

# APRU Global Health Conference 2021

# GLOBAL URBAN HEALTH

16-18 November  
The University of Hong Kong

## Final Report



香港大學  
THE UNIVERSITY OF HONG KONG



HKU  
Med  
LKS Faculty of Medicine  
School of Public Health  
香港大學公共衛生學院



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**ACKNOWLEDGEMENTS**

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# About the Conference

## Summary

The APRU Global Health Conference 2021 entitled “Global Urban Health” was held virtually from 16 to 18 November 2021. Hosted by the School of Public Health of The University of Hong Kong, the Conference brought together renowned local and overseas academics and industry practitioners from multidisciplinary fields, to generate innovative solutions to the challenges posed by urbanisation, and pave the way for building healthier, more livable and sustainable urban cities. The Conference attracted around 700 policymakers, think-tank representatives, environmental advocates, scholars, researchers and students mainly from Hong Kong, Mainland China and South East Asia.

## Conference Dates

Pre-Conference Workshops: 15 November 2021 (Mon)  
Scientific Programmes: 16 to 18 November 2021 (Tue-Thu)

## Delivery Mode

The Conference was held online through an integrated conference platform, where poster exhibition, interactions with speakers, poster presenters, abstract authors and live support were available.





# Key Figures at a Glance

This year, over 700 students, academics and industry practitioners from diverse economies and organisations registered for the Conference.

## REGISTRANT PROFILE

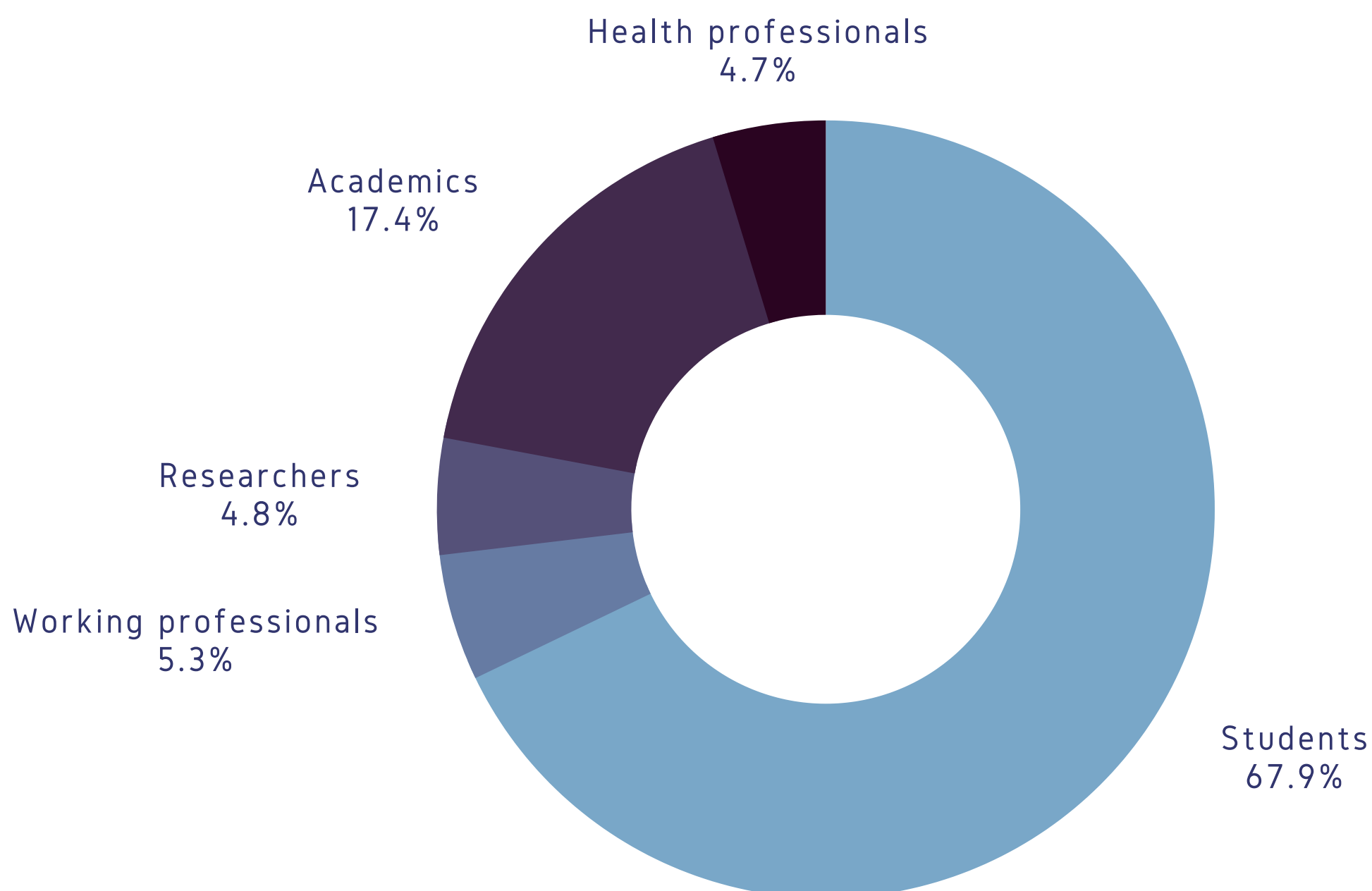
# 703

## CONFERENCE REGISTRANTS

# 520

## CONFERENCE ATTENDEES

## REGISTRANTS' OCCUPATION





# Key Figures at a Glance

## 33

### ECONOMIES

Australia	India	Nigeria
Bangladesh	Indonesia	Philippines
Brunei Darussalam	Israel	Russian Federation
Canada	Japan	Singapore
China	Macao, China	South Korea
Chinese Taipei	Malaysia	Sri Lanka
Ethiopia	Mongolia	Sudan
France	Myanmar	Switzerland
Germany	Namibia	United Kingdom
Hawaii	Netherlands	United States
Hong Kong, China	New Zealand	Vietnam

## 94

### WORLDWIDE ORGANISATIONS

## 27

### APRU MEMBER UNIVERSITIES



# Key Figures at a Glance

Besides calling for submission of abstracts, the Global Health Student Poster Contest and Global Health Student Case Competition were held in connection with the Conference. Impressive quality of entries were received from around the world.

## Abstracts

61

ENTRIES

Oral  
presentations

42

ENTRIES

E-poster  
presentations

## Global Health Student Case Competition

121

ENTRIES

## Global Health Student Poster Contest

64

ENTRIES



# Programme Highlights

## Pre-conference Workshops

The APRU Global Health Conference 2021 was kicked off virtually by two Pre-conference Workshops. The two half-day workshops, namely “New Research Methods for Global Health” and “Nowcasting Epidemics of Novel Pathogens: Lessons from COVID-19”, introduced new research methods in the field and tackled pressing public health issues. Conducted in an interactive approach to allow participants to effectively communicate and discuss with the instructors, the workshops received overwhelmingly positive feedback from researchers and students working in global health and relevant disciplines.

香港大學 THE UNIVERSITY OF HONG KONG APRU HKU Med LKS Faculty of Medicine School of Public Health 香港大學公共衛生學院

### Let's do it!

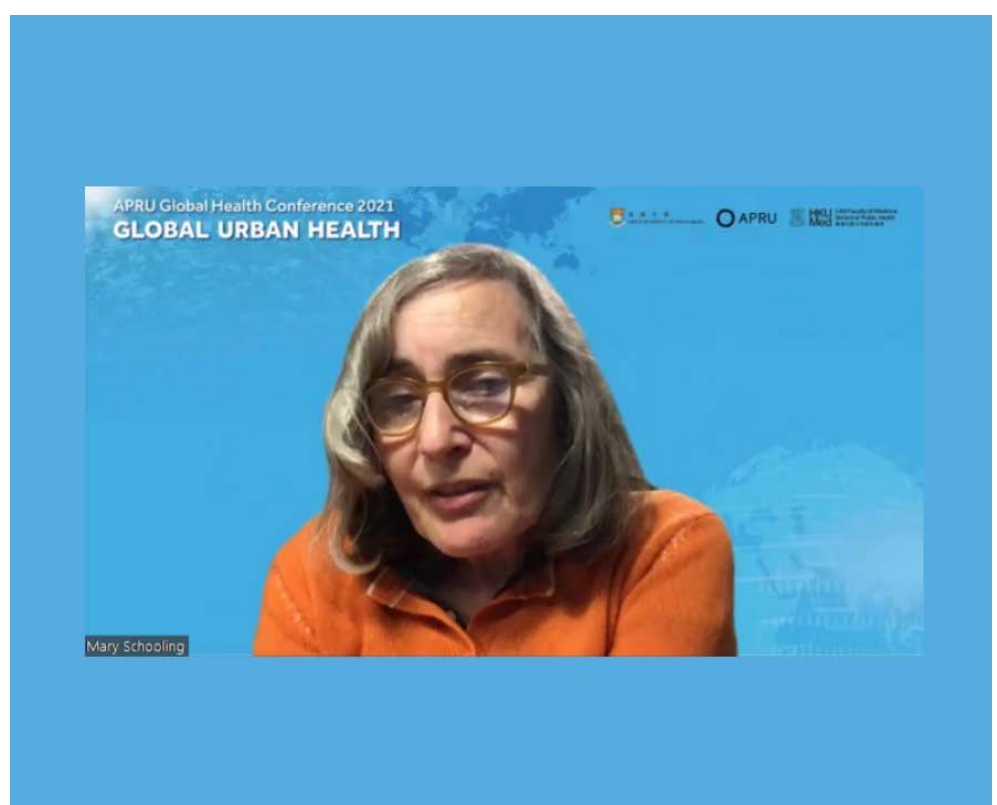
Genetic variants which reduce c-reactive protein via the interleukin-6 gene correspond to effects of the drug **tocilizumab**. Do they protect against **COVID-19** from October 2020?

- Create a file for these variants
- Go to MR-Base
  - Choose exposures
    - Then manual file upload
    - Upload your csv file
  - Choose outcomes
    - Search for COVID-19
    - Select the population as the comparison for very severe respiratory confirmed COVID
- Run MR
  - Click on Perform MR Analysis
- Interpret the results
  - b is the estimate, here it is in logodds, so exponentiate
  - Se is the standard error
  - Calculate odds ratio (OR) as  $\exp(b)$
  - Calculate 95% CI as  $\exp(b \pm 1.96 \times \text{se})$
- Results
  - The MR estimate for **tocilizumab** on **COVID-19** is OR 0.53, 95% CI 0.34 to 0.83

SNP	effect_allele	other_allele	beta	se	pval
rs73026617	T	C	-0.045308	3.93E-03	
rs12083537	G	A	0.065989	0.002887	
rs4556348	T	C	-0.05024	0.0036331	
rs2228145	C	A	0.093503	0.0024167	
rs11264224	C	A	0.039263	0.0032354	
rs12059682	C	T	-0.04613	0.0029529	
rs34693607	G	C	0.032832	0.0029159	0.21

	method	nsnp	b	se	pval
Severe	Inverse variance	7	-0.6395	0.2263	0.004718
	weighted	7	-0.4947	0.1187	0.000030

APRU Global Health Conference 2021: Workshop 1



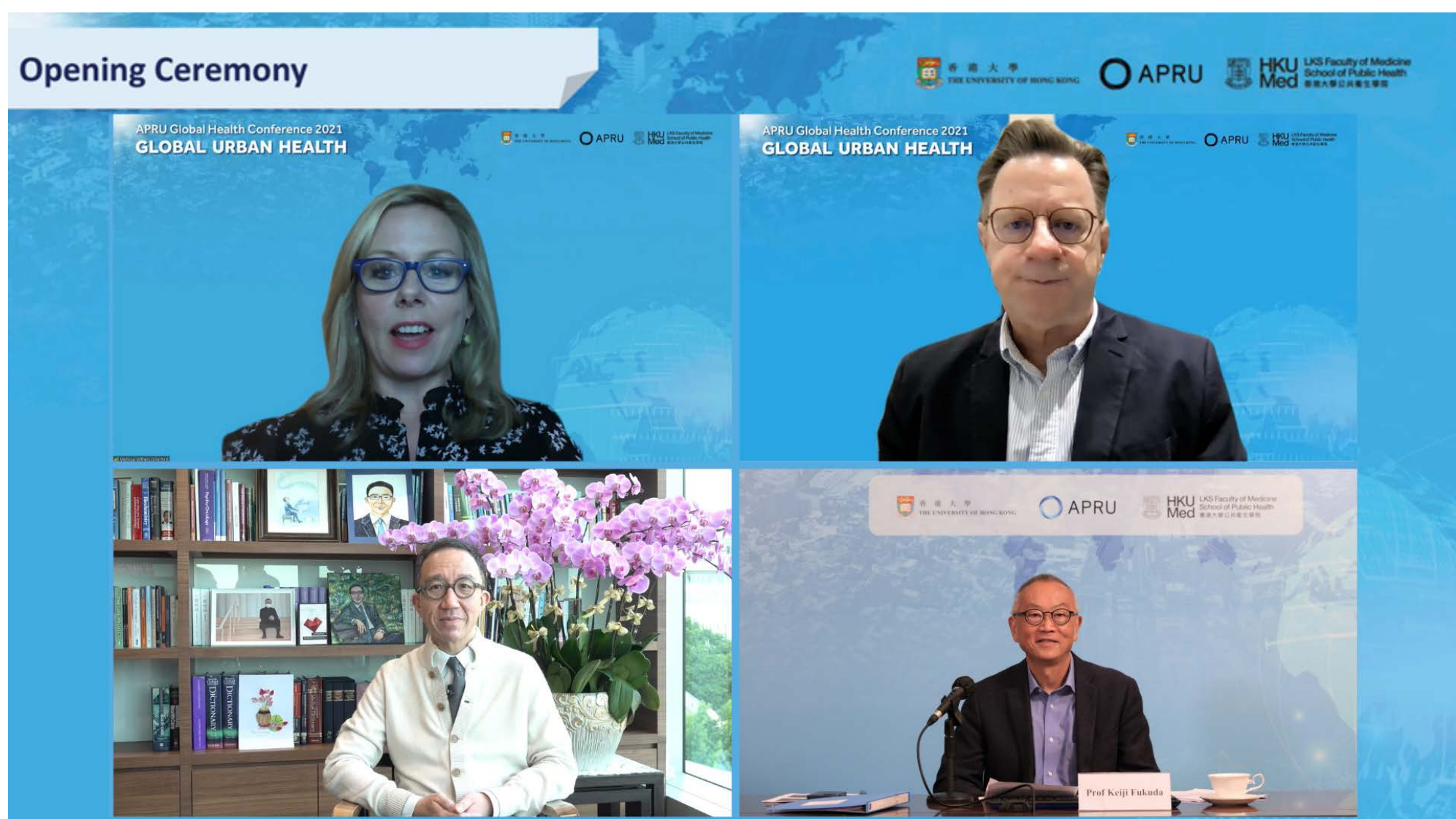


# Programme Highlights

## Opening Ceremony

The Conference opened with a short video introducing the host - the School of Public Health of LKS Faculty of Medicine at The University of Hong Kong (HKU). This was followed by an Opening Remarks by Dr Christopher Tremewan, Secretary General of APRU Secretariat, and a Welcome Address by Professor Gabriel Leung, HKU Dean of Medicine, who both acknowledged the Conference theme “Global Urban Health” as one of the most pressing global health topics amidst the COVID-19 pandemic.

The Ceremony was concluded by Professor Keiji Fukuda, Conference Chair and the then Director of HKU School of Public Health, who gave an overview of the Conference, and hoped the ideas and solutions generated from this Conference would help transform regional and global urban health challenges into opportunities.





# Programme Highlights

## Keynote Speeches

### Keynote Address 1 - “The Role of Catalytic Coalitions in Driving Systems Change”

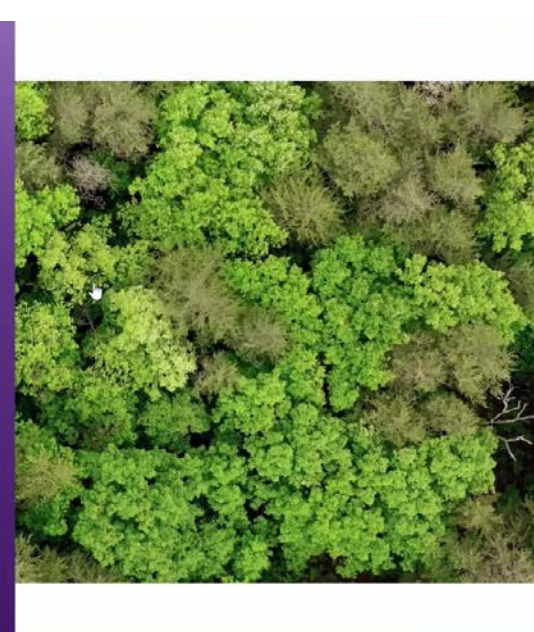
In the opening keynote address, Ms Gabrielle Fitzgerald, Founder & CEO of Panorama, shared her experiences on cross-sectoral partnerships, lessons learned, strategies to success and her perspectives on the long-term system changes in global health. She emphasised the importance and urgency to work across sectors to accelerate attention on global health and climate issues.

“

No matter how powerful an individual, a person or an organisation may appear, a partnership with other stakeholders is always the key to success.

*Ms Gabrielle Fitzgerald, APRU Global Health Conference 2021*

”





# Programme Highlights

## Keynote Address 2 - “Waging a War Against NCDs on All Fronts: Lessons from a City State”

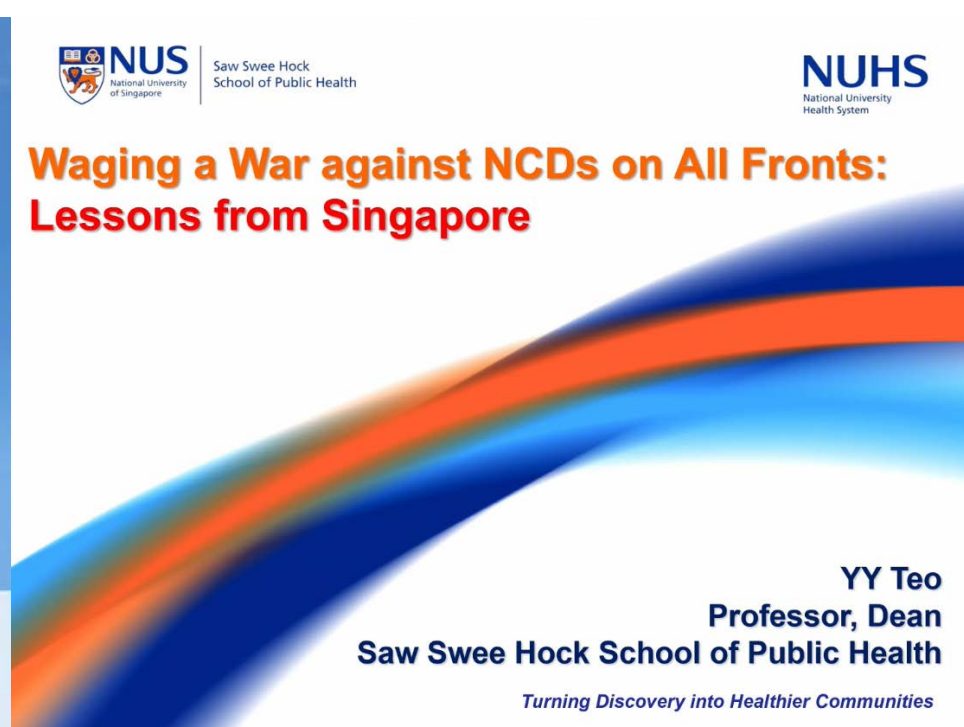
In this keynote address, Professor Yik Ying Teo, Dean of the Saw Swee Hock School of Public Health at National University of Singapore, highlighted the importance of a whole-of-government approach beyond just health, ranging from fiscal policies to food environment, from the design of transportation networks to the design of outdoor spaces, to systematically and comprehensively address the problem of NCDs.

“

The success of health promotion policies often depends on local context. It's important to forecast local impact prior to implementation.

*Professor Yik Ying Teo, APRU Global Health Conference 2021*

”





# Programme Highlights

## Keynote Address 3 - “Heat and Mortality Associations in Urban and Rural Communities of East Asian Countries”

In the last keynote speech, Professor Ho Kim from the Department of Epidemiology and Biostatistics of School of Public Health at Seoul National University, explored the health effects of heatwaves in urban areas and ways to minimise them. Advantages and disadvantages of urbanisation in terms of adaptation to climate change were also discussed.

“

Urbanisation is a new challenge of public health, especially in connection with climate change. Not only education and research but also having international health perspectives are substantial to tackle the issue.

*Professor Ho Kim, APRU Global Health Conference 2021*

”

APRU Global Health Conference 2021  
**GLOBAL URBAN HEALTH**

Heat and Mortality Associations in Urban and Rural Communities of East Asian Countries

Ho Kim, (金皓)  
Graduate School of Public Health, Seoul National University

18 November 2021

APRU Global Health Conference 2021  
**GLOBAL URBAN HEALTH**  
16-18 November 2021  
The University of Hong Kong, Pokfulam, Hong Kong

**Professor Ho Kim**



# Programme Highlights

## Symposium on “Advancing Diversity in the Academia”

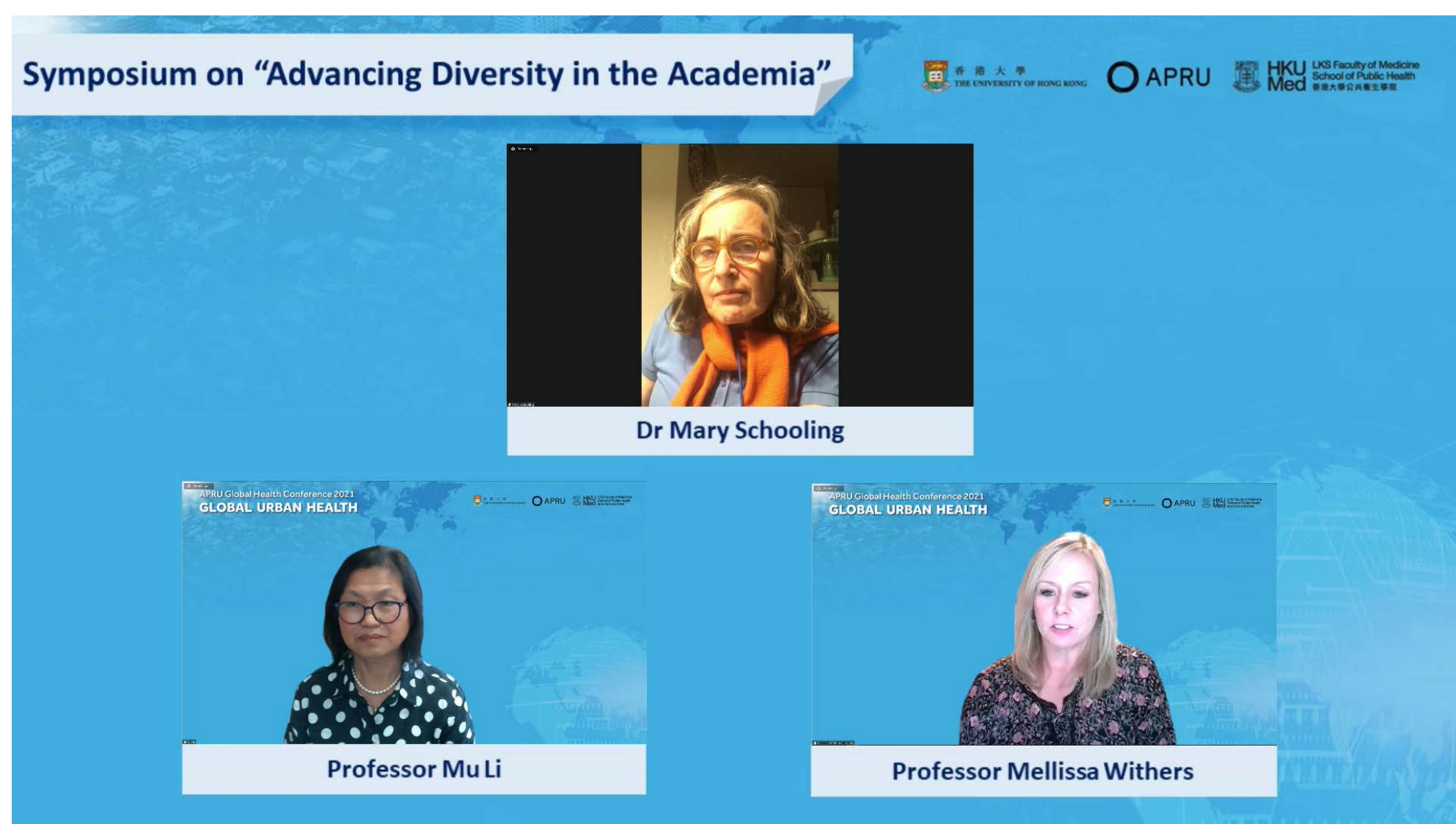
New perspectives emerge in richly diverse and inclusive environment, and are particularly essential in cultivating a dynamic and vibrant academic world. Entitled “Advancing Diversity in the Academia”, the Symposium delineated some of the issues that different gender, ages, races, ethnicities, in academia faces, and outlined actions that can be taken to develop a climate that supports equality and diversity. Moderators and panellists from a full range of backgrounds shared their personal experiences and advice, followed by a Q&A session.

“

The best way to advance diversity in academia can be addressed on both structural level and personal level. We should judge things equally and try to put ourselves in others’ shoes, so we would have more understanding and appreciation.

*Dr Mu Li, Dr Mary Schooling & Prof Mellissa Withers*  
*APRU Global Health Conference 2021*

”





# Programme Highlights

## Plenary Session on “Designing Cities to Promote Well-being”

The built environment has far-reaching impacts on urban health, including the mental, physical and social well-being of city-dwellers. During the Plenary Session, scholars from the field of Medicine, Architecture and Social Sciences had a dynamic plenary discussion on how our environment could be planned in a way that makes cities healthier, more livable and sustainable.

“

Having more green spaces, building social connectedness, identifying the inherent human needs and how they like to use spaces, and applying new technologies are the considerations to build a healthy city in the future.

*Prof Chris Webster, Prof Chun-Yen Chang, Dr Melanie Crane, Prof Brian Hall & Prof Christine Loh*  
APRU Global Health Conference 2021

”



### Plenary Session on “Designing Cities to Promote Well-being”





# Programme Highlights

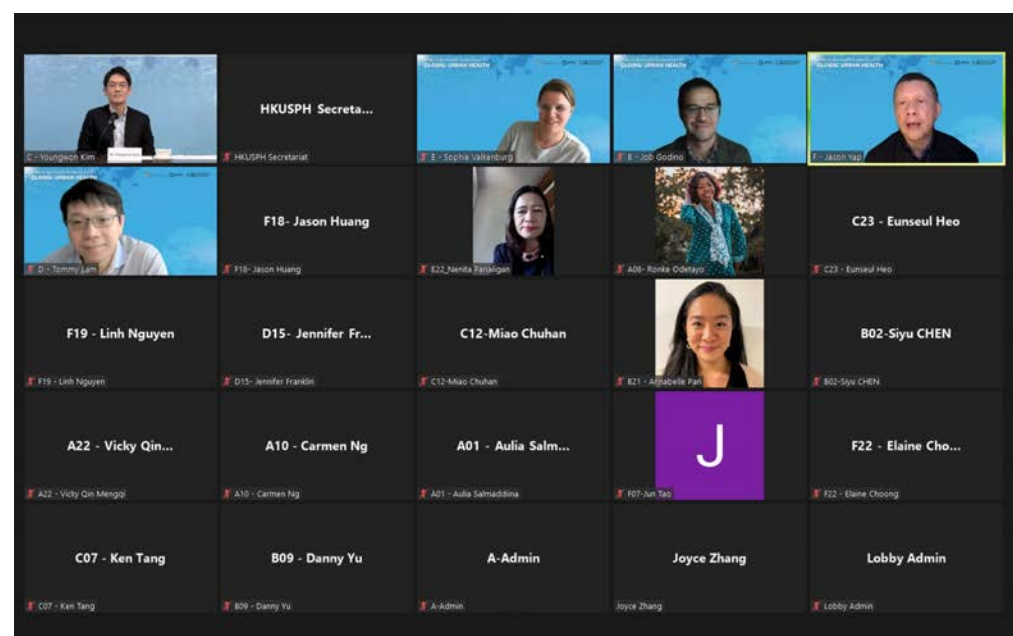
## Career Sharing in the Non-academic Sector

Designed for students and early career scholars, emerging public health practitioners shared their career aspirations and experiences in the global health field during the Career Sharing in the Non-academic Sector session. Sharing of industry insights was in a roundtable format and practical career advice was provided to prepare participants for their future careers.



## Career Mentoring in the Academic Sector

In this session, six mentors from academia of different parts of the world shared their advice on establishing a successful career in the academia, and how they solved the biggest challenge they encountered. Students and early career scholars, who aspire to pursue an academic path in the global health field, were then paired up with a mentor for a small group discussion. Personal career journeys and useful career guidance were shared during the session.

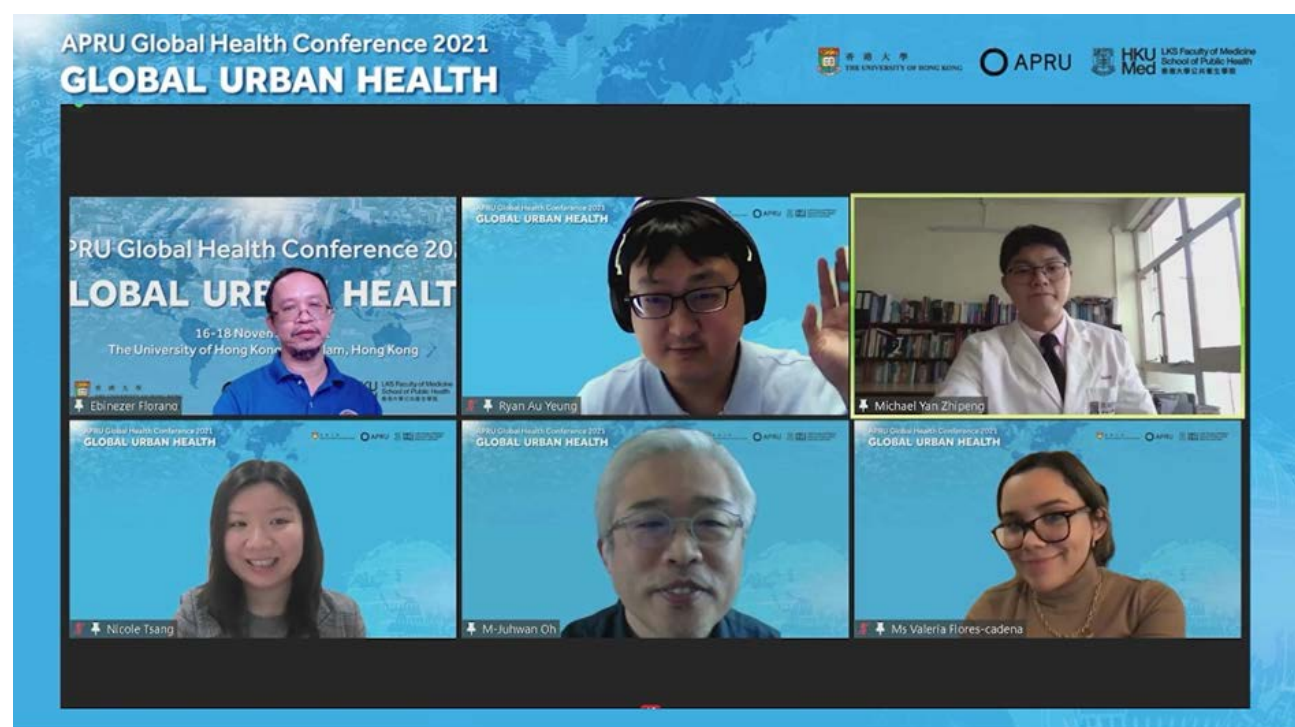




# Programme Highlights

## Parallel Breakout Sessions

The informative, solution-driven Parallel Breakout Sessions featured presenters from around the world, sharing their regional or institutional knowledge, expertise and different collaborative pathways to make cities healthier and more sustainable. The [Scientific Committee 2021](#) has reviewed and selected the best abstracts in respective fields. Abstract presenters presented their discoveries and research via a 10-min pre-recorded video, followed by interactive, in-depth dialogues among the presenters and participants.





# Programme Highlights

## Awards & Closing Ceremony

An award ceremony was held on the last day of the Conference. Winners of the student competitions were announced, and were asked to share their experiences in designing their winning proposals. Dr Julian Sham, Head of Health Business for Asia Pacific & Japan of Amazon Web Services, delivered a talk on "Digital Health – Connecting the Data Dots with Cloud Enabled Technology".

The Conference was concluded by Professor Keiji Fukuda, Conference Chair and the then Director of HKU School of Public Health, with his closing remarks. He thanked APRU, APRU Global Health Programme, speakers, mentors, moderators, judges, school members and all those who had contributed to making this Conference a success. He hoped that Conference participants were able to gain more insights on the complex global health challenges and opportunities abound for achieving healthier cities, and would respond to these issues with innovative and sustainable solutions.





# Programme Highlights

## Student Competitions

### Global Health Case Competition

Hosted by the APRU Global Health Programme and sponsored by Amazon Web Services, this international, virtual student case competition is held every year to encourage student teams to work on a challenge relating to a pressing global health problem. The topic of this year's challenge was "Technology-Driven Solutions to the COVID-19 Infodemic", which 121 teams of 4-6 students had 10 weeks to prepare a 10-minute video proposing a realistic, technology-driven solution to reduce the spread of misinformation of COVID-19 and increase health literacy.

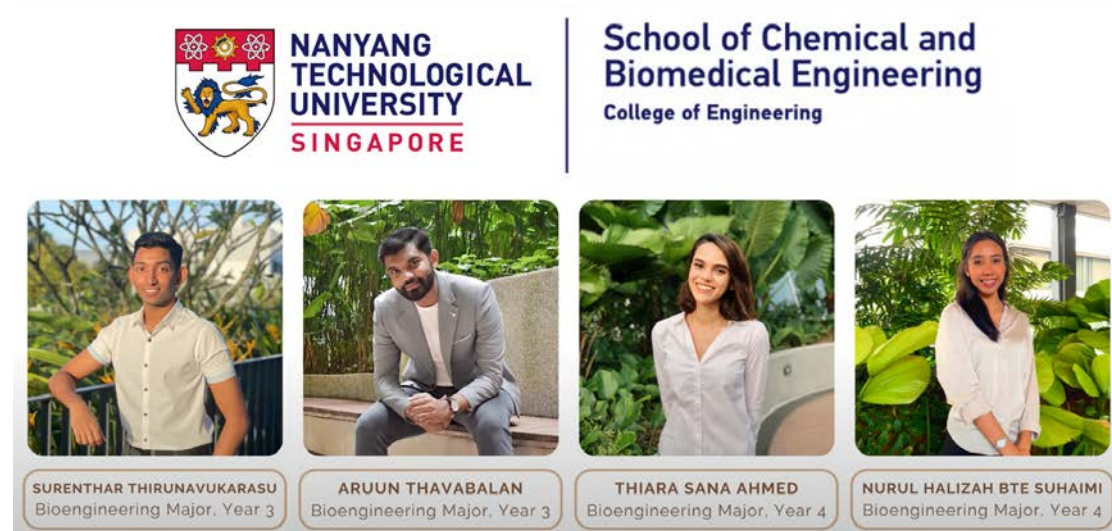
Winner of this year's Competition:

**UP Mediasina**  
**University of the Philippines**



Finalist Teams:

**SASH Inc**  
**Nanyang Technological University**



**ACES**  
**The Chinese University of Hong Kong**



Videos of the winning and finalist teams can be viewed at

<https://www.aprughc2021.org/result-of-global-health-case-competition>.

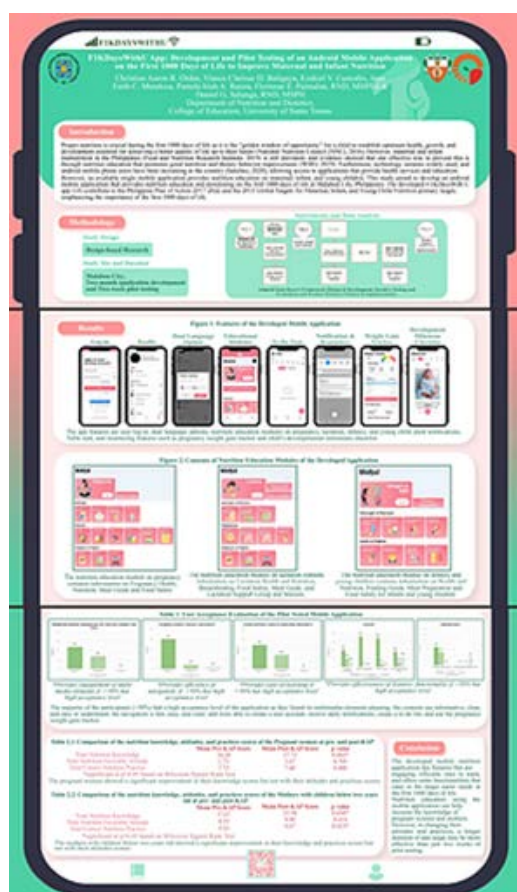


# Programme Highlights

## Global Health Student Poster Contest

The Student Poster Contest called for submissions from current undergraduate and graduate students from all over the world. 64 entries from 27 universities across 12 economies were chosen by an international Advisory Group comprising of members from different APRU universities and the host university, and voted by Conference participants. Winners of this year's contest were:

### Undergraduate category



#### Poster #178

F1KDaysWithU App: Development and Pilot Testing of an Android Mobile Application on the First 1000 Days of Life to Improve Maternal and Infant Nutrition

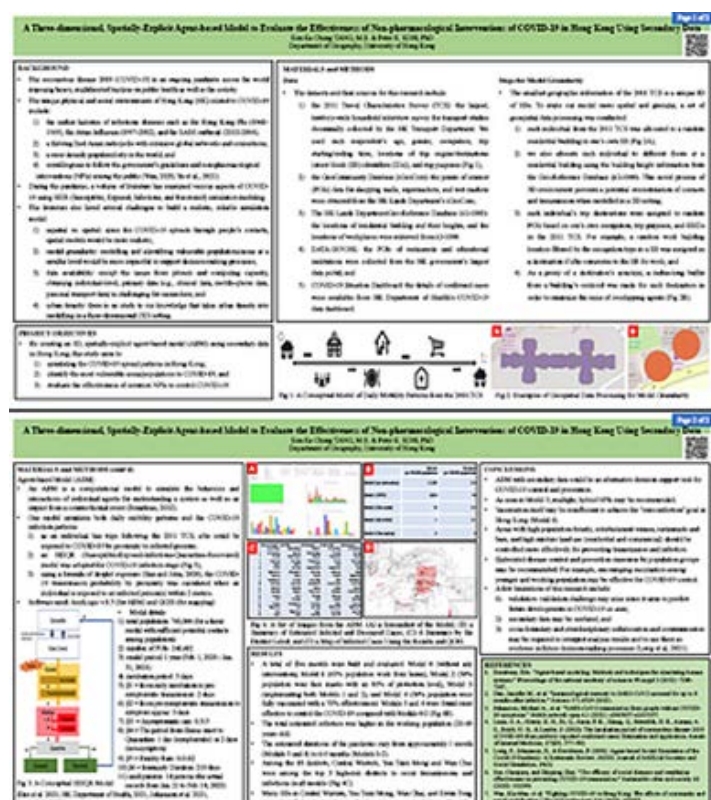
#### Authors

Christian Aaron R. Ordas, Vianca Clarisse D. Baligaya, Ezekiel V. Custodio, Joan Faith C. Mendoza, Pamela Irish A. Razon, Florimae E. Paimalan, Daniel G. Salunga

#### University

University of Santo Tomas

### Graduate category



#### Poster #217

A Three-dimensional, Spatially-Explicit Agent-based Model to Evaluate the Effectiveness of Non-pharmacological Interventions of COVID-19 in Hong Kong Using Secondary Data

#### Authors

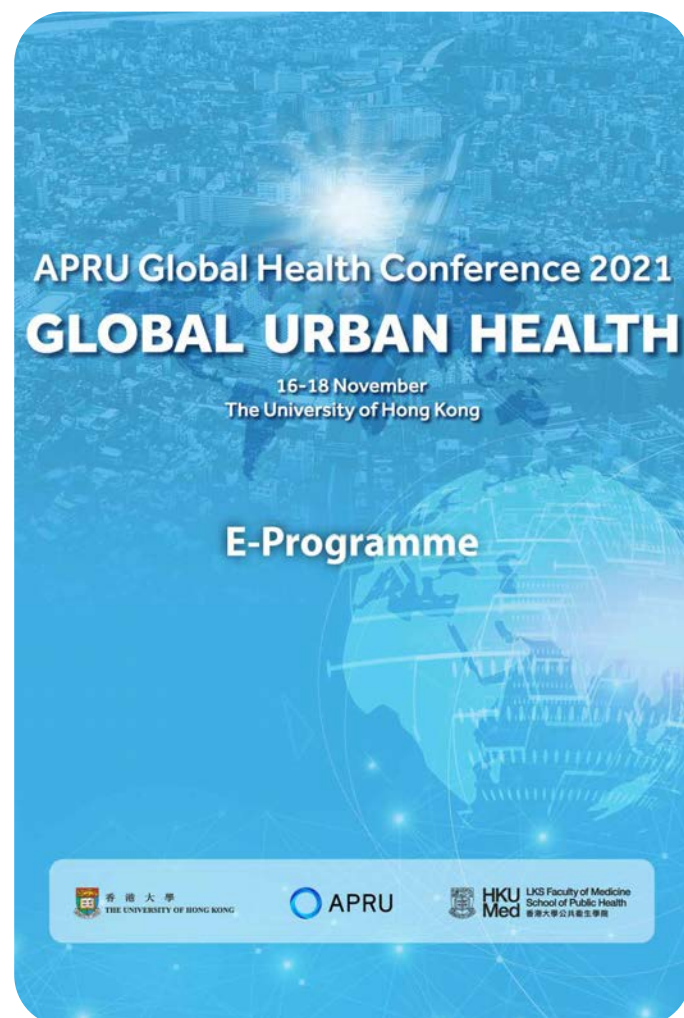
Ken Ka Chung Tang, Peter K. Koh

#### University

The University of Hong Kong



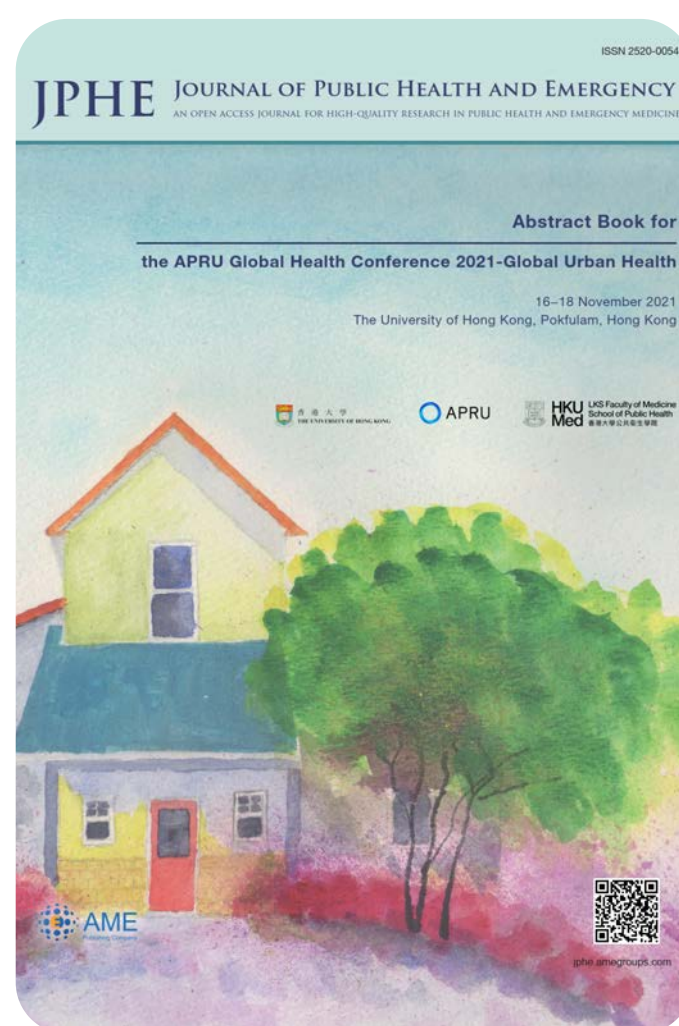
# Conference Publications



**E-programme Book**



**E-abstract Book**



**Abstracts published in  
the Journal of Public Health and Emergency (JPHE).**

*\*Full paper of top abstracts will be published in JPHE in 2022*



# Post-event Publicity

All programmes and contest results of the Conference were announced and publicised via social media platforms of HKU School of Public Health. Examples are as follows:



## Plenary Session on “Designing Cities to Promote Well-being”



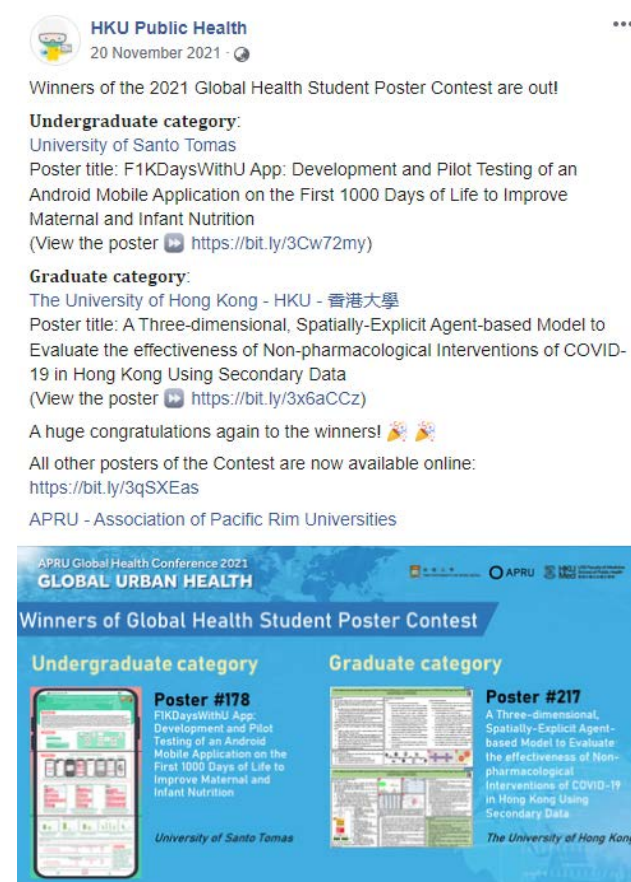
## Symposium on “Advancing Diversity in the Academia”



## 2021 Global Health Case Competition



## 2021 Global Health Student Poster Contest





# Post-event Publicity



## Twitter

### Keynote Address 1 - "The Role of Catalytic Coalitions in Driving Systems Change"

HKU Public Health @HKU\_SPH  
"No matter how powerful an individual or organisation may appear, a partnership with other stakeholders is always key to success," said Ms @FitzGab, Founder & CEO of @panoramateam in her keynote address at APRU Global Health Conference 2021.



### Keynote Address 2 - "Waging a War Against NCDs on All Fronts: Lessons from a City State"

HKU Public Health @HKU\_SPH  
"The success of health promotion policies often depends on local context. It's important to forecast local impact prior to implementation," said Prof Yik Ying Teo @NUSingapore in his keynote address on addressing #NCDs problems at APRU Global Health Conference 2021.



### Keynote Address 3 - "Heat and Mortality Associations in Urban and Rural Communities of East Asian Countries"

HKU Public Health @HKU\_SPH  
"#Urbanization is a new challenge of #publichealth, esp. in connection with #climatechange. Education, research & international health perspectives are substantial to tackle the issue," Prof Ho Kim @SNUnow concluded in his keynote address at APRU Global Health Conference 2021.



## LinkedIn

### Career Sharing in the Non-academic Sector & Career Mentoring in the Academic Sector

HKU Med School of Public Health, The University of Hong Kong  
1,097 followers  
1mo •

Big thanks to our speakers and mentors who contributed in the two career sessions in the APRU Global Health Conference 2021!

#### Career Sharing in the Non-academic Sector

Dr Au Yeung Shiu Lun Ryan (Moderator), Ms Shereen Ayub, Dr Ki Fung Kelvin Lam, Dr Lincoln Lau, Prof Vivian Lin, Dr Alex Ng, Dr Julian Sham

#### Career Mentoring in the Academic Sector

Dr YoungWon Kim (Moderator & Mentor), Dr Victoria Fan, Dr Job Godino, Dr Tommy Tsan-Yuk Lam, Dr Sophie Valkenburg & Prof Jason CH Yap

Thanks for your professional insights and useful guidance to the delegates. The sessions would be incredibly helpful for them to prepare for their future careers in the #globalhealth field!





# Acknowledgements

A big thank you to the judges of our 2021 student competitions:

## 2021 Global Health Case Competition - List of judges

King Chow (The Hong Kong University of Science and Technology)  
Donna Green (The University of Sydney)  
Calum Handforth (United Nations Development Programme)  
Budi Haryanto (University of Indonesia)  
Yin Hui (Peking University)  
Aya Ishizuka (The University of Tokyo)  
Masamine Jimba (The University of Tokyo)  
Youngwon Kim (The University of Hong Kong)  
Shubha Kumar (University of Southern California)  
Maggie Kwok (The University of Hong Kong)  
Mu Li (The University of Sydney)  
Julie Liao (The University of Hong Kong)  
Tina Lin (APRU)  
Leander Marquez (University of the Philippines)  
Judith McCool (The University of Auckland)

János Négyesi (Tohoku University)  
Juhwan Oh (Seoul National University)  
Erlinda Palaganas (University of the Philippines)  
Manuel Pérez Jiménez (Tecnológico de Monterrey)  
Sanjay Rampal (University of Malaya)  
Maosheng Ran (The University of Hong Kong)  
Tasdidaa Shamsi (University of Malaya)  
Haytham Sheerah (Osaka University)  
Parco Siu (The University of Hong Kong)  
Jingyi Wang (Fudan University)  
Mellissa Withers (University of Southern California)  
Martin CS Wong (The Chinese University of Hong Kong)  
Joni Zhang (The University of Hong Kong)  
Tianxiao Zhang (Xi'an Jiaotong University)  
Catherine Zhou (The Hong Kong University of Science and Technology)



**Our deep gratitude goes to Amazon Web Services for sponsoring the 2021 APRU Global Health Virtual Case Competition.**

## 2021 Global Health Student Poster Contest - List of judges

Edmar Elcarte (University of the Philippines)  
Budi Haryanto (University of Indonesia)  
Masamine Jimba (The University of Tokyo)  
Shubha Kumar (University of Southern California)  
Mu Li (The University of Sydney)  
Julie Liao (The University of Hong Kong)  
Judith McCool (The University of Auckland)  
Erlinda Palaganas (University of the Philippines)  
Manuel Pérez Jiménez (Tecnológico de Monterrey)

Sanjay Rampal (University of Malaya)  
Maosheng Ran (The University of Hong Kong)  
Tasdidaa Shamsi (Universiti Malaya)  
Haytham Sheerah (Osaka University)  
Mellissa Withers (University of Southern California)  
Martin CS Wong (The Chinese University of Hong Kong)  
Joni Zhang (The University of Hong Kong)  
Pinpin Zheng (Fudan University)

**We would also like to acknowledge the tremendous support of the APRU Secretariat, as well as the University of Southern California Office for Global Engagement.**



**USC** University of  
Southern California



# Acknowledgements

A big thank you to the Scientific Committee 2021:

## Co-Chairs



**Professor Mellissa Withers**

Global Health Programme Director  
Association of Pacific Rim Universities (APRU)

Associate Professor of  
Clinical Preventive Medicine  
University of Southern California



**Dr Mary Schooling**

Associate Professor and Cluster Leader (Non-communicable Diseases in Global Health)  
School of Public Health  
LKS Faculty of Medicine  
The University of Hong Kong

## Members



**Dr Parco Siu**

Associate Professor and  
Head of Division of Kinesiology  
School of Public Health  
LKS Faculty of Medicine  
The University of Hong Kong



**Dr Youngwon Kim**

Assistant Professor  
School of Public Health  
LKS Faculty of Medicine  
The University of Hong Kong



**Dr Maggie Kwok**

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The University of Hong Kong



**Dr Julie Liao**

Assistant Professor  
School of Public Health  
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