

# GROUP EDUCATION

Education is the cornerstone of NHG's multi-faceted strategy to cultivate a sustainable healthcare system. Designed as a holistic enabler, it is committed to build a strong pipeline of resilient, future-ready and versatile workforce capable of operating cross-functionally in various care settings to serve our patients with quality care.



## LEADERSHIP CHANGES AT LKCMEDICINE

On 1 April 2021, Professor Joseph Sung succeeded Professor James Best as the Dean of Lee Kong Chian School of Medicine (LKCMedicine). Renowned as a researcher in the field of gastroenterology and hepatology, Prof Sung had in 2003 led his medical team in Hong Kong in the fight against the Severe Acute Respiratory Syndrome (SARS). Prof Sung's extensive contributions and achievements place him well to provide counsel on NHG's education and research strategies, and to lead LKCMedicine to the next level of excellence.

"I am excited to work with our partner teaching hospitals, polyclinics, and national centres under NHG to develop translational research, and apply knowledge to clinical practice to make an impact on patients' outcomes. It would be good to have more platforms such as joint research and educational programmes, research seminars, and grand-rounds so that scientists are informed of patients' needs, and clinicians know more what technology and science can offer. It is only through the cross-fertilisation of ideas that we can build trust and partnerships to develop interdisciplinary research teams. We have the potential to change clinical practice and improve healthcare delivery."

**Professor Joseph Sung** Dean, Lee Kong Chian School of Medicine

## LKCMEDICINE IS ONBOARD NATIONAL PRECISION MEDICINE RESEARCH

LKCMedicine collaborated with the Precision Health Research Singapore (PRECISE), as part of Singapore's National Precision Medicine (NPM) research initiative. During Phase II of the programme which started in April 2021, LKCMedicine was involved in analysing the genetics of 100,000 healthy Singaporeans, as well as 50,000 with specific diseases. The genetic data will be integrated with detailed lifestyle, environmental, and clinical data to yield rich insights into factors that contribute to Asian diseases and conditions. Professor John Chambers, Professor of Cardiovascular Epidemiology, Chief Scientific Officer of PRECISE, and one of the principal investigators supervising and coordinating the population cohort study highlighted its immense impact on the development of new approaches to treat certain diseases that are unique to Asia, as well as Singapore residents.

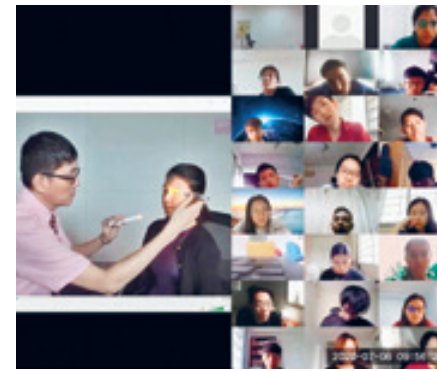


## NHG RESIDENCY INITIATES CLINICAL LECTURES FOR LKCMEDICINE GRADUATING CLASS

NHG Residency conducted a series of clinical lectures for the graduating class of LKCMedicine, whose Student Assistantship Programme was shortened due to the pandemic. The lectures focused on the management of core acute medical problems to better prepare the students for clinical practice when they graduate in April 2020. The lectures were also extended to the Post-Graduate Year 1 doctors who were unable to have a full-scale orientation when they commenced their clinical training between February and March 2020.



Dr Vishal G Shelat (right), Programme Director, TTSH, conducting a virtual clinical lecture.



## DISTANCE AUGMENTED REAL-TIME TRAINING (DART) FOR MEDICAL STUDENTS

The Distance Augmented Real-time Training (DART) programme was introduced during the Circuit Breaker to help medical students from NUS Yong Loo Lin School of Medicine and LKCMedicine continue with their clinic-based modules remotely, during their ophthalmology rotations. Developed by Associate Professor Yip Chee Chew, Education Director (Education Development Office), Yishun Health, DART used a combination of teaching methods, underpinned by learning theory, to help medical students practise basic eye examination skills.

The DART module comprised two parts: Self-Directed e-Learning and Face-to-Face teaching. The Self-Directed e-Learning sessions imparted knowledge through instructional videos and audio-guided mental rehearsals of the eye examination steps, and assessment of procedural knowledge. The second part required students to demonstrate the techniques on a 'standardised patient' such as a family member, during a face-to-face teaching session over Zoom. Timely corrective feedback was given by their peers and faculty to help improve students' performance.

## MODIFIED PPP TO ILLUSTRATE PATIENT JOURNEY

Tan Tock Seng Hospital (TTSH) revamped its Professional Practice Placement (PPP) module for first-year students of the Singapore Institute of Technology (SIT) Diagnostic Radiography and Radiation Therapy Programme to provide a more comprehensive overview of the diversity, intricacies, and inner workings of the healthcare system from a patient's perspective. Launched in October 2020, the PPP module highlighted the role of radiographers in various clinical settings and was redesigned based on a patient's journey upon admission to the Emergency Department (ED). Students were presented with case studies, re-enactments, and real-life interviews with standardised patients. This helped them familiarise with the various stations in the ED, such as resuscitation bays, triage, nursing stations, and observation bays, as well as cultivate empathy for their patients.



Above: A radiographer at TTSH teaching an SIT student.



Above: SIT students in a classroom discussion.

## ELEVATING CAPABILITIES TO BOOST PROFESSIONALISM

### REDESIGNING TRAINING PROGRAMMES

The cessation of face-to-face training at the onset of the COVID-19 pandemic prompted NHG College to redesign 28 training and development programmes to go online. NHG College has adapted 70 per cent of its programmes to-date, and ensured that the learning needs of healthcare professionals, educators, and leaders were met in a safe manner, without compromising the quality of curriculum. As of FY2020, NHG College has organised 78 programme runs attended by 4,260 participants.



Below: Collective Leadership Conversations was one of the many training programmes that NHG College redesigned to go online during the pandemic.



## GROUP EDUCATION

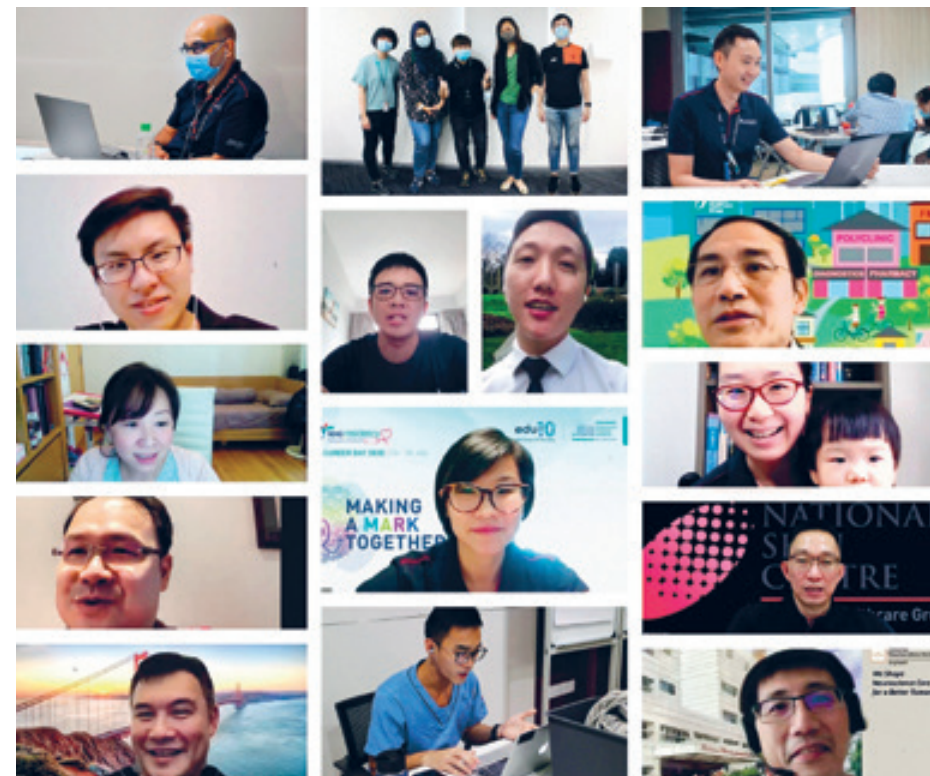
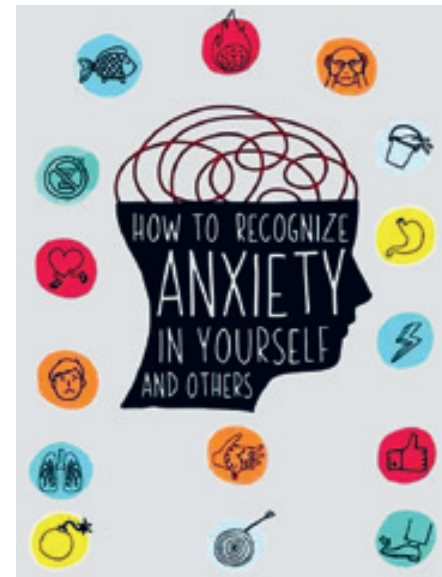
### BOOSTING DIGITAL LITERACY AND ONLINE LEARNING

Recognising digital literacy was essential for designing and facilitating online learning, NHG College conducted eight 'Tech Tool Series' workshops that equipped 105 NHG educators and colleagues with the skills to strengthen digital literacy. Additionally, 'Tech Tool Series' guides and micro-learning courses were launched on NHG eLEARN in the first quarter of 2021 to encourage educators and staff to create engaging online learning materials.

NHG College also organised a series of Health Professions Education (HPE) webinars that showcased the use of technology to enhance learning and teaching. The webinars saw some 630 attendees across four sessions. Two e-learning modules, *Introduction to Online Teaching and Learning* and *Gamification in Healthcare*, were made available to NHG staff.

### ENSURING WORKPLACE WELLNESS AND RESILIENCE

Burnout, fatigue, and trauma are some of the possible mental health conditions that healthcare workers may experience during the COVID-19 pandemic. To develop mental resilience, NHG College worked closely with core faculty teams from TTSH and the psychiatry department of Woodlands Health (WH) to develop the *Workplace Mental Health Workshops* to train staff to identify common mental health issues at the workplace, as well as administer mental health first aid. Two runs were conducted for 43 peer supporters and HR practitioners from NHG.



### NHG RESIDENCY CAREER DAY 2020

NHG Residency held its first virtual Career Day in July 2020, which attracted more than 400 local and overseas Singaporean medical students and junior doctors. Some 800 residents, faculty members, and institution leaders across NHG showcased residency programmes and career opportunities, as well as hosted 'live' chat sessions with participants.



## GATHERING ON-THE-GROUND KNOWLEDGE TO FIGHT COVID-19

### STUDY ON PERCEPTION OF SINGAPORE'S HEALTHCARE WORKERS ON COVID-19 VACCINATION

In conjunction with Singapore's approval of the Pfizer-BioNTech's COVID-19 vaccine in December 2020, the HOMER (Health Outcomes and Medical Education Research) team worked closely with NHG Group Research and Group Corporate Communications to implement a study to examine vaccine hesitancy and vaccination concerns among healthcare workers.

An online questionnaire was disseminated to all NHG Staff, which focused on their willingness to receive COVID-19 vaccinations, perceptions on the risk of COVID-19 infections, awareness and concerns about COVID-19 vaccines, previous experience with vaccinations, and perceived professional and public health responsibilities. The subsequent roll-out of educational and publicity materials were based on the results of the study to address misinformation on and allay fears of COVID-19 vaccines. The findings were also used by the Temasek Foundation to develop public education materials on COVID-19 vaccination.

### UNDERSTANDING COVID-19 TRANSMISSION IN THE MIGRANT WORKER COMMUNITY

HOMER led two studies that investigated the driving and mitigating factors that influenced the spread of COVID-19 within the migrant worker community. The studies also sought to better understand the health-seeking behaviours of migrant workers.

#### Study 1: The structure of relationships between dormitory locations, employers, and migrant workers in COVID-19 transmission

This study sought to understand the drivers of COVID-19 transmission by constructing an ecological network to examine the structure of relationships between migrant worker dormitory locations, employers, and the rise in infections. It aimed to help policymakers make informed decisions on the deployment of resources for testing and intervention, as well as to formulate housing policies that fortify the population against the spread of diseases. The ecological network enabled HOMER researchers to demonstrate a method to stratify risks of migrant workers' living locations, employers, and work locations. The study received a National Medical Research Council grant to undertake further work to bolster pandemic preparedness.

#### Study 2: Migrant workers' perceptions on the shift towards Regional Medical Centres (RMCs) for their healthcare needs

The HOMER team designed a multilingual survey to understand health-seeking behaviours of the migrant workers in the context of the transition to RMCs. The survey collected anonymous findings over one month from thousands of migrant workers residing in dormitories. The findings were presented to the Ministry of Manpower (MOM) and took into account the cultural sensitivities of migrant workers, especially in the provision of care to those who experienced acute respiratory infection symptoms.



Right: Illustrations provided by Temasek Foundation, under the Stay Prepared Initiative.

## HONOURING EDUCATION EXCELLENCE TO EMPOWER OUR WORKFORCE

### NHG RESIDENCY MVP AWARD

Fifty-two NHG residents – junior doctors training to be specialists – were recognised with the Most Valuable Player (MVP) award for stepping up to volunteer on the COVID-19 frontline, on top of their clinical commitments. The MVP award, given out by NHG Residency, acknowledged residents who have gone beyond the call of duty for their patients and their peers. Awardees were nominated by their colleagues, peers, and senior doctors.



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### CLINICAL EDUCATORS ACKNOWLEDGED DURING THE PANDEMIC

Two hundred and thirteen Teaching Awards were presented at the 2020 NHG Teachers' Day celebrations, up from 190 presented in 2019. A Special Commendation Award was also introduced to recognise 40 educators who went the extra mile to champion change, develop solutions to minimise disruptions to learning, and create innovative learning opportunities amid the COVID-19 pandemic.

*"The new normal is no longer new. Group Education has risen to the challenge, focusing on what we could control and negotiating areas which were unknown. Our people are our strength in weathering this storm."*

**Associate Professor Michelle Jong**  
Group Chief Education Officer, NHG



Above: Award winners from KTPH and Woodlands Health.



### CONTINUED ACCREDITATION AND FULL COMPLIANCE FOR NHG RESIDENCY PROGRAMMES

NHG Residency, NHG Surgery-In-General Residency Programme, and NHG Urology Residency Programme achieved full compliance with accreditation standards. NHG Residency received another five years of continued full accreditation by Accreditation Council for Graduate Medical Education International (ACGME-I) and was commended for its substantial compliance with institutional requirements. Additionally, the NHG Surgery-In-General Residency Programme and NHG Urology Residency Programme were awarded the maximum four-year accreditation by the Joint Committee on Specialist Training.



**"IN THE PAST, MANY SCIENTISTS AND CLINICIANS WOULD RARELY WORK ON A SHARED GOAL AT THE NATIONAL LEVEL. COVID-19 HAS BROUGHT THE IMPETUS AND FOCUS FOR ALL TO WORK TOGETHER, AND TO BUILD UP A COLLECTIVE CAPABILITY IN SINGAPORE'S RESPONSE TO THE PANDEMIC. TODAY, FEW RESEARCH CAPABILITIES IN THE MEDICAL FIELD EXIST ON THEIR OWN, THEREFORE, PARTNERSHIP IS INTEGRAL TO DEVELOP NEW AND BETTER WAYS OF DOING THINGS. IT IS ALSO IMPORTANT TO WORK BEYOND SINGAPORE, WITH OTHER COUNTRIES IN THE REGION, TO DEAL WITH THE THREAT OF NEW INFECTIOUS DISEASES COLLECTIVELY."**

**Professor Benjamin Seet** Deputy Group CEO (Education & Research), NHG, & Assistant CEO (Corporate Services), Tan Tock Seng Hospital & Central Health