To be a global leader in Public Health centred in Asia

To drive knowledge discovery and practice in Public Health

Altruism • Innovation • Mentorship

Building on 60 years of experience in research, teaching and practice in epidemiology and public health, the National University of Singapore, Saw Swee Hock School of Public Health was established on 1st October 2011.

The founding of The School signifies an important milestone for public health in Singapore. An interdisciplinary approach, augmented by rigorous training, applicable research and regional partnerships places The School at the forefront of public health knowledge discovery and practice in Asia.

Moving beyond the traditional domains of chronic disease aetiology and risk factors, The School emphasises integrating diverse disciplines into cutting-edge public health research, new technologies and methods to measure and monitor exposure and disease, as well as new approaches to develop and implement public health programmes and policies. From the use of mathematical and econometric modelling to better inform public health policies, to the development and evaluation of genomic tools to enhance understanding of gene-environment interactions, the underlying motivation is to generate relevant research with practical applications.
The founding of The Saw Swee Hock School of Public Health on the 1st of October 2011 signifies an important milestone in public health in Singapore and is the beginning of a new era for us.

Building upon over 60 years of experience, The School occupies a unique position in public health research, teaching and practice. Its inter-disciplinary approach augmented by rigorous training, applicable research and regional partnerships places The School at the forefront of public health knowledge discovery and practice in Asia.

The last two decades have exposed new challenges in public health ranging from epidemics in chronic diseases like Type 2 diabetes mellitus, cancer and cardiovascular disease to emerging infectious diseases like SARS (severe acute respiratory syndrome) and H1N1. These major threats are compounded in the background of a rapidly ageing population in Singapore and the increasing complexity of health issues such as these often pose seemingly intractable problems to policy makers. Tackling these challenges necessitates an innovative and integrative approach, with various ministries, government agencies, industries and community members an equal part of the solution as researchers and public health leaders.

The School, as an institute of higher learning and research, has a vital role to play in turning public health discovery into healthier communities. We aim to expand the boundaries of traditional research by focusing on the application and implementation of science through the formulation of comprehensive policies and programmes to improve health in Singapore and beyond.

Our endeavours to improve health must be firmly grounded in scientifically sound evidence and to that effect we are developing ground-breaking areas of research. These include translating genome-based knowledge into public health applications, new methodologies for programme evaluation, devising systems to better integrate healthcare informatics for the prevention and management of chronic diseases as well as utilising mathematical and econometric modeling for policy decision-making. Emphasising our integrative and multi-disciplinary approach we are also building collaborations and working closely with local and international organisations to help realise our aim to apply research findings to have real world benefits for people.

It gives me great pride and pleasure to share with you some of our more significant achievements in the first year since the founding of The School.

We signed a Memorandum of Understanding (MOU) with the London School of Hygiene and Tropical Medicine for the exchange of scientific, academic and technical information; to identify opportunities for cooperation in teaching and facilitate exchange of staff and students to develop collaborative projects, and for the organisation of and participation in joint academic and scientific activities.

We also have an MOU with the Harvard School of Public Health to conduct research, provide expert training, and establish an evidence-based model for the prevention of Type 2 diabetes in Singapore and Asia.

Along with the Health Promotion Board we will be setting up the Health Promotion Academy which will function as a Centre of Excellence for Health Literacy; developing programmes and curricula to train Health Ambassadors in health promotion and disease prevention in Singapore.

I would like to highlight The School’s Population Health Metrics and Analytics (PHMA) programme which is a cutting-edge health information system which can monitor and integrate a massive volume of data to help researchers understand health and disease, and provide guidance to policymakers.

Going forward, The School will continue to build on its strengths and push to new heights in order to “Turn Discovery into Healthier Communities”.

Professor Chia Kee Seng
Dean, Saw Swee Hock School of Public Health
1948 The Department of Social Medicine and Public Health was set up to amalgamate the former Raffles College and the King Edward VII College of Medicine, to form the University of Malaya.

The same year, Dr John J Strahan was appointed as the first professor of the Department until 1953.

1949 A nutrition unit was formed with the transfer of staff from the Department of Biochemistry.

1950 A lecturer in applied nutrition was appointed to the department.

1952 A medical statistician was appointed, enabling the development of a statistical consultative service.

1953 The Department was relocated to Nissen Huts in McAlister Road. Professor Trevor Lloyd-Davies, an industrial physician, was appointed and served as Professor of Social Medicine and Public Health until 1961. Lectures on occupational health were introduced to the curriculum. The postgraduate Diploma of Public Health was introduced with assistance from the World Health Organisation. It was the first diploma course in postgraduate medicine in Singapore and one of the earliest in the region. The course was specially designed to suit the conditions in the Far East.

1957 The Department moved into the Institute of Health in Outram Hill.

1961 Professor Winifred Danaraj served as Head of the Department until 1964.

1964 Professor Michael J Colbourne served as Head of the Department until 1969.

1970 Professor Phoon Wai On was appointed Head of the Department and was with the Department till 1987. He was the longest serving head in the history of the Department and was instrumental in the development of curriculum and research into occupation medicine.

1973 The Diploma of Public Health course was replaced by the degree of Master of Science (Public Health) course. The degree course for the Master of Science (Occupational Medicine) was introduced – it was the first postgraduate degree course in occupational medicine in this region.

1986 The National University Hospital was completed and the Department together with the rest of the Faculty of Medicine was relocated to the main campus of the National University of Singapore in Kent Ridge.

1992 The Master of Science (Public Health) and Master of Science (Occupational Medicine) were reorganised into the degrees of Master of Medicine (Public Health) and Master of Medicine (Occupational Medicine).

2001 The Department moved into the NUS Biomedical Complex.

2007 Combining the Master of Medicine (Public Health) and Master of Medicine (Occupational Medicine), the new Master in Public Health programme was introduced in keeping with the multidisciplinary demands of modern public health.

2008 The Department of Community, Occupational and Family Medicine celebrated 60 years in public health.

2009 The Department of Community, Occupational and Family Medicine (COFM) became the Department of Epidemiology and Public Health (EPh). These changes precipitated expansion into new areas of research including the genetic determinants of disease in Asian populations, the mathematical and statistical modelling of infectious disease epidemiology, as well as the role of gene-environment interactions in shaping chronic disease risk factors in the Singapore population.

2011 Formation of Saw Swee Hock School of Public Health to meet new challenges in public health. The School becomes a member of the National University Health System. With its distinctly Asian focus, it has a special role to play in public health research, training and practice.
Every gift to our School makes a difference. Your gifts are hard at work building the future of public health in Singapore and the region — from scholarships to research to outreach programmes. Your gift gives us the added advantage and confidence in meeting new needs or opportunities and responding to extraordinary challenges as they arise in our mission to become Asia’s global leader in public health.

We recognise and would particularly like to extend our deepest appreciation to all our donors — lifetime contributors, friends, individuals, organisations, alumni — listed here and all those who prefer to remain anonymous.

• 26th ICOH2000 Conference Organising Committee
• The National Kidney Foundation
• Binjai Tree
• Temasek Foundation CLG Limited
• Ms Khoo Kim Geok, Jacqueline Khoo
• Singapore Tourism Board
• Sincere Watch Limited

• Singapore Exchange Limited
• Pfizer Private Limited
• Profs Lee Hin Peng, Mr Hsieh Fu Hua, Prof Lim Meng Kin
• Amasco Healthcare Marketing Private Limited
• National University Hospital (S) Pte Ltd
• Singapore Chemical Industry Council Limited

How we use the money

Donations to The School will greatly help The School to achieve its vision through mainly two areas — manpower and operating costs. Budget has been allocated to develop and retain existing The School’s academic, research and administrative staff as well as to recruit new staff. It also includes the cost of hiring operations and IT staff involved in the Population Health Metrics and Analytics system.

Best Wishes from WHO

It gives me great pride to be associated with The School which has gained regional and international recognition as a centre of excellence in occupational and public health education, training and research.

On a personal level, I have fond memories of my postgraduate days in the School between 1984 and 1985 when I earned my degree in public health.

I am confident that the School will continue to grow from strength to strength in its role in the prevention and alleviation of illness, and the protection and promotion of health regionally and internationally.

My best wishes to the School in the years ahead!

Dr Margaret Chan
Director-General, World Health Organization MSc (PH) 1984/1985

Our Benefactor – Professor Saw Swee Hock

Professor Saw Swee Hock is a distinguished NUS alumnus whose generous endowed gift of $30 million has enabled the establishment of the Saw Swee Hock School of Public Health, which is specifically designed to play a key role in improving the standard of public health in Singapore and the surrounding region in the years ahead.

Professor Saw was a Senior Lecturer in Statistics in the University of Malaya, Kuala Lumpur, Founding Professor of Statistics in the University of Hong Kong, and subsequently Professor of Statistics in NUS. He is an Honorary Fellow of the London School of Economics (LSE) and an Honorary Professor in both the University of Hong Kong and Xiamen University. His first degree is from NUS and his doctorate in Statistics is from LSE. His publications include many books and articles in learned journals.

Professor Saw has provided philanthropic support to many charitable causes, particularly in the area of education in the form of gold medals, bursaries, scholarships, institutes, schools and buildings. Recipients of his donations include ISEAS, NUS, LSE, Xiamen University, University of Hong Kong, Nanyang Technological University and Singapore Management University. In NUS, he has set up an endowed bursary fund which has so far benefited over 100 final year needy students across all faculties and schools.
FACULTY MEMBERS

1. CHIA Kee Seng
   Professor, Dean

2. CHIA Sin Eng
   Associate Professor, Vice-Dean (Academic Affairs)

3. WONG Chia Siong
   Senior Lecturer, Vice-Dean (Education)

4. LIM Yee Wei
   Associate Professor, Vice-Dean (Research); Head, Health Education & Promotion and Health Systems & Policy Domains

5. WONG Mee Lian
   Associate Professor

6. Gerald KOH Choon Huat
   Associate Professor

7. TAI E Shyong
   Joint Associate Professor

8. Elizabeth Alderman JAHNCKE
   Joint Lecturer

OTHER FACULTY MEMBERS

Mike PAN
   Assistant Professor

Adeline SEOW Ling Hui
   Associate Professor

CHENG Ching-Yu
   Joint Assistant Professor

Joe SIM Heng Joo
   Joint Assistant Professor

TAN Kia Tang
   Joint Associate Professor

Leontine ALKEMA
   Joint Assistant Professor

Arul EARNEST
   Joint Associate Professor

GOH Liang Kee
   Joint Assistant Professor

Mohammad Kamran IKRAM
   Joint LKY Postdoctoral Fellow

KHOR Chia Chua
   Joint Assistant Professor

OOI Eng Eng
   Joint Associate Professor

Augustus John RUSH
   Joint Professor

SHEN Han Ming
   Joint Associate Professor

TAN Lai Yong
   Joint Senior Lecturer

Terri Lois YOUNG
   Joint Professor

Gregory CHAN Chung Tsing
   Adjunct Assistant Professor

CHEW Suok Kai
   Adjunct Associate Professor

Angela CHOW Li Ping
   Adjunct Assistant Professor

Kenneth David CHOY Kwok Yin
   Adjunct Assistant Professor

Sonia Maria DAVILLA DOMINGUEZ
   Adjunct Assistant Professor

Lee Chien Earn
   Adjunct Associate Professor

Lee Hock Siang
   Adjunct Associate Professor

LEE See Muhah
   Adjunct Associate Professor

Vernon LEE Jian Ming
   Adjunct Associate Professor

LEO Yee Sin
   Adjunct Associate Professor

As on 7th September 2012
FACULTY MEMBERS

1. LEE Hin Peng
   Professor
   Head, Epidemiology Domain

2. David KOH Soo Quee
   Professor

3. TAI Bee Choo
   Associate Professor

4. Jeannette LEE Jen Mai
   Associate Professor

5. Eric Andrew FINKELSTEIN
   Joint Associate Professor

6. TAN Chuen Seng
   Assistant Professor

7. HSU Li Yang
   Joint Assistant Professor

8. Mark CHEN I-Cheng
   Assistant Professor

9. LIM Wei Yen
   Assistant Professor

10. ONG Choon Nam
    Professor

11. SAW Seang Mei
    Professor

12. WONG Tien Yin
    Joint Professor

13. Jeannette LEE Jen Mai
    Associate Professor

14. Eric Andrew FINKELSTEIN
    Joint Associate Professor

15. TAN Chuen Seng
    Assistant Professor

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    Joint Associate Professor

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    Joint Assistant Professor

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    Assistant Professor

34. Rob Martinus van DAM
    Joint Associate Professor

35. Alex COOK
    Joint Assistant Professor

36. Joanne YOONG Su Yin
    Assistant Professor

OTHER FACULTY MEMBERS

LI Yi-Ju
   Adjunct Associate Professor

John LIM Chien Wei
   Adjunct Associate Professor

LIM Poh Lian
   Adjunct Associate Professor

Annie LING Mei Chuan
   Adjunct Associate Professor

LIU Jianjun
   Adjunct Associate Professor

LOW Yen Ling
   Adjunct Assistant Professor

NG Wee Tong
   Adjunct Assistant Professor

Eugene SHUM Jin-Wen
   Adjunct Assistant Professor

Matthias Paul TOH Han Sim
   Adjunct Assistant Professor

Christina Misa WONG
   Adjunct Assistant Professor

Eric YAP Peng Huat
   Adjunct Associate Professor

Mythily SUBRAMANIAM
   Adjunct Assistant Professor

Anbupalam THALAMUTHU
   Adjunct Assistant Professor

Sri Chander s/o TIKAMDAS NEBHRAJ
   Adjunct Associate Professor

Roy CHAN Kum Wah
   Joint Adjunct Professor

CHEAH Peh Yean
   Joint Adjunct Associate Professor

FONG Ngan Phoon
   Joint Adjunct Associate Professor

Jeremy LIM Fung Yen
   Joint Adjunct Assistant Professor

Stefan MA Sze Lok
   Joint Adjunct Associate Professor

TAN Boon Huan
   Joint Adjunct Assistant Professor

TAN Say Beng
   Joint Adjunct Associate Professor

Mahendran s/o A. MALIAPEN
   Joint Adjunct Assistant Professor

TAN Min Han
   Joint Adjunct Assistant Professor

David Lowell HEYMANN
   Visiting Professor

Helena Marieke VERKOOJEN
   Visiting Associate Professor

As on 7th September 2012
CONFERENCES AND SYMPOSIUMS
SYMPOSIUM ON PREVENTION OF TYPE 2 DIABETES IN ASIA
More than 60 participants from the National University of Singapore (NUS), Duke-NUS, the National University Health System (NUHS), Agency for Science, Technology and Research (A*STAR) Institutes, the Ministry of Health (MOH) and government-restructured hospitals attended the inaugural symposium on the prevention of Type 2 diabetes in Asia in October 2011.

COMBATING CHRONIC DISEASE IN ASIA
The second NUS Initiative to Improve Health in Asia (NIHA) forum was held in November 2011. The theme of forum was “Combating Chronic Disease in Asia – Gaps and Innovations.”

UK-SINGAPORE SYMPOSIUM ON OBESITY & DIABETES
The NUS Saw Swee Hock School of Public Health together with the British High Commission jointly organised a UK-Singapore symposium and workshop in December 2011 on Obesity & Diabetes: Causes, Consequences and Opportunities for Prevention.

CENTRES HIGHLIGHTS
SINGAPORE POPULATION HEALTH STUDIES
The Singapore Population Health Studies was set up in The School last year to monitor and assess the health of Singaporeans.

It serves as a source of health-related information that is useful to health policy makers and other healthcare sector stakeholders, and it will also be the resource centre for the School and the National University of Singapore for population-based health studies.

Population Studies
SINGAPORE CONSORTIUM OF COHORT STUDIES
Recruitment for this cohort of 14,576 community volunteers and 14,074 patients with diabetes has been completed.

SINGAPORE HEALTH 2012
From July to November 2012, the unit will be conducting a community survey of the health status, health-related lifestyle behaviours and health-related knowledge and attitudes of a nationally-representative population of 2500 Singaporeans and Permanent Residents between the ages of 18 to 79.

H1N1(2009) INFLUENZA STUDIES
Analyses of data obtained from the sero-epidemiology cohort between 2009 and 2010 were further analysed during the year, which resulted in two publications.

Household Cohort Study of Acute Respiratory Infections
The unit also embarked on a two-year household cohort study starting in April 2012 involving 800 households.

Demographic Epidemiological Model Of Singapore (DEMOS)
The Demographic Epidemiological Model Of Singapore (DEMOS) is a simulation model representation of Singapore. Once completed, it will provide a framework to transform low dimensional summary statistics from national statistics publications into richer, higher dimensional data.

Nutrition, physical activity, and metabolic disorders
This research programme is aimed at elucidating the role of nutrition and physical activity in the development of metabolic disorders such as dyslipidemia and hyperglycemia that increase risk of type 2 diabetes and cardiovascular diseases.
Systematic reviews and meta-analysis
A key objective of the unit is to develop the capacity to perform meta-analyses. Systematic reviews and meta-analyses comprehensively summarise relevant data and can allow the identification of potential reasons for differences in study results, and also permit an assessment of the strength of scientific evidence for a particular research hypothesis. We have so far initiated four meta-analyses projects, focusing on diet and health.

Genetic studies
Over the last year, the team has utilised the Singapore Genome Variation Project and Hapmap data to explore genetic diversity in Asia, and has also assembled data on both rare and common copy number variation.

International collaborations
Multiple collaborations are underway. These collaborations primarily focus on identifying genetic risk factors for common chronic diseases.

HEALTH PROMOTION RESEARCH
ONGOING PROJECTS
1. STI/HIV/AIDS risks related to heterosexual behaviours of Singapore Men
We are collaborating with Health Promotion Board on a study to assess STI/HIV-related sexual behaviours and health-seeking behaviours among heterosexual men who engage in paid sex and/or who have casual sex with women in Singapore and neighbouring countries.
This study will provide important findings for the prevention and control of HIV/AIDS and STI among Singapore men who engage in paid sex and/or casual sex.
2. A Qualitative Study of Attitudes and Risk Reduction Behaviors of Women (Non-Sex Workers) With HIV - Positive Partners
This AWARE-funded qualitative study is ongoing. The purpose of this study is to explore the attitudes and perceptions about HIV, sexual behaviour and safer sexual practices among women whose husbands or partners are infected with HIV so that effective HIV education programmes can be planned for these mainstream women.
3. Randomised Controlled Trial of an STI/HIV/AIDS Prevention Intervention for Adolescents Attending a Public STI Clinic in Singapore
This NMRC-funded research project, a collaboration between NUS and the Department of STI Control (DSC), aims to assess the impact of an STI/HIV/AIDS prevention programme on adolescents aged 16 to 19 years attending the Department of STI Control Clinic (DSC).
4. Survey on men having sex with men
We collaborated with CDC, Tan Tock Seng Hospital and research staff and clinicians from DSC and APA in a survey, using respondent-driven sampling, to estimate the prevalence of HIV, syphilis and sexual risk behaviors in men who have sex with men in Singapore.

HEALTH SERVICES RESEARCH
This unit serves to develop and promote Health Services Research through a multidisciplinary and inter-sectoral collaboration with clinicians and agencies in National University Health System as well as with international partners. The aim is to improve clinical care delivery, generate new knowledge and inform healthcare policy makers.

Research Activities
ADVERSE EFFECTS OF DRUGS AND HEALTH RELATED QUALITY OF LIFE AMONG PATIENTS WITH GLAUCOMA AT THE NATIONAL UNIVERSITY HOSPITAL.
The aims of this study are to evaluate the medication adherence rate, to explore the factors relevant to non-adherence, and to evaluate patients’ health related quality of life.

EMPIRICAL THERAPY AMONG ADULT FEMALE NEUTROPENIA PATIENTS AT NUH.
The aim of this study is to monitor and audit the empirical treatment delivered, to monitor the outcomes of using the new treatment guidelines.

HOSPITALISATION COSTS FOR FEMALE NEUTROPENIA PATIENTS AT NUH
Most of the FN cases are managed as inpatients, and the costs for FN are rarely reported in Asian countries. Thus, the aim of this study is to investigate the patients’ costs of each febrile neutropenia episode at NUH.

RELATIONSHIP BETWEEN APNEA-HYPOPNEA INDEX AND ANGIOGRAPHIC CORONARY DISEASE PHENOTYPES IN PATIENTS PRESENTING WITH ACUTE MYOCARDIAL INFARCTION
Previous studies suggested obstructive sleep apnea was associated with extensive atherosclerosis, but this has not been investigated using coronary angiography. We sought to examine the relationship between apnea-hypopnea index (AHI) and angiographic coronary disease phenotypes. A total of 240 patients presenting with acute myocardial infarction and undergoing a screening sleep study using a level 3 portable diagnostic device were recruited for this study.

EXPLORING THE USE OF THE DEMENTIA MANAGEMENT STRATEGIES SCALE IN CAREGIVERS OF PERSONS WITH DEMENTIA IN SINGAPORE
The present study expanded on previous research by refining and establishing the scale’s content validity and psychometric properties in the Singapore context. A total of 196 family caregivers completed questionnaires which assessed caregiver and patient characteristics, and dementia management strategies with DMSS.

SALIVARY BIOMARKERS RESEARCH GROUP
Our research interests include the use of salivary biomarkers in the study of mental and physical stress, allergic diseases (such as asthma and allergic rhinitis), infectious diseases (such as dengue fever), organophosphate toxicity, and oral immunity. We are also exploring applications in behavioural sciences (such as addiction treatment) and in the study of mental health and well-being. In 2012, a new study on the effect of cigoning on salivary biomarkers will be initiated, in collaboration with the PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam.

THE SINGAPORE CHINESE HEALTH STUDY
The objective of the Singapore Chinese Health Study (SCHS) is to establish a cohort for long-term follow-up study of dietary and other environmental determinants of chronic diseases such as cancer, diabetes mellitus, osteoporosis and cardiovascular disease. We will examine potential disease-protective dietary factors that are not present in western populations.

SINGAPORE EPIDEMIOLOGY OF EYE DISEASE (SEED)
The Singapore Epidemiology of Eye Disease (SEED) serves to initiate, promote and coordinate ophthalmic epidemiologic research in Asia. The programme provides a forum for generating new hypotheses, and the application of epidemiologic.
It focuses on epidemiology and biostatistics, and includes research related to clinical epidemiology, genetic and molecular epidemiology research, evidence-based medicine and outcomes research.

CANCER EPIDEMIOLOGY – LUNG AND LYMPHOID MALIGNANCIES
Genes, Environment and Lung Cancer, Singapore (GEL-S) study
The Genes, Environment and Lung Cancer, Singapore (GEL-S) study, was completed in April 2011. In total, the team recruited 398 cases and 814 controls from the four major public sector hospitals in Singapore, bringing the combined study population from two lung cancer case-control studies to 701 cases and 1577 controls.
Results from this study have been written up and published.

Singapore Lymphoma Study
The Singapore Lymphoma Study was completed in February 2011, and preparation of manuscripts is in progress. The collaboration with the Genome Institute of Singapore on a Genome Wide Association Study of genetic determinants of lymphoma risk in Asian populations is still ongoing.

CENTRE FOR INFECTIOUS DISEASE EPIDEMIOLOGY AND RESEARCH (CIDER)
The Centre for Infectious Diseases Epidemiology and Research (CIDER) was jointly established by the Ministry of Defence (MINDEF) and Saw Swee Hock School of Public Health, National University of Singapore (SSSHPH, NUS).
The aim is to develop the Centre into a professional academic and research centre that can reduce the public health burden caused by infectious diseases locally and in Asia.
THE SCHOOL IN NUMBERS

Figures from 1st October 2011 to 7th September 2012

Saw Swee Hock School of Public Health
Overview

The Education Office at the National University of Singapore (NUS) Saw Swee Hock School of Public Health offers various graduate courses. It is also actively involved in undergraduate medical training at the Yong Loo Lin School of Medicine.

Undergraduate Education

The School continues to support the NUS Yong Loo Lin School of Medicine in teaching medical undergraduates. The course is taught in the first to fourth year of the five-year medical course. The curriculum offered by The School aims to impart:

- An understanding of the influence and relevance of behavioural, social, cultural, environmental, occupational, and economic factors on health and illness, and apply this understanding to the promotion of health and management of illness;
- An awareness of the components of healthcare systems, including resource allocation and barriers, and their effects on the population, individuals and patients; skills to gather and critically evaluate information and effectively incorporate it into their knowledge base.

Master in Public Health Programme (MPH)

The present Master in Public Health Programme seeks to provide a rigorous and interdisciplinary approach to learning, with emphasis on finding evidence-based and innovative solutions to Asia’s current and future public health challenges. The annual recruitment exercise draws over 120 applications for 35 places. Approximately one third of our students come from the surrounding countries.

Students may choose from any of these areas of study:
- General Public Health track
- Occupational and Environmental Health
- Clinical Epidemiology
- Global Health

Graduate Diploma in Applied Epidemiology (GDAE)

In 2011, The School offered the Graduate Diploma in Applied Epidemiology. This is a 18-month part-time programme for university graduates with relevant public health experience. Candidates are required to complete six public health related modules. Our first GDAE cohort graduated in June 2012.

Graduate Research Programme (MSc/PhD)

As a department, we have supervised graduate research students under the auspices of the Yong Loo Lin School of Medicine (YLLSOM). A total of 11 YLLSOM graduate research students with SSHSPH supervisors graduated in AY2011/2012. The School launched its graduate research programmes in August 2012, offering both the Master of Science (M.Sc.) programme and the Doctor of Philosophy (Ph.D.) programme. The emphasis of the programmes is on the acquisition of core knowledge in the area of interest while developing a general understanding of public health, and in the mastery of research skills such as hypothesis formulation and study design, critical appraisal of existing research, data gathering and analysis, research management, and scientific writing.

Preventive Medicine Residency Programme (PMR)

Since 2010, public health and occupational medicine training programmes are now grouped under the Preventive Medicine Residency - a three-year ACGME-I (Accreditation Council for Graduate Medical Education International) accredited training programme. There are at present 16 residents undergoing the programme.

Bachelor of Environmental Studies (BES)

The Bachelor of Environmental Studies (BES) is a 4-year direct Honours degree programme offered jointly by the Faculty of Science, Faculty of Arts since 2011. SSHSPH runs the Environmental and Public Health module, which is a core requirement for students in their second year of study. There are at present 44 enrolled students taking this module.

Joint PhD programme in Genetic & Molecular Epidemiology (GAME)

A student graduated in AY 2011/2012. The thesis title is “Health outcomes associated with cognitive impairment”.

DEGREES & PROGRAMMES DEVELOPMENT AND GRADUATION STATISTICS

<table>
<thead>
<tr>
<th>Education Programmes</th>
<th>Person-in-charge</th>
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</thead>
<tbody>
<tr>
<td>Undergraduate (UG)</td>
<td>A/Prof Jeannette Lee</td>
</tr>
<tr>
<td>Master of Public Health (MPH)</td>
<td>Dr Wong Chia Siong</td>
</tr>
<tr>
<td>Graduate Diploma in Applied Epidemiology (GDAE)</td>
<td>A/Prof Fong Nyan Phoon</td>
</tr>
<tr>
<td>Graduate Research Programme (GRP)</td>
<td>A/Prof Rob Martinus van Dam</td>
</tr>
<tr>
<td>Preventive Medicine Residency (PMR)</td>
<td>Prof Lee Hin Peng &amp; Dr Judy Sng</td>
</tr>
<tr>
<td>Bachelor of Environmental Studies (BES)</td>
<td>Dr Judy Sng</td>
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As on 31st September 2012
FACULTY AND STUDENT ACCOLADES

Faculty

Professor Lee Hin Peng
- Lee Foundation Lifetime Achievement Award, NUHS Leadership Awards 2011
- Chapter of Public Health & Occupational Physicians Achievement Award for his outstanding contributions to public health and occupational medicine in Singapore at the 6th Singapore Public Health & Occupational Medicine Conference in August 2011

A/Prof Gerald Koh
- Award of Promotion and Tenure (1 July 2011)
- Awarded Singapore Millennium Foundation Grant in August 2011 for his proposed study entitled “Tele-Rehabilitation for Newly-Disabled Homebound Older Persons Needing Supervised Physical Therapy”

Dr Lim Sin How
- 6th Singapore Public Health and Occupational Medicine Conference Best Oral Presentation Award for the project entitled “Smoking Cessation and Mortality Among Middle-Aged and Elderly Chinese in Singapore – The Singapore Chinese Health Study” in August 2011

A/Prof Teo Yik Ying
- Singapore Youth Award 2011

Students

Master of Public Health

Dr Brian See Cheong Yan
- Tye Cho Yook Gold Medal for Best Performing Student in MPH
- Occupational and Environmental Health Society Medal for Best Performing Student in Occupational and Environmental Health Specialisation
- Richard Gillis Book Prize for Best Performing Student in COS305 Industrial Hygiene

Graduate Research Programme

Doctor of Philosophy (PhD)

Astrid Irwanto
- 3rd prize for Poster Award at the 16th Human Genome Meeting 2012 in Sydney

Haleh Ghaem Maralani
- Merit award for Oral Presentation and 3rd prize for Poster Presentation at the 6th Singapore Public Health & Occupational Medicine Conference 2011

Eugene Ho Wanning
- 2nd runner-up for Oral Presentation Award at the Yong Loo Lin School of Medicine 2nd Annual Graduate Scientific Congress 2012

Li Ling Jun
- Merit award for Oral Presentation at the 6th Singapore Public Health & Occupational Medicine Conference 2011
- Merit award for Poster Presentation at the 28th Singapore-Malaysia Joint Meeting in Ophthalmology 2012

Mao Hui
- Best Research Publication Award at the Yong Loo Lin School of Medicine 2nd Annual Graduate Scientific Congress 2012
- NMRC (National Medical Research Council) Research Training Fellowship 2012

Sim Xueling
- Best Research Publication Award at the Yong Loo Lin School of Medicine 2nd Annual Graduate Scientific Congress 2012
- Best Poster (Quality and Health Services Research) Award at the Singapore Health and Biomedical Congress 2011

Kwan Rui
- Merti Award, Allied Health Specialties Category at the 6th KK Women’s and Children’s Hospital Annual Scientific Meeting 2011

Melvin Seng Yi Feng, Kong Wang Yee and their supervisors Prof David Koh, Dr Lim John Wah, Dr Judy Sng
- Won the Best Oral Presentation Award (Occupational Medicine Category) for their paper on “A study of needle stick injuries among medical students” at the 6th Singapore Public Health and Occupational Medicine Conference in August 2011

As on 7th September 2012

Annual Report 2011/12

Saw Swee Hock School of Public Health

As a Triple Epidemic Burden on Asia* at the 25th East Asian Medical Students’ Conference in January 2012

Nazirul Hannan Bin Abdul Aziz
- Singapore Medical Association Public Health Research Award at the 2nd Yong Loo Lin School of Medicine Annual Scientific Congress 2012

Woo Liang An
- Best Abstract Award at the 10th International Scientific Congress of the Royal College of Obstetrics and Gynaecology in Mar 2012
- Singapore Medical Association Wong Hock Boon Award at the 2nd Yong Loo Lin School of Medicine Annual Scientific Congress 2012
- Best Poster (Quality and Health Services Research) Award at the Singapore Health and Biomedical Congress 2011
**RETNAL VESSEL CALIBRE, EARLY CHILDHOOD CARDIOVASCULAR RISK FACTORS AND REFRACTIVE ERRORS IN PRESCHOOL CHILDREN**

This study is to evaluate the relationship of retinal vascular caliber with early cardiovascular predictors such as birth parameters, blood pressure, early childhood lifestyle and maternal factors as well as refractive errors, amblyopia and strabismus in 1,000 children aged 2 to 16 years recruited from the Preschool study of Refractive Error, Amblyopia and Strabismus (STARS) and STARS Family study.

The study will provide new information on whether retinal vascular changes occur early in childhood, and whether these are related to birth weight, gestational age, blood pressure, refractive error and other factors.

**PLASMA ADIPONECTIN AND ITS ENVIRONMENTAL AND GENETIC DETERMINANTS IN CHINESE, MALAYS AND ASIAN INDIANS**

Central obesity and insulin resistance are major risk factors for diabetes mellitus and cardiovascular disease.

Environmental (diet and physical activity), genetic, gene-environment or gene-gene influences on its levels has still not been fully elucidated in large epidemiological studies. This study is thus an attempt to identify pathways and strategies through which adiponectin concentration may be regulated.

**ANALYSIS OF MULTIVARIATE FAILURE TIME DATA: A SEMI COMPETING RISKS APPROACH**

The aim of this research was to develop strategies for modelling covariate effects on the terminal and non-terminal events and account for their possible correlation.

Our study suggests that the proposed methods provide an efficient and feasible way of analysing illness-death (or semi-competing risks) models with practical sample sizes.
### New Projects

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### Ongoing Projects

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The Population Health Metrics and Analytics (PHMA) is a cutting-edge health information system that will monitor and integrate a massive volume of data, in order to help researchers understand health and disease; and provide guidance to policymakers.

This health information system will consist of three major components: a Population Health Monitor, an Aggregate Data Repository, and a Meta-Analysis Platform.

The Population Health Monitor will continuously follow-up a large cohort of Singapore’s population through questionnaires, interviews, health checks and laboratory tests, to understand their health risks and health-seeking behaviour.

Two major contributions of the PHMA are expected to be in research and policy. Researchers will have unprecedented access to high-quality demographic, behavioural, clinical, biological and health systems data that can be analysed to generate new scientific understandings of health and disease.

The health sector is a complex arena for policymakers who need to understand individual and aggregate national, regional and global indicators of health, economic development and demography. Furthermore they need to be able to evaluate the realistic long-term outcomes of proposed policies and interventions.

The PHMA’s monitoring and evaluation systems, mathematical modelling, simulation and decision support tools will greatly help them to do this.
Two eyes good, ‘four’ eyes bad

Jeremy, 11, and his sister Megan, 9, love to go out and play in the park. They like riding around on their bicycles and playing with their friends.

“Ah Ma, can we go out and play,” Jeremy asks his Grandma pleasingly, planting a kiss on her cheek.

“No, your Mummy says not to let you and me play outside. You may fall and hurt yourself, or someone may kidnap the two of you,” says Grandma. Since they can’t go out and play, the children play with the video games their parents had given them for Christmas. It is dinner time. Mummy and Daddy are back from work. The family sits down for dinner.

“Mama, you shouldn’t be cooking all these fried foods so often. It’s unhealthy especially for you because you’re diabetic. You need to lose weight. Also, the children shouldn’t be having all that fast food lunch for almost every day,” says Su-Ann, reprimanding her mother gently.

Everyone went silent, not knowing if Grandma is offended by the remark about her weight.

Then, Megan complains to her parents: “Ah Ma wouldn’t let us go out and play in the park.”

“When I was young, we lived in the kampong and we played outside all the time. We only went home to eat and sleep,” says Grandma.

“You mean you didn’t have to do any schoolwork and go for tuition classes?” Jeremy asks his Grandma, incredulously.

“I didn’t even go to school! Back then we didn’t have TV, we didn’t have computer games – I don’t remember anyone of my friends wearing spectacles – not like the all the four of you,” says Grandma looking around at her family, lovingly.

“And you know what – we called anyone wearing spectacles ‘four-eyes!’” chuckles Grandma, laughing at her own joke.

“Ah Ma, that’s not nice – making fun of us!” says Megan.

“I have a good idea. From today onwards, every evening after the park after dinner, we shall all go to the park – you can ride your bicycles and Grandma can walk around the park for exercise. According to doctors doing research on myopia, playing outside helps to relax the eyes and prevent your eyesight from getting worse,” says the children’s father, finally speaking up.

Since then, every evening, the family heads out to the park after dinner for some fresh air and exercise. And the children are happy because they get to play in the park with the other children in the neighbourhood.