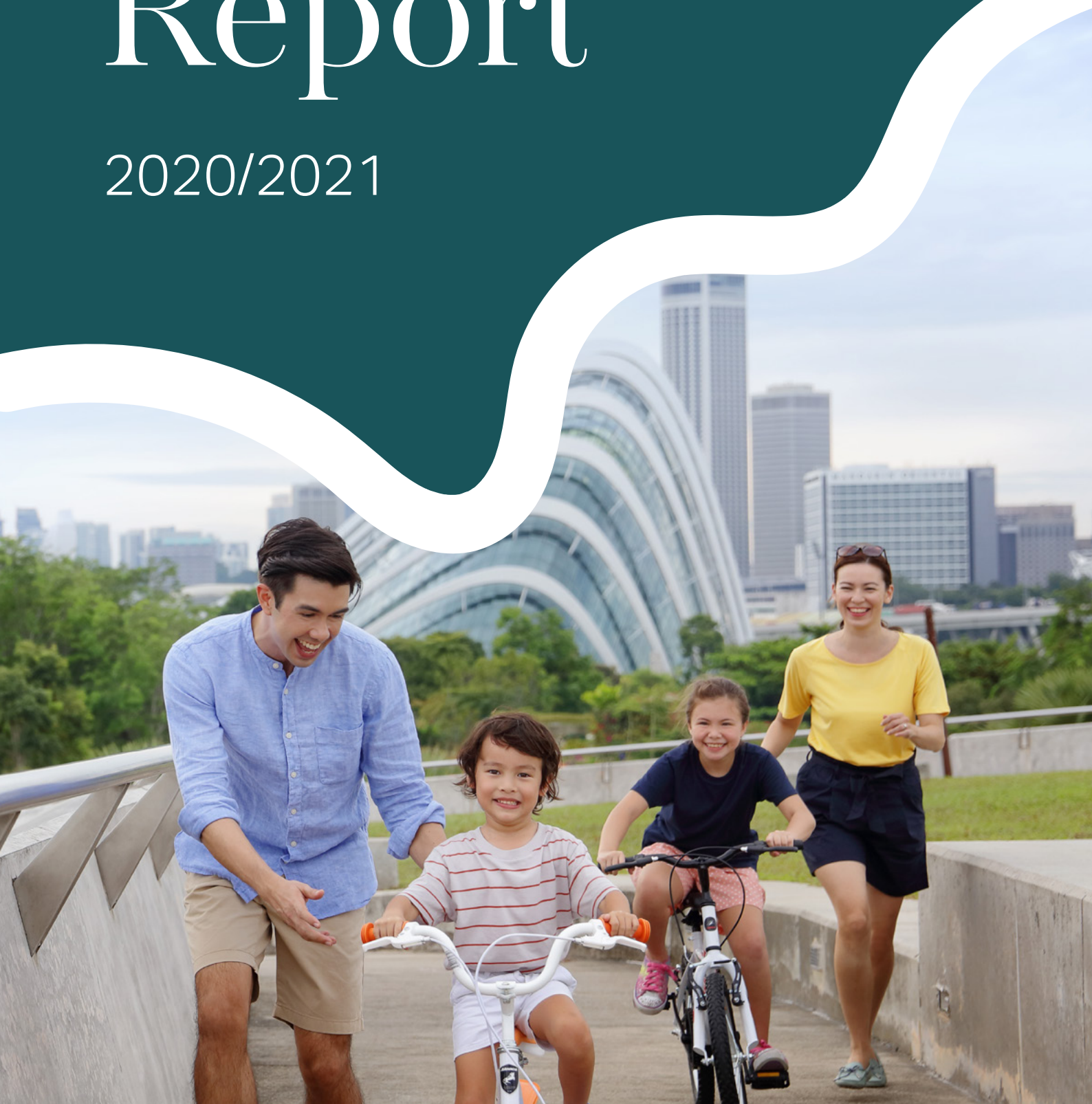
NUS SAW SWEE HOCK
SCHOOL OF PUBLIC HEALTH

Annual Report

2020/2021



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About the School

Building upon decades of experience in research, training and practice in epidemiology and public health, the Saw Swee Hock School of Public Health (SSHSPH), under the National University of Singapore, was established in October 2011 as Singapore's national school of public health. The School is also a member of the National University Health System (NUHS).

The School aims to continually foster healthier communities in Singapore and the region, and impact public health programmes and policies through its robust educational programmes and translational cross-disciplinary research work on cohort studies and life course epidemiology, infectious disease research, health technology assessments, health promotion, workplace safety and health, health systems evaluation and health services research. An interdisciplinary approach, augmented by rigorous training, applicable research and regional partnerships, places SSHSPH at the forefront of public health knowledge discovery and practice in Asia.

Mission

Turning discovery into healthier communities through education, research and partnership

Vision

Making the difference to the health of populations. Within Singapore and beyond, we catalyse the changes that improve the health and wellness of populations

Values

Excellence. We will be outstanding in our fields.

Partnership. We care, share and work together.

Integrity. We will do what is right.

Innovation. We find new ways to do better.

Dean's Message

This year marks the 10th anniversary of the founding of the School and the second year of the COVID-19 pandemic. The words of Martin Luther King Jr. neatly sum up both milestones, "Our very survival depends on our ability to stay awake, to adjust to new ideas, to remain vigilant and to face the challenge of change."

When the late Professor Saw Swee Hock donated S$30 million to establish the School in 2011, he envisioned a higher standard of public health in Singapore and the region, while grooming the next generation of public health leaders to tackle current and new public health challenges.

With the support of dedicated colleagues and alumni over the past decade, the School has played a key role in enabling policymakers to understand the magnitude and impact of growing chronic disease burden on local communities and help shape public health policies.

Over the past year, the School's tireless efforts have featured prominently in Singapore's public health fight against COVID-19. However, COVID-19 is just one of many diseases affecting the world now. We must be mindful of other public health challenges such as diabetes or hypertension and how ageing populations could enjoy healthy longevity, while exploring new ideas and innovations to address them.

Our role as public health practitioners will always be challenging as what we do has a direct impact on communities and human lives. Beyond our shores, there is increasing emphasis on public health challenges that are displacing large swathes of the population in Southeast Asia and the Middle East.

Climate change is an increasingly urgent challenge we must tackle. As a result of extreme weather events, increased respiratory and cardiovascular disease, injuries and premature deaths have already been recorded. In addition, food and water borne illnesses as well as infectious diseases and threats to mental health are also on the rise.

The School's transdisciplinary work and those by our peers across the globe have never been more important, as we need to work closely to prevent death and manage current and future diseases.

Despite the stark scenarios, the world is healthier and safer than ever. Work by our predecessors have halved the number of child mortality rates. The number of maternal deaths has also declined. These meaningful and important work must continue, so that future generations can live in a safer and more sustainable world.

To support this thrust, the School has partnered the Bill & Melinda Gates Foundation to leverage on mobile technology to support health volunteers in rural communities in Cambodia. The usage of technology will allow pregnancies and deliveries to be swiftly registered, while access to antenatal and postnatal care can be enhanced for pregnant women and young children. This is a small, but important step to uplift the standards of healthcare and living amongst the community.

Our efforts to impact regional communities were also given a further boost as Associate Professor Hsu Li Yang was awarded a grant to support the establishment and running of a regional infectious diseases research network - ADVANcing Clinical Evidence in Infectious Diseases (ADVANCE ID) - which will be primarily focused on clinical trials for drug-resistant infections. This latest initiative will allow the School to develop new capacity and capabilities among researchers and public health professionals in areas such as investigation protocols. We are already working on trials related to Antimicrobial Resistance which could lead to new treatment methods for populations in South and Southeast Asia.

The School has also collaborated with Temasek Foundation International to run a series of online webinars and workshops as part of the Healthcare Executive in Asia Leaders (HEAL) programme. Through the programme, participants from all sectors of society and businesses had a first-hand view of how policy and business decisions can influence public health.

On the home front, we have worked with SingHealth Duke-NUS Global Health Institute to set up a joint funding initiative for global health research in Asia to address wicked problems such as the unmet surgical needs in Southeast Asia and patient access to healthcare and essential health products in the Philippines.

Most, if not all, of our work and initiatives is only possible if we have a sustained pipeline of talent to support it. The past academic year also marks the first time the School took in our first batch of passionate undergraduate students undertaking their Second Major in Public Health. I look forward to some of them joining us as colleagues and contributing to the public health sphere in the years ahead.

As we celebrate our achievements over the past 10 years, I reflect and draw parallels with the ending lines to the poem, Ulysses, by Alfred Lord Tennyson, "One equal temper of heroic hearts, Made weak by time and fate, but strong in will, To strive, to seek, to find, and not to yield."

Our work is no less easy today, than it was a decade ago. It will get tougher in the face of current public health challenges, climate change or future black swan events such as COVID-19.

Yet, this is not new to us. We have fought adversities by remaining united while tapping on our strengths and working on new ideas to improve the health of communities. I am confident that the School will remain at the forefront of addressing the public health challenges facing Singapore and the world for decades to come.

Senior Management

PROF TEO YIK YING
Dean

ASSOC PROF JEANNETTE LEE
Vice Dean, Academic Affairs

ASSOC PROF LUO NAN
Director, Graduate Research Programmes
Domain Leader, Health Systems and Behavioural Sciences

ASSOC PROF CHIA SIN ENG
Domain Leader, Epidemiology

DR LIOW CHEE HSIANG
Vice Dean, Education

ASSOC PROF HSU LI YANG
Vice Dean, Global Health
Programme Leader, Infectious Diseases

ASSOC PROF JEREMY LIM
Director, Leadership Institute for Global Health Transformation (LIGHT)

ASSOC PROF JASON YAP
Vice Dean, Practice
Director, Public Health Translation

ASSOC PROF ALEX COOK
Vice Dean, Research
Domain Leader, Biostatistics and Modelling

Faculty Members

EMERITUS PROFESSOR

Lee Hin Peng

PROFESSORS

Chia Kee Seng
David Koh Soo Quee
Gerald Koh Choon Huat
Ong Choon Nam
Saw Seang Mei
Rob Martinus van Dam

ASSOCIATE PROFESSORS

Joseph Babigumira
Yann Boucher
Natasha Howard
Helena Legido-Quigley
Falk Müller-Riemenschneider
Ng Wee Tong
Adeline Seow Ling Hui
Tai Bee Choo
Kavita Venkataraman
Wee Hwee Lin
Wong Mee Lian

ASSISTANT PROFESSORS

Miho Asano
Cynthia Chen Huijun
Wenjia Chen
Mary Chong Foong Fong
Hannah Clapham
Mornin Feng Mengling
Saima Hilal
Zoe Jane-Lara Hildon
Lee Jeong Kyu
Rick Ong Twee Hee
Vincent Pang Junxiong
Nicholas Alexander Petrunoff
Seow Wei Jie
October Sessions
Sim Xueling
Clarence Tam
Tan Chuen Seng
Jasper Tromp
Yvette van der Eijk
Siyan Yi
Yi Huso

SENIOR LECTURERS

Lim Boon Tar Raymond
Judy Sng Gek Khim

LECTURERS

Julian Azfar
Andre Müller
Salome Antonette Rebello
Cecilia Teng

INSTRUCTORS

Suganthi Narayanasamy

View all faculty members here.

OTHER FACULTY MEMBERS

Gregory Chan Chung Tsing
Adjunct Assistant Professor

Roy Chan Kum Wah
Adjunct Professor

Cheah Peh Yean
Joint Adjunct Associate Professor

Chew Ling
Adjunct Associate Professor

Chew Suok Kai
Adjunct Associate Professor

Chia Ngee Choon
Joint Associate Professor

Winston Chin Chee Wei
Adjunct Assistant Professor

Martin Chio Tze-Wei
Joint Adjunct Associate Professor

Chng Jeremiah
Adjunct Assistant Professor

Chong Siow Ann
Adjunct Professor

Angela Chow Li Ping
Adjunct Associate Professor

Kenneth David Choy Kwok Yin
Adjunct Assistant Professor

Matthew Chua Chin Heng
Joint Lecturer

Raymond Chua Swee Boon
Joint Adjunct Associate Professor

Jeffery Lawrence Cutter
Adjunct Associate Professor

Eric Andrew Finkelstein
Joint Professor

Fong Ngan Phoon
Joint Adjunct Associate Professor

Gan Wee Hoe
Joint Adjunct Assistant Professor

Gao Xiaoli
Joint Associate Professor

Lorenz Fabian Goette
Joint Professor

Goh Kee Tai
Adjunct Professor

Mikael Hartman
Joint Associate Professor

Derrick Heng Mok Kwee
Adjunct Professor

Jeff Hwang Yi-Fu
Joint Lecturer

Satkunanantham s/o Kandiah
Joint Professor

Koh Woon Puay
Joint Professor

Lee Chien Earn
Joint Adjunct Professor

Lee Heow Yong
Adjunct Associate Professor

Lee Hock Siang
Adjunct Associate Professor

Lee See Muah
Adjunct Associate Professor

Vernon Lee Jian Ming
Adjunct Professor

Hsien-Hsien Lei
Adjunct Associate Professor

Leo Yee Sin
Adjunct Professor

Liew Tau Ming
Adjunct Assistant Professor

John Lim Chien Wei
Joint Professor

Lim John Wah
Joint Adjunct Assistant Professor

Lim Poh Lian
Adjunct Associate Professor

Lim Su Chi
Research Associate Professor

Lim Yee Wei
Joint Associate Professor

Annie Ling Mei Chuan
Adjunct Associate Professor

Stefan Ma Sze Lok
Joint Adjunct Associate Professor

Michael
Adjunct Assistant Professor

Prem Kumar Nair
Adjunct Associate Professor

Ng Kwong Hoe
Adjunct Associate Professor

Ngiam Kee Yuan
Joint Associate Professor

Ooi Eng Eong
Joint Professor

Steven Ooi Peng Lim
Adjunct Associate Professor

Peter Piot
Joint Distinguished Visiting Professor

Natarajan Rajaraman
Adjunct Lecturer

Adrian Roellin
Joint Associate Professor

Brian See Cheong Yan
Adjunct Assistant Professor

Lydia Seong Peck Suet
Adjunct Associate Professor

Eugene Shum Jin-Wen
Adjunct Associate Professor

Mythily Subramaniam
Joint Associate Professor

Tai E Shyong
Joint Professor

Kelvin Tan Jek Chen
Joint Adjunct Associate Professor

Kyle Tan Xin Quan
Adjunct Assistant Professor

Maudrene Tan Luor Shyuan
Adjunct Lecturer

Tan Say Beng
Joint Associate Professor

Clive Tan
Adjunct Assistant Professor

Teoh Yee Leong
Joint Adjunct Associate Professor

Shyamala Thilagaratnam
Adjunct Associate Professor

Bernard Thio Yauw Leng
Adjunct Associate Professor

Matthias Paul Toh Han Sim
Adjunct Associate Professor

Semra Ozdemir van Dyk
Joint Assistant Professor

David Wu
Adjunct Assistant Professor

James Yip Wei Luen
Joint Associate Professor

People

Fresh Faces

ASST PROF
CHEN WENJIA

I am a health economist and outcomes researcher. I have been appointed as an Assistant Professor (Tenure Track) in the Health Services and Behavioural Sciences domain since 22 February 2021. I obtained my BSc in Biotechnology from Sun Yat-Sen (Zhongshan) University, MSc (Neuroscience) from University of Iowa, MPH (Public Health – Health Economics) from University of Pennsylvania, and PhD (Health Economics and Outcomes) from University of British Columbia (UBC). Before joining the school, I was a postdoctoral fellow at the University of Toronto and UBC.

My research interests include big data science-driven population health economics and precision medicine, comparative effectiveness and cost-effectiveness of new technologies in particular precision medicine.

I am a fan of art and cats. I have a 7-year-old son and a 14-year-old cat. In my spare time, my son and I enjoy creating arts and crafts, and going to museums and to the beach. I love chocolate and Coca-Cola, but I always try to hide them from my son because he loves them too!

ASST PROF
JASPER TROMP

In April 2021, I joined the school as an Assistant Professor (Tenure track) in the Epidemiology domain. I hold a joint appointment with the National Heart Centre Singapore. I was born and raised in the Netherlands, and I completed degrees in International Relations (BA) and Medicine (BSc, MD and PhD) at the University of Groningen, the Netherlands.

I've always been interested in the intersection between medicine, research and policy from a young age. This interest has led me to be part of several municipal youth councils in high school, be an active member of the International Federation of Medical Students Abroad (IFMSA), and study International Relations next to my medical education.

During my MD and PhD studies, I lived in Japan for about two years (in 2011 and 2016) and Germany for about one year. I came to Singapore in late 2016 to finish my PhD. Subsequently, I stayed as a postdoctoral research fellow at the National Heart Centre Singapore.

I am mainly interested in cardiovascular disease and non-communicable risk factors (such as hypertension and diabetes). Specifically, I have done a lot of research on heart failure and studied differences in risk factors, quality of care, and health resource utilisation in lower- and middle-income regions in Asia. I'm also interested in digital health interventions in low-resource settings. For example, I am currently involved in a study testing deep learning-based decision support tools to diagnose heart disease by nurses in Tunisia. In addition, I enjoy working with the World Heart Federation on policy documents.

When I'm not working, I play the guitar, cycle, go to the gym and, in pre-COVID times, discover new places (in Singapore and beyond) or learn languages. My partner Mami, who is from Japan, joined me here in Singapore. We like to explore Singapore, our new home, and try different types of food together.

Importantly, I enjoy meeting new people and old friends, so I'm always happy to chat or meet for coffee or lunch!

During a visit to Canada

With Mami in a park in Tokyo

Fresh Faces

ASSOC PROF YANN BOUCHER

I was jointly appointed as an Associate Professor at SSHSPH and the Singapore Centre for Environmental Life Sciences Engineering (SCELSE) at Nanyang Technological University in August 2021, although I arrived in Singapore at the same time as SARS-CoV-2 in January 2020 for a short sabbatical beforehand.

Previously, I worked at the University of Alberta in western Canada, teaching general microbiology and microbial evolution, and running a research programme on the epidemiology of cholera.

I am originally French Canadian, having grown up in rural Québec, but bounced between the west and east coasts of Canada for my studies, completing a PhD in molecular evolution at Dalhousie University in Nova Scotia. I then moved to Australia to work as a postdoctoral researcher on antimicrobial resistance vectors at Macquarie University in Sydney. From there I went on to the Massachusetts Institute of Technology (MIT) in Boston, where I did a second postdoctoral period studying the population genetics and ecology of waterborne pathogens.

Hunting for giant mushrooms in Bison country

Ice skating in the Canadian Rockies

Yann and his crew running the Vibrio conference in Montreal in November 2019. Little did they know the pandemic was coming...

Hunting cholera in coastal Bangladesh

I have worked on cholera for over a decade, both in epidemic (Haiti) and endemic (Bangladesh) settings. I am a passionate taxonomist, loving to discover and finding names for new emerging pathogens. I love reading old historical records and papers to understand the history and evolution of infectious diseases. My research focus is on the environmental transmission of bacterial pathogens and how they cycle between the human host and outside reservoirs. Since joining SSHSPH, chats with my new colleagues have jolted my interest into how human behaviour affects this transmission cycle and how we can use a 'One Health' approach to understand it.
I am currently starting up a project on the long-term effect of contaminated drinking water on the health and microbiome of rural Bangladeshis, as well as the transmission pathways of antibiotic resistance in Singapore's St John's Island ecosystem.

I am enjoying the warm Singapore weather, its beautiful parks and all the delicious food with my family and our loyal doggo Pippi Longstocking. In my spare time, I develop educational games and hopefully will soon host barbecues, travel, dive and hike around Southeast Asia!

Faculty and Staff Awards

SSHSPH TEACHING EXCELLENCE AWARD AY19/20

This award recognises faculty members who have excelled in teaching, and have shown a high level of performance, dedication and commitment to teaching and learning.

Dr Liow Chee Hsiang, Vice Dean (Education)

Assoc Prof Kavita Venkataraman

Mr Julian Azfar, Lecturer

SSHSPH YOUNG RESEARCHER AWARD AY19/20

This award recognises junior faculty members who have demonstrated great potential in research and achieved research excellence.

Asst Prof Cynthia Chen

SSHSPH OUTSTANDING RESEARCHER AWARD AY19/20

This award recognises top deserving researchers who have achieved a consistent track record of research excellence and impact in their area of expertise.

Assoc Prof Falk Mueller-Riemenschneider

NUHS TEACHING EXCELLENCE AWARD 2020

This award recognises outstanding teachers who exemplify the NUHS values of Teamwork, Respect, Integrity, Compassion, Excellence and Patient Centredness.

Assoc Prof Jason Yap, Vice Dean (Practice)

Asst Prof Rick Ong

NUHS HEROES EDUCATION AWARD

This award recognises educators who have gone above their call of duty to contribute to the Education mission during the COVID-19 pandemic. Despite his commitment in the migrant worker dormitories, Asst Prof Pang sacrificed his time and spent late nights, sometimes till 5am, to help students with their Community Health Projects.

Asst Prof Vincent Pang

SSHSPH LONG SERVICE AWARDS 2021

45 YEARS

Ms Lim Poh Choo

Ms Soh Gim Choo Roma

35 YEARS

Ms Low Siew Hong

30 YEARS

Assoc Prof Wong Mee Lian

25 YEARS

Ms Vivian Ng

15 YEARS

Assoc Prof Luo Nan

Mr Mok Fook Chan

Mr Tan Yih Chong

10 YEARS

Prof Rob van Dam

Assoc Prof Kavita Venkataraman

Dr Judy Sng

Ms Chen Po Jan

Ms Chua Yee Shang Crystal

Ms Teo Hwee Ling Yvonne

Ms Yeap Liew Moon

5 YEARS

Assoc Prof Jason Yap

Asst Prof Sim Xueling

Mr Julian Azfar

Ms Chai Jin Fang

Ms Charmaine Tang Pei Si

Mr Joseph Yio Linao

Ms Lee Leng Choo

Ms Marina Binti Zahari

Mr Mohamad Nizar Bin Zainal

Dr Tam Chen Hee

Ms Tan Mei Jin Melisa

Ms Tang Cheng Yee

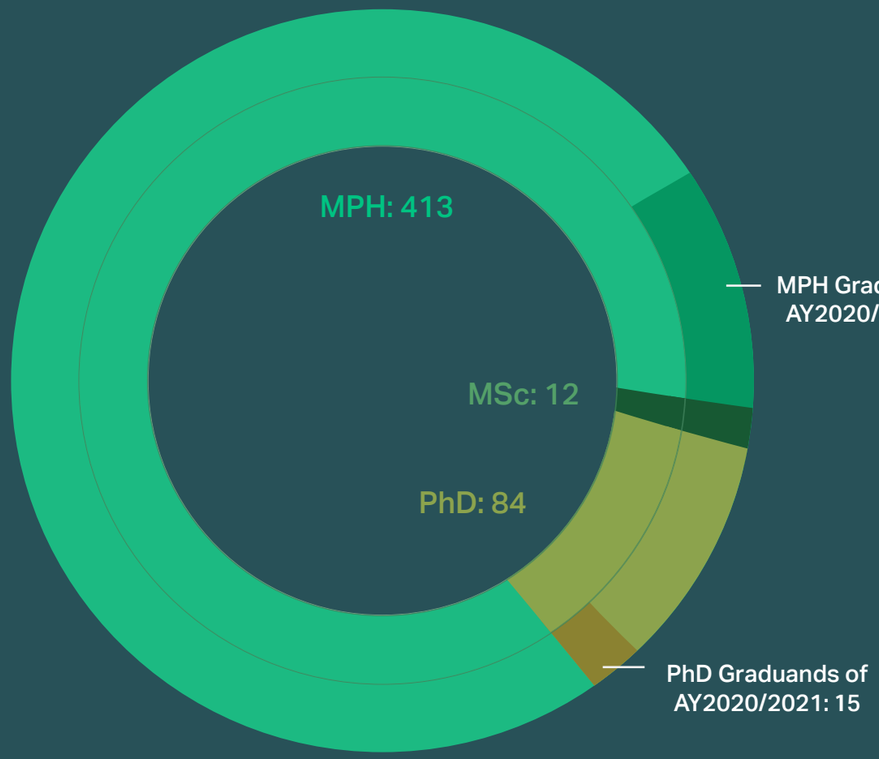
Mr Zulkhairil Bin Suradi

Master of Public Health (MPH) graduates at their Commencement ceremony in 2018

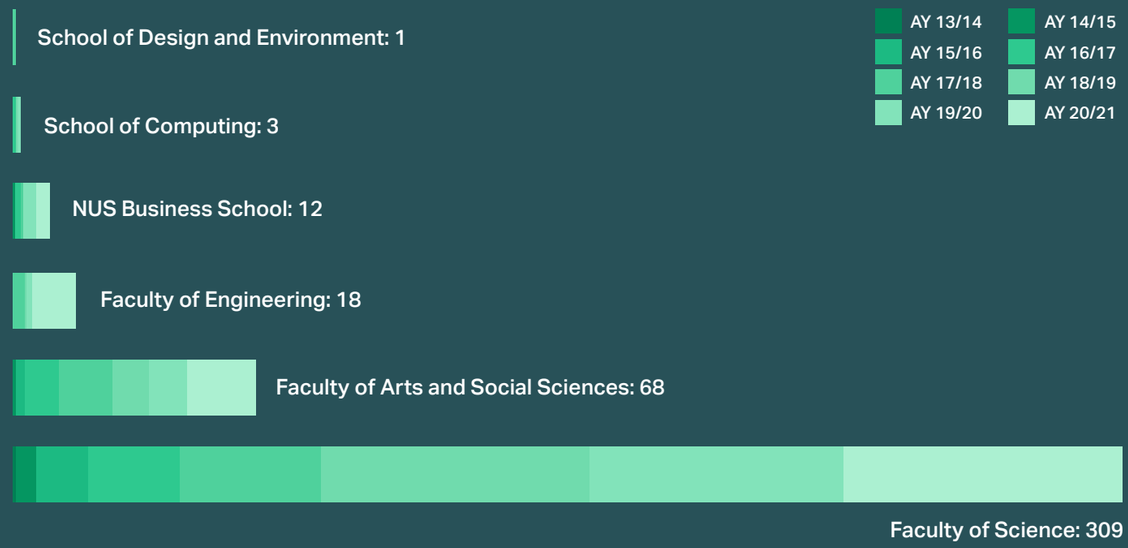
Education

Education in numbers

Graduates since the School's establishment in 2011:



Number of NUS graduates with a Minor in Public Health since 2013:



Number of medical students we taught this past academic year:

580 Year 1 and 2 students for the modules: Medicine and Society & Information Literacy	308 students Year 3 students for the modules: Public Health Aspects of Primary Care & Community Health Project

Congratulations, Classes of 2020 and 2021!

The SSHSPH Classes of 2020 and 2021 were conferred their degrees during NUS' first online graduation ceremony on 26 June 2021.

Mdm Halimah Yacob, President of the Republic of Singapore and NUS Chancellor, presided over the ceremony. In her message to the graduating class, she noted that COVID-19 is a reminder that sometimes even the best laid plans can be overturned by events that are not within our control, and she hoped that graduates will embrace all challenges with positivity and tenacity.

"It is during such challenging times that we must hold steadfast to our values – respect, integrity, innovation, excellence and resilience. I encourage you to embody these traits in the path ahead. Strive to give your best in whatever you do. Stay curious, and keep learning. More importantly, show respect and humility to all you meet along the way. These, more than anything, will help you go far in life."

– President Halimah

Dean, Prof Teo Yik Ying also shared his hopes for the graduates to continue protecting and maintaining the health of people: "We look forward to watching you soar in your careers as you turn what you have learnt and what you have discovered into healthier communities."

Dr Sharon Tan graduated with a Master of Public Health (MPH) and is the valedictorian for the Class of 2020. With the pandemic casting the spotlight on public health, she highlighted that her fellow graduates, now full-fledged public health professionals, join the band of the unsung heroes of the pandemic.

"Among us are epidemiologists who work round the clock to investigate links between cases, and biostatisticians who plough through multiple datasets under impossibly tight deadlines to generate predictions for contingency planning.

Among us are policymakers who have countless late-night meetings to iron out the details of safe management measures.

Also among us are practitioners in global health and health promotion, who tirelessly study, and advocate for the physical, mental and social well-being of our migrant workers and the underprivileged.

As a team, we draw on our diverse backgrounds, and the breadth and depth of our knowledge and training, to make a positive difference to the lives and health of the people around us."

Dr Tan shared her hopes for her classmates to hold on to the ideals and beliefs that led them to public health in the first place. She added, "May we trust that there is always light at the end of the tunnel, even though the road may be dark and murky, even if others criticise us, even if we stumble and fall, and even if the solutions to problems may not always be immediately clear and apparent to us."

In his speech, Dr Mervyn Lim Jun Rui, MPH graduate and valedictorian for the Class of 2021, reflected on the uncertainties brought by the pandemic and the impact on this year's graduating class:

"I believe that we have a unique opportunity to break the moulds of the past and be change agents in influencing the new normal. COVID-19 has been disruptive, but more importantly, it has shown us how we can work together to improve our healthcare system and reduce the health inequities in Singapore. It has lit a brilliant light on capitalising on technology like telemedicine, mobile applications, advanced diagnostics and new models of community care to enable us to deliver healthcare amidst a communicable disease crisis."

"We must be continually informed, identify areas of need, be brave enough to speak, and aim to influence change within our own communities.

After all, public health is all about its people making change for the people."

Read more here.

Student Awards

DEAN'S LIST

Awarded each semester to the top five per cent of students from the Master of Public Health programme with the highest Semester or Academic Year average point

SEMESTER 1

Chhugani Karuna Deepak

Ho Fu Wah Andrew

Irene Ooi Li Peng

Lee Junhong

Lim Zhiying

Teo Qun Xuan, Nigel

Yap Li Wen

SEMESTER 2

Andrew Arjun Sayampanathan

Chen Yu Ting

Halina Binte Talib

Lee Junhong

Lim Huizi, Evelyn (Lin Huizi)

Tan Kian Wei Alvin

Teoh Shu Ning, Nicole

Yap Li Wen

DEAN'S MEDAL AND PRIZE

Awarded each year to the student from the Master of Public Health programme who has achieved the highest mark for the Practicum

Lee Yun Hui

GRADUATE STUDENT RESEARCH AWARD

Three awards are available each year, one for each domain, for the graduate research student who has distinguished himself/herself in research, as assessed by the quality and quantity of the publications since matriculation and the public health impact of the student's work.

Epidemiology Domain
Alvin Teo Kuo Jing

Biostatistics and Modelling Domain
Lim Jue Tao

Health Systems and Behavioural Sciences Domain
Shilpa Tyagi

LEE HIN PENG MEDAL

Awarded each year to a graduating student from the Master of Public Health, Master of Science, or Doctor of Philosophy programme, who has obtained a good CAP and achieved the best score for the Public Health Research Methods module

Lee Zi Yao

NUSS MEDAL FOR OUTSTANDING ACHIEVEMENT

Awarded to the student who has achieved academic excellence as well as made significant extra-curricular contributions

Tan Kay Jin, Rayner

OCCUPATIONAL AND ENVIRONMENTAL HEALTH SOCIETY MEDAL

Awarded to the student who has most distinguished himself/herself in the examination leading to the degree of Master of Public Health (with specialisation in Occupational Health)

Eu Zai Feng, Elliot

RICHARD GILLIS PRIZE

Awarded to the graduating student pursuing a specialisation in Occupational Health in the Master of Public Health programme who achieves the best academic results and who also distinguishes himself/herself in the Industrial Hygiene component of the course

Eu Zai Feng, Elliot

TYE CHO YOOK GOLD MEDAL

Awarded to the student who has distinguished himself/herself in the examination leading to the Master of Public Health degree

Mervyn Lim Jun Rui

SSHSPH GRADUATE STUDENT TEACHING AWARD AY19/20

This award recognises the contributions of graduate students as Teaching Assistants (TA) in the school's education programmes, based on student and module coordinator feedback.

Lim Shan Xuan

Tan Kay Jin, Rayner

Tan Ken Wei

Student Features

ELLIOT EU

Master of Public Health ‘21
Recipient of the Occupational and Environmental Health Society Medal and Richard Gillis Prize

I am honoured to have received the Occupational and Environmental Health Society Medal and Richard Gillis Prize. Looking back, I see my Master of Public Health (MPH) experience as a highlight of this stage of my life. I know the skills and knowledge learned on this transformative journey will serve me well in my professional career in Occupational Medicine.

I quickly saw how I could apply so much of the curriculum I learnt to my daily work as a preventive medicine doctor. Through epidemiology and basic statistics, I gained a new perspective on the usefulness of data in the healthcare sector and skills to help analyse it. The module on programme evaluation taught me how to measure quality improvement projects within a hospital, and the health policy module helped make healthcare systems seem... less complex.

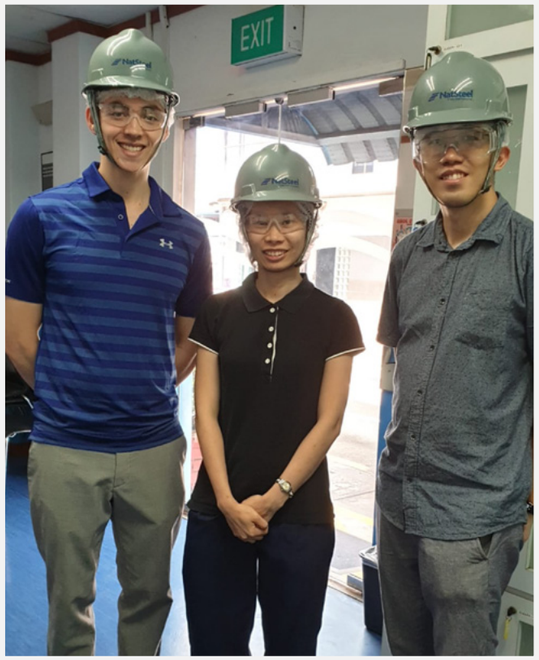
The best part of the MPH were the occupational health modules that allowed me to visit factories in different industries, practice workplace assessments and devise hazard controls. Such practical education made workplace health and safety so much more applicable and enjoyable.

The most challenging hurdle of the Masters was preparing my practicum report. I analysed how a hospital vaccination policy addressed the logistical, financial and ethical issues surrounding institution-level mass vaccinations.

This exercise allowed me to deep dive into an area of immediate relevance to my workplace and better understand a public health tool of tremendous benefit to society.

On reflection, what really made the subject come alive were the faculty – dedicated to what they do and passionate to share. I am grateful for their mentorship for without it, the two years would not have been the same.

In future, I hope many more students pursue their MPH at SSHSPH to discover for themselves where I have gained so much.



Dr Elliot Eu (left) visiting NatSteel during an occupational health module with fellow classmate Dr Alicia Loi (middle) and course lecturer, Dr Jeff Hwang

LIM JUE TAO
PhD ‘21
Recipient of the Graduate Student Research Award (Biostatistics and Modelling Domain)

As one of the winners of the Graduate Student Research Award, I am grateful to receive this as a recognition of research work done during my tenure as a research student. This would not have been possible without my supervisor, Assoc Prof Alex Cook, and fellow lab mates Borame, Crystal, Esther, Haoyang, Joel and Yiting who heavily supported me throughout the PhD journey, and whom I have learnt so much from, consequentially.

While a large portion of my PhD was conducted through the COVID-19 pandemic, I am glad that SSHSPH has provided resources as well as new research opportunities to guide us through these interesting times. This has borne fruition in my joint work modelling and evaluating COVID-19 motivated non-pharmaceutical interventions, as well as developing new collaborations with various public health agencies locally and regionally.

This PhD has given me a strong foundation to take up my research leadership role at the Environmental Health Institute at National Environment Agency, where my team translates tools from econometrics, statistics and computational epidemiology to answer questions of environmental public health concern.

The training at SSHSPH has allowed me to make a lasting impact in public health, and I will always be grateful for this short but memorable two years in SSHSPH as a research student.

All smiles at school

VINCENT CAI
Master of Public Health ‘21

COVID-19 contact tracing became a calling

Vincent Cai joined the Communicable Diseases Division at the Ministry of Health a month before the first cases of COVID-19 were reported in Wuhan. A natural extension from his past experience with surveillance and reporting of droplet-borne diseases during his postgraduate studies at the NUS Saw Swee Hock School of Public Health, Vincent soon found himself in multiple roles related to Singapore’s contact tracing efforts.

Performing a delicate balancing act, he completed his practicum in school while juggling the demands of contact tracing work at the peak of Singapore’s COVID-19 outbreak in 2020. He received his degree of Masters in Public Health (MPH) from NUS on 26 June 2021.

Recounting the challenging period at the height of the global pandemic, Vincent confessed that the journey was a tough one. In the initial weeks, little was known about the new virus. The science behind COVID-19 was constantly evolving, and the challenges that came with each case were also different. In an atmosphere of fear and uncertainty, Vincent had to handle each case with tremendous empathy, building a rapport with the contacts and their families while reassuring them of what to expect in the days ahead.

“Experiencing the rapid changes in the pandemic has made me realise the importance of being nimble and adaptable,” shared Vincent. “However, as a Public Health Officer, I see it both as a privilege and a duty to contribute to Singapore’s national effort of bringing COVID-19 under control.”

Vincent decided to enrol in the MPH programme after witnessing how the work of the School was translated into meaningful changes in healthcare delivery and initiatives, such as the War on Diabetes.

He credited his education for preparing him to handle the challenges of COVID-19. “My studies at NUS exposed me to a diverse range of public health topics, and gave me the opportunity to work with professionals from a wide range of backgrounds. This exposure has prepared me well for my current work, where a single issue, like a global pandemic, will have an impact on many sectors and facets of life,” he said.

Vincent’s current role within the Contact Tracing Task Group is to initiate the contact tracing process by verifying confirmatory laboratory results of patients that test positive for COVID-19. He remains continually inspired by what Singapore has achieved for public health, and is determined to contribute to its continual progress.

Read **here**.

FUNG RUI MIN

Pursuing a Bachelor in Life Sciences with a 2nd Major in Public Health

Reflecting on the past academic year, it has truly been a fulfilling chapter in my academic pursuit. I was enrolled into the pioneer batch of undergraduates in the Second Major in Public Health, led the NUS Public Health Society as President, and started an internship with GlaxoSmithKline (GSK).

Applying for the Second Major was a natural choice for me, having been intrigued by the blend of art and science of Public Health. The curriculum gave me the freedom and capacity to explore various facets of Public Health such as programme and policy design. This helped me to identify areas of interests, and therefore make informed choices in my future endeavours.

While the school's curriculum provided me with head knowledge, the NUS Public Health Society was where I put theory into action. Through avenues such as Public Health initiatives, research and communications, students get opportunities to create real world health impacts. As President, I oversaw such projects, liaised with external stakeholders, and was involved strategic planning - creating a vision that values health.

Together, classroom and experiential learning equipped me well as I began my internship at GSK. As a Medical Affairs intern in the Consumer Health category, I was involved in crafting accurate and innovative claims for GSK's products. This involved understanding consumer needs and epidemiology, regulations of different country's health systems, and other facets of the overall Public Health landscape.

I am thoroughly grateful for these enriching opportunities and am excited to continue on my journey of lifelong learning.

QUEK HUI YI

Pursuing a Bachelor in Life Sciences with a 2nd Major in Public Health

Taking GEH1049 in Year 1 was what first sparked my interest in global health and humanitarian work. Thus, when I was matched to Médecins Sans Frontières (MSF) / Doctors Without Borders for a three-month internship for SPH3001, I knew that this was not an opportunity to be missed. As an intern under the Operations Support Unit, I was given the autonomy to plan and execute the first phase of a research and stakeholder mapping project on emergency preparedness and response. It was a great learning experience as I needed to be highly independent in conducting the research and producing its outputs.

I also had valuable opportunities to engage in a variety of work from the Communications and other departments, including the digital mapping of rural areas around the world and maintaining the Instagram page. These, together with attending weekly meetings and presentations, opened my eyes to how such a complex organisation like MSF functions through the coordination of different departments within and across countries to fulfil its larger mission of delivering medical aid to where it is most needed.

I was able to better appreciate the importance of backend support (such as operational support, fundraising, communications, logistics coordination etc.), and also gained insights into the challenges that MSF field workers face on the ground when working in resource-scarce and inaccessible settings. Seeing the immense dedication that my fellow colleagues had to their work was truly admirable and inspiring!

While this was fully remote, the learning experience was definitely not compromised thanks to the high-quality support provided by my supervisor and colleagues who were so understanding, approachable and encouraging. All in all, spending my summer break with MSF was no doubt a fulfilling and inspiring learning journey, with takeaways that I will keep with me for a long time as I continue to pursue this path.

Hui Yi in Montréal, Canada for a family vacation in 2019

Hui Yi on a boat ride towards the Niagara Falls during a family vacation in 2019

Executive Education and Training Programmes

IMPLEMENTING TOTAL WSH IN THE WORKPLACE
25 Nov to 4 Dec 2020

The School organised a six-day workshop on Total Workplace Safety and Health (Total WSH) and how to best implement it in the workplace. The programme highlighted Singapore's framework to promote worker safety, occupational health and wellness, as well as management of infectious diseases at the workplace as the world continues to grapple with the pandemic.

The workshop was part of the NUS Resilience and Growth Initiative to offer development opportunities to graduates from the NUS Class of 2020.

A total of 19 participants from various backgrounds attended, including fresh graduates from NUS, safety and health officers, occupational nurses, and other professionals from the public and private sectors. The workshop was well-received with all participants agreeing that it met their learning expectations and was useful for their work.

HEALTHCARE EXECUTIVE IN ASIA LEADERS (HEAL) PROGRAMME
Mar to Aug 2021

Funded by Temasek Foundation International, this online programme comprised four webinars open to the public, and four workshops with a selected audience of 20 early- and mid-career leaders from different sectors and different countries in ASEAN.

The programme focuses on four topics: Precision Public Health, Food For Health, Health-Promoting Cities and Commercial Determinants of Health.

The webinars allowed a wider public to become familiar with topics and issues that affect health and society. The workshops provided training to managers and executives in leadership capacities in all sectors to effectively understand and navigate modern health challenges and to develop an ability to integrate health considerations into their decision making.

INFECTIOUS DISEASE CONTROL AND OUTBREAK MANAGEMENT
17 to 20 May 2021

Under the Japan-Singapore Partnership Programme for the 21st Century (JSPP21), which is part of the Singapore Cooperation Programme, the School convened an online course on infectious disease control and outbreak management for government officials in Southeast Asia, South Asia and the Pacific Island States who work in the healthcare sector.

This training platform was specially designed for agencies to build a sustainable field epidemiology workforce to meet the challenging future of public health fraught with emerging infectious diseases.

Facilitated by expert trainers from SSHSPH and the National Institute of Infectious Diseases, Japan, the short course introduced participants to knowledge and skills in applied epidemiology and rapid response for participants. Through group work, participants investigated issues and reflected on the creation of a profile of community health, which can provide important clues to the at-risk groups in need of targeted interventions. The course also touched on the importance of ensuring that health security extends beyond human health to involve good hygiene, sanitation, environmental health, animal health, food safety and even social resilience.

Thought Leadership

COVID-19 IN ASIA PACIFIC: BORDER CONTROL AND PATH TO REOPENING
21 Oct 2020

The COVID-19 outbreak brought global travel to an unprecedented halt as countries worldwide imposed travel restrictions in an attempt to contain spread. Yet, many look towards reopening and return to a sense of normalcy while striking a balance between protecting public health and economic survival. As the virus continues to rage across countries in the Asia Pacific region, governments have to explore different options to reopen their borders.

This webinar examined and discussed the experiences, ideas and practical considerations for border control, as well as the role of diagnostic testing in the reopening pathway. The 90-minute-long webinar moderated by Dean, Prof Teo Yik Ying, was attended by over 450 participants from 18 countries.

The report from the event is available **online.**

CELL AND GENE THERAPY REIMBURSEMENT IN ASIA
26 Oct 2020

This closed-door virtual round-table discussion brought together senior stakeholders in the health and insurance sectors to address the critical issue of how societies and health systems can and need to respond to the changing nature of therapies.

Today, most therapies for non-communicable diseases like cancer are stretched over months or are lifelong, thus spacing out payments. However, with the advent of cell and gene-based therapies, the treatments become one-off. This has profound implications for improvement of health and quality of life but the 'upfront payments' model will greatly stress financing systems and run the risk of crowding out other needed health expenditure.

FUTURE TRENDS FORUM
18 Nov 2020

This virtual forum focused on how health systems in selected countries (Thailand, Taiwan, Indonesia, Philippines, Vietnam and Singapore) are changing due to COVID-19, in particular with respect to the adoption of digital health initiatives.

The impact of the pandemic on healthcare systems was discussed in terms of resource allocation and changes in policy, with a view to draw lessons and recommendations for the future.

The acceleration in use of digital health technologies was assessed in the countries represented, and participants discussed whether this development will remain sustainable beyond the current emergency situation.

COVID-19 VACCINE: MEASURES OF SUCCESSFUL DEPLOYMENT IN ASEAN
21 Jan 2021

The School convened a virtual round-table discussion with regional stakeholders to explore strategies and challenges for efficient vaccine delivery among the ASEAN countries, as well as consider a common framework around what would constitute successful deployment of COVID-19 vaccines in the region.

APRU CRISIS MANAGEMENT GROUP WEBINAR SERIES
Sep 2020 to Mar 2021

As part of a group on Crisis Management supported by the Association of Pacific Rim Universities (APRU), the School took part in a series of four webinars in collaboration with Peking University, University of California Los Angeles and University of Sydney. The webinars discussed approaches to pandemic management during COVID-19, providing perspectives from across the world.

The School convened one webinar on 10 December 2020 with the topic **'Collaborating in Crisis: Academic-Governmental Partnerships during COVID-19'**. It was moderated by Dean, Prof Teo Yik Ying, and saw presentations from Vice Dean (Research), Assoc Prof Alex Cook, as well as presentations from the partner institutions.

The School also contributed to the other three webinars with presentations from faculty members. The topics discussed included: Perspectives of COVID-19 Pandemic: Epidemiology, Prevention and Control (presentation by Prof Teo Yik Ying); Solutions for COVID-19 Pandemic Control: Vaccines and Beyond (presentation by Asst Prof Hannah Clapham); and The Impact of COVID-19 on Non-Communicable Diseases (presentation by Assoc Prof Wee Hwee Lin).

Find out more about our education programmes and continuing education and training opportunities.

Research

Pandemic Fighters

We have been actively involved in the pandemic response with several faculty members providing research and analytic support to the Ministry of Health and other agencies.

Asst Prof Clarence Tam (left) and Asst Prof October Sessions (right) have been conducting research and publishing to strengthen the evidence base for interventions to target SARS-CoV-2, while also continuing their work on other infectious disease threats such as dengue.

Asst Prof Hannah Clapham, who joined us in January 2020, has been actively contributing to the national COVID-19 response while establishing her team. Her group's work focuses on understanding the impact of immunity on infectious disease dynamics, including estimations of vaccination impact, and design and analysis of serological studies.

With global collaborators, she led the publication of a paper on the key areas for consideration in the undertaking of different types of serological studies published in Emerging Infectious Diseases; she followed this up with a commentary on the current use of COVID-19 serological surveys globally in Lancet Global Health.

Locally, her team has contributed to the design and analysis of COVID-19 serological studies in Singapore, and she leads ongoing modelling work on projecting the impact of COVID-19 vaccination in Singapore.

Assoc Prof Natasha Howard completed a study funded by the United Nations Population Fund (UNFPA) to perform country-specific socioeconomic assessments and regional qualitative research on the impacts of the COVID-19 pandemic on women and adolescents.

Using povidone-iodine throat spray or consuming anti-malaria drug hydroxychloroquine found to reduce risk of COVID-19 infection in healthy individuals in high-transmission settings

These findings were revealed by a local study of 3,037 healthy young migrant workers who were quarantined in Tuas South Dormitory in May 2020. It was found that taking a povidone-iodine throat spray three times a day, or the oral drug hydroxychloroquine once daily, reduced the likelihood of getting infected by SARS-CoV-2 by over 20 per cent.

The study was done by clinician-scientists from the National University Health System (NUHS), led by Assoc Prof Raymond Seet, a senior consultant in the division of neurology at the department of medicine in National University Hospital (NUH). The researchers included Prof Paul Tambyah and Dr Amy Quek from NUH, and Assoc Prof Alex Cook and Assoc Prof Mikael Hartman from SSHSPH.

Assoc Prof Seet, Dr Quek and Assoc Prof Hartman were early volunteers at the dormitories, where they ran medical posts, swabbed and screened residents with infection who may require hospital care.

"At the start of the outbreak, the numbers of dorm infections were simply overwhelming. That was when we got together with Prof Tambyah and Assoc Prof Cook to come up with the idea of running a study, all with the overarching aim to help ease the burden on our healthcare system," said Assoc Prof Seet.

The aim of the study was to evaluate if existing licensed pharmacotherapies could be used as a prophylactic treatment to reduce the spread of COVID-19. The interventions studied were hydroxychloroquine, ivermectin, povidone-iodine, a combination of zinc and vitamin C, and vitamin C (as a control).

Staff from the SSHSPH Breast Cancer Prevention Programme, which is led by Assoc Prof Hartman, were mobilised to help recruit and mobilise the participants. Despite the challenges and restrictions faced in running the trial in a closed and high-exposure setting, the team managed to complete the recruitment and follow-up of approximately 4,200 migrant workers (including those that eventually withdrew or were excluded from the study) within 10 weeks.

FURTHER READING

Publication: Positive impact of oral hydroxychloroquine and povidone-iodine throat spray for COVID-19 prophylaxis: An open-label randomized trial
doi:10.1016/j.ijid.2021.04.035

Press Release: Large-scale study shows oral hydroxychloroquine and povidone-iodine throat spray can reduce spread of COVID-19 in high transmission settings
National University Health System, 25 April 2021

Media Coverage: Throat spray and hydroxychloroquine found to reduce risk of Covid-19 infection: S'pore study
The Straits Times, 25 April 2021

Anti-malaria drug, throat spray reduce Covid-19 spread in closed, crowded settings such as dorms: NUHS study
TODAY Online, 25 April 2021

Coronavirus: Singapore study suggests hydroxychloroquine and throat spray could protect against infection
South China Morning Post, 26 April 2021

WHO COVID-19 Health System Response Monitor

The School contributed a report on Singapore's response for the COVID-19 Health System Response Monitor for the World Health Organization (WHO) Asia-Pacific Observatory on Health Systems and Policies.

View other COVID-19-related publications **here**.

OTHER RESEARCH AREAS
Assoc Prof Chia Sin Eng takes over as Epidemiology Domain Leader

On 1 July 2021, Assoc Prof Chia Sin Eng assumed leadership of the Epidemiology Domain, taking over from Prof Rob van Dam who had led the domain for the past eight years.

Assoc Prof Chia was the School's pioneer Vice Dean of Academic Affairs from 2011 to 2017. Following that, from 2018 to 2020, he played a significant role as Senior Consultant with Tripartite Alliance Limited. During this time, he advised the Workplace Safety and Health Council on their efforts in 'Total Workplace Safety and Health' and 'Return to Work' at the Ministry of Manpower.

Prof van Dam helmed the domain since 2013, building the School's research programmes and capabilities around cohort studies, chronic diseases and nutritional epidemiology. From 2018 to 2020, he had also served as the Vice Dean of Academic Affairs. The School is grateful for Prof van Dam's invaluable experience and leadership over the past eight years.

Research Highlights

Members of the Epidemiology domain provide important contributions to the scientific literature on the role of both genetic and lifestyle factors in the development of major chronic diseases in Singapore.

Asst Prof Saima Hilal received an NMRC Transition Award focusing on the role of early brain changes in mid-life, in cognitive impairment in old age. She was also invited to give lectures at the European Stroke Organisation, World Stroke Organization, and Alzheimer's Association International Conference. Her work on cerebral cortical microinfarcts was selected for oral presentation at the Asian Society Against Dementia. Her work is expected to inform future initiatives to promote healthy ageing in Singapore.

Asst Prof Jasper Tromp is working to identify risk factors for cardiovascular disease, with a specific focus on heart failure, in the general population and quality of care for heart failure and non-communicable diseases in lower- and middle-income countries in Southeast Asia. He is using a combination of machine learning techniques and health system-based approaches and is involved in various multinational collaborations and expert committees.

Research in the Biostatistics and Modelling Domain involves methodological and applied research, with particular focus on informatics and population health analytics, artificial intelligence, genomics and clinical trials.

In the area of clinical trials, Assoc Prof Tai Bee Choo was the principal investigator of a randomised trial evaluating the effect of an SMS reminder in improving medication adherence in women with breast cancer. After the trial closed in December 2019, she and her team have written several publications from the results, including the trial protocol and the main trial report, and the PhD student who worked on the trial has started a post-doctoral position at the University of Oxford.

In addition to conducting her own trials, and biostatistical research on the impact of treatment non-compliance when interpreting the results from randomised trials, Assoc Prof Tai provides statistical expertise to other clinical triallists both locally and internationally. For instance, she has provided guidance in establishing the multi-centre EXPEL trial, involving six Asia-Pacific countries, 22 clinical centres, and 800 patients, results of which were recently published in the Lancet Gastroenterology. The second edition of her book, Randomised Clinical Trials: Design, Practice and Reporting, has also recently been issued.

Asst Prof Tan Chuen Seng and his team developed an innovative analytical workflow that provides a test to assess whether the ordinal scale is a good proxy for the continuous quantity.

When the proxy assumption is adequate, the workflow provides an estimated difference in mean ordinal scores. If the proxy assumption is not adequate, the risk or protective factors identified are still valid because the workflow leverages on a well-known ordinal regression model that was introduced more than 40 years ago.

The method, published in the journal Clinical Epidemiology, therefore provides a useful approach to analysing translational research involving studies with ordinal data.

Asst Prof Hannah Clapham published a paper in 2020 in Science on the impact of cross-reactivity of flavivirus immunity on disease dynamics and vaccination. The timing is apt, as 2020 witnessed Singapore's biggest ever dengue outbreak. Work by Assoc Prof Alex Cook's team, published in PLOS Neglected Tropical Diseases, linked Singapore's outbreak to pandemic control measures, showing the indirect effects of the COVID-19 response on other public health issues.

The Infectious Diseases programme launched its inaugural virtual symposium on 13 November 2020 that was attended by 61 SSHSPH students, staff and faculty members. The symposium aimed to showcase the work of members of the Programme, as well as encourage cross-fertilisation of ideas and greater collaboration. Prizes were awarded to the best presenters: Dr Jane Lim Mingjie, who presented on networks in rural Cambodian farming communities and how they influence antibiotic use; Ms Sharon Esi Duoduwa Quaye, who presented on HIV knowledge and stigma in Singapore; and Dr Rayner Tan Kay Jin, who presented insights on risk compensation from a discrete choice experiment on PrEP preferences among gay, bisexual and other men who have sex with men.

Pilot programme to encourage screening based on breast cancer risk

One of the aims of the Breast Cancer Prevention Programme is to look into improvements for breast cancer screening among women in Singapore. With the current age-based mammogram screening method, it is reported that only 66% of the target population has ever had a mammogram, and less than half of the target group adhere to the recommended biennial screening guidelines.

To improve screening rates, the team is piloting a risk-stratified screening programme called Breast Screening Tailored for Her (BREATHE) that would classify women based on their breast cancer risk. BREATHE participants will receive a breast cancer risk report derived from genetic and non-genetic risk factors. Genetic risk prediction is calculated using polygenic risk scores, which tally multiple common breast cancer susceptibility variants discovered through genome-wide association studies (GWASs). On the other hand, non-genetic risk prediction will be calculated using available models such as Gail model or BOADICEA model.

The pilot screening programme commenced recruitment in July 2021 and includes four institutions within the National University Health System – Ng Teng Fong General Hospital, National University Hospital, Bukit Batok Polyclinic and Choa Chu Kang Polyclinic. The Genome Institute of Singapore (GIS) under the Agency for Science, Technology and Research (A*STAR) is also heavily involved in this programme.

Singapore Breast Cancer Cohort

As of 31 May 2021, the Singapore Breast Cancer Cohort (SGBCC) has recruited 11,868 breast cancer patients with a participation rate of 83.1 per cent and a biosampling rate of 78.1 per cent. SGBCC will continue its recruitment of breast cancer patients in the seven public hospitals involved until the target of 15,000 has been reached.

The Cohort's active participation with international collaborators such as the Breast Cancer Association Consortium (BCAC) has led to the publication of a high-impact article in The New England Journal of Medicine. The study analysed a panel of 34 known or suspected breast cancer susceptibility genes and used the data to estimate the risks of breast cancer overall, tumour subtypes associated with germline protein truncating variants, as well as rare missense variants in the genes.

Governance of Assisted Living: Policy Recommendations for Singapore

The Leadership Institute for Global Health Transformation (LIGHT) completed a research project on long-term care and assisted living in Singapore, culminating in a policy report and an academic publication. The report examines the feasibility and potential of Assisted Living to be developed as a mainstream model of care in Singapore. Using a combination of case studies and key informant interviews with stakeholders from several countries in Asia, the report intends to shed light on the implementation process, governance framework, regulatory modes and financing options for Assisted Living.

Trends in Gastrointestinal Endoscopy in Singapore 2014-2019

LIGHT analysed a total of 212,793 episodes of gastrointestinal (GI) endoscopy (upper and lower GI endoscopies with and without biopsies, polypectomies, etc) for the period 2014–2019. The data was obtained from seven MediShield Life Integrated Plan insurers and independently analysed for trends in utilisation, pricing and diagnoses. Results of the analyses were presented in **a report published online.**

School signs memorandum of understanding with NUHS' Centre of Innovation in Healthcare (CIH)

Through CIH, NUHS will be a one-stop hub for start-ups to clinically validate their healthcare innovations, and aims to develop an ecosystem to nurture healthcare innovators. The objective of the memorandum is to provide a framework of collaboration between the School's Health Intervention and Policy Evaluation Research (HIPER) unit and CIH to build up CIH's health technology assessment (HTA) capacity and to enable greater support to local innovators that require HTA expertise and research to assess their suitability for clinical adoption.

Early HTA to inform clinical study on soft robotic sock in post-stroke patients in Singapore

Following up a ground-breaking concept paper to be published in the Technological Forecasting and Social Change journal, HIPER was engaged to conduct an early health technology assessment of a newly developed soft robotic sock that seeks to prevent deep vein thrombosis and ankle contracture in stroke patients.

The HTA looked into (1) estimating the cost-effectiveness, or value for money, of the soft robotic sock; (2) identifying the relative importance of key characteristics of the devices contributing to its value for money; and (3) understanding the data gap and information needed to collect in the clinical trial and possible future studies.

By looking into these, the study results gave insights into the expected performance of the soft robotic sock, as well as identified and prioritised key parameters to improve the invention and for future research, all before the first clinical trial in human subjects.

This work has been accepted to be part of the oral presentation at the 2021 Congress of International Health Economics Association (iHEA), which is a prestigious academic conference in health economics. HIPER is also driving the writing and production of some additional offshoots from the collaboration – a manuscript on the early HTA study conducted, and a video animation on early HTA with the soft robotic sock as the case study to help spread the knowledge and importance of early HTA to the public.

Resource utilisation study on the use of NGS technologies in precision medicine for familial hypercholesterolemia

HIPER was awarded a resource utilisation study for the Precision Medicine Steering Committee under the Ministry of Health Office for Healthcare Transformation (MOHT). The study sought to demonstrate the resource impact and value of adopting Next Generation Sequencing (NGS) Technologies in familial hypercholesterolemia (high blood cholesterol). Based on local data of cost and treatment effectiveness, the cost-benefits of several proposed screening protocols with and without NGS were quantified, with the most cost-beneficial protocol being identified and shared with the stakeholders involved.

Global Health

Global Health

The Global Health Office was created in July 2020 to support the School's regional and international activities under the leadership of the Vice Dean (Global Health), Assoc Prof Hsu Li Yang. The Global Health Office supports the School's international agenda, including programmes like the Leadership Institute for Global Health Transformation (LIGHT) and the UHS-SPH Integrated Research Programme (USIRP) in Cambodia.

During its first year of activity, it developed further regional collaborations, coordinating the signing of MOUs with two Lao institutions, the Tropical and Public Health Institute (LTPHI) and the Lao University of Health Sciences. The School will continue the discussion with stakeholders in Lao PDR including the possibility to set up a regional office.

In addition, the Global Health Office has been supporting the administration of international grants, in collaboration with the School's Research Office, and is working on developing further opportunities for global health research within the School.

The Global Health Office, alongside LIGHT, has also contributed to the coordination of executive training programmes for global health leaders, involving SSHSPH faculty and the School's network of international partners and collaborators.

Publication

Gwee SXW, St John AL, Gray GC, Pang J. Animals as potential reservoirs for dengue transmission: A systematic review. One Health. 2021 Jan 20;12:100216. doi: https://doi.org/10.1016/j.onehlt.2021.100216

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