

**CENTRE FOR  
HEALTH INTERVENTION AND  
POLICY EVALUATION  
RESEARCH (HIPER)**

2022  
ANNUAL REPORT

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# From our Director



It is the time of the year again to look back on what has happened over the last few months, reflect, and say thanks to everyone involved. It will of course be impossible to list down every individual who has supported HIPER and I shall not attempt to do so. I will give a big shout out to the Senior Management of the Saw Swee Hock School of Public Health, National University of Singapore, my staff and students, and our local and global partners in academia, government, non-government and the industry.

Looking back at 2022, it was a time when the country was transitioning from treating COVID as a pandemic to an endemic. As a team, HIPER has also moved away from COVID-related projects to pick up on where we had left off for non-COVID projects. At the same time, we undertook a strategic review and have undergone restructuring. I am pleased to inform that two of my esteemed colleagues, Assistant Professor Zoe Hildon and Assistant Professor Ian Ang, have kindly agreed to step up to co-direct HIPER with me, with effect from January 2023. Please check out the short write-up by them in this annual report. I am personally excited about the new possibilities that they will bring to HIPER.

There was a wave of resignation during COVID and HIPER was not spared of the trend. I would like to bid farewell to all the staff who have left HIPER and wish them all the best in their new endeavors. I am grateful for their contributions to HIPER over the years and particularly so during the very difficult period of the pandemic.

Moving forward, we will start the new year with a bang. The 2023 HIPER Symposium will be held on 23 and 24 February 2023. We will bring together world class experts to discuss the latest practice in reimbursement of digital health interventions as well as how healthcare professionals can contribute meaningfully to the Health Technology Assessment (HTA) process. In addition, HIPER will be transitioning from an academic research unit to an academic consultancy unit. This means that we will be taking on shorter-term projects with more immediate impact. We look forward to supporting more of you through this change in focus. Wishing everyone a Happy and Prosperous 2023!

**Associate Professor Wee Hwee-Lin**

Director

Centre for Health Intervention and Policy Evaluation Research (HIPER)

# Vision & Mission



## Vision

### **Evidence Empower Decisions**

Be a driver of health technology assessment (HTA) and its development locally and regionally

## Mission

01

In response to increasing demand for evidence based policy decisions, support the stakeholders with the use of health economic evidence to guide policy decisions on health resource allocation

02

Work with governments, global funders, NGOs and industry to perform applied health economics and outcome research

03

Provide a platform for industry experts, academic institutions and stakeholders to come together and promote organic networking opportunities



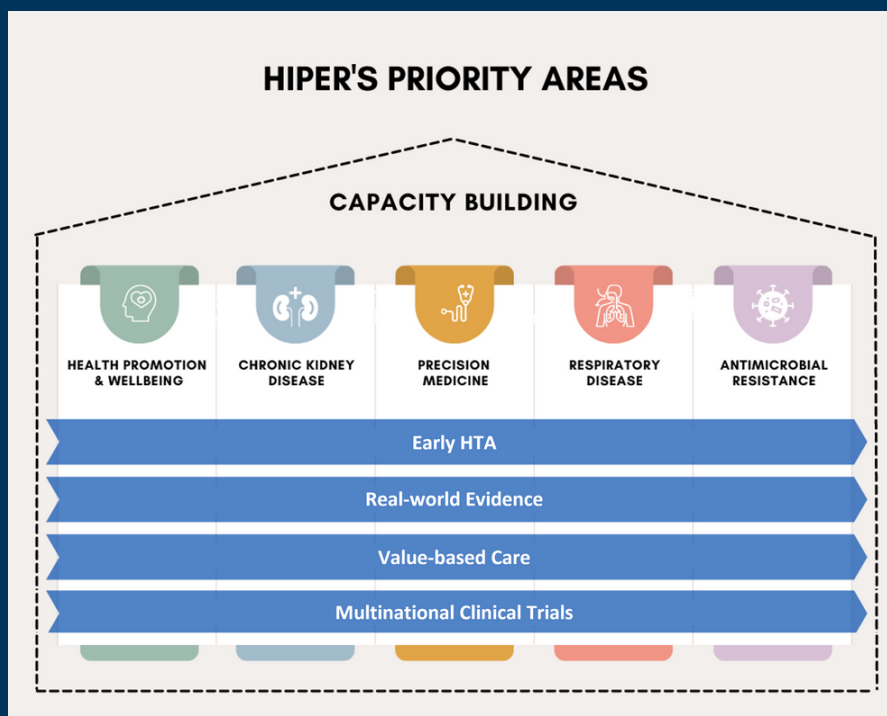
# About HIPER

## Who we are

Launched in 2019 within the Saw Swee Hock School of Public Health, HIPER upholds its vision “Evidence Empower Decisions” to strengthen Health Technology Assessment (HTA) capacity for evidence-based health policy decision-making in developing countries. Our efforts to build HTA capacity entail a range of activities, including consulting services and advisory work, technical support for HTA research, capacity building education opportunities, and networking at domestic and international levels.

## How we work

HIPER currently focuses on *five* areas within healthcare research: Health Promotion and Wellbeing, Chronic Kidney Disease, Precision Medicine, Respiratory Disease and Antimicrobial Resistance. We’ve refined our skills and built a strong multi-disciplinary team to approach our research areas in *four* ways: Early Health Technology Assessment (HTA), Real-world Evidence, Value-based Care and Multinational Clinical Trials.



# OUR NEW CO-DIRECTORS

Assistant Professor Zoe Jane-Lara Hildon  
Saw Swee Hock School of Public Health



I am an Assistant Professor at the Saw Swee Hock School of Public Health, National University of Singapore. My expertise has been gained over more than 15 years' of working in formative and mixed methods research for intervention development and to inform Monitoring, Evaluation, Research and Learning (MERL). I gained my PhD from Imperial College London working across cross-disciplinary teams as a Medical Sociologist. After which I have worked extensively in the areas related to the evaluation of community health promotion and health services, specializing in those relating to Social and Behavior Change (SBC) theory-based intervention traditions.

My work spans three continents – Europe, Africa and Asia. I've enjoyed working internationally, acquiring expertise from practice-driven project work. This includes working at the UCL Centre for Outcomes Research and Effectiveness, the Johns Hopkins Center for Communications Programs and at the London School of Hygiene and Tropical Medicine (LSHTM) Department for Health Services Research and Policy. My methodological expertise lies in qualitative research and mixed methods integration. Disciplines are often tied to methods and related applied traditions, and so, it often follows, that mixed methods will be informed by interdisciplinary thinking and conceptualization. This is an area of collaborative practice-related research that I've always been excited to lead, and which I'm excited to bring to HIPER. I am looking forward to working closely with existing and fresh talent as we grow together, and to delivering methodological innovation and theory-driven approaches tailored to project needs.

# OUR NEW CO-DIRECTORS

Assistant Professor Ian Ang  
Saw Swee Hock School of Public Health

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I am currently Assistant Professor at the Saw Swee Hock School of Public Health, National University of Singapore. After receiving my Ph.D. in Behavioral Nutrition from Columbia University, I had joined the National University Health System (NUHS) Regional Health System (RHS) Office, leading their RHS programme evaluation team. I have also previously worked in the Laurie M. Tisch Center for Food, Education and Policy and the New York Obesity Nutrition Research Center.

My research focuses on evaluating community-based health interventions, healthcare services, and telehealth programmes, and how these initiatives can improve patient experience and population health. I am also interested in exploring how the built environment can help nudge communities towards improved health, particularly through improvements in nutrition, physical activity, and lifestyle behaviours. I am excited to join HIPER as a co-director and support the various evaluation projects with our partners. I look forward to working with everyone in HIPER and hope we continue to grow and contribute to the centre's great work.

# Our Partners

## Regional and Global Partnerships

### Academic institutions

- Erasmus University Rotterdam
- Ewha Womans University
- Hitotsubashi University
- Mahidol Oxford Tropical Medicine Research Unit (MORU)
- Postgraduate Institute of Medical Education and Research (PGIMER)
- Stanford University
- University of Adelaide
- University of Sheffield
- University of Warwick
- University of York
- Universiti Sains Malaysia

### Non-profit organisations

- Center for Global Development Europe
- National Health Foundation, Thailand

### Government agencies

- Health Intervention and Technology Assessment Program (HITAP)
- Ministry of Health (Bhutan)
- Ministry of Health and Welfare (Taiwan)
- The Department of Health (DOH), the Philippines

### Multilateral Agencies

- United Nations Population Fund (UNFPA)
- WHO Regional Office for South-East Asia (WHO SEARO)



## Local Partnerships

### Government and its related agencies

- Civil Service College (CSC)
- Ministry of Health (Singapore)
- MOH Office for Healthcare Transformation (MOHT)
- Precision Health Research Singapore (PRECISE)

### Public Health Institutions

- Institute of Mental Health
- Khoo Teck Puat Hospital (KTPH)
- KK Women's and Children's Hospital
- National Centre for Infectious Diseases (NCID)
- National Kidney Foundation Singapore (NKF)
- National University Hospital (NUH)
- National University Polyclinics (NUP)
- NUHS Centre for Innovation in Healthcare (CIH)
- Singapore General Hospital (SGH)
- Tan Tock Seng Hospital (TTSH)

### Academic institutions

- Duke-NUS Medical School
- Massachusetts Institute of Technology (MIT)
- Nanyang Technological University (NTU)

### Industry

- Becton Dickinson (BD)
- Johnson & Johnson
- Glaxosmithkline
- Novartis
- The Asia Pacific Medical Technology Association (APACMed)

### Non-profit organisations

- PleaseStay Movement

# OUR PARTNERS

## Professor Tai E Shyong

Chief Medical Officer of Precision Health Research, Singapore (PRECISE)  
Senior Consultant, Division of Endocrinology, Department of Medicine, National University Hospital

### How have you been collaborating with HIPER?

We have done a number of different projects together with HIPER this year.

HIPER has supported a systematic literature review on precision medicine as part of a collaboration with the office of the Chief Medical Officer at PRECISE (Precision Health Research, Singapore) which is being used as a baseline for developing a framework for economic evaluation of precision medicine implementation going forward. In addition, HIPER provides health economics support to several clinical implementation pilots that are ongoing that seek to optimize the delivery of precision medicine solutions in the public healthcare system in Singapore. These ongoing collaborations will continue into 2023.



### What is your impression of HIPER?

HIPER is home to a team of individuals who provide state of the art capabilities in the area of economic evaluation as it pertains to health. These capabilities are not commonly available and as such, HIPER provides a great opportunity to access skills that are rare, and important, in making decisions related to healthcare.

# OUR PARTNERS

## **Professor Ryota Nakamura**

**Professor, Hitotsubashi Institute for Advanced Study,  
Hitotsubashi University**

### **How have you been collaborating with HIPER?**

I have been working with HIPER on various projects and events, including the following:

- Co-organizing the workshop on impact evaluation of health interventions
- CORESIA – analysis of public acceptability of Covid-19 vaccine certificate
- The Physical Activity at Work study in Thailand
- Real world data and evidence for health technology assessment
- Estimating marginal productivity of healthcare system to inform cost effectiveness threshold in Singapore
- Impact of changing cost effectiveness threshold in Thailand



### **What's your impression of HIPER?**

HIPER is an extremely well organized and hardworking team, with charming and pleasant team members to work with. I believe HIPER is one of the most well-funded and largest groups in the area of HTA and other health systems research in Asia. The team is trustable, friendly and humble, facilitating spiritually good experiences in collaborations.

### **What are your ideas about future collaboration with HIPER?**

It has been great so far to help out with some projects on health resource allocation in Singapore. Perhaps it would be great if we can expand the collaboration further to projects in LMICs to analyze and help policy decisions. Looking forward to such opportunities ahead!

# OUR PARTNERS

**Ms. Saudamini Dabak & Assoc. Professor. Wanrudee Isaranuwatchai**

**Health Intervention and Technology Assessment Program (HITAP), Thailand**

## **How have you been collaborating with HIPER?**

HITAP and HIPER have been collaborating for the past few years under the aegis of Strengthening Active Partnerships for Policy and Health Intervention Research and Evaluation (SAPPHIRE). This year, we have enjoyed the following collaborations.

- Conducting a workshop on impact evaluation, together with Hitotsubashi University, Japan.
- Exploring novel topics together through:
  - Systematic review of economic evaluations of precision medicines
  - Estimating the impact of changing the cost-effectiveness threshold in Thailand
  - Distributional Cost-effectiveness Analysis (DCEA)
  - A review of the economic cost of Anti-microbial Resistance (AMR).
- Collaboration on our flagship project, the COVID-19 Research and Decision Support Initiative in Asia (CORESIA): a regional study on vaccination certificates an economic analysis of border control policies during COVID-19 pandemic, using the case of Singapore and Thailand.
- Discrete Choice Experiment (DCE) to estimate the trade-offs between equity and efficiency in contact tracing for COVID-19
- Collaboration with partners in the Philippines to conduct an economic evaluation of COVID-19 vaccines.

## **What's your impression of HIPER?**

It has been a great pleasure working with HIPER. The team has demonstrated commitment and flexibility, added with good cheer. They have expertise in a range of analytical techniques and workshop organization is also one of the prominent strengths of HIPER. Additionally, HIPER has links to other teams at NUS with different capabilities which also allows for broader collaborations on research and other policy-relevant initiatives including on infectious disease modelling and policy.

## **What are your ideas about future collaboration with HIPER?**

Our close collaboration with HIPER continues in 2023, and we will be working on research projects such as the threshold study, AMR review and reviewing precision medicine.

We hope to further expand the scope of work that we do together in the coming year.



Back row left to right: Thanayut Saeraneesophon, Budsadee Soboon, Picharee Karynayawong, Dr.Jarawee Sukmanee  
Front row: Waranya Rattanavipapong, Chanida Ekakkarungroj







# KEY EVENTS in 2022

Events | Workshops | Courses organised by HIPER

	Event Title	Dates
01	SHORT COURSE: Applied Health Econometrics for Health Technology Assessment	3-7 Jan, 2022
02	WORKSHOP: Healthcare Financing in Singapore	28-29 Mar, 2022
03	SHORT COURSE: Simulation for Health Technology Assessment	26, 27, 30, 31 May & 2 June 2022
04	WEBINAR: Updates to NICE HTA methods guide: Would they apply to Asia?	1 July, 2022
05	COURSE: Evidence Synthesis for Health Technology Assessment	Every Friday, 12 Aug - 4Nov
06	WORKSHOP: Impact Evaluation of Health Interventions	24 & 25 Sep, 2022





# Healthcare Financing in Singapore



On 28th and 29th March, the Centre for Health Intervention and Policy Evaluation Research (HIPER) organised a workshop on Healthcare Financing in Singapore. The workshop saw 30 participants across the pharmaceutical, insurance, long-term care and consultancy sectors. During the sessions, our speakers shared insights on various healthcare financing topics surrounding the recent developments and announcements of the capitation funding model and Healthier SG. Each session was followed by active Q & A and discussions, allowing participants to take advantage of the extensive knowledge, experience and insights of the distinguished speakers.

The workshop covered the following topics, with lectures and group discussions.

1. The Singapore Health System - Financing Philosophy over the Ages by Assoc Prof Jeremy Lim
2. A case discussion: The Objectives of a Healthcare Financing Model by Assoc Prof Jason Yap
3. Historical Context and Evolution of Healthcare Financing in Singapore (I) by Prof Phua Kai Hong
4. Historical Context and Evolution of Healthcare Financing in Singapore (II) by Dr Kelvin Bryan Tan
5. Private Health Insurance and Healthcare Financing by Dr Alan Ong
6. Health Technology Assessment, Priority Setting for Universal Health Coverage & Rare Disease Fund by Ms Fiona Pearce
7. Perspectives on Hospital Procurement: How hospitals make purchasing decisions by Assoc Prof Eugene Liu
8. Evaluation of Healthcare Financing in Singapore: Pros and Cons by Asso Prof Joanne Yoong
9. Healthcare Financing Challenges by Mr Chan Beng Seng



The workshop concluded with a panel discussion on the prevailing and anticipated challenges surrounding healthcare financing.

# STRIVING FOR EXCELLENCE

## HIPER's Graduate Students



### Shen Qianyu - PhD Student

#### Q: Why did you choose to do PhD with HIPER?

I had previously worked with Associate Professor Wee on a research project during my undergraduate study and that experience introduced me to the area of HTA. After that, I also read more on this area in order to integrate published research result into my clinical hospital work. I came to know of HIPER as a renowned research unit that builds HTA capacity and thus chose to do my PhD under Professor Wee to learn more of this area.

#### Q: Tell us about your research!

My initial research idea was to apply cost-effectiveness analysis to decision-making practices but my thesis has since evolved into developing and testing a decision-aid tool for hospitals. Nonetheless, my original intention still remains the same as I hope the patient's decision-making process will incorporate cost-effectiveness analysis based on their personal willingness-to-pay threshold. In the long term, I hope to work on the implementation of my developed decision-aid tool in broader clinical practices. My wish is to expose more patients to the concept of cost-effectiveness analysis in their health decision.

#### Q: How is your experience so far?

I have taken a few HTA modules offered by the school and have learned tremendously. I also realised that I have misunderstood some of the core concepts previously but this was thankfully clarified by members of the experienced HIPER team. Furthermore, the HIPER team also gave advice on other research areas such as survey construction and qualitative analysis which were very beneficial.

#### Q: Any advice or message to someone considering the degree programme?

I think prospective students don't have to know everything about HTA to join the Ph.D. programme and the HIPER team. However, it is important that the student has a clear and passionate objective in mind because the research journey will be filled with self-doubt and critiques by others. However, the programme will definitely be a promising experience to better understand oneself.



# HIPER's Graduate Students

## Ong Jian Chun Matthew - PhD Student



### Q: Why did you choose to do PhD with HIPER?

I am interested in the pharmaceoeconomics and health technology assessment as I believe it plays a crucial role in ensuring long term sustainability of the healthcare system. HIPER/SSHSPH felt like the natural site to receive training in both in pharmaceoeconomics methods, while providing opportunities to be exposed to Singapore specific perspectives in the field.

### Q: Tell us about your research!

My research is focused on investigating outcomes following allogeneic hematopoietic stem cell transplant and research methods (e.g. E-PROMs/Novel Pharmaceuticals) to optimize the management of these patients. Through this Ph.D., I aim to become more well-versed in the theoretical underpinnings of pharmaceoeconomics. In the longer run, I aim to incorporate my experience into supporting the early development (early HTA) of interesting products with novel mechanisms of action in the early development stage (pre-clinical development).

### Q: How is your experience so far?

The HTA modules offer a strong foundation in health technology assessment which allow me to develop the capability to critique and develop ideas. The modules provide the opportunity to learn from and interact with a wide range of experts in the field, facilitating an invaluable learning experience. In addition, the professors in SSHSPH have enthusiastically answered any questions raised and provided an ideal learning environment. The HIPER faculty has been extremely welcoming, allowing me to participate in discussions which in turn has helped grow my competencies and develop my research ideas.

### Q: Any advice or message to someone considering the programme?

Health technology assessment is a growing field with the potential for further development. While there may be some hesitation due to the perceived complexity of modelling, with persistence and effort, these knowledge gaps can be easily bridged.

# HIPER's Graduate Students

## Chee Miao Li - MPH Student

I work as a biostatistician in a research institute where my job involves analysis for epidemiology and population health services-related projects. Through the course of my work, I became more interested in health technology assessment and wanted to learn more about how the method can be utilized to evaluate and compare the different health-related technologies and models as they are shown to be effective.



I read the HTA specialisation in the Master of Public Health (MPH) Programme. From this course, I got to build networks with coursemates from all walks of life where we helped each other and had fun learning together. The courses are structured in a way where the professors not only impart us with the relevant knowledge and skills but also how to put them to use in real-life public health situations. In addition, I also appreciate that guest lecturers from external healthcare institutes and organisations were invited to share with us their industrial experiences and provide us with up-to-date knowledge on what are the situations happening on the ground.

The MPH training will definitely come in handy for my career in the public health sector as I hope to contribute more towards HTA-related components for healthcare research projects in the future.

# HIPER's Graduate Students

## Tan Zhi Yang, Benjamin - MPH Student



I am a registered pharmacist with a B.Sc (Pharmacy) from the National University of Singapore and currently working in the regulatory affairs team at Novartis. I decided to pursue an MPH (HTA specialisation) as I have always wanted to learn more about Health Technology Assessment - how it is used to determine the value of a therapy to the different stakeholders in the healthcare industry.

Despite my course being fully virtual (due to the pandemic), I never once felt short-changed. I was still able to actively engage in meaningful and insightful interactions with my classmates and my lecturers. In fact, this was the part that I enjoyed the most as it was a rare opportunity to build connections and learn from individuals of different professions/backgrounds and the lecturers who were renowned experts in the HTA field.

During my course of study, I had always received post-exam/post-assignment feedback from the lecturers which I greatly appreciated and found really useful.

Governments and healthcare systems are grappling with rising healthcare costs and are increasingly leveraging on HTA to inform decision making. Therefore, an MPH (HTA specialisation) would be highly relevant for my career in the pharmaceutical industry as it would help me understand how governments make subsidy decisions as well as better evaluate and communicate the value of important therapies to key stakeholders. After this MPH, I plan to explore opportunities in the field of HTA as it is an up-and-coming industry and I particularly enjoyed those school assignments where I had to build models.

### HIPER

Are there any funny moments you recall during your MPH?

### Benjamin

There was one time I almost missed one of the exams, misunderstanding the time. Luckily my classmate Junyang messaged me, asking why I was not in the Zoom, and phew, I made it in time! 😊

# OUR RESEARCH

Project Title

Funder

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Elicitation of contact tracing preferences

World Health Organization (WHO)

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Economic burden of spinal muscular atrophy (SMA) costing

Novartis

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Cost benefit analysis of alternative testing and quarantine policies for travellers for infection control: a case study of Singapore during the COVID-19 pandemic

Becton Dickinson Holdings Pte. Ltd

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Economic analysis of border control policies during COVID-19 pandemic: a modelling study to inform cross-border travel policy between Singapore and Thailand

National Research Council of Thailand

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Cost-effectiveness of COVID-19 vaccine in an upper-middle income country: Thailand

National Research Council of Thailand (NRCT)

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Promoting Rational Use of preemptive pharmacogenotyping through developing a multicriteria DEcision analysis framework and conducting Cost-Effectiveness analysis (PRUDENCE)

MOH HSR CRG

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Cost-effectiveness analysis for the primary technology enhanced care-hypertension scaling programme

MOHT

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Managing cavities in children and institutionalized elderly: cost-effectiveness and acceptance of silver diamine fluoride treatment

MOHT

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Understanding financial and non-financial barriers to chronic disease management in Singapore: a natural experiment

Ministry of Education (MOE) Tier 1

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Core real world dataset for economic evaluations of oncology drugs (RODEO)

NMRC

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Cost-effective analysis of COVID-19 vaccine distribution and domestic non-pharmaceutical interventions

NMRC

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Sewage-based surveillance for rapid outbreak detection and intervention in Singapore

National Research Foundation Singapore (NRF)

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Resource Utilisation Study on the use of Next Generation Sequencing Technologies in Familial Hypercholesterolemia (NGS for FH)

PRECISE

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Precision medicine: Development of grant selection criteria and reference case study

PRECISE

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Systematic review and meta-analysis of cost-effectiveness of personalised medicine

PRECISE

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Predictive Modelling for pre-emptive Pharmacogenetic PGx testing

PRECISE

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Evaluation of Pilot Clinical Implementation of Pre-emptive Pharmacogenomics (PPGx) Testing Service as a Precision Medicine Tool in Singapore: An implementation study

PRECISE

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ELectronic PHenotyping to Enhance Patient Access to Precision Medicine (ELPHA)

PRECISE

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Unintended Healthcare Consequences of Disease Outbreak Response Measures: The Case of Coronavirus Infectious Disease 2019 (COVID-19)

NUHS

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Remote Monitoring of Cardiac Implantable Electronic Devices (RECEIVE) : Leveraging Telemedicine To Create New Models Of Care With Improved Patient Outcomes And Increased Clinic Productivity

NUHS

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Estimating marginal productivity of Singapore healthcare system

Saw Swee Hock School of Public Health

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Comparative bleeding outcomes between P2Y12 inhibitors in acute coronary syndrome patients on dual antiplatelet therapy: A South EastAsian database study (SEA DAPT)

HIPER

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Cost-effectiveness analysis of daratumumab

HIPER

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The mental healthcare gap among youths in Singapore

HIPER

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Population-based miRNA screening for gastric cancer

HIPER

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WE SAY – Wellbeing among SingApoorean Youths

HIPER

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Communicating and Counselling on Secondary Genetic Finding detected in Multi-Ethnic Cohort Study

HIPER

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Thai Quality Outcome Framework (QOF)  
HIPER

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Social and Economic Cost of Non-pharmaceutical interventions - COVID-19  
HIPER

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Value-based care for kidney disease in Singapore: Perspectives from dialysis patients, supporting family members and dialysis service providers

HIPER

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# PRECISE Clinical Implementation Pilot (CIP) Grant

HIPER has been awarded the **PRECISE Clinical Implementation Pilot (CIP) Grant** for three precision medicine research projects and supplementary funding for related pilot studies. Each project will receive up to \$1.5 million over a 2-year period. The CIP grant will support our research efforts to improve patient outcomes, whilst working towards cost sustainability and the optimisation of healthcare experiences for both providers and patients.

1. **BREast Cancer Screening Tailored for Her (BREATHE):** A breath of fresh air to breast cancer screening in Singapore
2. **Clinical Implementation of Pre-emptive Pharmacogenomic Testing** as a Precision Medicine Tool in Routine Clinical Practice in Singapore.
3. Addressing the challenges in **Case identification, Cascade Screening, Genetic testing and Treatment in Familial Hypercholesterolemia (FH)** – a cross-cluster clinical implementation programme by FHCARE
4. Supplementary grant for the project **ELectronic PHenotyping to Enhance Patient Access to Precision Medicine (ELPHA)**

**CONGRATULATIONS TO THE HIPER TEAM FOR SECURING 3 OUT OF 5 GRANTS AWARDED BY PRECISE!**

**BREAST CANCER SCREENING TAILORED FOR HER (BREATHE):**  
A breath of fresh air to breast cancer screening in Singapore

**What is the problem that this project aims to address?**  
Current mammography screening programmes are:  

- under-utilised; low participation and adherence
- misses breast cancers in young women

**How will HIPER be involved?**  

- HIPER will conduct an economic evaluation to understand the value for money of risk-stratified breast cancer screening compared to age-based breast cancer screening in Singapore.
- HIPER will identify the data gap, guide the clinical team with data collection and conduct modelling exercises.
- Together with the clinical team, we aim to demonstrate the benefit of risk-stratified breast cancer screening and to improve the rates of breast cancer screening in Singapore.

**How will we address the problem?**  

- Breast cancer risk calculators tailored for Asians
- Inclusion of genetic risk
- Personal risk profiles and bespoke advice for high-risk individuals

TO FIND OUT MORE ON THE CIP GRANT, visit the PRECISE website: <https://www.npm.sg/>  
If you have any questions, please contact Dr Wang Yi at [ephwyi@nus.edu.sg](mailto:ephwyi@nus.edu.sg)

**NUS** National University of Singapore  
Saw Swee Hock School of Public Health

**CONGRATULATIONS TO THE HIPER TEAM FOR SECURING 3 OUT OF 5 GRANTS AWARDED BY PRECISE!**

**Clinical Implementation of Pre-emptive Pharmacogenomics (PPGx) Testing as a Precision Medicine Tool in Singapore**

**What is the problem that this project aims to address?**  
Currently in Singapore, Pharmacogenomics (PGx) testing is:  

- Conducted only reactively
- Tested in single-gene/single-drug approach
- Takes 2-7 days or longer to return results

**How will HIPER be involved?**  

- HIPER will conduct an evaluation of the implementation process of this pilot study, to inform the future adoption of PPGx in Singapore.
- HIPER will assess the satisfaction of patients as well as those of healthcare professionals in the pilot study.
- HIPER will conduct a cost-effectiveness analysis to assess if pre-emptive pharmacogenomic testing is more cost-effective than reactive single-gene testing in the Singapore context.

**How will we address the problem?**  
This prospective, longitudinal, interventional multi-cluster study involving the clinical implementation of pre-emptive PGx testing will enable personalised prescriptions, by which adverse drug reactions and ineffective drug/dosage for individuals with certain genetic variants can be pre-emptively avoided.

TO FIND OUT MORE ON THE CIP GRANT, visit the PRECISE website: <https://www.npm.sg/>  
If you have any questions, please contact Dr Hwee-Lin at [hwlin@nus.edu.sg](mailto:hwlin@nus.edu.sg)

**NUS** National University of Singapore  
Saw Swee Hock School of Public Health

**CONGRATULATIONS TO THE HIPER TEAM FOR SECURING 3 OUT OF 5 GRANTS AWARDED BY PRECISE!**

**Addressing the challenges in Case identification, Cascade Screening, Genetic testing and Treatment in Familial Hypercholesterolemia (FH) – a cross-cluster clinical implementation program by FHCARE**

**What is the problem that this project aims to address?**  

1. There's **NO** genetic Familial Hypercholesterolemia service in Singapore
2. Currently Familial Hypercholesterolemia patients are:
  - Frequently under-diagnosed
  - Frequently under-treated

**How will we address the problem?**  

1. By **improving** case detection and **reducing** under-diagnosis by enhancing cascade screening
2. By **increasing** the number of people with FH who achieve LDL-C goal by **reducing** barriers to care and enhancing workflow

**How will HIPER be involved?**  

1. HIPER will conduct an **ECONOMIC EVALUATION** on alternative workflows of hypercholesterolemia with genetic tests
2. HIPER will estimate the **PRODUCTIVITY LOSS** due to cardiovascular disease
3. HIPER will **DEVELOP TOOLS** to identify patients eligible for genetic tests (under ELPHA project)

TO FIND OUT MORE ON THE CIP GRANT, visit the PRECISE website: <https://www.npm.sg/>



Congratulations to HIPER researchers who presented their latest research findings at the 10th HTAsiaLink 2022 Conference!

## Presentations by HIPER

Name	Presentation Title
Wenjia Chen	Plenary session Talk "Exciting Use of RWE in Research and Policy"
Wang Yi	"Economic Evaluation of Using Sewage Surveillance to Inform Lockdown Decisions at the Early Phase of a Pandemic: A Simulation Study Considering COVID-19 in Singapore"
Celestine Cai	 Winner of Best Oral Presentation Award Economic Evaluation Track "Cost Benefit Analysis of Alternative Testing and Quarantine Policies for Travellers for Infection Control: a Case Study of Singapore during the COVID-19 Pandemic"
Sharon Tan	 Winner of Best Oral Presentation Award Health Services Research Track "Impact of Financial Subsidies on Oral Health Care Utilisation Among Persons with Disabilities"
Clarence Ong	Poster Presentation "The Population's Preference for Colorectal Cancer Screening Test in Singapore: A Discrete Choice Experiment"
Amelia Lim	Poster presentation "Cost-effectiveness Analysis of Universal Antenatal Serologic Cytomegalovirus Screening versus Targeted Screening in Singapore"





# PUBLICATIONS

Akksilp, K., Koh, J. J. E., Tan, V., Tong, E. H., Budtarad, N., Xueying, G., Dieterich, A. V., Tai, B. C., Müller, A. M., Isaranuwatthai, W., Rouyard, T., Nakamura, R., Müller-Riemenschneider, F., Teerawattananon, Y., & Chen, C. (2022). The physical activity at work (PAW) study: A cluster randomised trial of a multicomponent short-break intervention to reduce sitting time and increase physical activity among office workers in Thailand. *The Lancet Regional Health - Southeast Asia*

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# Meet theTeam



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Director



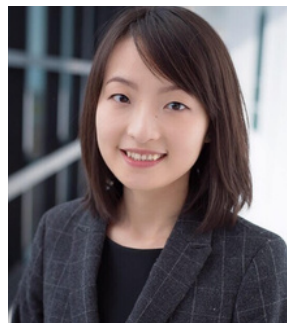
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**Asst. Prof. Zoe Jane-Lara  
Hildon**  
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**Asst. Prof. Ian Yi Han Ang**  
Co-Director



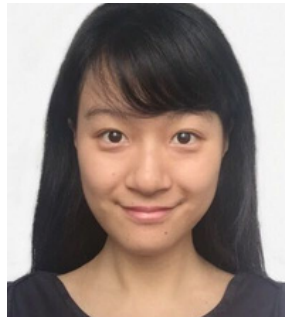
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**Dr Lou Jing**  
Senior Research Fellow



**Ms Jamaica Briones**  
Research Associate



# Meet the Team



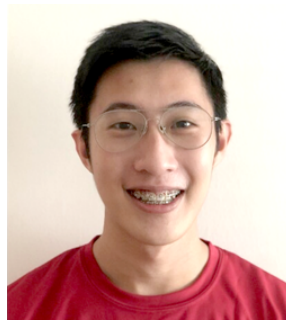
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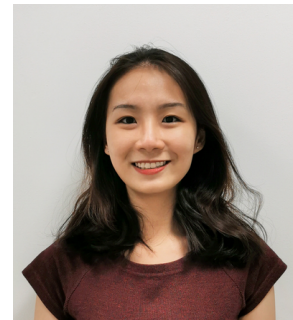
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**Mr Clarence Ong**  
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**Ms Amelia Lim**  
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**Ms Sharon Tan**  
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**Mr Shi Guoming**  
Research Assistant



**Ms Sage Wu**  
Intern

**A Big  
Thank  
You**

*We bid farewell to colleagues listed below. Thank you for your important contributions and warm friendship.*

***Wishing you the very best in your future endeavours!***

Ms Chai Jia Hui

Mr Tan Soon Guan

Ms Pearlyn Neo

Ms Sarah Gan

Ms Michiko Hayashi

Mr Jeremy Chan

Mr Loh Xueliang

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