





GLOBAL HEALTH NEWSLETTER

FEATURING ALL THINGS GLOBAL HEALTH AROUND THE SINGHEALTH DUKE-NUS ACADEMIC MEDICAL CENTRE

December 2023

This Issue in Summary

The Duke Global Health ecosystem reaffirms its commitment to increase collaboration to meet Global Health goals.

Congratulations to the awardees of the SDGHI Pilot Grant!

Three Duke-NUS MD students reflect on their journey in Global Health research.

Registration for our Graduate Certificate in Global Health Practice in Asia is now open. Discounts are available for participants from the AMC.

Meet Dr Anne-Claire Stona, Research Fellow, who heads the mental health team at SDGHI. Find out more about the team's plans for creating a network of mental health advocates and professionals around the region.

Collaboration is Key to Global Health

Representatives from the Duke Global Health Institute, SingHealth Duke-NUS Global Health Institute, and Duke Kunshan University Global Health Research Centre meet to discuss common goals.

Several common themes emerged as prime areas for further collaboration: global mental health, climate change, and infectious diseases.

The value of partnerships is well understood within the Duke University ecosystem. It's why its three Global Health bodies constantly look for opportunities to work together on common issues of interest.

"The convergence of two or three of our specified themes is a really sweet spot," said A/Prof Tan Hiang Khoon, Director of SDGHI. "We could look at establishing signature programmes on the relation climate change has to mental health, or how mental health affects health systems."



A/Prof Tan Hiang Khoon on common themes of interest within the Duke Global Health ecosystem

"We are preparing Global Health leaders for tomorrow."

- Prof Chris Beyrer, Duke Global Health Institute Apart from research, substantial attention is being put into the education of future Global Health practitioners.

Leveraging the strength of the Duke ecosystem, such plans range from student exchanges across the three Duke campuses to executive courses and short non-degree courses as further ways of promoting learning and exchange.

"There is much enthusiasm for these programmes," said Prof Chris Beyrer, Director of DGHI. "Our goal is to prepare Global Health leaders for tomorrow."

These reflections were made at a meeting between representatives at Duke Kunshan University, in conjunction with the 10th anniversary celebrations of its Global Health programme.



Prof Shenglan Tang on future steps for the Duke ecosystem

Prof Shenglan Tang, Director of Global Health at Duke Kunshan University, spoke about keeping the momentum going.

"Thematic working groups will be set up for research and education," he said. "What is discussed there will ladder up into conversations involving leadership from each institute, so that we can push forward these collaborations in effective ways."

Being connected to the Duke ecosystem and

its respective extended networks, as well as to local government and philanthropic outlets, each of the three Duke Global Health bodies brings to the table a wealth of resources and connections that all



Prof Chris Beyrer on the importance of integrated Global Health education

organisations can tap into to fulfil goals in research, education, or health systems strengthening and capacity building.

"By working closely together, the Duke ecosystem is exquisitely poised to do Global Health work that no one else can do."

- A/Prof Tan Hiang Khoon, SingHealth Duke-NUS Global Health Institute "This joint meeting is indicative of the amplified potential we have when we pool together our experience and expertise." said A/Prof Tan. "By working closely together, the Duke ecosystem is exquisitely poised to do Global Health work that no one else can do."

Read the full article here.



Faculty members and staff from the Duke Global Health ecosystem met recently at Duke Kunshan University

The <u>Duke Global Health Institute</u> was formed in 2006 as part of Duke University's commitment to spark innovation in Global Health research and education, bringing together knowledge and resources from across the university to address the most important Global Health issues of our time.

The <u>SingHealth Duke-NUS Global Health Institute</u> seeks to tackle prevalent health challenges, strengthen health systems, and better insulate countries from pandemics and disease threats. Harnessing the strengths and expertise of SingHealth and Duke-NUS Medical School, the institute aims to address current and emerging health challenges across Asia and beyond.

The **Duke Kunshan University Global Health Research Centre** aims to promote health equity and improve health for all in China and worldwide. Working closely with partners around the world, the Program is actively involved in conducting research, generating robust evidence, and providing policy advice.

Global Health Grant Awardees

Congratulations to the awardees of the USU-SDGHI Pilot Grant!

PULMONOLOGY RADIOLOGY

Prof Noni N. Soeroso (USU) Prof Lim Kiat Hon (SDGHI)

PROJECT TITLE

Multiple Gene Alteration (ROS 1- BRAF) in Lung Cancer Patients in the Population of North Sumatera, Indonesia

ENT

Prof Farhat (USU)
A/Prof Lim Chwee Ming (SDGHI)

PROJECT TITLE

Screening of nasopharyngeal cancer (NPC) among first-degree family of North Sumatera NPC patients using EBV-EA IgA, EBV-VCA IgA, and EBV DNA markers

NEUROLOGY

A/Prof Deidre Anne De Silva (SDGHI) Dr Fasihah Irfani Fitri (USU)

PROJECT TITLE

Prayer pattern assessment as a tool for cognitive and functional screening in Muslim communities in Singapore and Medan

SURGERY PHARMACOLOGY

Prof Balram Chowbay (SDGHI) Dr M. Ichwan (USU)

PROJECT TITLE

Tamoxigenomics in three admixed Indonesian estrogen receptor positive breast cancer patients

CARDIOLOGY

Dr Yasmine Fitrina Siregar (USU)
Dr Jack Tan (SDGHI)

PROJECT TITLE

Early Detection of Cardiovascular Risk Factors for Primary Prevention Amongst Sumatera Utara Adults

PSYCHIATR

Prof Eric Andrew Finkelstein (SDGHI)
Prof Elmeida Effendy (USU)

PROJECT TITLE

The economic consequences of common mental health conditions and adverse childhood experiences in Indonesia

CARDIOLOGY

Dr Ali Nafiah Nasution (USU) Dr Jack Tan (SDGHI)

PROJECT TITLE

North SumatrA Study of StructurAl and Rheumatic Heart Disease (NASSAR-HD Study)

About the USU-SDGHI Pilot Grant

The USU-SDGHI Pilot Grant is a joint grant between SDGHI and Universitas Sumatera Utara (USU). It seeks to support and encourage interdisciplinary teams jointly led by faculty from both institutes to undertake Global Health projects that address pressing health challenges in Asia.

Universitas Sumatera Utara is one of the partnering Regional Collaborating Centres of SDGHI.

Connect with us at sdghi@duke-nus.edu.sg if you are involved in Global Health work and would like to be an SDGHI Faculty member!

Global Health Grant Awardees

Congratulations to the awardees of the SDGHI Pilot Grant for Nurses and Allied Health Professionals!

NATIONAL NEUROSCIENCE INSTITUTE

Asst Prof Ng Wai May Ms Ng Suan Gek

PROJECT TITLE

Building nuRses cApability In JaffNa (BRAIN)

KK WOMEN'S AND CHILDREN'S HOSPITAL

Ms Jasmine Goh Dr Saumya Jamuar

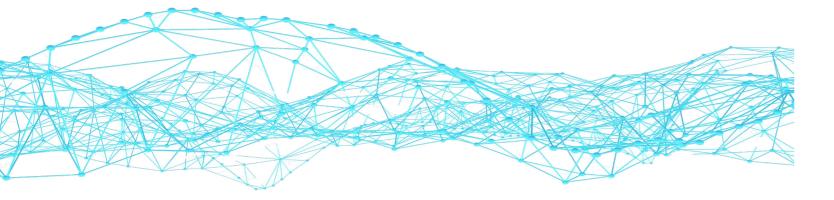
PROJECT TITLE

Improving the lives of people living with rare diseases (RD): Establishing an Asia-Pacific (APAC) Chapter of the Global Nursing Network for Rare Diseases (GNNRD)

About the SDGHI Pilot Grant for Nurses and Allied Health Professionals

The SDGHI Pilot Grant for Nurses & Allied Health Professionals seeks to support and encourage interdisciplinary teams led by a nurse and/or an Allied Health Professional (AHP) within the SingHealth Duke-NUS Academic Medical Centre (AMC) to undertake Global Health projects that address pressing health challenges in Asia.

Connect with us at sdghi@duke-nus.edu.sg if you are involved in Global Health work and would like to be an SDGHI Faculty member!



Students of Global Health

Three Duke-NUS medical students reflect on their experiences immersing themselves in Global Health work during their MS3 research year.

Passion in Global Health can be manifested in a variety of ways. For MS3 medical student Dana Chow, an aspiration to do humanitarian work stemmed from years of experience in community service.

"I was regularly involved in volunteering in rural China while growing up in Shanghai, and at NGOs in London while I was an undergraduate," said Dana. After coming back to Singapore and interning at HealthServe, the first-hand experience doing service in a medically-related field gave Dana the impetus to work towards studying medicine, with the aspiration to do humanitarian work.

For others such as **MS3 student Shereen Soon**, the interest to go global came about later in life, when she took a module in public health during her

undergraduate studies. There, she learnt about the systemic issues that contribute to health disparities and the strategies employed to address them.

Taking their interest one step further, Shereen and Dana are currently undertaking a global health research project as part of their research year.

Dana is in Tanzania working with Young People Living with HIV (YPLWH) as part of the intervention Sauti Ya Vijana (SYV; The Voice of Youth). Shereen is in Sri Lanka, helping a local hospital team set up a traumatic brain injury (TBI) registry.

"It has been such an incredible learning experience," said Shereen. "I've had the opportunity to witness firsthand how healthcare is delivered in a low-



Dana with the youth leaders she works with at the Sauti Ya Vijana intervention.

resource setting across vast regions, along with the challenges faced in providing adequate care to underserved populations."

Naomi Huang, a recent graduate of Duke- NUS Medical School, echoed similar sentiments about the nature of global health, which often serves as both obstacle and opportunity.

"I especially love the challenge of having to recognise, appreciate, and subsequently navigate the delicate nuances of cultural, social, geographical, and economic characteristics of various countries and regions in global health work," said Naomi, who did a qualitative study on the effects of COVID-19 on surgical care delivery, particularly in resource-constrained countries.

Having had prior experience in global health work via medical humanitarian trips and public health advocacy programmes, Naomi was inclined towards global surgical projects addressing issues reaching beyond Singapore.

"I do hope to integrate global health into my practice, finding solutions for surgical care problems faced by resource-constrained populations."

- Naomi Huang

All three projects, while different in scope, were crafted with the goal of empowering and enabling advancement of health outcomes across regions of interest. Dana, Shereen, and Naomi's experiences have shown them the importance of data, that public health policy work can have far-reaching impacts in global settings, and that narrowing

the digital divide is crucial to bridging the gap in healthcare equity and improving healthcare accessibility in resource constrained countries.

While at different points in their medical and global health journeys, all three are optimistic and eager to see where this path will take them.

Indeed, it is the beginning of a new chapter for Naomi, who is about to begin her medical career and start residency training in surgery.

"I do hope to integrate global health into my practice," said Naomi, who intends to build a meaningful career as a clinician-innovator, finding solutions for surgical care problems faced by resource-constrained populations.

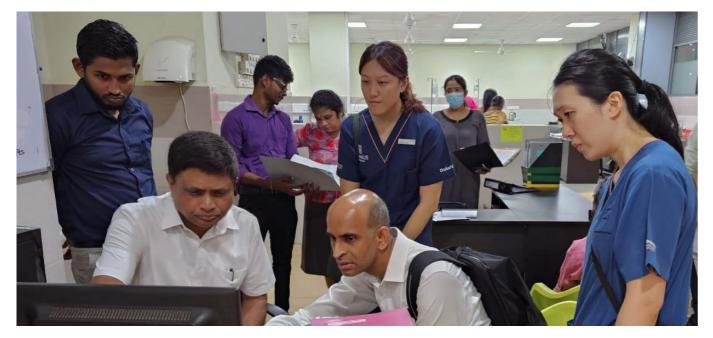
In Sri Lanka, Shereen is excited about the potential of her work in allowing the team to understand the regional epidemiology of injury. "There is potential for the registry to expand into a larger, longitudinal epidemiological survey," she said. "I hope this means that I can continue to contribute to it even beyond the duration of my third-year curriculum."

On the other side of the world, Dana's reconnection with nature has reminded her to stay grounded, to have an open mind, and to lead with compassion. She cited a method of communication that is taught to youths within the SYV - to embody a Tembo (elephant in Swahili) by having big ears and a little mouth, to listen and learn from your surroundings.

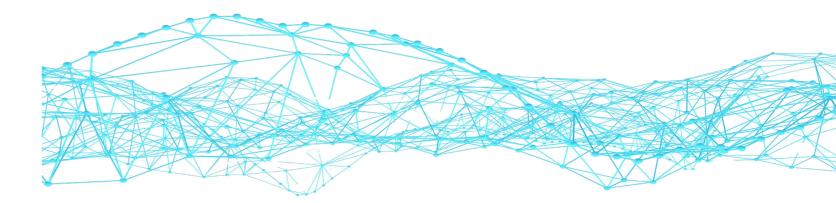
"I hope to hold on tight to this value," said Dana.

"To bring compassion with me to every patient
I meet in the future, whether in Singapore or
elsewhere. At every corner, if we just pay attention,
there are always opportunities to give a little more to
others and take a little less."

Read more about <u>Dana</u>, <u>Shereen</u>, and <u>Naomi's</u> journeys on the SDGHI website.



Shereen (middle) at the neurosurgical ward with Dr Jai Prashanth Rao, where they were shown CT scans for an upcoming case by local neurosurgical consultant Dr Athiththan.



Enhance your Global Health Knowledge

Graduate Certificate in Practice of Global Health in Asia

The Graduate Certificate in Global Health and its constituent courses seek to empower participants with the necessary knowledge and skills to address Global Health issues affecting Singapore, Asia, and beyond.

Curated for the global learner, the Graduate Certificate delivers world-class knowledge through an Asian lens, developing your understanding of the intricacies and challenges of health and healthcare in Asia and beyond. It provides you with a strong foundation of both theoretical knowledge and practical skills to further your career in Global Health as a practitioner, educator, researcher or administrator.

COURSE FEE

\$\$21,600.00 for whole Graduate Certificate or **\$\$5,400** per course

Discounts are available for participants from within the AMC.

REGISTRATIONS OPEN NOW

FOR MORE INFO

To find out more, visit our website

CONTACT

For enquiries, connect with us at sdghi@duke-nus.edu.sg

2024 Course Schedule

| Course Number | Course Title | Course Dates |
|---------------|--|----------------------|
| GMS 6961 | Practice of Global Health in Asia: An Introduction | 26 Feb - 1 Mar 2024 |
| GMS 5151 | Project Evaluation in Global Health | 22 Apr - 26 Apr 2024 |
| GMS 5152 | Infectious Diseases and Global Health | 12 Aug - 16 Aug 2024 |
| GMS 5153 | Non-Communicable Diseases: Building Health System Capacity | 2 Sep - 6 Sep 2024 |
| GMS 5155 | Planetary Health: From Analysis to Action | 23 Sep - 27 Sep 2024 |
| GMS 5154 | Adolescent Health in Asia | 11 Nov - 15 Nov 2024 |

Global Health Warrior

We profile the champions of Global Health who have been doing great work across the region. Get to know more about their motivations, interests, and expertise, and feel free to reach out to them for collaboration opportunities!

Anne-Claire Stona

Research Fellow

SingHealth Duke-NUS Global Health Institute Duke-NUS Medical School

There are many cultural determinants that play an important role in how people perceive mental health and seek help, especially in Asia.

Despite the presence of advocators and pockets of innovative work, mental health innovators in Asia have been left out of the global conversation and their work hasn't been profiled enough.

This is something Dr Anne-Claire Stona wants to change. As a public health practitioner, she realised early on that addressing mental health is an essential component to addressing health disparities.

"Throughout my public health education, including my residency training and a Master in Public Health in France, we often focused on topics such as cardiovascular diseases, infectious diseases, and elderly care," said Dr Stona. "But mental health was rarely addressed."

And even after moving to Singapore and lending her expertise to health policy, regulation, supply chain components, and digital health, she never lost sight of her goal.



"The <u>SDGHI global mental health</u> team aims to support projects that cover the whole spectrum of mental health, from education to policy analysis, research, and the formation of a regional network."

- Dr Anne-Claire Stona

During her work supporting the Asia Pathogen Genomics Initiative as part of the Duke-NUS Centre for Outbreak Preparedness and the Duke-NUS Centre of Regulatory Excellence, she applied for the Paris-Cite NUS grant to conduct a landscape analysis of mental health innovations in the region, with the ultimate goal of establishing the foundation for a regional network.

"Little did I anticipate that a few months later, I would receive the grant and lead the mental health initiatives for SDGHI, and work with equally passionate colleagues like Shreya and Glen," said Dr Stona.



Dr Anne-Claire Stona at the 3rd Global Summit for Mental Health Advocates, speaking about the Mental Health Innovation Network's Asia Hub, of which SDGHI is

Indeed, the team at SDGHI carries a similar infectious passion for the topic. Despite being a small outfit, the three-member team has already established connections with other mental health stakeholders in Singapore and across the region, all with the intention of elevating global mental health in a localised context, with localised solutions.

"Despite the presence of advocators and pockets of innovative work, mental health innovators in Asia have been left out of the global conversation."

- Dr Anne-Claire Stona

"The SDGHI global mental health team aims to support projects that cover the whole spectrum of mental health, from education to policy analysis, research, and the formation of a regional network," said Dr Stona. "While we have begun working on some joint projects, we are very open to being a part of other initiatives around the region."

Global health, in Dr Stona's perspective, signifies that every individual should have the right to reside in an environment that is conducive to health and encourages healthy practices, whether they live in Asia, Africa, Europe, or anywhere else.

"It's about creating conditions where individuals can be empowered," said Dr Stona. "It's crucial to foster an environment in which the population is able to address the challenges they face."

She aims to do just that in the field of global mental health. As with any new venture, the road might be an uphill one, but Dr Stona is optimistic about the journey ahead. With great enthusiasm and an extensive list of ideas, she knows that meeting new people and understanding their work will lead to exciting collaborations to strengthen mental health in populations across Asia and beyond.

Dr Stona and the mental health team at SDGHI are eager to support mental health projects across the region that cover the whole spectrum of mental health, including

- Mental health promotion and positive mental health
- Prevention of mental health conditions in various settings (school, workplace etc)
- Suicide prevention
- Mental health care and recovery

In particular, the team aims to conduct policy analyses of national strategies, comprehensive reviews of mental health interventions, and implementing and assessing programs to enhance mental health awareness or prevent mental health conditions

As the host of the <u>Asia Hub of the Mental Health Innovation Network</u>, the team is building a regional network for like-minded passionate people and welcome anyone who would like to be part of this initiative.

CONNECT & COLLABORATE

Interested in collaborating with the SDGHI mental health team? Find out more on the **SDGHI website** and connect with them at **mhinasia@duke-nus.edu.sg**

BE FEATURED AS OUR GLOBAL HEALTH WARRIOR

If you would like to be featured as our Global Health Warrior, or know one who should be featured, connect with us at **sdghi@duke-nus.edu.sg**

"Global Health is about creating conditions where individuals can be empowered."

- Dr Anne-Claire Stona

Global Health Publications

In this segment, we list down recent Global Health publication by SDGHI faculty.

Connect with us at **sdghi@duke-nus.edu.sg** for your paper to be featured in our next newsletter.

Cancer disparities in Southeast Asia: intersectionality and a call to action

Erin Jay G. Feliciano, Frances Dominique V. Ho, Kaisin Yee, Joseph A. Paguio, Michelle Ann B. Eala, Janine Patricia G. Robredo, Kenrick Ng, Jasmine Lim, Khin Thuzar Pyone, Catherine A. Peralta, Jerickson Abbie Flores, J. Seth Yao, Patricia Mae G. Santos, Christian Daniel U. Ang, Gideon Lasco, Jeffrey Shi Kai Chan, Gary Tse, Enrico D. Tangco, T. Peter Kingham, Imjai Chitapanarux, Nirmala Bhoo-Pathy, Gerardo D. Legaspi, Edward Christopher Dee

This paper draws attention to disparities in cancer in Southeast Asian countries and highlights the need to study cancer disparities affecting minoritised groups in Southeast Asia - not only along lines of race/ethnicity, but also people minoritised along lines of sex/gender, socioeconomic status, religion, geography, and others.

<u>Policy analysis on municipal solid waste management in Dhaka South City Corporation, Bangladesh: A qualitative study</u>

Sultana T, Azim N, Akuju F and Joarder T.

Inadequate and improper municipal solid waste (MSW) management is one of the significant reasons behind the environmental deterioration in Bangladesh. There are few studies on MSW management in Bangladesh, most focusing on household-level waste management, measurement of the amount of MSW, etc., but none applied a political economy lens to examine the policy issues related to MSW management. This study aims to explore the context, actors, and processes regarding MSW management of policies in Dhaka City, Bangladesh, applying the policy-triangle-framework.

Artificial intelligence and digital health in improving primary health care service delivery in LMICs: A systematic review

Saif-Ur-Rahman, K.M., Islam, M.S., Alaboson, J., Ola, O., Hasan, I., Islam, N., Mainali, S., Martina, T., Silenga, E., Muyangana, M., Joarder, T.

Technology including artificial intelligence (AI) may play a key role to strengthen primary health care services in resource-poor settings. This systematic review aims to explore the evidence on the use of AI and digital health in improving primary health care service delivery.

Geospatial mapping of 2-hour access to timely essential surgery in the Philippines

Xuxin Lim, Madhumitha Ayyappan, Ma Wai Wai Zaw, Nikita Kanumoory Mandyam, Hui Xiang Chia, Don Eliseo Lucero-Prisno III

Timely access to safe and affordable surgery is essential for universal health coverage. To date, there are no studies evaluating 2-hour access to Bellwether procedures (caesarean section, laparotomy, open fracture management) in the Philippines. The objectives of this study were to measure the proportion of the population able to reach a Bellwether hospital within 2 hours in the Philippines and to identify areas in the country with the most surgically underserved populations.

Artificial intelligence and digital health in global eye health: opportunities and challenges

Ting Fang Tan, Arun J Thirunavukarasu, Liyuan Jin, Joshua Lim, Stanley Poh, Zhen Ling Teo, Marcus Ang, Prof R V Paul Chan, Jasmine Ong, Angus Turner, Jonas Karlström, Prof Tien Yin Wong, Jude Stern, Daniel Shu-Wei Ting

This paper explores the opportunities and challenges presented by digital health and AI in global eye health and describes how these technologies could be leveraged to improve global eye health. It also suggests that a global digital eye health task force could facilitate coordination of funding, infrastructural development, and democratisation of AI and digital health to drive progress forwards in this domain.

End-user acceptability of a prototype digital stethoscope to diagnose childhood pneumonia-a qualitative exploration from Sylhet, Bangladesh

Joarder, T., Tune, S. N. B. K., Islam, A. S. M. D., Islam, A., Roy, A. D., McCollum, E. D., ... & Ahmed, S.

The low specificity of the World Health Organization (WHO) guideline on managing pneumonia in low-resource settings leads to many false-positive pneumonia cases receiving antibiotic treatment. Integrating diagnostic technology to incorporate lung sounds into WHO guidelines could improve childhood pneumonia diagnosis and management. This qualitative study aims to explore the acceptability of a prototype digital stethoscope device among potential end-users in Bangladesh.

<u>Professional Relationship Between Physicians and Journalists in Bangladesh: Web-Based Cross-Sectional Study</u>

Islam, M. A., Rabbani, M. G., Rahaman, Z., & Joarder, T.

This study explores the tensions and alliances between physicians and journalists in Bangladesh, along with identifying strategies that could potentially improve the often contentious relationship and quality of medical journalism.

Health System Considerations for Community-Based Implementation of Automated Respiratory Counters to Identify Childhood Pneumonia in 5 Regions of Ethiopia: A Qualitative Study

Angeli Rawat, Agazi Ameha, Jonas Karlström, Lisanu Taddesse, Elias Legesse Negeri, Anne Detjen, Kristoffer Gandrup-Marino, Noah Mataruse, Karin Källander, Abraham Tariku

In Ethiopia, childhood pneumonia is diagnosed in primary healthcare settings by measuring respiratory rate (RR) along with the presence of cough, chest indrawing, difficulty breathing, and fast breathing. This study aims to identify health system-level lessons from implementing two automated RR counters, Children's Automated Respiration Monitor (ChARM) by Phillips® and Rad-G by Masimo®, to provide considerations for integrating such devices into child health programmes and health systems.

FEATURE YOUR PUBLICATIONS!

Connect with us at sdghi@duke-nus.edu.sq for your papers to be featured in our next newsletter.





Advancing Global Health in Asia and Beyond

The SingHealth Duke-NUS Global Health Institute seeks to tackle prevalent health challenges, strengthen health systems, and better insulate countries from pandemics and disease threats.

Have an idea for a segment in the Global Health News newsletter? Let us know! ashley.teo@duke-nus.edu.sg

