

Spring & Summer 2022 Newsletter

Touching lives, making an impact

康復治療科學系 Department of Rehabilitation Science

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COVER STORY

RS students joined forces to help at residential care homes during the pandemic

Fifty year-4 students of our undergraduate PT and OT programmes responded to the call from The Hong Kong Council of Social Service (HKCSS) and RS, and took part in a project which enlisted postsecondary students from healthcare-related disciplines to help with the frontline work at residential care homes for persons with disabilities and for the elderly, so as to alleviate the manpower shortage at these facilities. Twenty RS faculty members also served as online mentors to provide backup support for these students.

Under the 5th wave of the COVID-19 pandemic in Hong Kong, there had been an exponential surge of infections among hostel residents and staff, exacerbating the manpower shortage at these facilities. According to HKCSS, due to the labour shortage, a majority of the residents had been "immobilised" in beds for a long period of time, which would indeed cause detrimental effects on their health.

With the help from donors, HKCSS launched the "Youth Internship in Caring Profession for a Brighter Future" Project in early March this year to tackle the situation. At RS, 50 year-4 students of our undergraduate PT and OT programmes joined the project to show their readiness to provide healthcare services to the elderly and persons with disabilities. They worked at various residential care homes from mid-March to June 2022. Given their rehabilitation expertise, we believe they had contributed a lot to those in need in the aforesaid premises, especially in the provision of professional rehabilitation services to enhance the mobility of those "immobilised" hostel residents and to avoid complications caused by prolonged inactivity.



COVER STORY

Visit to RS students serving at residential care homes by Under Secretary for Labour and Welfare

Mr Ho Kai-ming, JP, Under Secretary for Labour and Welfare, visited RS students who had joined HKCSS's "Youth Internship in Caring Profession for a Brighter Future" Project and had been providing rehabilitation support to residential care homes since mid-March 2022. The residential care home Mr Ho visited on 12 April 2022 is Kai Yuet Adult Training Centre under Fu Hong Society, which provides day training and residential services for persons with moderate to severe intellectual disabilities. The visit was also joined by Miss Yip Hau-yu, Hannah (Assistant Director [Rehabilitation and Medical Social Services], Social Welfare Department), Prof. Wing-tak Wong (Deputy President and Provost, PolyU), Mr Lai Kwan Ho, Raymond (Business Director, The Hong Kong Council of Social Service [HKCSS]), Ms Frankie Tsui (Chief Executive Officer, Fu Hong Society), Prof. David Shum (Dean of Faculty of Health and Social Sciences, PolyU), and Prof. Hector Tsang (Head of Department of Rehabilitation Sciences, PolyU). The event was kicked off by a presentation by Mr Ho Kai-ming and Miss Yip Hau-yu separately. They expressed their appreciation of the HKCSS's project and RS students' active support to the project. This was followed by HKCSS's brief introduction of the project and their assigning of RS students to various residential care homes affiliated with HKCSS. After that, Prof. Hector Tsang gave a short speech on how he recruited a group of 50 year-4 PT and OT undergraduates to join the project in a short period of time and what he expected the students could contribute to the frontline work at the residential care homes. Then several PT and OT students shared their work experience and feelings of contributing to society in the 5th wave of the pandemic. The whole group finally toured around Kai Yuet Adult Training Centre and visited the facilities there.



A group photo taken at Kai Yuet Adult Training Centre.

RS provides diverse anti-pandemic knowledge to the public

Although the 5th wave of the COVID-19 pandemic in Hong Kong continues to recede, Hong Kong society has not fully recovered yet from the public health disaster, either psychologically and economically. Some people who have recovered from the disease are still experiencing long COVID or post-COVID symptoms. On the other hand, the healthcare system has constantly been under huge strain due to the never-ending pandemic. There is also the prevailing fear of having a 6th COVID wave in society.

To help relieve the physical and psychological stress of Hong Kong residents after the Omicron wave and to better prepare them for the

possible 6th wave, RS has recently released a series of articles and interviews to provide diverse anti-pandemic knowledge to the public. These articles and interviews cover a wide range of topics, including the advantages of wearing low Delta P masks to manual workers, the development of "Rehab 8 Forms" programme to aid post-COVID recovery, assistive technology and gerontechnology, reduction and prevention of pain caused by WFH, management of mental health during the pandemic, prevention of long COVID conditions, etc. We believe better personal health management is an effective method to prevent or combat future pandemics. Please visit <u>https://www.polyu. edu.hk/rs/covid-media-coverage/</u> for details.

RS research team has developed "Rehab 8 Forms" programme to aid post-COVID recovery

The World Health Organization has suggested that while most people who have developed COVID-19 will fully recover, some may experience a variety of post-COVID or "long COVID" symptoms months after their recovery, including breathlessness, fatigue, cognitive dysfunction, and so on.

Funded by the Health and Medical Research Fund of the Food and Health Bureau, HKSAR Government, a research team from RS conducted prospective research to assess the cardiorespiratory function, physical fitness, fatigue level, psychosocial functions and health-related quality of life (HRQoL) in COVID-19 patients after recovery, as well as evaluating their changes in the "3Rs", namely "Rebuild fitness", "Regain confidence" and "Resume normal life". The research project commenced in October 2020 and was led by Prof. Amy Fu, Peter Hung Professor in Pain Management and Associate Head of RS, and Dr Arnold Wong, Associate Professor at RS. The research team found that more than 40% of the 118 COVID-19 survivors who participated in the research were still suffering from "long COVID" symptoms including fatigue and lower limb muscle weakness, 6 and 12 months after their diagnosis of COVID-19, posing a negative impact to their daily life.



The research was led by Prof. Amy Fu, Peter Hung Professor in Pain Management and Associate Head of RS (left), and Dr Arnold Wong, Associate Professor at RS (right).

To help COVID-19 survivors regain their health, the research team has developed a 6-week physical training programme. Upon completion of the training programme, the study indicated that the lung capacity and lower limb strength of most of the 24 participants improved, and their fatigue level also improved.

The physical training programme features "Rehab 8 Forms" exercise, which consists of eight different movements to train various muscle groups and improve cardiorespiratory and muscle performance. "Rehab 8 Forms" exercise is easy to follow, with each set taking about 8 to 10 minutes to complete. One can make adjustments to the pace and progress according to their own physical condition, in order to gradually improve their fitness, as well as achieving the 3R objectives – Rebuild fitness, Regain confidence and Resume normal life.

To watch the video of "Rehab 8 Forms", please visit: <u>https://youtu.be/</u> oXJ2PLA926k.



"Rehab 8 Forms" designed by the research team.

OSHC and RS found that low Delta P breathable masks effectively reduce fatigue of manual workers and people who exercise

The Occupational Safety & Health Council (OSHC) and RS of PolyU recently conducted a study and found that people who wear highly breathable masks (with Delta P <3) while doing manual labour or exercise are less likely to experience shortness of breath and fatigue. The study suggests that users and employers should consider both filtration efficiency as well as breathability (Delta P) when choosing masks. It also suggests that manufacturers should print information of Delta P value on packages of masks to provide useful reference for the public and employers to make informed purchasing decisions.

From February to October 2021, Dr Shirley Ngai, Associate Professor of RS, and her team were commissioned to study how different breathability rates and shapes of masks affect the physiological responses of wearers conducting manual tasks or workouts. Their findings showed that, compared to wearing a high Delta P mask (Delta P~5.3), wearing masks with a low Delta P value (Delta P~2.7) could reduce the load on the cardiopulmonary system (e.g. heart rate and respiratory rate) and the fatigue of manual workers.

It is also worth noting that wearing a low Delta P mask can reduce workers' physiological burden during manual work. It may therefore

curb the tendency of wearers to take off or pull down their masks due to discomfort, thus offering better protection against COVID-19.



Staff Activities

Warmest support to RS from 2013 MOT (China) graduates during the pandemic



Prof. Hector Tsang (Cally Kwong Mei Wan Professor in Psychosocial Health, Chair Professor of Rehabilitation Sciences and Head of RS) had an online gathering with 2013 MOT (China) graduates.

The 2013 graduates of Master in Occupational Therapy (MOT) programme (China) have always been concerned about the pandemic situation in Hong Kong and the health condition of their teachers at RS. When noticing that the 5th wave of COVID-19 in Hong Kong became out of control day by day, Eden Liu and Betty Luo, delegates of 2013 MOT (China) graduates, offered anti-pandemic materials (scented sachets) to RS teachers and supporting staff to help improve their work environment and protect them from COVID-19.

Prof. Hector Tsang (Cally Kwong Mei Wan Professor in Psychosocial Health, Chair Professor of Rehabilitation Sciences and Head of RS) met 2013 MOT (China) graduates online on 29 March to receive the anti-pandemic materials officially. Eden and Betty firstly presented the background information of the scented sachets, which contain Chinese traditional medicine for improving immunity and cleaning the air. They showed the gifts to Prof. Tsang via Zoom first and arranged to deliver them to RS after the online gathering. Prof. Tsang expressed gratitude to 2013 MOT (China) graduates on

behalf of RS teachers and supporting staff. He said he was super excited and even surprised at first when receiving the news from Eden about the anti-pandemic materials as he did not expect graduates would show their care and love to RS in this manner.

Then 10 selected graduates shared their OT-related work in mainland China. After that Prof. Tsang briefed the development of the department in the recent five years. All the participating graduates expressed their appreciation to the teachers who had taught them and given them good guidance. Prof. Tsang said he was very happy to see all the graduates excel in their career in different areas, for example, as heads of departments, researchers, teachers at universities, leaders in cross-disciplinary environment, etc. He encouraged them and wished them good luck in their future career development. He finally suggested to have regular gatherings with them to enhance mutual understanding.

The way in which graduates continue to show their care and love to their teachers is moving.



Prof. Hector Tsang officially receives the anti-pandemic materials (scented sachets) online from Eden Liu, a delegate of the graduates.



The anti-pandemic materials (scented sachets) offered to RS.

PolyU is ranked No. 1 in China and Asia in OT and PT specialities, according to EduRank

RS has been playing a leading role in rehabilitation research and the professional training of occupational therapists and physiotherapists in Hong Kong, mainland China and the Asia-Pacific region. This achievement is once again confirmed by the 2022 EduRank's ranking. According to this ranking, PolyU gets No. 1 for the first time in China and Asia in medical-related specialities, namely Occupational Therapy and Physical Therapy. PolyU's world rank in these two specialities are 59 and 84 respectively. The EduRank's ranking for PolyU is based on three factors: research performance (evaluation of its publications and citations), non-academic reputation, and the impact of notable alumni.

Compared with the most popular international rankings such as the QS World University Rankings, the EduRank's ranking is relatively new and still in development. Nevertheless, it is pioneer in that it uses a significantly improved ranking methodology since 2021 to analyse the other rankings and critical scientific literature to find a way to correct at least some of the existing shortcomings. Of

course, at the level of the university, we will consider the QS World University Rankings by Subject the most authoritative rankings.

Regarding professional education, our occupational therapy and physiotherapy programmes have been among the world's top 5% of similar programmes, as shown by highly acclaimed international rankings.



Occupational Therapy



In China & Asia Physiotherapy

Source: EduRani

Creating high-quality learning experiences for students is utmost important in teaching

The result of RS Outstanding Teaching Award 2021/22 was released after careful deliberation of the assessment panel. The award-winning teaching team, led by Ms Josephine Wong, Senior Clinical Associate (Occupational Therapy), demonstrated excellence in the classroom by leveraging information and communication technology to develop a virtual overseas exchange programme to enhance the learning experience of PT and OT students in Hong Kong and Singapore under the pandemic.

The assessment panel considered that the team showed a good example of making new values with technology to get students from the globe connected. The panel also acknowledged the team's initiative to collaborate with other universities and extend the impact of the collaborative work and international exchange culture with other universities. Having taken into account different aspects of educational leadership, the panel appreciated that the team had worked on the reflection and showed the impact on students outside Hong Kong.

Ms Josephine Wong's teaching team comprises the following members: Mr Alexander Woo, Mr Eddie Hai, Ms Bonnie Ma, Prof. Shamay Ng, Mr Philip Ng, Ms Mandy Lau, Mr Alan Tse, and Mr Thomas Chan. The teaching team will be nominated for the FHSS teaching award.



Prof. Hector Tsang (Cally Kwong Mei Wan Professor in Psychosocial Health, Chair Professor of Rehabilitation Sciences and Head of RS) and the winning teaching team.

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Staff Activities

Congratulations to faculty members on their recent promotion

RS is pleased to announce that Dr Andy Cheng will be promoted to Professor and Dr Stanley Winser will be promoted to Associate Professor with effect from 1 July 2022. We would like to congratulate them on their success, which has been achieved through their diligence, perseverance, and unwavering efforts.



Professor Cheng is a registered occupational therapist (HK and UK), chartered safety and health practitioner, certified work capacity evaluator, and registered driving assessor. He received his professional training in occupational therapy at former Hong Kong Polytechnic. He got his bachelor's degree in Health and Safety at Curtin University and completed his MPhil and PhD in the Department of Orthopaedics and Traumatology, Faculty of Medicine, Chinese University of Hong Kong, and certificate course in big data analysis from Massachusetts Institute of Technology, USA. He was the first Asian recipient of Canadian Institutes of Health Research Scholarship for postgraduate training on the Work Disability Prevention CIHR Strategic Training Programme at Université de Sherbrooke and University of Toronto.

Prof. Andy Cheng

Professor Cheng was the President of the Hong Kong Ergonomics Society, Council Member of the International Ergonomics Association, and Member of Hong Kong Occupational Therapists Board. Currently, he is Treasurer of the Chinese Association of Ergonomics Societies, Associate Editor of American Journal of Occupational

Therapy, Academic Editor of Occupational Therapy International, Editorial board of Journal of Occupational Rehabilitation, Approved Assessor for persons with disabilities under the Minimum Wage Ordinance by Labour Department, Specialist of the Hong Kong Council for Accreditation of Academic & Vocational Qualifications, and Vice Chairperson of Hong Kong Occupational Therapy Association. Prior to joining the Department, he worked as an occupational therapist in public hospitals and then ran his own private rehabilitation centres. He has extensive experience in hand rehabilitation and medico-legal evaluation.

Professor Cheng's research interest is centered on Work Disability Prevention and Management for injured workers, occupational drivers, and cancer survivors. His research agenda is organized around three core questions: 1) What are the human factors resulting in occupational injury? 2) What are the risk factors in delayed return-to-work (RTW)? and 3) How different RTW interventions, including both rehabilitative and administrative strategies, can promote timely and safe RTW?

Dr Winser is Associate Professor of Physiotherapy at the Department of Rehabilitation Sciences, The Hong Kong Polytechnic University. He specialises in neuro-rehabilitation in physiotherapy. After obtaining his bachelor's degree in physiotherapy, he worked as a clinical physiotherapist for many years at the Rehabilitation Centre of the Christian Medical College & Hospital (CMCH), India, which is known to be one of Asia's best institutes for rehabilitating clients with spinal cord and traumatic brain injuries. During his study for a master's degree, Dr Winser secured the Gold Medal for the Best Performance in Neurosciences in Physiotherapy. Following his master's study, Dr Winser also worked as Lecturer in Physiotherapy at the Masterskill University, Malaysia for three years. He completed his doctoral degree at the University of Otago (UoO), New Zealand.



Dr Winser serves as a board member of the Hong Kong Spinocerebellar Ataxia Association (HKSCAA), the Editor of *IMPACT*, a quarterly newsletter of the Department of Rehabilitation Sciences at The Hong Kong Polytechnic University and a reviewer for many peer-reviewed journals. He has special interest and inclination towards

University, and a reviewer for many peer-reviewed journals. He has special interest and inclination towards teaching and research. He received the Special Recognition Poster award for Neurology section at the American Physical Therapy Association Conference in North Carolina, USA in 2014. Dr Winser's key research focuses on the economic evaluation of balance interventions and falls prevention programmes for people with neurological disorders and the elderly. He has published in many international journals, including *Clinical Rehabilitation, Disability and Rehabilitation, Clinical Journal of Pain, and Physical Therapy.*

Highlights of RS event



Visit by Dr Hon David Lam Tzit-yuen, LegCo Member (Medical and Health Services) (5 May 2022)



Weekly Flag-Raising Ceremony – RS Session (23 May 2022)



Welcome to our NEW faculty members



Ms Anna Bella SUEN Professor of Practice (PT)

Ms Anna Bella Suen graduated with a bachelor's degree in physiotherapy and obtained her master's degree in health care (physiotherapy) from The Hong Kong Polytechnic University. She further excelled herself and obtained a fellowship from the Australasian College of Health Service Management and the Hong Kong College of Health Service Executives.

Ms Suen has extensive clinical experience in different fields including cardiopulmonary rehabilitation, fast-track physiotherapy service in the Accident and Emergency Department and work-related injury rehabilitation. She had been involved in various occupational safety and health projects at hospitals under the Hospital Authority, and was Case Manager of Occupational Medicine Care Service in New Territories West Cluster. Ms Suen was Senior Physiotherapist in the Physiotherapy Department of Tin Shui Wai Hospital, New Territories West Cluster, and was a member of the commissioning team of Tin Shui Wai Hospital from 2015-2017. Before joining PolyU, she was Manager of the Occupational Safety & Health Team and Staff Health Team in Hospital Authority Head Office.

Ms Suen's clinical specialties are work-related injury rehabilitation, occupational safety and health, cardiopulmonary rehabilitation and health service management. At present, she is an Executive Committee Member of the Hong Kong Physiotherapy Association.

Dr Li Jingjing Kim obtained his bachelor's and master's degrees in Chinese medicinal science from the Southwest Jiaotong University (SWJTU) and the University of Macau (UM), respectively. He received his PhD from the Department of Pharmacology and Pharmacy, The University of Hong Kong, in 2020. Before joining PolyU, he received a postdoctoral fellowship at Li Ka Shing Faculty of Medicine, The University of Hong Kong between 2020 and 2021.

Dr Li is interested in using different cells and animal models to study the underlying pathological mechanisms of angiogenesis in different diseases, such as ischemic stroke, Parkinson's disease, Alzheimer's disease and cancers. He is also interested in identifying the pharmacological and therapeutic properties of novel constituents derived from Traditional Chinese Medicine (TCM), particularly those that can be used to regulate angiogenesis in the above-mentioned diseases. During his PhD study and postdoctoral training, Dr Li has discovered several promising bioactive compounds from TCM, which could be used as complementary and alternative medicine for the treatment of cardiovascular diseases, neurodegenerative diseases and cancers. He has so far published more than twenty scientific papers in top-ranked peer-reviewed journals in the fields of pharmacology as well as integrative and complementary medicine.



Impact

Dr Kim LI Research Assistant Professor (Traditional Chinese Medicine)

Dr Li is currently a member of the young editorial board of the journal *Military Medical Research* and a review editor of several other scientific journals, including *Frontiers in Pharmacology, Phytomedicine, Chinese Medicine, Biochemical Pharmacology, and Chinese Journal of Natural Medicines*. His current research projects focus on investigating the role of vascular abnormality in the pathological process of neurodegenerative diseases (e.g. Parkinson's disease and Alzheimer's disease), as well as developing effective strategies (e.g. vascular normalization therapy) for the treatment of neurodegenerative diseases and cancers.



Dr Meiqi XIN Research Assistant Professor (Public Health)

Dr Meiqi Xin (Maggie) obtained her bachelor's degree in preventive medicine from Sun Yat-sen University. She further received PhD and postdoctoral training in public health at The Jockey Club School of Public Health and Primary Care of The Chinese University of Hong Kong.

Dr Xin is dedicated to applying theoretical and methodological advances in health communication and health psychology to develop evidence-based health promotion interventions and translate them into sustainable and scalable practices. Her main research areas include health behaviours and health promotion, health communication, health psychology, and epidemiology. She has rich experience in leveraging persuasive communication techniques to resolve people's resistance to health messages and thus effectively change their health behaviours. Her PhD thesis is a GRF-funded randomised controlled trial. She led the design, implementation, and evaluation of an internet-based intervention that utilised narrative persuasion to improve HIV prevention behaviours among local sexual minority men. She is also interested in understanding how people's use of media technology shapes their health behaviours and mental health, and how people represent illness threats and self-regulate their responses.

Dr Sanchez is a biomedical scientist with international research experience in both academia and the pharmaceutical industry (Crucell, now Janssen Vaccines and Prevention, in The Netherlands and AstraZeneca in Sweden). She received her bachelor's degree in pharmaceutical industrial chemistry from the ENCB-IPN in Mexico. As an Utrecht Excellence Scholarship awardee, she completed her master's degree in biomedical sciences at Utrecht University in The Netherlands. She received her PhD degree in biological sciences from The Hong Kong Polytechnic University.

Dr Sanchez has participated in a wide variety of research projects, including those on depression, mental health, renal medicine, and viral vaccine development. As a postdoctoral fellow, she studied the crosstalk molecular mechanisms of receptor tyrosine kinases relevant to kidney pathologies in a collaborative project between the University of Gothenburg and AstraZeneca in Sweden. As a project leader, she has coordinated projects on mental health and developed digital mental health interventions in collaboration with universities in Switzerland, Hong Kong, and the Philippines.

Dr Sanchez is particularly interested in understanding the underlying molecular mechanisms of psychiatric and neurological disorders as well as the therapeutic effect of complementary and alternative medicine (CAM). Her research focuses on neurogenesis, a plasticity mechanism associated with the pathophysiology of neurological and affective disorders, and the



Dr Dalinda Isabel SANCHEZ VIDANA Research Assistant Professor (Traditional Chinese Medicine)

effect of CAM on neurogenesis using animal models. She has participated in projects evaluating the effect of single drugs, hormones, aromatherapy, traditional Chinese medicine, and social isolation on neurogenesis and its role in mood and affective disorders. She has presented her work at international conferences and published in peer-reviewed journals such as *Neuroscience, Frontiers in Neuroscience, Frontiers in Behavioral Neuroscience, Evidence-Based Complementary and Alternative Medicine*, and successfully obtained funding to conduct research on renal medicine and mental health.



The 15th International Convention on Rehabilitation Engineering and Assistive Technology

Enabling All with Assistive Technology



26 - 29 August 2022 The Hong Kong Polytechnic University



https://www6.rs.polyu. edu.hk/icreate/

