CENTRE FOR HEALTHCARE INNOVATION

### PULSE



INNOVATION STORIES . HIGHLIGHTS@CHI . UPCOMING EVENTS . NEWS FROM PARTNERS / NOV 2022

# INNOVATION STORIES



## AERODROP DUO: AN INNOVATIVE DUO FUNCTION PROTECTIVE SCOPE MASK AND FILTRATION SYSTEM

A recipient of the Ng Teng Fong Healthcare Innovation and Productivity (HIP) grant, Dr Chew Hui Sing shares more about the Aerodrop Duo, an innovative duo function protective scope mask and filtration system for Aerosol Generating Scope procedures.

Deeply entrenched in the battle against the spread of COVID-19, Dr Chew, an ENT Consultant, and her colleagues have had to defer non-urgent aerosol generating procedures (AGPs), such as nasoendoscopy and laryngoscopy during the peak of the pandemic. As COVID-19 can be transmitted through respiratory droplets and contact routes, AGPs were seen as high-risk procedures in the effort to minimise contamination.

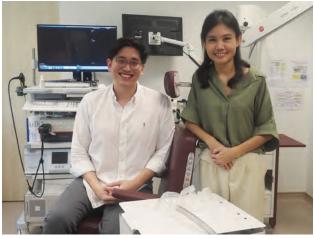
"During these procedures, the scope would be inserted through the nose and into the upper airway, sometimes causing patients to sneeze or cough, resulting in aerosol or droplets going into the environment, thus contaminating the surroundings. There is also the worry that the aerosol in the air and droplets on the surfaces may cause disease transmission to thehealthcare workers or patients and visitors within the vicinity," shares Dr Chew.

With Covid-19 becoming endemic, with asymptomatic community transmission and new variants arising time, , there was a need to modify practices to ensure that clinical services can resume without compromising healthcare workers' and patients' safety and comfort; and to carry this out in a logistically sustainable manner.

Click here to read more about this innovative solution!



A demonstration on how to apply the protective scope mask.



Dr Chew collaborated with Dr Marcus Tan from The BioFactory on this innovation.

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## CHI HOSTS MOUNT ELIZABETH HOSPITAL (ORCHARD) FOR CO-LEARNING ON INNOVATION

#### 6 OCT 2022

CHI was pleased to host Mount Elizabeth Hospital (Orchard) on a visit that focused on co-learning! The hospital, which will be undergoing major renovation from Jan 2023 for 3 years, shared that they hope to learn from CHI and Tan Tock Seng Hospital's experience, as they consider ways to adopt healthcare innovation in their care delivery processes, and transform their workforce through job redesign with the adoption technology such as automation and robotic innovation.

The visiting team was given a tour of the facilities at CHI, which included the CHI Living Lab (CHILL), a makerspace equipped with 3D printing facilities for the prototyping of ideas, and Innospace, a room equipped with mobile hanging partitions that enables the planning required for different configurations of healthcare/clinical spaces, in order to achieve optimal use of the available space.

It was an enriching visit as we shared experiences and learning points on our transformation journey. We look forward to visiting the new Mount Elizabeth Hospital when it's ready!

Click here for more!



The team from Mount Elizabeth Hospital (Orchard) with CHI members.



Understanding the co-sharing and collaborative intentions of Kampung Square.

### CHI FELLOWSHIP IN HEALTHCARE INNOVATION AND LEADERSHIP WELCOMES CLASS OF 2022

#### 11 OCT 2022

A big welcome to the CHI Fellowship in Healthcare Innovation and Leadership programme's Class of 2022!

An exciting journey begins for 15 students from Singapore, Thailand and South Korea, who will co-learn together in a hybrid setting - with virtual classrooms and in-person training sessions.

The participants will also have the opportunity to immerse themselves when they visit each other's countries as part of the 16-week Fellowship programme, a part of the programme that has been made possible this year with the easing of travel regulations due to the pandemic.

This year, the CHI Fellowship is a Singapore-Thailand collaboration with CHI's co-learning network partners. Designed around the three stages of the CHI Innovation Cycle, the programme is practice-based and anchored on the participant's project, while combining professional development, coaching and mentoring, peer and experiential-

learning, fostering international and local network, innovation projects and immersions into other innovation healthcare systems in Singapore and beyond.

Click here for more.



The Class of 2022 assembles! Participants from Thailand joined in virtually via Zoom.

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### HEALTHCARE 5G: USE CASE WORKSHOP WITH CHI AND IMDA

#### 28 OCT 2022

Healthcare 5G, a concerted exploration of 5G applications in healthcare by CHI and Infocomm Media Development Authority (IMDA), kicked off a 5G Use Case Workshop with TTSH to understand the demands within healthcare and how the sector will benefit from the implementation of 5G. One example would be the study of an existing pill delivery robot, the Pillbot, at TTSH. Currently, the innovation is limited to delivering medications with a teleconferencing feature to patients in the Emergency Department's high-risk zones. With a 5G Network, the robot can potentially host multichannel conferencing capabilities scaled up for bedside care in the wards and augment manpower in other hospital operations such as security and portering.

The team discussed ideas about multimodal way finding for patients/staff using 5G and wifi and integration with operations to improve operational outcomes and optimise service provision as well as robot pillboxes, autonomous logistic robots and smart logistics systems.

If you have ideas that you would like to work on that will benefit from this, get in touch with the team from the Digital & Smart Health Office at dsho@ttsh.com.sg



Everyone focused on the insights being shared by IMDA



Participants from TTSH and IMDA.

### NEWS FROM OUR PARTNERS



## CHI WELCOMES ST HEALTHCARE AS THE 38TH CO-LEARNING PARTNER



 $From \ left to \ right: A/Prof \ Tan \ Cher \ Heng, Prof \ Eugene \ Fidelis \ Soh, Dr \ Tan \ Chien \ Her, and \ Mr \ Siow \ Seow \ Wei.$ 

CHI welcomes our newest co-learning network partner ST Healthcare (a wholly owned subsidiary of ST Logistics)!

The MOU signing ceremony took place on 4 November with Dr Tang Chien Her, Head, Healthcare Vertical, ST Logistics and Prof Eugene Fidelis Soh, Chairman of the CHI Co-Learning Network, CEO, Tan Tock Seng Hospital & Central Health. Signing as witnesses were Mr Siow Seow Wei, General Manager, Supply Chain Management from ST Logistics and A/Prof Cher Heng Tan, Executive Director, CHI.

Organised in conjunction with CHI INNOVATE Flagship Day, and witnessed by fellow co-learning network partners, ST Logistics is the 38th co-learning partner on the network. This partnership will drive healthcare innovations in areas such as smart technology and analytics, as well as integrated inventory and supply chain management, including last mile delivery.

Founded in 2016 on the concept of co-learning and collaboration, CHI and its network of like-minded local and international partners create thought leadership, as well as co-build initiatives and programmes to inculcate a culture of innovation within healthcare. Strengthened by this network, CHI has been able to customise and design signature programmes that aim to build a sustainable workforce via new andragogy and paradigms for our communities of carers and patients.

Click here for more.

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