



**22,569**

INDIVIDUALS  
TRAINED



**3**

GLOBAL  
OBJECTIVES



**12**

STRATEGIES

# One Health puts technical knowledge into social contexts







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# ONE HEALTH WORKFORCE

## NEXT GENERATION



<http://ohwng.org>  
<https://afrohun.org/>  
<https://seaohun.org/>