ABOUT THE SCHOOL

Officially established in October 2011, the National University of Singapore (NUS) Saw Swee Hock School of Public Health is Singapore’s first and only full-fledged public health tertiary education institution.

First set up as the Department of Social Medicine and Public Health under the then-University of Malaya in 1948, the School has continually aimed to advance population health in Singapore and the region through its robust educational programmes, translational cross-disciplinary research work and fast-growing international partnerships.

Mission

Turning Discovery into Healthier Communities

Vision

Vision 2020

The School will be recognised for integrating knowledge across disciplines to develop solutions that will improve the health of populations in Singapore and beyond.

Values

Altruism • Innovation • Mentorship

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MESSAGE FROM THE DEAN

Turning discovery into healthier communities. That’s our mission.

But it is more than a grand statement packaging what we do. It is a forceful and honest declaration of what we are passionate about and of what drives us on even when the road ahead seems all uphill.

Together, we have made much progress, gaining national recognition for the School’s translational research and cross-disciplinary integration. Among the areas addressed by the School’s noteworthy findings and community-based programmes include new approaches to disease burden projections, total workplace safety and health, cancer, pharmacogenomics and myopia.

Perhaps one of our most significant days was marked by the official opening of our new premises in the Tahir Foundation Building on 12 February 2015. More than just brand new facilities and hardware, our new home engenders and fosters productive working partnerships amongst our growing quality academic, research and student strength.

But improving the health of communities is an ambitious goal. Success depends largely on a collective commitment shared by our faculty, staff, students, alumni and partners on the “end game”. And that starts with building up resources effectively so we can move towards accomplishing our goals.

For the hard-hitting issues at stake, we must be prepared to work hard for the long haul. The School’s Vision2020 document, following the conclusion of our strategic review exercise, outlines a five-year roadmap for us to address complex health issues by looking beyond disciplinary differences to aim for the common agenda of advancing population health.

The restructuring and streamlining of the School’s domains and research programmes allows for different units to invest concurrently in the School’s sustained, comprehensive research work, so we can impact policies and programmes addressing the big picture healthcare issues, while allowing the units to strengthen their respective research capabilities.

Such cross-disciplinary collaboration provides an extraordinary opportunity for the School to bridge the varied expertise of our faculty as well as our partners to protect and improve population health. As an exemplar, we’ve established a Public Health Translational Unit to drive our research, beyond publications and classrooms, to seek improved health outcomes for communities in Singapore and throughout the region.

To effectively address the challenges of a rapidly changing public health landscape, we need highly and diversely trained public health professionals, who will become our ambassadors and future leaders in public health. Regardless of their backgrounds, our students graduate with the breadth and depth of the right mind- and skill-sets that are the hallmarks of a SSHSPH education. To achieve this, we are continuously developing ways to inspire creativity in the robust education and training opportunities, ranging from professional development courses to graduate education. Our students learn alongside colleagues and partners from disciplines including economics, engineering, computing and social sciences, allowing them to seek solutions from varied fields. In that spirit, we have also introduced the Minor in Public Health, making our public health courses accessible to undergraduates from other NUS faculties and schools on campus.

Recognising the value of input from other disciplines puts us in a good position to explore the application of burgeoning new frontiers of health systems, health promotion and behavioural sciences in public health. With the strengthening of both our education programmes and research agendas, we can better engage the region in research and educational collaborations that improve regional population health outcomes.

As the School celebrates its fourth anniversary, we need to continue to transcend challenges with the School’s high-impact research and perspectives needed to influence and shape evidence-based policies and programmes for disease prevention and better health.

We cannot and will not rest on our laurels. For turning discovery into healthier communities is not merely an aspiration, it is what we do.

Professor Chia Kee Seng
Dean, NUS Saw Swee Hock School of Public Health
SENIOR MANAGEMENT

Gerald Koh Choon Huat
Associate Professor, Head, Health Systems & Behavioural Sciences Domain; Tele-rehabilitation Programme

Mikael Hartman
Joint Associate Professor, Head, Breast Cancer Prevention Programme

Rob Martinus Van Dam
Associate Professor, Head, Epidemiology Domain

Chia Kee Seng
Professor, Dean

Chia Sin Eng
Associate Professor, Vice Dean (Academic Affairs)

Jeannette Lee Jen Mai
Associate Professor, Vice Dean (Education)

Teo Yik Ying
Associate Professor, Vice Dean (Research); Head, Biostatistics & Modelling Domain; Head, Public Health Genomics Programme

Richard James Coker
Professor, Head, Tuberculosis Control in Cambodia Programme
### Professors
- David Koh Soo Quee
- Lee Hin Peng
- Ong Choon Nam
- Saw Seang Mei
- Hubertus Johannes Maria Vrijhoef (Visiting)

### Associate Professors
- Helena Leguido-Quigley
- Lim Yee Wei
- Adeline Seow Ling Hui
- Tai Bee Choo
- Sri Chandar s/o Tikandas Nebhraj
- Norbert Ludwig Wagner
- Wong Mee Lian
- Jason Yap Chin Huat
- Joanne Yoong Su-Yin

### Assistant Professors
- Mark Chen I-Cheng
- Choi Hung Won
- Alex R. Cook
- Zoe Jane-Lara Hidon
- Mishal Khan
- John Tayu Lee
- Luo Nan
- Falk Mueller-Riemenschneider
- Sim Xueling
- Clarence Tam Yee Sang
- Kavita Venkataraman

### Senior Lecturer
- Judy Sing Geok Khim

### Lecturers
- Salome Antonette Rebello
- Lim Boon Tar Raymond

### Other Faculty Members

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<td>Gregory Chan Chung Taing</td>
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<td>Wang Tian Yin</td>
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Information updated as of 1 October 2015
OUR GLOBAL PRESENCE

**London, UK**

The School signed a Memorandum of Understanding with the London School of Hygiene & Tropical Medicine (LSHTM) in 2011, fostering a partnership anchored on research and education in areas of infectious disease control, health systems and chronic diseases with an Asian focus.

The School has jointly developed a short course with LSHTM on vaccinology since November 2013, which will see faculty from each School lending their teaching expertise to the course.

**Bangkok, Thailand**

The School conducted a genomic sequencing workshop in November 2013.

The School has a regional partnership with Health Interventions and Technology Assessment Programme (HITAP) as part of the Asia-Pacific Regional Capacity Building for HTA (ARCH) Initiative. The inaugural ARCH Workshop was held in Bali, Indonesia in July 2013.

**Yangon, Myanmar**

Led by the London School of Hygiene & Tropical Medicine (LSHTM), the School is conducting a two-year collaborative research programme on multi-drug resistant tuberculosis (MDR-TB) with the University of Public Health, Yangon and Myanmar’s national tuberculosis programme. The programme will analyse risks associated with MDR-TB, health systems constraints to control, and the economics of control.

Since 2013, the School has conducted a series of research capacity building workshops in Occupational Medicine, Research Methodologies and Field Epidemiology. Myanmar is part of the Southeast Asian TB network coordinated by Singapore through the School.

**Philippines**

The School has a regional partnership with NICE International, the international division of the UK National Institute for Health and Clinical Excellence (NICE) and regional partners in Thailand and Philippines. This consortium brings together existing high-value global expertise in topic selection and prioritization of technologies for evaluation and adoption, evidence assessment and appraisal and the implementation of HTA-based decisions into clinical policy and practice.

**Cambodia**

The TB Cambodia Programme is a five-year programme which began its first phase in October 2014 and aims to “develop a strong infectious disease capability, and establish strategic regional and global partnerships in public health”. This strategic research programme comprises epidemiological, modelling and genomics studies in partnership with local tuberculosis control efforts, the National Institute of Public Health (NIPH) and University of Health Sciences (UHS).

Cambodia is part of the Southeast Asian TB network coordinated by Singapore through the School.

**Vietnam**

Vietnam is part of the Southeast Asian TB network coordinated by Singapore through the School.

**Medan, Indonesia**

The APEC Health Working Group meeting was held in July 2013.

**Bali, Indonesia**

The ARCH Initiative Workshop Bali was held in August 2014, aimed at further enhancing and strengthening participant engagement and capacity in health technology assessment.

**Sabah, Malaysia**

The School conducted a genomic sequencing workshop in March 2014.

**Yangon Province, China**

Led by the London School of Hygiene & Tropical Medicine (LSHTM), the School is conducting a two-year collaborative research programme on multi-drug resistant tuberculosis (MDR-TB) with Yunnan’s national tuberculosis programme. The programme will analyse risks associated with MDR-TB, health systems constraints to control, and the economics of control.

**Yunnan Province, China**

The School has a regional partnership with the Department of Health (DOH)/HTA taskforce as part of the Asia-Pacific Regional Capacity Building for HTA (ARCH) Initiative. The inaugural ARCH workshop was held in Manila in April 2014.

**Boston, US**

The School signed a Memorandum of Understanding with the Harvard T.H. Chan School of Public Health in 2011, establishing a partnership in which the two institutions will cooperate strategically in joint academic and scientific activities.

The Asian Diabetes Prevention Initiative website, a joint effort between the School and the Harvard T.H. Chan School of Public Health, was launched in March 2014 and provides the public, health professionals and public health practitioners quick and easy access to information on Type 2 diabetes, and what can be done to decrease the prevalence of this disease in Asia.

**Netherlands**

The School inked a Memorandum of Understanding with Utrecht University in 2013, to foster partnerships on medical research and advancement.

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A GIFT THAT MADE PUBLIC HEALTH HISTORY

Professor Saw Swee Hock, an esteemed National University of Singapore (NUS) alumnus, is a visionary philanthropist whose landmark $30 million gift made possible the establishment of the NUS Saw Swee Hock School of Public Health on 1 October 2011.

With Prof Saw’s gift, the School will be able to develop into a leading institution of public health research, education and training. It will enable the School to invest and expand much-needed facilities, cutting-edge research, and world-class educational programmes, professorships and scholarships, and to dream big and pursue excellence in turning discovery into healthier communities.

Prof Saw is an eminent academic who is currently Professorial Fellow at the Institute of Southeast Asian Studies and has received many illustrious accolades for his academic and philanthropic contributions. He also holds honorary positions in Hong Kong University, Xiamen University, London School of Economics and NUS. Prof Saw has published some 49 books, 31 book chapters and more than 110 articles in learned journals, and was a former member of the NUS Board of Trustees.

As a philanthropist, Prof Saw has been recognised for his significant contributions to numerous higher education institutions in Singapore, China, Hong Kong and the UK. He has supported medals, bursaries, scholarships, institutes, schools and buildings, including setting up an endowed bursary fund for final-year needy students in NUS and contributing towards developing the Saw Swee Hock Student Centre at the London School of Economics.

In 2013, Prof Saw received the Singapore President’s Award for Philanthropy and the Public Service Medal (PBM) at the 2013 Singapore National Day Awards, in honour of the excellence benchmarks set in encouraging the spirit of giving in Singapore.

This year, Prof Saw received an especially distinguished accomplishment – he was conferred the NUS Honorary Degree of Doctor of Letters during the NUS Commencement Ceremony on 6 July 2015, in recognition of his contributions in the fields of statistics and demography, as well as for his extensive philanthropic work. He joined fellow honorary degree recipients Emeritus Senior Minister Goh Chok Tong and Sir Richard Brook Sykes, who were presented with the Doctor of Laws and Doctor of Science respectively.

The Wu Yu Lin Scholarship was set up this year, thanks to the generous contribution of Ms Tai Al Luen. The Scholarship will fund one postgraduate scholarship annually for the Master of Public Health programme, and is named after Ms Tai’s mother, the late Dr Tai Yu Lin, and in honour of her grandfather, the late Dr Wu Lien-Teh.

Ms Tai presented Dean, Prof Chia Kee Seng, with a bust of Dr Wu Lien-Teh at a gift appreciation session on 16 January 2015. Ms Tai was joined by University Professor Lim Pin and Mrs Tan Suan Imm, a prominent NUS alumnus from the Faculty of Arts and Social Sciences.

REMEMBERING “PLAGUE FIGHTER” DR WU LIEN-TEH

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Dr Wu Lien-Teh, also known as the “Plague Fighter”, was a Malayan-born Chinese doctor and the first medical student of Chinese descent to study at the University of Cambridge. He is remembered for his role in fighting the pneumonic plague pandemic in China in the early 1900s, helping save millions of lives and is widely regarded as the “Father of modern medicine in China”.

CREATING OPPORTUNITIES, TRANSFORMING FUTURES

“My dream of having a master’s education in Public Health was made possible by the generosity of the JC Trust Ltd. This gift enabled me to study at SSISPH and interact with an international student cohort. Equipped with the necessary training and expertise, I am thankful for the opportunity given to me as I work towards improving the health of my community.”

Dr Kacha Vijay Kumar (Master of Public Health ‘15) Master of Public Health Scholarship Recipient

Dr Vijay is back in his home country, India, pursuing a career in health policy development and implementation.
A NEW HOME FOR THE SCHOOL OF PUBLIC HEALTH

12 February 2015 marked a new milestone for the NUS Saw Swee Hock School of Public Health with the official opening of its new premises at the Tahir Foundation Building.

Gracing the occasion was Guest of Honour Dr Margaret Chan, Director-General of the World Health Organization and alumna of the School’s Master of Public Health programme. Also lending her presence was special guest, Dr Amy Khor, Senior Minister of State, Ministry of Health and Ministry of the Environment and Water Resources.

Prof Chia also highlighted the School’s work in implementing Total Workplace Safety and Health in national policies, as well as in pharmacogenomics, in particular supporting the use of genetic testing for preventing adverse drug reactions.

In his opening address, Professor Chia Kee Seng, the School’s Dean, highlighted several outstanding efforts the School has embarked on towards building healthier communities since its establishment. He touched on existing capabilities in projecting chronic disease burden which has enabled policymakers to inform the Ministry of Health’s Healthy Living Master Plan.

Likening the development and training of public health professionals to triathletes, Prof Chia ended with a parting shot to “integrate knowledge across disciplines to develop solutions that will improve the health of populations in Singapore and beyond.”

Professor Tan Chorh Chuan, NUS President and Chairman of the National University Health System (NUHS) Board then took to the stage, noting that this move to a new premise marked “a major milestone for public health in our University, Singapore and our part of the world”.

Prof. Chia Kee Seng, giving his welcome remarks at the official opening of the School’s new premises.

Watch the opening of the School’s new premises

Dr Margaret Chan then addressed the room, fondly recalling her NUS days at the then-Master of Science (Public Health and Occupational Medicine) programme during the mid-1980s, with her fellow classmate, Prof Chia.

“What served me the best was what I learnt here, in Singapore… Through you, I’ve learnt to serve the world.”
- Dr Margaret Chan, on how her experience at the School has shaped her as a global health leader

Dr Chan highlighted the School’s strategic focus on translation and cross-disciplinarity in tackling complex current and future public health challenges, and praised Singapore’s approach to public health and willingness to lead, which has helped the nation avoid mistakes observed in other regions.

L-R: Professor Lee Hin Peng, Dr Margaret Chan and Professor Chia Kee Seng launching the opening of the NUS Saw Swee Hock School of Public Health’s new premises at the Tahir Foundation Building.

Dr Chan signing on her class photo which was featured on the alumni wall outside the School’s reception area.

Guests watching the premiere showing of the School’s first corporate video after the official launch of the new premises.

Prof. Chia Kee Seng (left) and Mr. Wong Ngit Liong (right), Chairman of the NUS Board of Trustees, during a tour of the school’s premises.

Dr Chan, together with Prof Lee – who sparked the idea of developing an independent School of Public Health - and Prof Chia, placed the kerosene projector lamp on the base, officially launching the opening of the School’s new premises. The kerosene projector lamp was given to the School by the World Health Organization in 1948, when the School, then known as the Department of Social Medicine and Public Health, was first started.

The ribbon cutting ceremony held at the lift lobby outside the School’s main reception. From left: Chairman of the NUS Board of Trustees, Mr. Wong Ngit Liong; Senior Minister of State, Ministry of Health and Ministry of the Environment and Water Resources, Dr. Amy Khor; Director-General, World Health Organization, Dr. Margaret Chan; esteemed alumnus, philanthropist and the School’s benefactor, Professor Saw Swee Hock; Dean, NUS Saw Swee Hock School of Public Health, Professor Chia Kee Seng; and NUS President and Chairman, NUS Board, Professor Tan Chorh Chuan.
FACING PUBLIC HEALTH CHALLENGES IN THE POST-2015 ERA: NEED FOR A NEW PARADIGM

As part of the School’s Public Health Thought Leadership Series, Dr Margaret Chan, Director-General of the World Health Organization, delivered a dialogue session on Facing Public Health Challenges in the Post-2015 Era: Need for a New Paradigm.

Dr Margaret Chan addressing the room as Guest Speaker for the third installment of the School’s Public Health Thought Leadership Series.

Dr Chan’s talk was followed by a discussion moderated by Professor John Wong, NUHS Chief Executive, and joined by panelists including Associate Professor Vernon Lee, Head of the Singapore Armed Forces’ Biodefence Centre; Associate Professor Joanne Yoong of the Saw Swee Hock School of Public Health; and Dr Winston Chin, a Senior Resident under the NUHS Preventive Medicine Residency programme.

From left: Dr Winston Chin, Associate Professor Joanne Yoong, session moderator NUHS Chief Executive Professor John Wong, Dr Margaret Chan and Associate Professor Vernon Lee during the panel discussion.

In keeping with the theme of “Those Were The Days…” guests were treated to a montage of photos throughout the years – dating back to 1959 when the school was the Department of Social Medicine and Public Health, to the present batch of graduating students.

On 10 July 2015, the SSHSPH AlumNite 2015 brought together faculty, alumni, graduating students, and their loved ones for an evening of reunion and celebration of their shared journeys in public health.

The session ended on a heartwarming note and much to the delight of the crowd as Dean Prof Chia Kee Seng presented Dr Chan with a class photo of their 1984/1985 Master of Science (Public Health and Occupational Medicine) class.

Our alumni with their families at the SSHSPH AlumNite 2015.

A NEW CLASS OF PUBLIC HEALTH GRADUATES

This year, 33 Master of Public Health (MPH), Master of Science (MSc) and Doctor of Philosophy (PhD) graduates marked a significant milestone in their public health journeys at the School’s Commencement Ceremony on 12 July 2015.

Guest of Honour, Associate Professor Benjamin Ong, Director of Medical Services (DMS) at the Ministry of Health, shared with the graduates three keywords on future proofing our healthcare system: prevention, integration and innovation.

Dr Margaret Chan and Prof Chia Kee Seng presented Dr Chan with a class photo of their 1984/1985 Master of Science (Public Health and Occupational Medicine) class.

A/Prof Benjamin Ong highlighting the importance of prevention in healthcare.

Even as we strive to achieve the best treatment outcomes for our patients, we must realise that the ideal option remains that of prevention and maintenance of health. 

Dr Shilpa Tyagi, Class Valedictorian from the Master of Public Health programme, also took to the stage, congratulating her classmates on the culmination of a journey they had all embarked on together. She also thanked her professors for their dedication and mentorship, ending with a message for her fellow public health professionals working in prevention and health promotion: “The trees that are slow to grow bear the best fruit”.

The SSHSPH Class of 2015, together with faculty and alumni across different batches caught up over a casual dinner and humorous self portraits by caricature artists.

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In keeping with the theme of “Those Were The Days…”, guests were treated to a montage of photos throughout the years – dating back to 1959 when the school was the Department of Social Medicine and Public Health, to the present batch of graduating students.

Prof Lee Hin Peng also addressed the room on “The CPD (Continuing Professional Development) Agenda”, encouraging the graduating class to seek excellence in their work, lead a personally fulfilling life and maintain an interest in society and its wider issues.
FRONTIERS OF BEHAVIOURAL ECONOMICS 2015

The two-day conference drew more than 200 participants, bringing together leading international thinkers in the behavioural economics field, policymakers, private firms in the health and finance sectors, and non-profits, to address behavioural economics in finance, health and lifestyle in the Asia Pacific region.

Frontiers saw speeches and panel discussions involving distinguished academics such as Professor Kevin Volpp, Professor of Health Care Management at the Wharton School and Director of the University of Pennsylvania CDC Prevention Research Centre, as well as co-organiser Associate Professor Joanne Yoong from the Saw Swee Hock School of Public Health.

A/Prof Joanne Yoong from the NUS Saw Swee Hock School of Public Health speaking on “Designing and Using New Psychometric Diagnostic Tools” at the Frontiers of Behavioural Economics 2015.

A/Prof Nava Ashraf from Harvard Business School leading the discussion on ‘Translating Behavioural Economics Into Policy - Working Across Domains’

Mr Liak Teng Li, Group CEO of Alexandra Health System, engaging participants during the panel discussion with Prof Bert Vrijhoef (moderator), Prof Philip Phan, Mr Matthew Coghlan and Dr Rory Gallagher.
The Education Office at the NUS Saw Swee Hock School of Public Health offers various undergraduate and postgraduate courses.

**MEDICAL CURRICULUM**

The School supports the NUS Yong Loo Lin School of Medicine in the teaching of medical undergraduates, from the first to the fourth year of the five-year medical course. Led by Associate Professor Gerald Koh, the School’s curriculum equips medical students with the skills to critically appraise evidence, prevent and manage disease, and promote health at the community level crucial to the health of our population.

The undergraduate medical training culminates with the Community Health Project, which sees students carry out research projects in the community under supervision of the School’s faculty. This year, the School incorporated global health topics under the Medicine and Society track and co-taught health economics with the Centre of Biomedical Ethics.

In addition, several workshops were conducted for medical students to further their knowledge about design, monitoring and evaluation of community health programmes.

**MINOR IN PUBLIC HEALTH**

The School offers a Minor in Public Health, headed by Vice Dean (Education) Associate Professor Jeannette Lee, which is available to all NUS undergraduates.

Comprising 13 modules, the Minor introduces non-medical undergraduates to the translational aspects of public health and the need for a cross-disciplinary and team-based approach in tackling public health issues. It also lays the foundation for future training in carrying out public health and clinical research.

**BACHELOR OF ENVIRONMENTAL STUDIES (ENV2103)**

Led by Dr Judy Sng, the ENV2103 Environmental and Public Health module is a core requirement for students undertaking the Bachelor of Environmental Studies offered jointly by the Faculty of Science and Faculty of Arts and Social Sciences.

**GRADUATE RESEARCH PROGRAMMES**

The School’s flagship graduate programme, the Master of Public Health (MPH) programme, is chaired by Vice Dean (Education) Associate Professor Jeannette Lee and seeks to provide a rigorous and interdisciplinary approach to learning, with an emphasis on finding evidence-based and innovative solutions to Asia’s current and future public health challenges.

Our MPH graduates are equipped to address both traditional and emerging public health issues, and assume positions in diverse public health disciplines in local as well as international settings.

The School’s Master of Science (MSc) and Doctor of Philosophy (PhD) programmes are currently headed by Associate Professor Rob van Dam and are research-intensive programmes that emphasise both mastery of research skills and acquisition of domain knowledge.

Students will complete coursework and conduct independent research under the supervision of a faculty member, leading up to the submission of a thesis demonstrating their scholarship and original contributions to the knowledge in their research fields.

**GRADUATE DIPLOMA IN APPLIED EPIDEMIOLOGY**

The Graduate Diploma in Applied Epidemiology (GDAE) was designed in response to a perceived national need for training in basic epidemiological principles, theory and practice. The GDAE is intended to provide candidates with both the theoretical concepts of disease control as well as the opportunity to readily apply these concepts to situations encountered in the health and healthcare setting. Adjunct Associate Professor Fong Ngan Phoon is the programme director.
PREVENTIVE MEDICINE RESIDENCY PROGRAMME

The Preventive Medicine Residency Programme is offered by the National University Health System (NUHS), combining the previous public health and occupational medicine training programmes in Singapore.

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NIHA LEADERSHIP DEVELOPMENT PROGRAMME

The NUS Initiative to Improve Health in Asia (NIHA) Leadership Development Programme is a two-week programme aimed to enhance leadership acumen and decision-making capabilities among healthcare leaders. The fourth NIHA Leadership Development Programme was held from 2 to 13 February 2015 and saw 17 participants from Bangladesh, Brunei, Japan, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Singapore and Thailand. The programme is led by Associate Professors Lim Yee Wei from the Saw Swee Hock School of Public Health and Audrey Chia from the NUS Business School.

SHORT COURSES

In addition to its undergraduate and graduate programmes, the School offers several educational short courses to external participants to enhance their public health skills and training.

Over the last years, courses were offered in Medical and Humanitarian Emergencies, Industrial Hygiene, Advanced Quantitative Methods, Design, Conduct and Analysis of Clinical Trials and Public Health Communication.

JUNICE & FIONA: EXCHANGING SINGAPORE-UK KNOWLEDGE & CULTURES

This year, PhD students Ng Yi Siu Junice from the NUS Saw Swee Hock School of Public Health and Fiona Mapp from the London School of Hygiene & Tropical Medicine (LSHTM) embarked on a mutual exchange programme to learn about their research work conducted in their respective countries. Both students share common research interests in sexual behaviours and STIs/HIV. The exchange, which was made possible by a grant from the UK Economic and Social Research Council (ESRC), has helped build on existing relations in the form of educational partnerships between the two institutions, strengthen social science research in public health, and offer the students the opportunity to experience different study settings.

During her exchange in Singapore, Fiona visited the Department of STI control (DSC) clinic, meeting with healthcare professionals to understand the barriers to STI testing in Singapore.

She also participated in discussions with non-governmental organisation Action for AIDS, a sex worker drop-in centre, as well as Junice’s colleagues and supervisor, Associate Professor Wong Mee Lian, at the NUS Saw Swee Hock School of Public Health.

Junice’s visit to London gave her the opportunity to meet up with colleagues from the National Survey of Sexual Attitudes and Lifestyles (NATSAL) at LSHTM and University College London and engage in discussions on communicating research and findings to mass audiences. She also had the opportunity to examine healthcare settings in the UK and gain insights in researching on sexual behaviours and sexual health systems in a country outside Asia.

“I had lots of interesting, insightful and informative visits to different places, and some of the best learning took place through informal conversations and lunches with people Junice introduced me to. We spent a lot of time discussing the similarities and differences between Singapore and London on a range of sexual health issues.”

- Fiona, on her two-week stint in Singapore.

“This exchange has not only given me an outlook of academic research from a different perspective, but also provided a great source for cross-pollination of ideas that can be explored in Asia.”

- Junice, on her exchange experience.

After the exchange, Junice and Fiona both presented their PhD research at the World Association of Sexual Health Congress in Singapore.
Yasmin Ho (Master of Public Health, 2013) is a full-time pharmacovigilance pharmacist who represented Singapore at the recent Southeast Asia (SEA) Games 2015 as part of the national netball team, which won on to score Singapore’s first ever gold medal in netball.

How does she balance her academic, professional and athletic commitments?

On juggling multiple commitments as a pharmacist, Master’s student and netballer, and her experience at the NUS Saw Swee Hock School of Public Health

I left my job as a hospital pharmacist to pursue a Master of Public Health as I feel that much could be done in the area of disease prevention and health promotion in Singapore, where chronic diseases are on the rise. I also wanted to learn more about epidemiology, how various studies are conducted, as well as its application in the control of diseases and other health issues. I was very fortunate to have received the Saw Swee Hock Master of Public Health Scholarship so I could study full time.

Other than the first semester when I had to complete most of my core modules, including one of the toughest modules, Quantitative Epidemiologic Methods, taught by Prof Chia Kee Seng - although Prof Chia did make the lessons very enjoyable and easy to learn - the timetable for the next two semesters were relatively flexible which allowed me to train with the NUS team and Sneakers. On days when I had to miss lessons for competition, my classmates were always ready to lend me notes and help me catch up with my work. The tutors were also very willing to help explain certain concepts where I needed clarifications, especially Associate Prof Tai Bee Choo, Prof Alex Chan (from NUS Department of Pharmacy) and Cynthia Chen (PhD student) for providing me with guidance in my practicum.

I am currently a pharmacovigilance pharmacist in the industrial sector so working hours are pretty much fixed. However, compliance and meeting adverse events reporting timelines to the Health Sciences Authority are crucial. As such, I have to work when I am overseas and during the SEA Games as well to ensure that all submission timelines are met. Trainings are 4-5 times a week so it can get tiring and hectic. Most of my teammates have full-time jobs, with some working shifts, so things may be even tougher for them. Seeing everyone’s commitment, dedication and sacrifices for the team motivates me and makes me want to give more and work harder.

On making the squad and prepping for the SEA Games 2015

Of course, I was really happy. I enjoy travelling with my teammates and the entire process of getting to understand my new teammates and preparing for the competitions was fun and exciting, though there were moments of frustrations and disappointments.

The preparation period seemed long and tedious as we had intense strength, conditioning and court work training. At the same time, bonds of friendship, respect and care for one another were forged. I am proud to be in this team. All the hard work was paid off when the final whistle was blown and Singapore won Malaysia by 3 goals in the gold medal match. Everything seems to pass by in a flash and before I know, the SEA Games is over!

On Her Journey In Netball

In 2012, I returned to competitive netball, playing for Sneakers and NUS (while doing my Master of Public Health) in various netball leagues and tournaments. During this period, my coaches and teammates played very important and significant roles in helping me to get back into the netball scene.

I was selected to join the Singapore Opens netball team following one of the major netball leagues where my club emerged as champions this year. I was invited to undergo a trial for their training and selections trip for SEA Games in Fiji and eventually made it into the SEA Games team.

On Advice For Aspiring Sportsmen And Sportswomen

To be honest, I didn’t expect myself to be back with the national team, even though I always had a fervent hope of doing so. I guess subconsciously I just wanted to play competitively, so before I received the invitation to join the Opens netball team, I was swimming and hitting the gym at least 3-4 times a week. To all aspiring athletes, dare to dream, work hard and be daring to go for it when opportunities come knocking on your door. There might not be the “best / right” time when everything comes together really for you to do something, so take some risks to go out there, venture, experience, learn, grow, be present and appreciate that you’re part of a much bigger world!
Research / DOMAINS

EPIDEMIOLOGY

Under the leadership of Associate Professor Rob van Dam, the Epidemiology domain provides insights into the frequency and distribution of diseases in populations and its determinants, contributing to the identification of appropriate targets for public health interventions and evaluation of health promotion initiatives.

Our team focuses on pertinent health issues prevalent in our society, such as breast cancer, obesity, type 2 diabetes, cardiovascular diseases, eye diseases, infectious diseases and healthy ageing.

BIOSTATISTICS & MODELLING

MODELLING FORECASTS

Singapore’s population structure and forecasted working diabetics in our working population in 2050

By 2050, about 15% of working age adults (18-65) are expected to have DM

HEALTH SYSTEMS & BEHAVIOURAL SCIENCES

The Health Systems & Behavioural Sciences domain was formed in August 2014, combining the previous Health Education & Promotion and Health Systems & Policy domains. In line with the School’s Vision and mission, the domain focuses in areas of health services, health systems, health economics and health promotion.

The domain is led by Associate Professor Gerald Koh, leading cross-disciplinary studies with multiple agencies to support nationwide initiatives such as the Smart Nation Initiative and National Telehealth Implementation Strategy.

We also examine the spectrum of healthcare in Singapore leading up to the development of integrated healthcare in Singapore’s Regional Health Systems.

In health promotion, our research addresses the interactions between lifestyle behaviours, and the physical and socio-cultural environment, to design, implement and evaluate behavioural change and health promotion interventions.

Our health economics research is part of the School’s Centre for Health Services and Policy Research, leading health policy modelling and simulation for Singapore, establishing the School as a regional leader in the areas of population health and behavioural economics.

The Biostatistics & Modelling domain (formerly the Biostatistics domain) was recently renamed to reflect the expanded scope of the domain in mathematical modelling. Led by Associate Professor Teo Yik Ying, the domain retains its traditional strengths in the development and application of sophisticated statistical methodologies in clinical epidemiology, genetics and proteomics. We have forged closer ties with the Ministry of Health, the National University Health System and other healthcare agencies in Singapore, enabling us to expand our focus to include the modelling of chronic and communicable diseases, as well as healthcare data science and analytics.

This year, we welcomed our sixth faculty member, Dr Sim Xueling, in January. Dr Sim brings with her valuable insights and expertise in clinical and translational genetics, which are important pieces in the global development of precision medicine. We also look forward to exciting developments in big data in healthcare.

We also support research focusing on the quality of management and care in healthcare organisations in Singapore, with plans to expand regionally in Myanmar, China, Cambodia and potentially Thailand.

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This year, we collaborated with colleagues from the National University Hospital and grassroots leaders to initiate Community Health projects in Bukit Panjang and Queenstown, which included conducting a survey, health screening, follow-up care for participants and preventive interventions to address key health issues in the neighbourhood.

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The secondary aims are to evaluate the cost-effectiveness and efficiency of other telemedicine or tele-health initiatives within the University, the National University Health System and on a national level.

**PUBLIC HEALTH GENOMICS**

Led by Associate Professor Teo Yik Ying, the School’s Public Health Genomics Programme comprises two sub-programmes in Pathogen Genomics and Regulatory Pharmacogenomics.

**PATHOGEN GENOMICS**

The Pathogen Genomics arm utilises next-generation sequencing technologies to survey the genomic diversity of several infectious disease pathogens such as:

- Dengue virus
- Malaria P. falciparum parasite
- Tuberculosis M. tuberculosis
- New Delhi metallo-beta-lactamase 1 (NDM-1) bacteria
- HIV virus

The Pathogen Genomics arm aims to develop and apply statistical methodologies to measure adverse reactions and differential drug dosing.

We work closely with the Singapore drug regulatory agency, the Health Sciences Authority, under the Ministry of Health and international partners to develop screening regimes tailored to individuals. Working with colleagues at the National University Hospital, KK Women’s and Children’s Hospital, Malaysia and the United Arab Emirates, the programme is investigating new techniques to perform early diagnosis.

Our anthropological study looks at ways people behave throughout Asia in terms of breast cancer across Denmark, Mongolia, China, Turkey and Iran, with our anthropological team doing IDIs with BrCa survivors and patients as well as living with their families to better understand their behaviours.

For cancer patients, the programme has developed a risk of life issues for cancer survivors, including returning to work, sexuality, body image, long-term side effects, neuropathy and cardiovascular side effects.

**REGULATORY PHARMACOGENOMICS**

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**TUBERCULOSIS CONTROL IN CAMBODIA**

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Preliminary discussion with the NTP have shown that they are open to research and capacity building cooperation and are keen to develop a portfolio of research and training strategy which includes operational and genomic research, together with the School and the London School of Hygiene & Tropical Medicine.

The School will also team up with local partners in TB efforts such as the National Institute of Public Health and the University of Health Sciences, in the following proposed areas:

- Situational assessment
- Qualitative study
- Epidemiological study
- Genomics/cohort study
- Incentives pilot study
- Modelling

**TELE-REHABILITATION**

The tele-rehabilitation programme is led by Associate Professor Gerald Koh.

Together with our partners in the NUS Faculty of Engineering, Singapore General Hospital and Ang Mo Kio-Bye Hua Kwan Hospital, this trans-disciplinary research programme is primarily aimed at evaluating the cost-effectiveness and efficiency of tele-rehabilitation in comparison with traditional forms of rehabilitation.

The programme’s objective towards breast cancer screening and management is to decrease mortality due to breast cancer, without increasing the burden of breast cancer to the healthcare system. Currently, the programme conducts projects which involve understanding the risk factors of breast cancer in the local population, diagnostics, prognostication and quality of life issues for cancer patients.

We also work with local, regional and international partners to assemble large population-level cohorts to study the risk factors to breast cancer, and with clinicians at the Singapore General Hospital and National Cancer Centre to develop screening regimes tailored to individuals. Working with colleagues at the National University Hospital, KK Women’s and Children’s Hospital, Malaysia and the United Arab Emirates, the programme is investigating the incentives and factors influencing the behaviour to seek early diagnosis and treatment, and evaluate new techniques to perform early diagnosis.

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**BREAST CANCER PREVENTION**

Led by Associate Professor Mikael Hartman, the Breast Cancer Prevention Programme centres on different stages of prevention through stratifying the population by cancer risk using genetics, lifestyle and exposure to other environmental triggers.

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- Modelling
SINGAPOREANS IN THE DARK ABOUT STROKE

Although stroke is Singapore’s fourth most common cause of death, a recent study on stroke literacy revealed that less than 50 percent of Singaporeans could correctly identify one stroke symptom.

The lack of awareness is worrying, as certain treatments, such as thrombolysis, have to be carried out within a few hours of onset of symptoms, and patients seeking treatment at a later stage may not be able to receive the best rescue therapy treatments and prevent complications.

Unlike heart attack patients who seek help immediately, stroke patients might try to sleep it off or go to a polyclinic to seek help, says Dr Lim Wei-Yen, who supervised the Community Health Project conducted by a group of fourth-year medical undergraduates.

The study also uncovered several misconceptions people have about stroke, including around 20 percent of respondents identifying heart problems as causing stroke and mistaking chest pains and breathlessness as stroke symptoms.

WOMEN MORE AFFECTED BY GENITAL WARTS

Women with genital warts seem to cope less well than men, faring poorer on questions relating to emotional well-being, according to a study published in the Sexual Health Journal.

The findings suggest that female patients may require more attention from caregivers. Genital warts is the fourth most common sexually transmitted illness (STI), with slightly more than 1,100 cases of genital warts each year.

Dr Luo Nan, who is one of the study’s main authors, said that the study highlights how patients are affected by their condition, and this can help guide future innovation studies.”

HOW IS BIG DATA CHANGING HEALTHCARE IN SINGAPORE?

Big data analytics is one of the key buzzwords shifting the way many industries work, including changing the way healthcare institutions and systems work in Singapore. From managing department and clinic workloads, to identifying target groups for intervention programmes and treatment, the use of big data analytics has improved clinical and operational efficiency, and is set to expand to predictive and preventive care.

Analytics has taken off due to the greater availability of data and electronic health records, increasingly sophisticated software and more personnel trained in big data sets, say analysts.

Associate Professor Teo Yik Ying, Vice Dean (Research) at the Saw Swee Hock School of Public Health, points out that the School’s biostatistics team is also working on projects such as developing methods to mine huge data sets for complex diseases in humans, especially the genetics and genomics of infectious diseases.
GO OUTDOORS FOR BETTER EYESIGHT

Many research studies have shown that more time spent outdoors leads to a lower risk of myopia developing in children. However, despite Singapore having one of the highest myopia rates in the world, getting Singaporean children and their families to spend time outdoors still seems like a challenge.

“There should be a comprehensive programme which can include park visits, outdoor CCAs in schools, outdoor programmes in the community and even an outdoor gadget to help monitor the time spent outdoors.”

- Professor Saw Seang Mei, the study’s principal investigator

HOW DO OUR GREEN SPACES BENEFIT US?

Greenery and parks have certainly contributed to Singapore’s ‘Garden City’ image, but apart from beautifying our city state, just how do our green spaces benefit us? The National Parks Board (NParks) aims to embark on two studies to quantify the benefits of our green spaces, one of which is a study on the benefits of physical activity in parks.

HOW SINGAPORE IS PIONEERING TELE-MEDICINE

Patients recovering from stroke and various disabling conditions can now do so at home, using a tele-rehabilitation system which allows them to perform rehabilitation exercises and receive therapist supervision remotely.

The tele-rehabilitation project, led by Associate Professor Gerald Koh, is currently part of a trial at the National University of Singapore, and will ease the stroke recovery process by allowing patients to overcome numerous barriers faced in post-stroke rehabilitation.

WHY SINGAPORE STILL NEEDS TOBACCO CONTROL MEASURES

At 13.3%, Singapore has one of the lowest adult smoking rates in the world, thanks to forty years of tobacco control measures. But Singapore still needs to keep up the vigilance on tobacco control measures despite these low rates, says Associate Professor Joanne Yoong. Although current control measures have resulted in healthcare savings of about S$66 million, that is still a minor fraction of the estimated annual S$839 million for smoking-related direct and indirect costs.

From the introduction of new tobacco products which are less-regulated to the numerous negative social impacts – the health of secondhand smokers, household burden and work productivity – our preventive efforts and policy responses need to constantly adapt in curbing tobacco use.

Led by Dr Falk Mueller-Riemenschneider, the study aims to show the benefits of combining exercise and a park setting. “Our objective is to investigate whether a park prescription, with or without a tailored exercise programme in the park can, on one hand, increase physical activity level and, on the other hand, increase general well-being,” he explains.
Ms Cheong Lou Kuen Angela, Ms Tan Siok Keng Karen, Ms Cheong Lou Heng Sharon, Ms Cindy Chew Ning Fong, Ms Kyin Nwe Moong Don, Ms Tan Joo Ee Monica and Ms Ho Sau Ling Karen were awarded the NUHS Values-In-Action (VIA) Award for demonstrating the NUHS TRICE values (Teamwork, Respect, Integrity, Compassion and Excellence).

Prof Saw Seang Mei and A/Prof Teo Yik Ying received awards at the NUHS-Mochtar Riady Pinnacle Awards 2015. Prof Saw was awarded the NUHS Mochtar Riady Pinnacle Excellence Award which recognises those who have contributed significantly towards NUHS’ clinical, research and education missions. A/Prof Teo was awarded the NUHS-Mochtar Riady Pinnacle Young Achiever Award, which recognises young NUHS staff who had demonstrated excellence in their professional fields, shown instances of promising leadership skills, and is an exemplary role model for those around them.

Professor Saw Seang Mei was awarded the Asia-Pacific Academy of Ophthalmology (APAO) Achievement Award 2015 in recognition of her contributions and dedication to the scientific programmes of the APAO Annual Congress.

Professor Saw Seang Mei was named an ARVO Gold Fellow in the Class of 2015 by The Association for Research in Vision and Ophthalmology (ARVO) for her individual accomplishments, leadership and contributions to the Association.

Associate Professor Wong Mee Lian received the Red Ribbon award at the 9th Singapore Aids Conference, presented by Action For Aids Singapore, for her significant contributions in the fight against HIV. For more than 20 years, A/Prof Wong has been tirelessly involved in projects to promote condom use among those in the sex trade, efforts which have helped bring down the numbers of sexually transmitted infections among sex workers and their clients in Singapore.

Awards & Achievements

FACULTY AND STAFF

Associate Professor Wong Mee Lian was awarded the ASHPA by NUS President Prof Tan Chorh Chuan during the NUS OSHE Annual Safety & Health Performance Award Ceremony 2014/2015 held on 15 April 2015. A/Prof Chia Sin Eng, Vice Dean (Academic Affairs), received the award on behalf of the School.
STUDENTS

From the Master of Public Health Class of 2015, Mr Lim Soon Kok (Lin Shunguo), Dr Shilpa Tyagi, Ms Er Pei Ling (Yu Peiling), Ms Ng Xin Ru Marie, Ms Cher Boon Piang and Ms Tang Zixian Cheryl were awarded the Dean’s List for their excellent academic performance.

Dr Hwang Yi-Fu, Jeff (MPH Class of 2015) received the Richard Gillis Prize and Occupational and Environmental Health Society Medal.

Ms Er Pei Ling (Yu Peiling) (MPH Class of 2015) also received the Tye Cho Yook Gold Medal for her position as Class Valedictorian.

Dr Pang Junxiong, Vincent (PhD graduate, Class of 2015) presented at the 63rd Annual Meeting of The American Society of Tropical Medicine and Hygiene, held on 2 – 6 Nov 2014 at New Orleans, LA USA, and was awarded second place for the Elsevier Clinical Research Award 2014. This award recognises excellence in clinically oriented research presented by a student at the Annual Meeting.

Ms Dai Zhaoli (PhD student, Year 4) was awarded the IOF Young Investigator Award, and was given a cash award of USD 1,000 and invited to present her work at a special session during the IOF Regionals – 5th Asia-Pacific Osteoporosis Meeting. Zhaoli’s abstract was selected as one of the top 5 from a field of over 150 submitted abstracts to the IOF Regionals 5th Asia-Pacific Osteoporosis Meeting. Award recipients were selected based on the excellence and quality of their research.

Ms Wang Yeli (PhD student, Year 2), presented her work “Interaction between body mass index and atherogenic dyslipidemia in association with risk of Type 2 Diabetes” and was awarded the first prize of ‘Professor Mustaffa Young Investigators’ Award at ‘Diabetes Asia 2015’, held on 6 - 9 August 2015, in Kuala Lumpur, Malaysia.

Dr Pang Junxiong, Vincent (PhD graduate, Class of 2015) received the NUSS Medal for Outstanding Achievement awarded by the National University of Singapore Society (NUSS) for outstanding all-round achievements.