



## INNOVATION STORIES



### iMOVE: IMPROVING MOBILITY VIA EXOSKELETONS



The collaborative initiative of Alexandra Hospital (AH), Saint Luke's Hospital (SLH), Stroke Support Station (S3), NTUC Health, Saint Luke's Eldercare (SLEC), Jurong Community Hospital (JCH) won the "Adoption Medal" at the National Healthcare Innovation and Productivity Medals 2022.

More than 80 percent of stroke survivors have impaired walking ability, with 50 percent of them suffering long-term motor deficits. As improved mobility is connected to decreased morbidity, mortality and complications across diseases, it is vital to consider rehabilitative solutions that would accelerate the recovery of mobility in patients.

With a drive to improve mobility for patients, the collaborative team of physiotherapists and research professionals undertook the efforts to implement Robotic Exoskeleton Training (RET) across the continuum of

rehabilitative care (hospital to community), and studied the effectiveness and manpower utilisation in different settings.

The RET initiative was implemented through the collaborative efforts of the team comprising of physiotherapists Nur Shafawati Kamsani (AH), Suresh Ramaswamy (AH), Yap Thian Yong (SLH), Alexis Lau (S3), Jean Tan (NTUC Health), Lui Yook Cing (SLEC), Qiu Wenjing (JCH), as well as Research Fellow Tang Ning (NUH) and Research Coordinator Evania Wong (NUH).

#### Problem and Background

While there are clinical studies on the advantages of RET, the impact when adopted in real life and its cost effectiveness in the local context is unknown. Adoption of rehabilitation technologies have typically been

hampered by lack of guidance, inadequate awareness, conflicting priorities and staff attrition.

#### Evaluation Considerations

To find out how feasible it would be to implement the RET, the collaborative team first evaluated the utilisation and effectiveness of wearable RET across the continuum of rehabilitation care, from hospital to the community, including the manpower utilisation.

The team sought to improve access to RET in order to improve effectiveness of rehabilitation, and to evaluate manpower requirements associated with this.

#### The Results

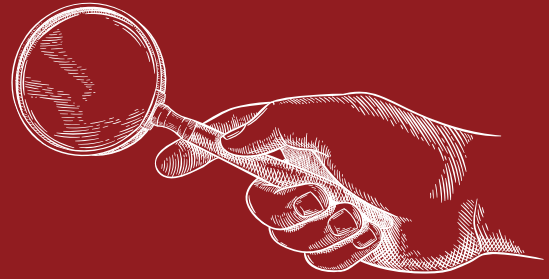
In conclusion, the adoption of RET increased the efficiency of mobility training, and decreased manpower requirements for rehabilitation of dependent ambulators.

Patients took 3 times more steps and walked 3 times further with RET per session vs conventional physiotherapy, and less manpower utilised in the rehabilitation process.

It resulted in 34 percent better improvement in functional mobility compared to conventional physiotherapy in this group.

**Click here to read more.**

# HIGHLIGHTS @CHI



## BUILDING A POPULATION HEALTH SYSTEM

16 JAN 2023



Associate Professor Angela Chow, opens the session by sharing more about the intent of the module.



Participants were asked to list down what they would like to know about population health.

Participants from both clinical and administrative areas of Tan Tock Seng Hospital (TTSH) and the National Healthcare Group (NHG) were engaged in the sessions led by healthcare leaders, as they were introduced to how incentives and funding mechanisms could be an enabler, and synergistic in our approach towards a population health system. The sessions also featured examples of other health systems which have embarked on this population health approach.

At the end of the course, participants were able to appreciate the reasons, challenges and opportunities for Singapore's healthcare system as it progresses on its next phase of transformation, and identify ways in which they can contribute to this development. [Click here for more.](#)

CHI hosted the one-day executive course "Building a Population Health System" on 16 January, aimed at equipping care providers across all levels with the knowledge and tools to drive population health; starting off with healthcare leaders.

Developed by TTSH's Department of Preventive and Population Medicine, the one-day executive course is the first in a series on Population Health, a module within CHI's selection of Signature Programmes on Health & Social Change. In line with the HealthierSG initiative, the suite of programmes have been designed to support health and social care providers.

[Click here for more.](#)

## CHAMP: GROOMING TOMORROW'S LEADERS

1 FEB 2023

The CHI Healthcare Advanced Management Programme (CHAMP) started its 2nd run with amazing energy on 1 Feb, as each participant is set to equip themselves with the knowledge, skills, and abilities to transform healthcare.

Riding on the success of its inaugural run in 2022, this year we welcomed 24 participants from Tan Tock Seng Hospital, Woodlands Health, and National Healthcare Group, each one identified as potential leaders or those who are in their first term of leadership.

Organised in partnership with Nanyang Business School, the programme will engage, enable, and empower healthcare leaders through collective leadership and learning. The multilevel designed programme incorporates case studies, Action-Learning Projects (ALP), learning journals, caching and fireside chats to drive learning. This year, the programme features 3 pillars: Leading Self, Leading Together, Leading Organisation.

David Dhevarajulu, CHAMP's co-programme director, and consultant at CHI, shared that while there is academic rigour, the programme was customised to ensure that the knowledge can be applied through experience and exposure.



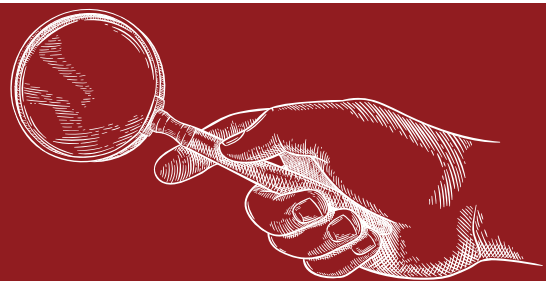
Participants of the programme are participants identified as future leaders in healthcare.

Dr Tan Joo Seng, co-programme director of CHAMP, and Associate Professor of Management at Nanyang Business School shared that he hopes the participants see the programme as a means to embrace mastery in different areas of leadership and management, give themselves the autonomy to explore new worlds and envision new possibilities, as well as build peer support.

[Click here for more.](#)



# HIGHLIGHTS @CHI



## REDEFINING IMPACT: WHAT IS A SUCCESSFUL INNOVATION? HOW DOES AN INNOVATION BECOME OF VALUE AND IMPACTFUL?

4 NOV 2022

Continuing from the previous issue of PULSE@CHI, the second Centrestage session of CHI INNOVATE 2022's Flagship Day on 4 November, focused on Redefining Impact.

Sir Muir Gray, Director of the Oxford Value & Stewardship Programme featured as the Centrestage speaker for this session, and was joined by Dr Joanne Yoong, CEO of Principal Economist & Behavioural Scientist, who was also the moderator and speaker for the panel discussion.

The panel featured:

- Lynette Leong, CEO, Environmental, Social and Governance (ESG) Funds & Stewardship, Capitaland Investment
- Prof Jose Maria Valderas Martinez, Head, Department of Family Medicine, National University Health System (NUHS)
- Ron Loh, Assistant Chief Executive, SG Enable
- Ellil Mathiyan, Co-Founder & President, Ostomy Association of Singapore, Mentor, SingHealth Patient Advocacy Network (SPAN)
- Ong Yunn Shing, Chief, Strategy, Research and Data Division

Beyond clinical and cost impact, this segment featured the different perspectives of impact from healthcare practitioners, economists, patient advocates, community and social care as well as from the sustainability sector. This session was set to broaden your mind examining the 'truth' and 'purpose' of impact in innovation, as well as to bridge the gap between an aspirational outcome vs practical outcome. Discuss in great detail the different levels – the healthcare system, operationalising the patient and provider directions, the patient viewpoint, the centre level, and the macro-outcomes.



Dr Joanne Yoong engages Sir Muir Gray, who is in the UK, in a conversation on redefining impact.



From left to right: Dr Joanne Yoong, Ong Yunn Shing, Prof Jose Maria Valderas Martinez, Ellil Mathiyan, Ron Loh, and Lynette Leong.

**Click here for the full article.**  
**Catch the Highlights of the Flagship Event here.**  
**For the full programme, relive the experience here.**

## CHI AMPED: LAUNCH OF OFFICIAL PODCAST

We had an exciting time chatting with top healthcare innovators, and we would like to share the conversations with YOU on our official podcast, CHI Amped!

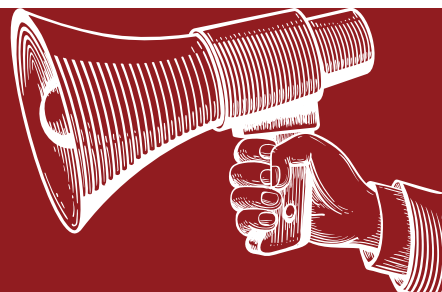
The platform would be our way of bringing the conversation to you, sparking off inspiration for meaningful engagements and collaborations! Each episode would feature interviews with leading experts and innovators in the field, providing valuable insights and inspiration for those working to improve healthcare for all.

From research and innovation to organisational development, our podcast aim to cover a wide range of topics shaping the future of healthcare. Whether you are an innovator, researcher, or simply passionate about improving healthcare, CHI Amped would have something for you.

**Listen to the series on Spotify here.**  
**To suggest conversation topics, email us at [chi@ttsh.com.sg](mailto:chi@ttsh.com.sg).**

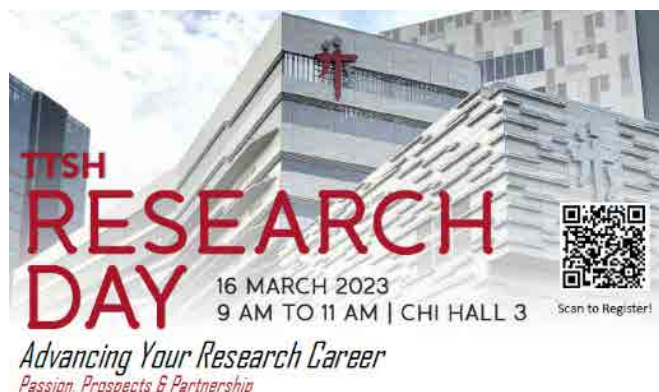


# UPCOMING EVENTS



## TTSH RESEARCH DAY

16 MAR 2023



Clinical Research & Innovation Office (CRIO) is hosting the annual TTSH Research day on 16 March 2023, Thursday, 9am to 11am at CHI Level 2, Hall 3.

This year's theme is Advancing Your Research Career PASSION, PROSPECTS & PARTNERSHIP. CRIO has invited distinguished speakers to share their personal research journey and experience, with a hope that this event will inspire researchers to embark on their research journey or further their research career!

To register, please scan the QR code in the poster or simply click here.

For any enquiries, please email to: [CRIO@ttsh.com.sg](mailto:CRIO@ttsh.com.sg)

## CHI INNOVATE 2023: BE THERE WITH US!

28 JUL 2023



To register, please scan the QR code in the poster or simply click here.

## CAPE Allied Health Congress 2023

2 - 3 NOV 2023



ABSTRACTS

Themed "Re-inventing for Population Health: Embracing Diversity & Harnessing Inclusivity", the Centre for Allied Health & Pharmacy Excellence (CAPE), welcomes submissions across all settings from Healthcare Institutions, Community Care Organisations, Industry and Academia. Submissions from Allied Health and Pharmacy students, as well as encore abstracts are also welcomed.

The top 3 abstracts will be invited to participate in the oral presentation competition during the Congress and will be awarded cash prizes and certificates.

Submission deadline: 15 May 2023

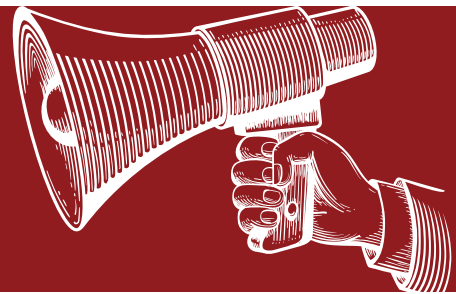
For more details, please scan the QR codes shown here.



IDEAS PIT



# UPCOMING EVENTS



## NATIONAL HEALTHCARE INNOVATION AND PRODUCTIVITY MEDALS



Coming Soon

Supported by the Ministry of Health, the annual National Healthcare Innovation and Productivity (HIP) Medals provide an opportunity for Healthcare and Community Care institutions to acknowledge, showcase and celebrate excellence in healthcare innovation and productivity.

The medal is a prestigious, national-level award that recognises local healthcare institutes that have demonstrated thought leadership through the adoption of innovation and productivity projects and successfully scaled and spread the solution within and outside the primary implementing institute.

The Medals recognise teams who achieve excellence in 3 award categories: Care Redesign (CR), Automation, IT and Robotics Innovation (AIR), and Workforce Transformation (WT)

**More details will be shared via email soon! For enquires, email us at [nhip@chi.sg](mailto:nhip@chi.sg)**

### 3 Things Everyone Needs to Know about

#### CHI Learning & Development (CHILD) System



##### WHAT IS CHILD?

CHILD stands for the Centre for Healthcare Innovation Learning & Development System.

It is a Knowledge Management platform for sharing of healthcare innovation, improvement and productivity.

CHILD is Open for All!



##### WHY DO I NEED CHILD?



**SHARE:**  
I can upload my team's project to showcase our innovation and demonstrate the value we created.



**LEARN:**  
I can search for tools, tips and even pitfalls from others' projects, so that I can shortcut my project.



**DO:**  
I can look for potential collaborators, expand the expertise and resources in my team.

##### HOW CAN I FIND CHILD?



@childkm



@CHI Learning & Development System - CHILD



<https://www.chi.sg/knowledge-hub>

Watch this space as CHILD is developing a bigger and better platform!

For more info, email us at [CHILD@CHI.SG](mailto:CHILD@CHI.SG) (cc: [CHILD@ttsh.com.sg](mailto:CHILD@ttsh.com.sg))

# NEWS FROM OUR PARTNERS



## METI LAUNCHES “ASEAN-JAPAN CO-CREATION FAST TRACK INITIATIVE”

15 FEB 2023



Corporations and organisations all around the world are ramping up efforts to bring the latest innovations to the forefront for quicker access to the masses. From CHI Healthcare InnoMatch to global challenges like the “ASEAN-Japan Co-Creation Fast Track Initiative” featured here, SMEs/Start-ups are increasingly gaining recognition as an important force in the innovation ecosystem. Though this initiative, CHI looks forward to getting to know more Japanese companies and future collaborative opportunities!

Organised by the Ministry of Economy, Trade and Industry (METI), The Japan External Trade Organization (JETRO), and co-organised with Singapore government agencies, the first “Singapore-Japan Fast Track Pitch Event” will be held in Singapore as part of the “ASEAN-Japan Co-Creation Fast Track Initiative”.

ASEAN is expected to become a growth centre in driving the world economy, startups have been creating many innovations that solve social issues by utilising digital technology in a wide range of fields such as logistics, payments, and finance.

For Japanese companies, it is becoming crucial to develop strategic collaboration with startups that are achieving rapid growth so that they can incorporate newly created innovations in the ASEAN region and improve their competitiveness in the growing market.

With this understanding and in conjunction with the 50th anniversary of ASEAN-Japan friendship and cooperation this year, METI and JETRO have decided to launch the “ASEAN-Japan Co-Creation Fast Track Initiative” to support the creation of open innovation through collaboration between startups and large companies from both ASEAN and Japan.

Moreover, at the Japan-Singapore Economic Dialogue (JSED) held on Feb 15, both sides affirmed further cooperation in supporting start-ups. As a tangible collaboration project of the JSED, the first Singapore-Japan Fast Track Pitch Event (the “Fast Track Pitch Event”) will be held in Singapore and co-organised by METI, JETRO, the Singapore Ministry of Trade and Industry, Enterprise Singapore, and Singapore Economic Development Board.

Under the ASEAN-Japan Co-Creation Fast Track Initiative, startups will have the opportunity to (1) receive support not only from Japanese organisations such as JETRO, but also from the government agencies of ASEAN countries, and (2) access not only major Japanese companies, but also a wide range of startup ecosystems, including global companies based in ASEAN.

At the first Fast Track Pitch Event in Singapore, a total of 8 companies, from both Japan and Singapore, will provide challenges based on each company’s needs to create open innovation and call for solutions to each challenge from participating startups.

Startups can submit their proposals through the special website. The deadline for proposals is 19 March, 2023.

**[Click here for more details on the website.](#)**

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