香港中文大學
The Chinese University of Hong Kong

研究及知識轉移服務處
Office of Research and Knowledge Transfer Services

Knowledge Transfer

Annual Report 2023/24

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1 Executive Summary

Leading international information and analytics company Elsevier's recent analysis of megatrends driving research impact in the GBA provides evidence for CUHK's profound contributions to specialized fields of vital importance for the region's economic competitiveness. This testament to CUHK's focus on impactful research and knowledge transfer is further reinforced by its remarkable achievements in securing funding from the prestigious Research Impact Fund (RIF) of the Research Grants Council (RGC). For two consecutive years, CUHK has been awarded the highest RIF funding of any university in Hong Kong. CUHK also ranked among the top 50 universities worldwide in the Times Higher Education Impact Rankings 2024, jumping 39 places from the previous year. This further testifies to CUHK's success in developing innovative sustainable development solutions for the common good.

CUHK's prowess in completing the 'research-incubation-commercialization' continuum is further exemplified by its outstanding performance in the newly launched RAISe+ program. With the highest number of successful applicants among local universities, CUHK has demonstrated its exceptional strengths in transforming and commercializing its R&D outcomes, as evidenced by the many thriving enterprises born from its innovations. To expand the CUHK entrepreneurship ecosystem and network , the new CUHK Shanghai Centre has been established as another important liaison hub to provide comprehensive one-stop support services for translating and commercialising scientific research outcomes in the Yangtze River Delta Region. Furthermore, CUHK Innovation Limited has begun to provide early-stage funding to promising CUHK start-ups, catalysing their growth and success in the competitive landscape of innovation and entrepreneurship.

Expanding its impact frontier, CUHK is collaborating with China National Space Administration to strengthen cooperation between Hong Kong and Chinese Mainland in the field of earth observation and promote the development of aerospace technologies. The CUHK Institute of Space and Earth Information Science (ISEIS) is also collaborating with the Chinese Academy of Sciences, the China Aerospace Science and Technology Corporation, and various HK government departments in projects related to smart cities, carbon neutrality and sustainable development. One of these is the first earth observation satellite construction project funded by the HKSAR government.

In conclusion, CUHK's relentless pursuit of impactful research and knowledge transfer activities, as evidenced by its recognition, funding, and ground-breaking initiatives, clearly demonstrates that the sky is not the limit for its innovation and knowledge transfer endeavours. As CUHK continues to push the boundaries of the possible, its contributions to the GBA and beyond will undoubtedly continue to reverberate, advancing knowledge and making our world a better place to live in.

2 Driving Innovation and Impact through Collaboration and Institutional Support

2.1 Partnerships and Developments

New CUHK Shanghai Centre as a Liaison Hub in the Yangtze River Delta to Drive Strategic Development

Along with the CUHK Beijing Centre, the new CUHK Shanghai Centre is an important liaison hub which provides comprehensive one-stop support services for translating and commercialising scientific research outcomes in the Yangtze River Delta Region. In addition to being a gathering point for CUHK students and alumni to engage in social exchanges, entrepreneurial ventures, internships, professional training, and academic activities, the Centre will carry out collaborative projects with strategic partners, either research and industrial, and establishing new innovation consortiums in the Region. The InnoPort at the CUHK Shanghai Centre will also support CUHK's interdisciplinary research teams by strengthening their partnerships the industry in the Region, achieving the 'research–incubation–commercialisation' continuum.

Lift-off of CUHK Innovation Limited

CUHK Innovation Limited (CUIL), a subsidiary company of CUHK dedicated to providing early-stage funding and support to promising CUHK start-ups, entered full operation. CUIL is dedicated to providing early-stage funding to promising CUHK start-ups, catalysing their growth and success in the competitive landscape of innovation and entrepreneurship. It provides not only funding support for innovation projects but also a platform for inventors and investors to network, explore potential partnerships and exchange ideas. Since its official launch, CUIL has been working on establishing and expanding a joint investment platform. This platform is a collaboration with experienced venture capitalists, venture builders, and family offices, and seeks to drive innovation and entrepreneurship. Eighteen active institutional investors have joined the platform as co-investment partners. This diverse group of investors brings capital funding, extensive experience, and valuable connections in different fields. The platform has greatly enhanced the CUHK innovation and entrepreneurship ecosystem through the addition of considerable connections and resources.

CUIL is actively reaching out to research teams to inquire about their status, explore potential support, and build the entrepreneurship ecosystem. This includes promoting the visibility of CUHK spin-offs and actively participating in various startup events. Moving forward, the company will continue to collaborate with institutional and professional investors to seek potential investment opportunities and offer guidance to startup founders.

Additionally, the company will utilise its partnerships with various stakeholders in the ecosystem to equip entrepreneurs with the essential resources and opportunities they need to succeed. This involves organising impactful events, workshops, and conferences that bring together industry leaders, academics, and the startup community to promote a flourishing startup ecosystem.

Applying Breakthrough Therapy in Public Hospitals to Save Lives

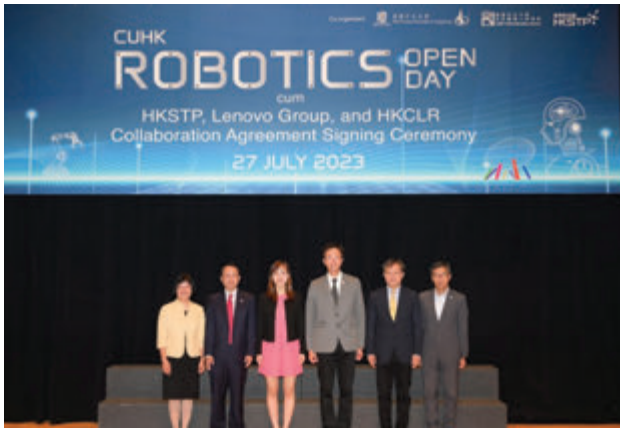
Clostridioides difficile infection (CDI) is a common hospital-acquired infection worldwide. Recurrence and mortality rates have been reported to be as high as 35% and 40%, respectively. Faecal microbiota transplantation (FMT), which involves taking healthy bacteria (microbiota) from the faeces of a carefully screened donor and transferring them to the colon of the recipient, has emerged as a useful approach to treating patients with refractory or recurrent CDI. Some hospitals in Europe and the US have offered FMT in the past few years. However, the numbers of FMT procedures performed remain limited, and success rates in treating CDI vary from 40% to 80%. There is also a lack of well-defined standards for donor screening, stool storage, best practice protocols and long-term safety profiles.

Microbiota I-Center (MagIC), one of the CUHK InnoHK Centres, has developed a novel technology, MOZAIC™ (Multi-kingdom OptimiZAtIon for microbiota Consortia), to improve clinical outcomes of FMT. MOZAIC™ is an analytical platform driven by machine learning analysis, utilising over 800 FMT datasets and over 2000 metagenomic sequenced samples to dissect the complex network of multi-kingdom microbiota and their genes and functions, so as to facilitate personalised donor selection and donor-recipient-matching that lead to improved FMT outcomes and better long-term safety. The success rate is over 90% in patients with recurrent CDI. In addition, patients' median survival has doubled from 2.1 to 4.7 years.

This patented technology has been adopted by the local health authority, the Hospital Authority, to provide a territory wide FMT service to patients in public hospitals in Hong Kong. The collaboration not only helps the public healthcare system cope with the growing number of CDI cases, but also has the potential to reduce the frequency and duration of hospitalisations in these patients, hence allowing for more efficient resource utilisation. It is a successful example of CUHK InnoHK Centres delivering high quality R&D outcomes, translating their research excellence into practicable applications that contribute to a better life for us all.

Advanced Robotics Improve Human Life and the World

Robotics is an interdisciplinary engineering subject with numerous applications in areas such as manufacturing, services, health care and space. After the Internet, robotics is widely considered as the technology with the greatest potential for changing the way we live. As one of the strategic initiatives of the University, CUHK T Stone Robotics Institute (CURI) strives to develop cutting-edge technologies in robotics and to become a global leader in the special robotics areas that fit its strengths and local needs. On 27 July 2023, CURI joined hands with Hong Kong Science and Technology Park Corporation (HKSTP) to organise the CUHK Robotics Open Day, showing off its leading innovations to the public.



More than 30 cutting-edge robotics projects, including autonomous asset inspection and management technologies, nanorobot swarm systems for medical intervention, and innovative last-mile delivery solutions, were showcased in the event. The event was a great opportunity for CUHK to showcase and celebrate its work, and for visitors to learn more about the wonderful possibilities of robotics.

The event also involved the signing of a collaboration agreement between HKSTP, Lenovo Group and Hong Kong Centre for Logistics Robotics (HKCLR),

one of the CUHK InnoCentres, to foster and incubate young talents in robotics and AI technologies. The collaboration is another example of translation of useful research into commercial success.

Partnership Sets Stage for AI in Public Service

The Centre for Perceptual and Interactive Intelligence (CPII), one of the CUHK InnoHK Centres, is collaborating with Radio Television Hong Kong (RTHK) to integrate artificial intelligence into public broadcasting services. The collaboration is a major step towards translating advanced research into practical, real-world applications.

CPII is set to deploy its cutting-edge AI technologies in speech and language intelligence, which are adept in processing and analysing textual data, as well as recorded speech, on the extensive data available from RTHK. These technologies can proficiently execute real-time speech-to-text and text-to-speech translation, and enable public broadcasting services and society to benefit from the CUHK InnoHK Centre's advanced research and technology.

CPII's commitment to developing culturally informed AI technologies tailored to Hong Kong's unique trilingual context, with RTHK providing data that will trilingual context, with RTHK providing data that will enhance AI performance. This collaboration exemplifies the synergy between media and research. It will contribute to Hong Kong's public services, and have a significant social and cultural impact.

Belt and Road Alliance for Traditional Chinese Medicine

Initiated by CUHK, the Belt and Road Alliance for Traditional Chinese Medicine was established in November 2023. Representatives of the National Administration of Traditional Chinese Medicine, HKSAR government officials, heads of universities and research institutes, and industry leaders converged to discuss the modernization strategies of traditional Chinese medicine (TCM). The Alliance is a conglomerate of industry, academic, and research institutions in the Belt and Road regions. Its founding members include 20 provincial-level traditional Chinese medicine universities and institutes and 12 established enterprises in the field. Bringing together parties in government, industry, academic, and research sectors devoted to the development of TCM in Belt and Road countries and regions, the Alliance aims to nurture talents and promote modernization and international cooperation.

New STEM Labs to Bring Social Benefits

CUHK has received generous support of HK$49.7 million from The Hong Kong Jockey Club Charities Trust to establish five Jockey Club (JC) STEM Labs. These labs represent a significant investment in developing STEM talent in Hong Kong and leveraging innovative science and technology for social impact. For example, the JC STEM Lab of Stem Cells and Regenerative Medicine is led by Prof. Stephen Dalton from the Department of Biomedical Sciences. The lab is using proprietary stem cell technology to create a new generation of therapies to treat type 2 diabetes, pre-diabetes and obesity.

Each Lab focuses on a unique research area and is set to deliver impactful discoveries and innovative outcomes that will not only increase Hong Kong's competitiveness in the long run, but also emerge as global breakthroughs that will bring heightened social benefits for the community at large.

Strengthen Cooperation Between Hong Kong and Chinese Mainland in the Field of Earth Observation and Promote the Development of Aerospace Technology

CUHK's Institute of Space and Earth Information Science (ISEIS) signed a memorandum of understanding (MoU) with China National Space Administration's Earth Observation System and Data Center to strengthen cooperation between Hong Kong and Chinese Mainland in the field of earth observation and promote the development of aerospace technology. The two parties have conducted extensive communication and coordination, reaching broad consensus on various aspects of collaboration. This includes the 'CUHK Science-1 Satellite' project and constellation construction, satellite data sharing and exchange, international cooperation and other related areas. Both parties will deepen their collaboration, expand the scope of cooperation and accelerate the establishment of the Hong Kong Aerospace Data Application Center at CUHK.

Following the signing of the MoU, ISEIS held a ceremony to launch the project 'Development of CUHK Satellites and Integrated Remote Sensing Technologies for Near Real-time Landslide Monitoring'. This project is the first earth observation satellite construction project funded by the HKSAR government, and aims to independently develop and launch CUHK's first satellite, which will be used to conduct research on smart cities, carbon neutrality and sustainable development.

2.2 From Innovations to Successful Enterprises

RAISe+

Launched in October 2023, the Research, Academic and Industry Sectors One-plus Scheme (RAISe+ Scheme) aims to unleash the potential of local universities in transforming and commercialising R&D outcomes, and facilitate collaboration between the government, industry, university and research sectors. The RAISe+ Scheme will fund, on a matching basis, research teams in the eight UGC-funded universities that have the potential to become successful start-ups. Up to HK$100 million in funding support will be provided to each project that is approved.

CUHK's research teams have been granted funding for seven projects. This was the highest number of awards made to any local institution. This achievement highlights CUHK's dedication to pioneering research and its commitment to nurturing industry collaborations, and is a testament to CUHK's global leadership in medicine, computer science and engineering.

The CUHK-led projects cover a diverse range of innovative areas from advanced engineering, biomedical to biotechnology, demonstrating a highlevel of technology readiness that enables the translation of research outcomes into downstream product development. Their success clearly showcases the University's powerful industry links and translational research capabilities. Aligning with the goal of the 14th Five-Year Plan to establish Hong Kong as an international innovation and technology hub, the University is poised to make substantial contributions to Hong Kong's knowledge-based economy and create opportunities for talent development.

CUHK Innovation Summit

CUHK Innovation Limited (CUIL), in collaboration with the Office of Research and Knowledge Transfer Services (ORKTS), hosted the inaugural CUHK Innovation Summit in April 2024, which fostered connections and facilitate collaborations between CUHK start-up companies and the investment community. The summit, on the theme 'Igniting Innovation – from Insights to Impact', facilitated networking between venture capitalists and academics and created valuable opportunities for collaboration and knowledge exchange between the two groups.

CUIL has signed MoUs with nine new investing partners. CUIL has also formed an Investment Committee led by Ms Cindy Chow, Executive Director and Chief Executive Officer of the Alibaba Hong Kong Entrepreneurs Fund. The committee includes investors from prominent institutional investment backgrounds, half of whom are CUHK alumni.

At the event, a panel discussion shared insights on the application process for the first cohort of RAISe+ applicants. The conversation revolved around the theme of 'Unlocking Capital: Bridging the Gap between Groundbreaking Research and Applications that Benefit Society'. The knowledge sharing and networking sessions allowed more than 10 teams of CUHK academics to showcase their innovative solutions to social and scientific challenges to a crowd of over 20 investment firms and organisations. With over 160 individuals in attendance, the CUHK Innovation Summit provided an outstanding opportunity for academia and the business world to converge, fostering public-private collaboration in building a better society. The event exemplifies CUHK's commitment to driving innovation and entrepreneurship forward.

3 Developing an Innovative and Entrepreneurial Culture

3.1 Innovation & Entrepreneurship Ecosystem

CUHK Innovation Day 2023

CUHK Innovation Day highlighted the achievements of scholars, students and alumni in industry-academia-research collaboration. The event focused on the development of the campus innovation ecosystem and featured over 40 exhibitors, who showcased innovative projects from CUHK InnoHK centres, CUHK start-ups and other entrepreneurial ventures. The day included an exhibition, an inter-professional symposium, talks and an Elevator Pitch Competition.

A new event this year, a live broadcast of an exhibition tour, introduced CUHK's start-ups and various innovative inventions to political, industrial, commercial and academic online guests from Beijing and Shanghai. It took place with the valuable support of the National Torch Academy of Innovation and Entrepreneurship (ZGC) and the InnoPort@Shanghai (CUHK Shanghai Centre). More than 50 local secondary school students took part in another new event for this year, the Exhibition Guided Tour. The tour is designed to promote and enhance young people's understanding of and interest in innovation.

At the event, CUHK also announced that CUHK Innovation Limited, a company dedicated to providing early-stage funding and support to promising CUHK start-ups, was now in full operation. For details of CUHK Innovation Limited, please refer to Section 2.1.

TSSSU

With a total of HK$ 16 million funding support (HK$ 8M for TSSSU-O fund; HK$ 8M for TSSSU+ matching fund) from the Innovation and Technology Commission, 30 CUHK technology startups (23 TSSSU-O teams and 7 TSSSU+ teams) were awarded funding to launch or continue their start-ups in this year. These TSSSU companies undergo startup training through our ecosystem to build their startups. 30 startups including PI and TSSSU companies, have received HK$ 1.7 billion worth of external investments.

CUHK TSSSU Teams applied to several pre-incubation and incubation programmes at HKSTP and Cyberport to secure additional funding. These programmes offer financial and valuable support, including mentoring services, investment and partnership opportunities, and access to a start-up network. These teams would be able to leverage the Incubators' resources to make further progress in their startup journey.

Pre-Incubation Centre

This year, our Pre-Incubation (PI) Centre admitted a total of 26 teams out of 63 applicant teams in two batches. The teams were selected by a vetting panel of internal and external professional assessors. The Centre has also been working with HKSTP closely to launch the Co-Ideation Programme. This programme could offer a maximum of HK$ 130K start-up seed funding for outstanding PI teams to commercialise their technologies and implement innovative business models for profit and for the benefit of society.

IdeaBooster Fund

IdeaBooster Fund provides support to translational research projects from an early ideation stage. Eligibility for support from the fund has been expanded to include full-time CUHK research, teaching staff and postgraduate students. The vetting panel agreed on the funding amount based on a combination of four criteria: Innovativeness and Creativity, Implementation Feasibility, Potential for Impact and Commercialization and Market Feasibility. This year, 20 out of 56 applications were shortlisted and nominated by the vetting panel for IdeaBooster Fund 2024/25. The teams awarded funding can use the money to bring their idea to a proof-of-concept stage. ORKTS will monitor their progress and provide necessary support for these potential innovations.

Entrepreneur Day (E-Day) 2023

CUHK hosted Entrepreneur Day 2023, a two-day event aimed at providing a platform for alumni, teachers, students, industry representatives and investors interested in entrepreneurship. The event featured a wide range of activities, including entrepreneurship exhibitions, interactive displays of entrepreneurial projects, entrepreneurship competition, and one-to-one business consultation sessions. The event showcased nearly 50 start-ups from alumni, professors and students, including successful unicorns like SenseTime and SmartMore. The second day of the event included a joint session with the Shanghai Alumni Association, encouraging entrepreneurs in Hong Kong and Shanghai to interact and share their valuable experiences.

3.2 Entrepreneurship Education

EPIN

The CUHK Minor Programme in Entrepreneurship and Innovation (EPIN) fosters an entrepreneurial mindset via an interdisciplinary curriculum and extra-curricular activities. The programme focuses on ideation, realization and commercialization. During the past eight years, EPIN has attracted over 1000 course enrolments and seen around 50 successful minors.

Partnership with local Innovation and Technology Companies

EPIN follows the principle of 'Learning Through Practice' through project-based learning experiences and collaborations with the Project Launcher Programme at HKSTP, where participants work on sponsored projects, as well as with Cyberport. Students act as consultants to review and improve start-up business models.

Creativity @CUHK Series

EPIN's Creativity @CUHK Series offers informal education workshops on topics like music, education and retail, attracting over 100 participants. This included the workshop 'Creativity by Beer' with guest speaker Mr. Kenneth Ho, co-founder of Hidden Gem, who shared details of his entrepreneurial journey in the craft beer industry.

Maker Workshop Series

Since 2018 EPIN has collaborated with the Maker Space at the Learning Garden of the University Library to run its Maker Workshop Series. These workshops aim to equip students with essential skills for prototype production, including 3D printing, video shooting, and VR shooting. With over 100 participants, the hands-on training and practical knowledge provided in the workshops empowered students to effectively utilize these technologies and bring their ideas to life, with notable workshops such as 'Make your own Wooden Coaster by Laser Cutting' .

CUHK Data Hack 2024 - Data Solutions for Social Good

EPIN, in collaboration with CUHK departments, organized a Hackathon on 'Data Solution for Social Good' in March. The event focused on the United Nations' Sustainable Development Goals #3, #9, #11 and #13, and brought together over 60 students and staff who worked tirelessly for 48 hours. The top-performing teams went to ANTs, Five Gays, and Social Vision Pro.

From Classroom to Workplace

EPIN offers internship opportunities through collaborations with Cyberport, HKSTP, CUHK Alumni Entrepreneurs Association and CUHK-funded start-ups. Students gain experience and earn course credits.

Study Trips

As international borders have reopened, EPIN has resumed organizing study trips, providing students with diverse overseas opportunities. Destinations have included the prestigious University of Cambridge in the UK as well as visits to industry leaders such as Huawei in Shenzhen and Dongguan. These study trips offer students firsthand exposure to different entrepreneurial ecosystems and invaluable insights from international experts. By immersing themselves in global business environments, students broaden their perspectives and enhance their entrepreneurial mindset.

Deep-Tech Lab

Deep-Tech Lab (DTL) is an incubation program by the Centre for Entrepreneurship (CfE) that aims to enhance the commercialization of science in order to make an impact on business and society. The participating ventures in this program are characterized by their founders having STEM doctorates or prior experience in university research labs. These ventures are focused on commercializing cutting-edge scientific discoveries made by their founders. They already possess, or are in the process of obtaining, valuable intellectual property rights. They have also developed working prototypes or proofs of concept, and are seeking to raise their initial seed funding, with their projects at technology readiness levels of 4 or higher.

Every admitted venture has access to practical and measurable guidance from investors, business leaders, industry experts, technical mentors, and business partners. Unlike other programs, the DTL program takes an objective-based approach. Usually 3 or more mentors will work as a team to nurture the admitted ventures.

Rather than a mentor dictating a direction for the venture in a one-on-one mentoring design, the peer mentors debate their views and then prioritize the most important things to increase value and de-risk the venture quickly within the incubation period. Meetings will also be held for all the admitted ventures, mentors, industry experts and partners. Mentors of each venture will report the progress and upcoming plans on the stage to receive constructive suggestions openly.

3.3 Innovation and Entrepreneurship Competitions

Competitions offer an invaluable platform for students to learn, flex their creative muscles and inspire each other throughout the process. Through the entrepreneurship competitions on campus, students are equipped with the critical skills to compete locally and globally with confidence.

Hong Kong Techathon+ 2024

'Hong Kong Techathon+ 2024' is an inter-university platform for programmers, software developers, engineers, designers, marketers and entrepreneurs to collaborate and learn to pitch new business ideas for seed funding and incubation support. The physical award presentation and closing ceremony were held in January 2024. Nine teams of CUHK students (AISight, Pivot BME, Sixth Sense, FACCI, HelloMemories, OAO, Mindplus AI, Eleuto and RiceFort) won Two Championships, One 1st runner-up and Two 2nd runner-up and four Merit awards in the categories 'Trusted AI & Data Science, 'Sustainability & ESG' and 'Digital Economy' respectively.

The Vice-Chancellor's Cup of Student Entrepreneurship

The 17th Vice-Chancellor's Cup of Student Entrepreneurship (VCCE) held in April 2024 gathered over 50 teams who were transforming their business ideas into reality. The competition offered networking events and consultations. 'Wearable Robot for Load Transportation' won the championship title. The winning team developed different back-support exosuits and validated their effectiveness in reducing the physical burden by nearly a third during manual lifting tasks. First runner-up RiceFort is a green material science team based in Hong Kong, dedicated to addressing climate change through the development of board products and design solutions using rice husks as the primary material. The second runner-up was JobReady, a revolutionary job-matching and all-in-one human resource management platform designed to streamline and enhance the employment process in low-skill industries.

The National & Greater Bay Area Youth Innovation & Entrepreneurship Competitions

Student representatives from CUHK received a total of seven awards at the National & Greater Bay Area Youth Innovation & Entrepreneurship Competitions – Hong Kong Regional Award Ceremony 2023: three gold prizes, one silver prize and one bronze prize in the 9th China International College Students' "Internet+" Innovation and Entrepreneurship Competition; a first prize in the 10th 'Chuang Qing Chun' Guangdong-Hong Kong-Macao Greater Bay Area Youth Innovation and Entrepreneurship Competition; and a third prize in the 18th 'Challenge Cup' National College Students' Extracurricular Academic Science and Technology Contest. The various innovation and entrepreneurship competitions at the GBA and national level are excellent platforms for students to showcase their research outcomes and entrepreneurial ideas, laying the foundation for them to become future innovation leaders.

National Challenge Cup China University Student Innovation and Entrepreneurship Competition

The Hong Kong University Student Innovation and Entrepreneurship Competition is a territory-wide competition which has been running since 2015. Each year, winning teams may be selected to represent Hong Kong in national competitions, e.g. the 'Challenge Cup'. This year, a record number of 470 projects from 21 tertiary institutions participated in the competition. After two rounds of rigorous competition, student representatives from CUHK received a total of nine awards.

4 Technology Transfer and Commercialisation

4.1 Highlights of Intellectual Properties (IP) Management Outputs and Achievements

IP protection is integral to cultivating a vibrant innovation system at the University. This year CUHK has continued to fuel innovation with its 'inclusive strategy' enabled by innovative funding schemes. In 2023–2024, CUHK inventors made 122 new invention disclosures, while a total of 537 and 349 patent applications were filed or granted in different jurisdictions around the world. The University also granted 56 IP licenses to local and overseas companies, and these grants brought in licensing income of HK$91,702,429 during the year.

In 2023/24, we have seen another remarkable high number of innovation output facilitated by the University's comprehensive IP support. Our expanded patent funding strategy has motivated and supported new or less-experienced inventors to pursue IP protection for their research work. By empowering a new generation of inventors who might have previously been hesitant to file patents, we managed to diversify and sustain the university's patent pipeline by engaging a broader range of researchers. Such inclusive approach has inspired innovation from diverse fields, from the traditional 'tech-based' faculties to 'non-tech' domains such as arts, social sciences, and humanities. The University's streamlined IP support has also contributed to the development of a robust and well-rounded Innovation and Entrepreneurial Ecosystem at CUHK by enabling CUHK inventors to safeguard their innovations at early stage, achieve a competitive advantage in the market and attract potential investors and partners. Our strong IP position has allowed researchers to compete for and secure prestige government grants for innovation and entrepreneurship in 2023/24.

4.2 IP Workshop

Tech Transfer Bootcamp was organized to cover a number of key skills and issues, particularly those important to the university and research organizations. The essential terms of various Tech Transfer agreements such as NDA, MTA, Research Agreements and License Agreements were also reviewed. The full-day workshop attracted a number of technology transfer professionals and research scientists, and the participants received certificates of completion at its close.

4.3 Research Contracts and Agreements

University collaborations with external parties from academia, industry and elsewhere are crucial for facilitating knowledge transfer, accessing complementary capabilities, commercializing research outcomes, securing additional resources, and ensuring real-world relevance, ultimately enabling the advancement of research and the creation of innovative solutions that benefit society. The University has demonstrated its commitment to fostering research collaborations and knowledge transfer by concluding 1,066 contracts valued at over HK$350 million. These contracts cover a wide range of research areas across faculties, allowing researchers to pursue interdisciplinary work and apply their expertise to new fields. The contracts also encompass various types of collaborations, including material transfer, collaborative research, clinical trials and consultancy services, reflecting the diverse needs of the research community.

4.4 Innovation and Technology Commercialization Series

A series of seminars and webinars were organized to equip CUHK researchers with the necessary knowledge to translate their innovative ideas into tangible products. For example in the seminar 'Market and Registrations for Medical Devices in the US, EU & ASEAN', Mr Wu Qilong, a highly regarded industry expert renowned for his profound knowledge and extensive experience in the registration processes of medical devices worldwide,provided exclusive insights into the regulatory procedures in the US, EU, and Southeast Asian countries, particularly Singapore, Thailand and Indonesia. The webinar 'Regulations and Registrations for New Drugs in China' featured Dr Gao Linyan, an industry expert in R&D, manufacturing, quality control, and registration of innovative drugs. Dr Gao shared her exclusive knowledge and experiences, offering a comprehensive understanding of the registration processes for new drugs through the National Medical Products Administration (NMPA). In another event, Ms May Zhou, an industry expert who holds the RAC-Device certificate from the Regulatory Affairs Professionals Society (RAPS), and is one of the few professionals with this certification in China, shared her invaluable knowledge and experiences regarding the regulatory requirements and procedures involved in registering new medical devices in China.

The series was invaluable for CUHK staff and students, equipping them with essential knowledge for the pathway of commercializing biotechnology research.

4.5 Innovation Creating Impact Beyond Academia

Speech and language processing: finding their voice again

Neurological diseases can make communication by speech a struggle for many. When the muscles needed for speech become weak or hard to control, those affected begin to slur their words. This disorder is called dysarthria. Treatment is difficult because there is no body of relevant research in the Cantonese language outside Hong Kong to draw upon. Prof. Helen Meng Mei-ling and Prof. Patrick Chun Man Wong have been working together for more than a decade on speech and language processing. While Professor Meng deals with the digital and AI-related aspects of their projects, Professor Wong brings neuroscience and linguistics expertise in a cross-disciplinary approach to the challenge.

Although databases for dysarthric patients are plentiful in the English language, no publicly available equivalent yet existed for Cantonese. The professors, together with other CUHK colleagues, remedied this by carefully curating a selection of stimuli, the length of which range from single words to paragraphs and even full conversations in Cantonese. This allows them to gather data on the enunciation of certain words and vowels by dysarthric patients, as well as the rhythm of sentences they utter. They have also been able to adjust their system so that it automatically translates dysarthric speech into normal speech, a predictive process on which Professor Meng has brought to bear her work in AI.

With their teams, Prof. Wong and Meng have also done MRI experiments, with older adults at different cognitive levels as subjects, hoping to isolate the features of dysarthric decline by looking into how those affected might understand language or express themselves. They are also looking at how to support younger patients in language acquisition, and have developed an AI-based system that can accurately predict the progress of babies' language skills.

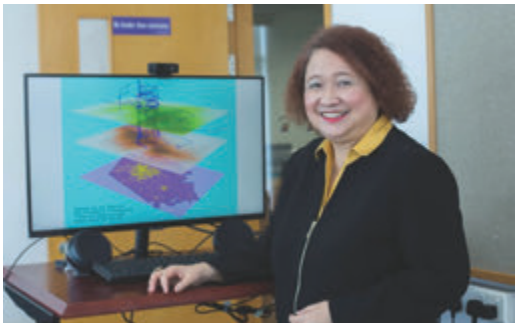
Applied geography research solve real-world problems

The rapid development of geographic information systems (GIS) and other technologies in the past few decades has greatly expanded the reach of applied geography. Prof. Kwan Mei-po, internationally recognised for her ground-breaking work that advanced GIS techniques, is dedicated to finding innovative ways to accurately assess people's environmental exposures and the impact on their health, with an emphasis on capturing individual experience.

In one of her major projects in the United States, Prof. Kwan used GIS data, spatial statistics and interactive mapping to identify HIV concentration hotspots in Tijuana, a city at the US-Mexican border plagued by violence related to drug cartels and the sex trade. In her field work, she collected and mapped the narratives of female sex workers to understand their working conditions and visualised their fears. The project culminated in the government's proactive health intervention, which included the provision of HIV testing and education to the affected communities.

Now as Director of the Institute of Space and Earth Information Science (ISEIS) of CUHK, Prof. Kwan is committed to developing the application of innovative GIS methods in researching environmental health, transport and urban planning in Hong Kong and mainland China. Her team is conducting two projects on individual environmental exposure and health impact assessment, using Global Positioning System (GPS) tracking and real-time mobile sensing technology. One project focuses on noise and air pollution and their health effects in Hong Kong, Chicago, Beijing, Shanghai and Guangzhou. The other project, focusing on Hong Kong, considers more environmental factors, including green and blue spaces (rivers, lakes and seas), light at night, air pollution and noise, and comprehensive health outcomes including physical health, mental stress and sleep disturbance.

The team's mobile sensing technology can sense in real time the exposures that individuals experience every second, momentary subjective perceptions and psychological responses in real life scenarios, enabling more accurate assessment. The team has found that mobility-based exposure to green space is significantly higher than residence-based exposure, and that air pollution exposure assessments based on the government's monitoring stations and the researchers' real-time mobile have significant differences. These findings suggest that policymakers should consider providing more green space in areas outside residential neighbourhoods instead, and review its biased estimates of personal pollution experience.



Recently, ISEIS has secured HK$33 million funding from the HK Government for two interdisciplinary research projects in the fields of smart traffic and satellite remote sensing.

Led by Prof. Kwan and Prof. Ma Peifeng, these projects are being conducted in collaboration with the Chinese Academy of Sciences, the China Aerospace Science and Technology Corporation, and various HKSAR government departments including the Transport Department, the Civil Engineering and Development Department, and the Lands Department.

Naturally biodegradable packaging materials help local industry comply with disposable plastic utensils regulations

Plastic bags take hundreds of years to decompose, and indiscriminate disposal of plastic bags has led to severe environmental pollution. A research team led by Prof. Ngai To has discovered that bacterial cellulose can be used as an edible food packaging film. This novel bio-based packaging material exhibits similar stretching properties to plastic bags, can degrade in the natural environment, and is harmless to humans to the extent that it is edible. This new bacterial cellulose (BC) food packaging film can provide an environmentally friendly alternative that will help the local food and beverage industry to comply with the upcoming regulations on disposable plastic tableware.

Magnetic hydrogel micromachines that combat biofilm

Biofilms are slimy films composed of microorganisms and the substances produced by them. They act as a physical barrier that protects the bacteria from antibiotics, making it difficult to completely eliminate them. Biofilms can grow on various surfaces, including medical implants such as artificial tubes inserted into the human body during treatment. Unlike body organs, which are protected by the immune system, antibiotic implants are prone to the growth of biofilms. Medical implants are often located in hard-to-reach locations in the human body, making it challenging to treat biofilm infections effectively.

The magnetic hydrogel micromachines developed by a collaborative research team led by Prof. Zhang Li can navigate the magnetic micromachine to the desired location with external magnetic fields. The mechanical force induced by the micromachines can break up biofilms physically and the chemical agents released locally can treat the biofilm more effectively.

The team is discussing suitable, significant application scenarios with their medical partners, and planning for further animal experiments with the microrobotic technology. They are also working on human-scale magnetic actuation systems compatible with clinical imaging modalities for clinical application in patients. Finally, they are working with non-medical collaborators and industrial partners to apply microrobots to environmental and industrial applications.

AI-based Automatic Retinal Image Analysis (ARIA) diagnosis depression and autism

The Centre for Clinical Research and Biostatistics (CCRB) in CUHK's Faculty of Medicine has won two gold medals and a special award at the International Exhibition of Inventions of Geneva this year for two projects featuring the AI-based Automatic Retinal Image Analysis (ARIA) technology, on autism spectrum disorder (ASD) in preschoolers and depression in adults. The first project aims to utilise innovative technology to allow children at risk of ASD to receive appropriate educational intervention programmes as soon as possible, while the other aims to raise public awareness about depression, contributing to depression prevention and management. The team has already collaborated with local non-profit organisations, kindergartens and medical institutions to recruit subjects and commence research work.

Project 1: Using ARIA to study the risk of autism and global developmental delay in preschoolers

In 2021, CCRB developed ARIA technology to assess the risk of ASD in adolescents, with a sensitivity of up to 90%. It analyses captured retinal images to identify if there are characteristics such as those related to the thinning of the retinal nerve fibre layer of the children's eyes. Researchers have recently demonstrated that the same methodology can be used in children aged 2-6 and can distinguish ASD from global developmental delay. The study included more than 28 local NGOs and educational institutions.

This project provides hope for ASD children, allowing them to be targeted with the most relevant educational intervention programme from a very young age. The project was awarded a Gold Medal with Congratulations of the Jury and a Special Award from the Korean Invention Promotion Association (KIPA) in the 49th International Exhibition of Inventions of Geneva.

Project 2: ARIA technology detects depression risk in adults

A previous CCRB study showed that ARIA can estimate the risk of depression, anxiety and stress in patients who have recovered from nasopharyngeal cancer years after completing chemoradiation therapy. The research team demonstrated in this project that psychiatric hospital patients with depression can be detected using ARIA. Because the digital approach also allows for fast, easily scalable, accurate assessment of the risk of depression in community screening and routine follow-up of patients in remission, it will make a significant contribution to depression prevention and management.

4.6 Industry Liaison Activities, Exhibitions and Business Matching Meetings

49th International Exhibition of Inventions of Geneva

This year, 31 CUHK projects were selected by an international jury of specialists to exhibit amongst 1035 inventions from 45 countries and regions at the prestigious 49th International Exhibition of Inventions of Geneva. Our projects garnered 1 special grand prize, 1 Gold Medal with the Congratulations of the Jury, 12 Gold Medals, 16 Silver Medals, and 2 Bronze Medals, reflecting the success of our knowledge transfer expertise.

Five of the 31 projects were developed under the world-class InnoHK research centres led by CUHK, which collaborate with top research institutions around the world. Another 19 innovations have been commercialized through university-supported startup companies led by CUHK researchers or become successful social enterprises.

International Invention Fair of the Middle East

The 14th IIFME (International Invention Fair of the Middle East) was organized by Kuwait Science Club under the Patronage of His Highness, the Emir of Kuwait, Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah, in collaboration with the International Federation of Inventors' Associations (IFIA), World Intellectual Property Organization (WIPO), UNESCO, and the International Exhibition of Inventions of Geneva. In total, around 150 inventions from 40 different countries were involved. This year, teams from CUHK won 6 awards, including 2 gold medals and 4 silver medals, which demonstrated the University's success in translating research and innovation into tangible benefits and outcomes.

Asia Exhibition of Innovations and Inventions Hong Kong

The 3rd Asia Exhibition of Innovations and Inventions Hong Kong showcased a diverse collection of more than 110 inventions from Hong Kong and neighboring countries and cities. This year, teams from CUHK won a total of 7 awards, including 4 Gold Medals, 1 Silver Medal and 2 Bronze Medals, in recognition of their innovations.

Think Business Think Hong Kong

'Think Business, Think Hong Kong', a signature promotion organized by the Hong Kong Trade Development Council (HKTDC) with a view to promoting Hong Kong's new opportunities and advantages to the French business community, was held at the Carrousel du Louvre in September 2023 in Paris, France. This event aims to showcase Hong Kong as a resilient business and innovation hub facilitating global businesses to capture new demands worldwide and realize business opportunities in overseas markets. It brought together business leaders from Hong Kong and France to discuss the latest developments and opportunities in Asia's new economy, sustainability in business, innovation and technology, design and creativity, and more. CUHK and its startup companies participated in this event to share their perspectives about the market potential and areas of collaboration with Hong Kong.

China International Import Expo

The 6th China International Import Expo is the world's first import-themed national-level exhibition. This year, over 3,400 enterprises from 128 countries and regions participated, including more than 280 Fortune Global 500 companies and industry-leading enterprises, and attracted nearly 400,000 visitors. During the 6-day Expo, CUHK introduced to participants the newly established InnoPorts at Beijing and Shanghai, and explored potential areas of collaboration with various stakeholders.

Asia Summit on Global Health

The 4th Asia Summit on Global Health (ASGH) is Asia s premier event on health innovation and investment. Themed "Innovation. Inclusion. Impact", ASGH gathered senior government officials and policymakers, investors, influential business leaders, financial and professional service providers and globally renowned researchers and academics to exchange insights on the development of global healthcare. With over 21,000 visitors from 54 countries attended the event, we exhibited several projects featuring 10 CUHK technology startups

HICOOL Global Entrepreneur Summit

The HICOOL 2023 Global Entrepreneur Summit is a comprehensive international talent event focusing on domestic and overseas talent entrepreneurship competitions, and has extensive international influence. It brought together outstanding talents and innovative entrepreneurial projects, attracting the participation of a large number of universities and high-tech enterprises from different countries and regions. Keynote speeches were made by CUHK's Vice Chancellor, and CUHK teams also presented and gave round-table dialogues, focusing on topics spanning from dialogues with high-level professionals, prospects of the cutting-edge scientific technologies, exploration of the sciences, and insights into investment for innovation.

Gerontech and Innovation Expo cum Summit

The 7th Gerontech and Innovation Expo cum Summit (GIES) is the largest gerontechnology public education event in Hong Kong, attracting some 37,000 visitors over four days. CUHK showcased a wide-range of inventions and projects, including health monitoring, rehabilitation equipment, mobility assistance devices and public space co-creation, to facilitate different aspects of life and address the challenges of population ageing in the digital era.

Golden Age Expo & Summit

As a pioneering event and interactive platform that propels transformative change in population ageing topics, the 8th Golden Age Expo & Summit exhibited the latest technology, innovative products and services in the ageing industry. We shared innovative ideas and experiences on ageing with over 22,000 visitors, including policymakers, corporates, NGOs and the general public.

5 Social Innovation and Community Engagement

5.1 Social Innovation and Impact Creation

As a socially responsible institution, we are committed to driving social innovation and creating meaningful change within our society. Through initiatives such as the Knowledge Transfer Project Fund (KPF) and the Sustainable Knowledge Transfer Project Fund (S-KPF), we have spearheaded a series of programmes and events designed to help our researchers translate academic knowledge into practical community projects and social ventures. By supporting researchers, students, and the broader community, our aim is to develop practical solutions that address pressing social needs.

Our dedication to fostering a robust social innovation ecosystem is exemplified by the Hong Kong Social Enterprise Challenge (HKSEC). This longstanding platform empowers Hong Kong's youth to tackle social issues through creative social entrepreneurship, highlighting our ongoing efforts to cultivate a thriving environment for social innovation.

Social Impact Academy@ORKTS: Enabling Academics to Transfer Research Knowledge into Socially Impactful Solutions

We recognize the importance of translating academic knowledge into practical solutions that address tangible social needs. The Social Impact Academy is a vital capacity-building initiative designed to equip our academics with diverse skills and knowledge required to turn socially impactful solutions into reality. It includes a series of inspirational webinars, workshops, and coaching programs that promote knowledge exchange, collaboration, and equip academics with essential skills to launch social ventures.

We have launched an online foundation course, 'Foundations of Social Business', to help academics and students transform their promising research into purpose-driven social enterprises. Led by seasoned impact investor and experienced executive coach Mr Mark Cheng, this self-paced course offers a practical foundation for researchers aiming to launch impact-focused businesses. Participants will learn key aspects such as mapping their enterprise's evolution from idea to maturity, identifying and approaching the right investors at each funding stage, quantifying and articulating their vision's social impact, managing and forecasting cash flow, and crafting a compelling business plan to attract funding. They also gain insider knowledge on launching a successful social business that transforms lives, with lessons covering every important aspect, from securing investment to effectively measuring and reporting social impact.

Social Impact Academy

Cross-Sectoral Knowledge Exchange and Collaboration for Targeted Poverty Alleviation Workshop

In response to the 2023 Policy Address emphasizing Targeted Poverty Alleviation, we hosted an 'Innovation for Poverty Alleviation Workshop'. The event brought together scholars, NGOs, social enterprises and funding bodies to share innovative ideas and explore new poverty alleviation strategies.subdivided units and elderly care by CUHK professors. An idea generation workshop enabled participants to co-design solutions for unmet social needs. This cross-sectoral dialogue aimed to foster targeted, collaborative efforts among different sectors to make poverty alleviation efforts more impactful and empowering for communities in need.




Knowledge Transfer Project Funding Support

Since its inception in 2009, the Knowledge Transfer Project Fund (KPF) has supported 281 evidence-based community impact projects, positively impacting over one million people. In 2017, we partnered with the Social Innovation and Entrepreneurship Development Fund (SIE Fund), and together we have supported 56 projects since the collaboration began. During the 2023–2024 period, KPF backed 18 projects: 8 funded by the SIE Fund and 10 by the UGC.

Highlighted KPF Projects:

Peace In and Peace Out: Narrative Approach to Peace Education in Hong Kong

The 'Peace In and Peace Out' project led by Dr Chow Wai Yin from the Department of Cultural and Religious Studies has made significant strides in peace education among Hong Kong's youth through a series of interactive workshops and seminars. By focusing on conflict resolution, stress management, compassionate listening and peaceful communication, the project has seen over 70% of participating students report improvements in their awareness, engagement, behaviours, and experiences related to interpersonal harmony. Both students and teachers have praised the initiative for empowering youth with narrative and practical peacebuilding skills applicable both inside and outside the classroom. By instilling values of self-acceptance, nonviolence and trust, Dr Chow's innovative approach has enhanced well-being, strengthened social connections, and promoted a more just and harmonious society. Additionally, the project's impact has extended further with the establishment of the SouLight Spiritual Education Centre, a social enterprise funded by the Sustainable Knowledge Transfer Project Fund (S-KPF), which aims to equip youth with the knowledge and skills to cultivate peaceful relationships, essential for their holistic development.


‘Hou2’ Living Gallery: Co-creating an Age-friendly Neighbourhood in Hong Kong’s Private Housing Estates

Hong Kong is currently facing the dual challenges of an aging population and aging buildings. According to the 2021 population census, approximately 1.45 million individuals aged 65 and above, accounting for about 20% of the total population, and this figure is projected to rise to 36% by 2046. In response to these challenges, Dr Mo Kar Him from the School of Architecture initiated this innovative project to adopt a participatory action research approach in CityOne Shatin, a well-established private housing estate. By bringing together older residents, multi-generational residents, community stakeholders, and built environment professionals, the project aims to collaboratively create quick-win prototypes that enhance the age-friendliness of the neighbourhood.

The project engaged over 20 elders and 15 professionals who served as ‘Age-friendly Ambassadors’, with the valuable support of student volunteers. The feedback gathered from these stakeholders has informed the development of actionable recommendations for key stakeholders. The project’s success has been recognized through the Innovation of the Year - Active Ageing Community Programme Award bestowed by Ageing Asia. This accolade highlights the project’s achievements in promoting active aging, fostering intergenerational living, and creating an inclusive built environment through collaborative, place-based solutions.

5.2 Social Entrepreneurship

Engaging in social entrepreneurship provides CUHK members with an opportunity to create sustainable social impacts. To foster social entrepreneurship within the CUHK community, we have established various schemes and programs dedicated to this purpose.

Sustainable Knowledge Transfer Project Fund for CUHK Academics

The Sustainable Knowledge Transfer Project Fund (S-KPF) is a pioneering funding scheme in Hong Kong designed to empower academics in transforming their research into viable social enterprises. The S-KPF has facilitated the establishment of 23 social enterprises led by CUHK professors since its inception. This scheme provides two-year seed funding, incubation services, comprehensive training, and support to help these ventures evolve into self-sustaining organizations with robust revenue models. The ultimate goal is for these enterprises to be self-sustaining by attract external investment or secure additional funding resources, over HKD 90 million of additional funding has been raised by funded ventures thus far.

Highlighted S-KPF Project:

Vocofy.AI Limited

Project Leader: Prof. Tan LEE, Department of Electronic Engineering, Faculty of Engineering
Nature of Business: MedTech for People with Serious Communication Challenges

Vocofy.AI Limited leverages cutting-edge AI-based speech generation technology developed at CUHK to revolutionize communication for individuals with vocal impairments. By providing personalized voice solutions, the company enables patients, including those undergoing head and neck surgery, to regain their

unique voices, thereby fostering confidence and aiding in their social reintegration. This technological advancement holds significant potential for people affected by various speech disabilities, enhancing their ability to communicate and improving their overall quality of life. Through collaborations with healthcare professionals and support from diverse funding streams, Vocofy.AI aims to ensure the sustainability of its services and explore broader applications in education, entertainment, and business marketing. The anticipated outcomes include increased patient empowerment, better support for families, and the promotion of an inclusive community, thereby contributing to the sustainable development of society.

Social Enterprise Startup Scheme (SESS)

Since its launch in 2015–16, the Social Enterprise Startup Scheme (SESS) under the Student Experience and Development Section of the Office of Student Affairs has supported students and recent graduates in their social enterprises. In 2023–24, 15 teams participated in this mentorship program, benefiting from the guidance of business experts in the real business sectors. The awarded teams will be selected following the Final Presentation Day and each team will receive up to HK$100,000 in seed funding. The training sessions attracted more than 300 students and alumni.

5.3 Community Engagement

Entrepreneurship Support Fair @InnoPort

Different activities aimed at students were held to promote and encourage entrepreneurship on campus.

The Entrepreneurship Support Fair, which introduces our entrepreneurial ecosystem and corresponding supports, such as funding sources and mentorship, was held again this year. The theme for this year was 'Fuel your future: Ignite your entrepreneurial spirit at CUHK!' . We aimed to sow the seeds of entrepreneurship among students, who might struggle if going for a working career or starting up after graduation, and to spark them to think 'Why don't you start something that you could do in your twenties or thirties?' .

Information on various forms of support provided for starting up a business was shown. There was also a consultancy offered by our partners. The 'Happy Lunch Hour' was launched this year, where guests were invited to share their startup journey from the perspective of alumni founders, student founders and students working in startups. Topics including recycling business, LoT-related business, and social media business were covered.

Inno-Ambassadors

The Inno-Ambassador Programme aims to facilitate the transfer of knowledge and expertise from experienced individuals to others. The Ambassadors have been involved in various tasks such as multimedia production, event planning and cubic zine interviews. They can learn about the entrepreneurial support and services offered by our office through all these participations.

Multi-media and Social Media Channels

News about the events organized in our office will be shared through ORKTS e-Newsletter and InnoPorte-Newsletter monthly. The newsletters are primarily sent to around 60,000 undergraduate and post-graduate students and to staff on the campus. InnoPort Newsletter will be further sent to more than 3,000 subscribers, including partners such as NGOs and media organisations.

News about the events organized in our office will be shared through ORKTS e-Newsletter and InnoPort e-Newsletter monthly. The newsletters are primarily sent to around 60,000 undergraduate and post-graduate students and to staff on the campus. InnoPort Newsletter will be further sent to more than 3,000 subscribers, including partners such as NGOs and media organisations.

In order to reach different target audiences, we have also established accounts on various social media platforms. These have significantly increased our reach and connected different communities and organizations to spread the news of our activities.

Cubic Zine @InnoPort

Cubic Zine is a digital newsletter and is released bimonthly to our staff, students, and external partners. It features the stories of social innovators from various departments and faculties in CUHK. Apart from current and graduated KPT/S-KPF project leaders, we have also invited alumni who have contributed their expertise to social innovation development. Each cover story honours the successes and influence of the social innovators.

Since its launch in 2019, more than 30 issues have been distributed by email, on average over 18,000 CUHK recipients (30%) and more than 800 external parties (50%) in different countries have read Cubic Zine. In addition to the traditional media, such as printed books, we have incorporated multimedia elements into Cubic Zine, such as short films/ reels, audiobook and other interactive elements. They can enhance the reader's reading experience and attract readers in different demographic groups.

6 Looking Forward

CUHK continues to excel in the research-incubation-commercialization continuum, affirming our role as a pivotal force in advancing knowledge and fostering innovation. Our commitment to impactful research and translational applications remains unwavering, as we actively participate in national and international scientific projects.

Expanding our influence beyond Hong Kong, we are excited about the transformative opportunities presented by the Central Government's plan to develop Hong Kong as an international hub for innovation and technology. Apart from actively participating in the development of the Hong Kong-Shenzhen Innovation and Technology Park at Lok Ma Chau Loop, CUHK will expand its knowledge transfer bases, first in Shanghai and Beijing, and eventually in other strategic cities across China. This strategic move will enhance our collaborations with industry partners, government agencies and prestigious research institutions, fostering a robust innovation-driven culture that promotes social and economic development.

CUHK is dedicated to supporting the growth of more unicorns, particularly in the deep technology sector. By providing mentorship, networking opportunities, funding, and state-of-the-art facilities, we empower aspiring entrepreneurs to bring their groundbreaking ideas to fruition. Our robust knowledge transfer mechanisms and professional support will continue to aid researchers, start-ups and technology companies, ensuring their success and growth.

Looking ahead, our knowledge transfer strategy will stay focused on creating impactful outcomes that benefit society. CUHK will remain at the forefront of driving innovation and entrepreneurship, contributing to the advancement of various industries. We are enthusiastic about future opportunities and remain steadfast in instigating positive change through our innovation and entrepreneurship initiatives.

Professor Sham Mai-har
Pro-Vice-Chancellor / Vice-President (Research)

Annexes
Annex I Knowledge Transfer Cases

A. Non-invasive Diagnosis for Gastrointestinal Cancers

Principal Investigator

Prof. YU Jun (Faculty of Medicine)

Project

Gastrointestinal (GI) cancers are among the top cancers in Hong Kong. Early screening of GI cancers facilitates detection of early cancer or precancerous lesions. Unfortunately GI cancers are often only discovered at a late stage due to a lack of effective, population-based screening tools. Endoscopies are labor-intensive, invasive and have low uptake (<10%). Molecular diagnostics are non-invasive and more acceptable and accessible for patients.

Underpinning research has been carried out at the State Key Laboratory of Digestive Disease of CUHK to tackle the unmet need for a simple, non-invasive diagnostic test for GI cancers, such as gastric cancer (GC), colorectal adenoma and colorectal cancer (CRC). This research is led by Prof. Jun YU, Choh-Ming Li Professor of Medicine & Therapeutics.

Impact

Commercial diagnostic kits using the licensed technology by Prof. Yu have been developed for non-invasive diagnosis of GC and CRC. The tests are the first approvals for the molecular diagnosis of GC and CRC by National Medical Products Administration (NMPA). Meanwhile, the 'm3-CRC test kit' is the first commercial kit based on fecal bacteria markers for non-invasive diagnosis of CRC and is now used in clinical practice in Hong Kong and elsewhere in Asia. These new, non-invasive methods were more sensitive and specific than conventional non-invasive markers. All these tests are based on quantitative PCR, a low-cost, accurate, and high-throughput technology ideal for population-wide screening.

It has now been demonstrated that the molecular biomarkers are robust across different ethnic populations, supporting their role as universal biomarkers that could be applied globally to benefit individuals at risk of gastrointestinal cancers.

Data from clinical trials support that these kits can detect early gastrointestinal cancers while it can still be cured, thereby reducing the incidence and improving the prognosis of CRC patients. For example, in Hong Kong the introduction of the non-invasive m3-CRC test kit has increased uptake of screening by 68% and doubled early CRC detection. According to the projected incidence of CRC, the detection kits have the potential to benefit 5.6 million Chinese and 19.3 million people globally over the next 10 years.

Fecal miR-92a kit has been used in 270 hospitals in mainland China since its launch in 2018. As the number of individuals at risk of CRC continues to escalate, it is anticipated that more than 900 million people in China will be eligible for early CRC screening by 2030. These projections indicate a substantial market potential, with estimated annual sales of the diagnostic kit in China exceeding 200 million.

B. Changing Behaviour, Changing Outcomes:Promoting the Green Path to Sustainable Tourism for Hospitality Businesses and Tourists

Principal Investigator

Prof. WAN Chun Ying, Lisa (Business School)

Project

In 2023, we witnessed record-breaking heat, marking the hottest summer since temperature tracking began in 1880. Tourism is a significant driver of economic growth, but is also responsible for substantial environmental damage. Both hotels and tourists consume excessive amounts of energy through lighting, fuel, and water usage, while generating substantial amounts of food and plastic waste. Therefore, promoting the green path to sustainable tourism for hospitality businesses and tourists is crucial to ensure the sustainability of the tourism industry.

Prof. Lisa Wan investigated the green preferences and behaviors of tourists from 2014 to 2023. She discovered that when tourists feel psychologically distant from locals and do not perceive themselves as belonging to the same 'group', they are more inclined to waste food. She also discovered that positioning the concept of 'going green' as a trend can attract consumers to choose green hotels. This is because individuals' concern for their social image can lead to a perception of higher quality toward a green hotel brand, as it enhances their social standing. Another study by Prof. Wan suggests that since the onset of the covid-19 pandemic, an increasing number of travelers have shown a preference for sustainable modes of travel. However, many practitioners are unaware of the most effective strategies for promoting green hotels. Prof. Wan's research highlights the pivotal role of eco-information presentation on booking platforms.

Impact

Prof. Wan's research on the green preferences and behaviors of tourists provides a foundation for encouraging hotel companies to develop effective corporate social responsibility practices. She has collaborated with the Centre for Business Sustainability and expanded efforts to develop sustainable practices within the hotel industry in the Greater Bay Area. Prof. Wan successfully spearheaded the Hotel Business Sustainability Index (Hotel BSI) project and inaugurated the first Hotel BSI for listed hotel companies in Greater China in 2021. Drawing on publicly available data from 36 listed hotel companies in Greater China and six major international hotel chains, the Hotel BSI evaluates the yearly sustainability performance of these businesses.

The index is the only one in the region that provides a benchmark for hotels to assess their own sustainability progress. The Hotel BSI has successfully motivated hotel companies to optimize sustainable practices, and the awarded companies have announced their commitment to continue adopting green management and promoting eco-minded initiatives through press releases and their websites. Well-known hotel groups have all made public announcements regarding their ongoing commitment to green management and eco-friendly initiatives via press releases and their websites.

The insights from Prof. Wan's published research works have also generated news articles which attracted extensive media coverage. The article 'How to Help Tourists Behave Better Abroad' attracted 459 local and international media pickups and generated total US$472,000 PR value (monthly unique website visitors: 9,976,266,746).

Prof. Wan's research has also highlighted practical implications for the development of tourism in Hong Kong post-pandemic, particularly advocating for the establishment of in-depth travel and eco-tourism as long-term sustainable strategies. Prof. Wan was invited by Hong Kong radio to write a 'Letter to Hong Kong' (香港家書), addressing the general public and sharing her insights on tourism development strategies for Hong Kong.

SDSN Southeast Asia and United in Diversity believe Prof. Wan's insights encouraged participants to act more responsibly while abroad. Furthermore, Prof. Wan's research impact extends beyond the hotel industry and finds applications in engineering, tourism development, and smart city planning. For example, Mr Desmond Ho, the Associate Director of the world renowned architectural consultancy company Arup International Consultants Ltd., testified that her research had prompted them to explore the application of technology in designing destination and theme park areas that enhance tourist comfort.

C. Transforming Creative Practices, Advancing Music Education, and Enhancing Public Awareness through Cantonese Contemporary Music Research and Compositions

Principal Investigator

Prof. CHAN Kai Young (Faculty of Arts)

Project

Since the 1950s, Hong Kong has cultivated a vibrant choral music scene where choirs from primary and secondary schools, university choirs, children's choral organisations, church choirs, and numerous professional and amateur choruses perform locally and internationally. Despite the abundance of choral activities in Hong Kong, the Cantonese choral repertoire, both sacred and secular, remains small compared to works in other languages. The scarcity of creative output in Cantonese can primarily be attributed to the challenge of effectively writing lyrics that align with the music. Since Cantonese is a tone language that uses pitch changes to differentiate word meanings, its musical expression is constrained by the pitch structures. Consequently, unless Cantonese lyrics are skillfully set to an optimal melody, they could be significantly misconstrued.

Instances of mismatched melodies are still prevalent in Cantonese musics. While the relationship between speech and melody has been explored in studies on Cantonese opera and popular music, the constraints and creativity of intelligible text-setting in Cantonese choral music—choral music in tone languages—have not been thoroughly examined.

Prof. Chan's creative output and research have addressed this gap by demonstrating how the Cantonese text-setting constraints can be transformed into creative resources in multiple aspects of music, such as melodic writing, harmony, and textures. Adopting corpus-based methodologies and conducting perception tests, Chan's research has provided theoretical and musical models for text-setting in sung Cantonese. Prof. Chan identifies the melodic intervals that enable accurate perception of text in all possible successions between Cantonese tones. With this model, he analyses the text-setting practices of Hong Kong choral composers, underlining the creative and theoretical affordances their music can offer to local and international audiences, scholars, composers and performers.

Impact

Prof. Chan's compositions have been published as scores at top-tier publishers, released on international recording labels, and performed internationally. While existing Cantonese choral works often feature a single intelligible melodic line and ignore mismatches between speech tone and melody in the lower parts, Prof. Chan's choral works are pioneering in that the Cantonese text is intelligible in all vocal parts of the choir. Moreover, Chan's instrumental works demonstrate how principles of tone-melody correspondence can serve as an algorithm to construct musical materials, in a purely instrumental context. This approach expands Cantonese music beyond the explicit presence of the human voice, creating songs with hidden words that can only be 'sung' by instruments.

Prof. Chan's compositions and research have transformed the performance landscape both locally and internationally. Locally, the organiser of the Hong Kong Schools Music Festival (HKSMF) testified that Chan's compositions and research have led to a 700% increase in the Cantonese choral set pieces in the competition from 2018 to 2023. Internationally, Chan's work has led to the formation of the UK-based Gey Teal Girls' Choir in 2023, the first choral group outside of Hong Kong dedicated to uniting the Cantonese diaspora and showcasing Cantonese musics to broad audiences. Chan's work has enhanced the cultural awareness and public understanding of Cantonese contemporary music, through performances, recordings, and presentations. His Cantonese compositions have been performed and broadcast over 200 times in 27 countries and regions in Asia, Europe, North America and Latin America.

The open-access digital platform for Prof. Chan's research houses the web application Cantonese Melody Generator (Generator), Cantonese Choral Database (Database), and other resources for Cantonese music performance and research. Based on his findings on intelligible text-setting conditions, the Generator turns Chinese text input into intelligible melodic settings. The Database includes original Cantonese choral works that have been performed, recorded or published, or are scheduled to be premiered. As of March 2024, the database has recorded 203 works composed by 88 composers.

Prof. Chan's Generator has received over 140,000 queries by users including researchers, composers, lyricists and educators worldwide since its public debut in May 2022. Over 20 composers in Hong Kong have testified that they have been inspired by Chan's research and compositions and have used the Generator to compose Cantonese music. Composers have commented that the Generator has helped them 'find melodies that they never thought of before.' Inspired by the Generator, Sit Tsz On composed a Christmas carol service and premiered in December 2023, with four performances in four local churches. Over 1500 people watched it live, and its online stream has garnered over 5000 views. The Generator has also had a transformative impact on local secondary schools by expanding the topics music teachers can incorporate into their curriculum.

Annex III
Updates on Table 4.1 of Initial Statement

(1 July 2023 – 30 June 2024)

	UGC Performance Indicators	2022-23	2023-24
1	Number of patents filed in the year (with breakdown [Annex V] by country and type)	481	537
2	Number of patents granted in the year (with breakdown [Annex VI] by country and type)	260	349
3	Number of licences granted (with breakdown [Annex VII] by type)	78	56
4	Income (on cash basis) generated from intellectual property rights	HK$71,056,181	HK$91,702,429
5	Expenditure involved in generating income from intellectual property rights	HK$15,969,030	HK$14,475,226
6.1	Number of economically active spin-off companies (with breakdown [Annex XII.A] by type)	8	8
6.2	Total number of social enterprises launched under the Sustainable Knowledge Transfer Project Fund [Annex XII.B]	20	23
6.3	Accumulated number of active technology startups supported by the Technology Start-up Support Scheme for Universities (TSSSU) [Annex XII.C]	71	85
7	Net income generated (or net loss arising) from spin-off companies (a)(b)	Net loss HK$7,980,610 (e)	Net loss HK$1,158,812
8	Number of collaborative research projects, and income thereby generated (a)	243 cases HK$175,593,174	229 cases HK$150,800,066
9	Number of contract research projects (other than those included in "collaborative research projects" above), and income thereby generated (a)	70 cases HK$37,909,212	229 cases HK$84,687,013
10	Number of consultancies, and income thereby generated (a)	278 cases $157,177,972	292 cases HK$176,352,609
	Subtotal Income Item (4)+(7)+(8)+(9)+(10)	HK$433,755,929 (e)	HK$502,383,305
11	Income received from Continuing Professional Development (CPD) courses (a)(c)	HK$1,500,598,488	HK$1,711,555,919
	Total Income Item (4)+(7)+(8)+(9)+(10)+(11)	HK$1,934,354,417 (e)	HK$2,213,939,224
12	Number of student contact hours in short courses or e-learning programmes specially tailored to meet business or CPD needs	6,744,130.5 hours (2,049 courses with 354,066 students)	6,759,846 hours (1,788 courses with 484,924 students)
13	Number of public lectures / symposiums and speeches to a community audience	1,133	925
14	Number of performances and exhibitions of creative works by staff or students	83	79
15	Number of staff engaged as members of external advisory bodies including professional, industry, government, statutory or non-statutory bodies (d)	1488	1553

Footnotes

(a) Subject to year-end adjustments.

(b) Only wholly-owned subsidiaries or controlling companies are included.

(c) Including income from non-award bearing programmes offered by the School of Continuing and Professional Studies and the Asia-Pacific Institute of Business.

(d) Honorary, visiting and inactive staff are not included.

(e) Revised figures.

Annex IV
Updates on Table 4.2 of Initial Statement

(1 July 2023 – 30 June 2024)

	Other Performance Indicators	2022-23	2023-24
1	Knowledge Transfer Project Fund (KPF): Projects supported by the UGC KT Fund	2022-23: 10 Total: 214	2023-24: 10 Total: 224
2	Sustainable Knowledge Transfer Project Fund (S-KPF)	2	3
3	IdeaBooster Fund	18	20
4	Number of other KT projects and activities not funded by the UGC KT Fund	528	737
5	Number of websites on KT activities at Faculties / Departments / Centres [(a)]	191	194
6	Number of publicity or media features related to KT, including print, online and electronic media [(b)]	5,630	9,215

Footnotes

(a) Including websites, mobile applications, social media channels and video-sharing platforms

(b) Including appearance on social media channels and video-sharing platforms

Annex IX
Knowledge Transfer Project Fund (KPF)

Project List (Jul 2023 - Jun 2024)

KPF - Projects in progress

No.	Project Code	Project Title
1	KPF22GWP10	Knowledge transfer of the advanced morphokinetic analysis on embryos' developmental potential in in vitro fertilization
2	KPF22GWP14	An Artificial Intelligence chatbot for sleep education
3	KPF22REP23	Multilingual E-Resources for Vocabulary Acquisition: Enhancing Learning Cantonese as an Additional Language and Maintaining Home (Heritage) Languages
4	KPF22GWP34	AR-Home & AR-Centre Rehab
5	KPF22CHP36	Collaborative Conservation: Regenerating Mui Tsz Lam village with Participatory Rebuilding
6	KPF23GWP01	Power Up and Mange Parents (PUMP): Resolve 20 common dilemmas in autistic children
7	KPF23GWP02	Establishment of website-based bio-electrical drug database with interactive business intelligence elements focused on gastrointestinal pacemaker activity for public access
8	KPF23GWP03	Improving the psychological well-being of older adults with an online lifestyle medicine program
9	KPF23GWP05	Education and Promotion of Weight Control in School Children of Hong Kong
10	KPF23GWP11	Healthy Back, so the Good Life is Back
11	KPF23GWP12	Thriving through the storms: A school-based mental health promotion program for building psychological flexibility and resilience
12	KPF23GWP13	Transferring research output to benefit the community: Production of a Computerized Adaptive Test on Receptive Vocabulary for Preschoolers
13	KPF23GWP14	Empower our Youth and Transform our Future
14	KPF23GWP20	Embodied Conversational Agent (ECA) on Mental Health with Humanoid Robot for Child Well-being Therapy
15	KPF23GWP21	Fit & Active Retirement: A mobile-based, combined coach- and peer-led physical function programme for young-old retirees
16	KPF23GWP23	Prevention of non-communicable diseases through screening and educating individuals on health-risk behaviours in the community
17	KPF23REP24	Promoting Deaf Access to Justice: Legal Basics in Hong Kong Sign Language
18	KPF23GWP25	Developing an e-health platform to improve maternal health and reducing long-term risk of chronic diseases for women with gestational diabetes
19	KPF23SCC27	each Clean-up Workshop x Design Thinking Training x Cross-cultural Environmental Film Screening
20	KPF23GWP28	Reducing inequality in women's health: Providing cervical screening and decision-aid counselling by trained peers in deprived populations
21	KPF23REP29	E-learning platform for enhancing life planning competence of people with intellectual disabilities
22	KPF23GWP33	Enhancing Mental Health of the Deaf Community in Hong Kong (Phase 2)

Annex IX
Knowledge Transfer Project Fund (KPF)

Project List (Jul 2023 - Jun 2024)

KPF - Projects in progress

No.	Project Code	Project Title
23	KPF23GWP38	Navigate the Complexities of Rare Diseases: A community-academic partnership program on co-creating a patient journey visualization toolkit
24	KPF24GWP02	Arrhythmia detection by smart devices
25	KPF24GWP05	Research and development of magnesium-incorporated bioartificial ligament
26	KPF24GWP07	WHY soft meals? Raising awareness for indications and benefits of soft meals in older adults?
27	KPF24REP08	Tech-Infused Prosperity: Leveraging Behavioral Insights for Empowered Financial Decisions
28	KPF24GWP11	Computer Use for Seniors on Mood Improvement and Logic Enhancement (CU-SMILE)
29	KPF24GWP13	Promotion of high-fibre diet and synbiotics to manage overweight and obesity with support of social media and online platforms
30	KPF24SCC15	“Hou2” Living Gallery: Co-creating Age-friendly Neighbourhood in Hong Kong's Private Housing Estate
31	KPF24GWP16	Personalised stroke self-management support by trained lay and peer volunteers
32	KPF24CHP17	Start-up Space for Aspiring Musician: connecting culture and urban space through resource matching platform
33	KPF24GWP18	Utilizing Telemedicine and Mobile Health Platform in Facilitating Acute Heart Failure Treatment
34	KPF24GWP21	A personalised health coach with wearable technologies for intensive lifestyle intervention in prediabetes
35	KPF24GWP24	"One Mindfulness Practice a Day, Keeps the Doctor Away" – Facilitating Mindfulness in Everyday Living Through a Mobile App
36	KPF24GWP27	Empowering Youth from Underprivileged Community: Enhancing Programming Skills and Mathematical Knowledge for STEM Teaching and Learning
37	KPF22GWP20	Culturally adapted sleep intervention - A brief online sleep intervention tailored to South Asian population in Hong Kong
38	KPF24SCC28	Understanding Natural Hazards: From Peer Reviewed Publications to Digital Animated Videos in Social Media
39	KPF24REP29	ModuLimb Ecosystem: Wearable Orthotic Upper-Limb Assistive Devices
40	KPF24GWP30	Personalized voluntary services and information dissemination for rare disease patients
41	KPF24GWP33	Education, Screening and rehabilitation of the vestibular system in Older Adults

Annex X
Sustainable Knowledge Transfer Project Fund (S-KPF)

(Jul 2023 - Jun 2024)

Social Enterprise List

S-KPF graduates

No.	Project Code	Project Title	Website
1	SKPF22GHW01	HerBChain Co., Limited	http://herbchain.hk/
2	SKPF22SCC04	Condition_Lab Limited	https://condition-lab.com/
3	SKPF22GHW06	Physical Literacy Academy for Children and Youth (PLACY) Limited	NA
4	SKPF22SCC05	Soyvestors Co. Limited	https://soyvestors.com/

S-KPF teams on-going

No.	Project Code	Project Title	Website
1	SKPF23QED02	Learniversity Limited	https://learniversity.hk/
2	SKPF23SCC05	Countryside Curators Limited	NA
3	SKPF24REP01	Vocofy AI Limited	https://vocofy.ai/
4	SKPF24GWP02	Replenishing Hand Spa	NA
5	SKPF24QED03	SouLight Spiritual Education Centre	NA

Newly funded

SKPF24REP01	**Vocofy AI Limited** Prof LEE Tan (Department of Electronic Engineering) To provide innovative and technology based solutions and services to address the needs of people with communication disabilities and develop software applications that help vocally stricken patients regain the ability of speaking.
SKPF24GWP02	**Replenishing Hand Spa** Prof Suzanne LO (The Nethersole School of Nursing) To provide home-based hand and nail care services to community-dwelling people with hand spasticity resulting from a range of neurological conditions including but not limited to stroke, spinal cord injury, multiple sclerosis, cerebral palsy, brain or head trauma, and hereditary spastic paraplegias.
SKPF24QED03	**SouLight Spiritual Education Centre** Dr CHOW Wai Yin (Department of Cultural and Religious) To create genuine and meaningful connections between people, fostering a spirit of empathy, understanding, and mutual respect; and cultivate vibrant communities where well-being takes centre stage.

Annex XIII
KT Seminars & Events

Knowledge Transfer Seminars/Events organised by ORKTS (1 Jul 2023 - 30 Jun 2024)

No.	Date	Title	Speaker(s)	Participants	Mode	Venue
1	05-Sep-23	ORKTS IP Workshop/ Tech Transfer Bootcamp	Mr. Philip Mendes	40	Physical	InnoPort
2	06-Jul-23	【Legal Series 7】Raising Capital for Early Stage Businesses	Mr. Pádraig Walsh	13	Face to Face	UGA
3	21-Jul-23	NVLT matching session	PI Centre x NVLT	17	Face to Face	UGA
4	26-Jul-23	Intellectual Property Issues for Entrepreneurs	Dr. Albert Wai-Kit CHAN, PH.D., J.D, Partner of the Law Offices of Albert Wai-Kit Chan, PLLC, Dr. Roy Yee-Loi CHAN, Executive and Scientific Adviser, Albert Wai-Kit Chan Intellectual Property Limited	around 50	Online	N/A
5	28-Jul-23	20th Round PI Programme Info Session	Mr. Alan Lo & Ms. Hannah Mak	17	Face to Face	UGA
6	03-Aug-23	【Legal Series 8】Investment Agreements	Mr. Pádraig Walsh	31	Face to Face	UGA
7	18-Aug-23	Fireside Chat - Capturing business opportunities in Hong Kong's thriving Innovation and Technology Ecosystem	Dr. Aldrin Yim	14	Face to Face	UGA
8	22-Aug-23	Social Impact Academy Webinar Series: Art for Good - Promoting Diversity and Inclusion in the Society through Art	Amanda Sun/Founder and Director, Arts For Good Foundation	40	Online	Zoom
9	04-Sep-23	Zhuji I3 Park-An accelerated pathway for overseas IVD IPs to commercialize in China	Dr. WANG Yu	11	Face to Face	2B
10	06-Sep-23	【Legal Series 9】Shareholder Agreements	Mr. Pádraig Walsh	8	Face to Face	UGA
11	13-Sep-23	Class Visit (Cultural Studies)	InnoPort Team	40	Physical	Cultural Studies Classroom
12	13-Sep-23	ZhenFund x PI Centre Empowering Frontier Technology Entrepreneurship	Mr. Victor Wang/ Dr. Xiaoyong SHEN	97	Face to Face	Choh-Ming Li Basic Medical Sciences Building (BMS)BMS G18 (CK HALL)
13	15-Sep-23	CUHK Student Start-up Showcase (CSSS)	ORKTS & CfE	40	Face to Face	CYT 201
14	15-Sep-23	CUHK Shanghai Centre x InnoPort @Shanghai – Town Hall Meeting	郑岳肖先生	27	Face to Face	UGA
15	21-Sep-23	CUHK Innovation Day 2023	ORKTS	/	Face to Face	YIA
16	26-Sep-23	CUHK 20th Round PILOTS Lite Programme (Fall 2023) - First Round Interview	Dr. Victor Lau	51	Online	
17	29-Sep-23	RAISe+ Scheme Investor Meet-up Session	Ir Prof. Alan LAM, JP	99	Hybrid	UGA
18	03-Oct-23	Knowledge Transfer Project Fund (KPF) 2023-24 Information Session cum Talk	Prof LEE Tan/ Department of Electronic Engineering,CUHK	20	Online	Zoom
19	06-Oct-23	RAISe+ Scheme Investor Meet-up Session 2	Mr. Fred LI	75	Hybrid	UGA
20	06-Oct-23	TSSSU 2024-25 info session	Ms. Joyce Mak	92	Online	
21	10-Oct-23	Recycling Fund - Info Session	Mr. Sam Lee	11	Face to Face	UGA
22	16-Oct-23	Start-up Clinic	Mr. Pádraig Walsh	/	Face to Face	
23	18-Oct-23	CUHK 20th Round PILOTS Lite Programme (Fall 2023) - Final Round Interview		58	Face to Face	3B
24	19-Oct-23	Sustainable Knowledge Transfer Project Fund (S-KPF) 2023-24 Information Session cum Talk	Mark CHENG/Founder, Social Innovation Circle/ Senior Advisor, Ashoka	20	Online	Zoom
25	10-Nov-23	20th Round PI Programme Briefing Session	Mr. Alan LO & Ms. Christie WONG	11	Face to Face	UGA
26	21-Nov-23	ORKTS X BOCHK【Start-up's guide】Business Formation & Financial Management	Ms. Nancy YANG (BOCHK), Mr. Kevin WOO (INCE & CO)	29	Face to Face	UGA
27	22-Nov-23	Empowering Secondary Students through Entrepreneurship	InnoPort Team and Venture Acceleration Team	30	Physical	InnoPort
28	29-Nov-23	Social Impact Academy Webinar Series: AI for Good	Kevin Pereira/Managing Director at Blu Artificial Intelligence	100	Online	Zoom
29	07-Dec-23	TSSSU 2024-25 interview (non-bio track)	ORKTS HKSTP, Internal & external judges	38	Face to Face	YIA
30	08-Dec-23	TSSSU 2024-25 interview (bio track)	ORKTS, Internal & external judges	28	Face to Face	YIA
31	08-Jan-24	中大 x 國宏嘉信資本「創投互動日」	Mr. LIANG Zhu	51	Face to Face	CYT LT1B
32	17-Jan-24	20th Round PI Team x NVLT Matching Session	PI Centre x NVLT	24	Face to Face	UGA
33	23-Jan-24	Investor Meet-up Session – Beyond Ventures	Mr Lap MAN (Co-founder & Managing Partner, Beyond Ventures)	30	Hybrid	UGA

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34	23-Jan-24	Beyond Ventures Clinic Session	Mr Lap MAN (Co-founder & Managing Partner, Beyond Ventures)	/	Face to Face	
35	31-Jan-24	MIT Urban Tech Week 2024 - Sharing Session	Mr. Gene Soo (Head of Ecosystem – Global Innovation, MTR), Ms. Sunnie Lau (Director, MIT HK Node) and 2023 Cohort Team Sharing by CUHK student	18	Face to Face	UGA
36	01-Feb-24	Innoangel Fund Clinic Session		/	Face to Face	
37	15-Feb-24	Social Impact Academy Webinar Series: Strategizing for Social Impact and Innovation – a case sharing of Nan Fung Group	Garrick Lau/Head of Sustainability & Shared Value, SEWIT Department, Nan Fung Development Limited	50	Online	Zoom
38	16-Feb-24	RAISe+ Scheme Sharing Session	Dr. Desmond Cheng (ORKTS)	66	Hybrid	UGA
39	27-Feb-24	Delos Capital Clinic Session		/		
40	07-Mar-24	Gaw Capital x CUHK InvestTech Expo	Mr. Garry YU	77	Face to Face	YIA LT3
41	14-Mar-24	Social Impact Academy Webinar Series: Innovative Elderly Care - a case sharing by Sheng Kung Hui	Poline Chan/Service Director, Hong Kong Sheng Kung Hui Welfare Council Limited Annie Dai/Service Supervisor, Hong Kong Sheng Kung Hui Welfare Council Limited	50	Online	Zoom
42	14-Mar-24	Investor Meet-up Session – Great Eagle Holdings Limited	Dr. James ZHANG (Chief Investment Officer)	72	Hybrid	UGA
43	14-Mar-24	Great Eagle clinic Session	Prof. HUANG Zhifeng, Prof. BRELEN Marten, Prof. CHEN Fei, Prof. Liona Poon, Prof. ZHOU Renjie, Prof. WONG Nathalie, Prof. ZHANG Li & Dr. LIU Wai Shing	/		
44	22-Mar-24	Tips from Business Expert about Commercialization Plan	Mr. Derek KWIK (Managing Advisor)	41	Hybrid	UGA
45	25-Mar-24	CPC Clinic Session		/		
46	18-19-Apr-2024	Entrepreneurship Support Fair & Happy Lunch Hour Sharing	Mr. Harold Yip (Founder of MilMill), Miss Amy Lai (Founder of ReCube), Miss Timmy Lee (Project Manager of the Hong Kong Social Enterprise Challenge), Mr. Xu Chang Liang (Founder of Hong Kong 365 Days), Mr. Huang Xiangkun (CUHK Student, Global Studies), Mr. Derek Ng (Founder of Parami.ai) Mr. Jason Or (Founder of SmartAge Intelligence), Mr. Wong Chun (Founder of DOKO TECH, CUHK Student, Computer Science)	400	Physical	Café 330 and Bookstore at YIA
47	19-Apr-24	IdeaBooster Fund 2024-25 Briefing Session	Dr. Desmond Cheng (ORKTS)	67	Online	ZOOM
48	25-Apr-24	CUHK Innovation Smmit		around 200	Face to Face	YIA LT6 LT5
49	21-May-24	Social Impact Academy Webinar Series: The D. H. Chen Foundation - Journey to Compassion-based Philanthropy & Social Innovation	Peter Poon/Chief Program Officer, The D. H. Chen Foundation Ruby Yong/Program Director, The D. H. Chen Foundation	40	Online	Zoom
50	27-May-24	CPC Clinic Session		/		
51	30-May-24	Beyond Ventures Clinic Session	1) Prof Edwin Chan Rare power 2) Prof Tong Kai Yu Raymond 3) Lasense 4) Irwin KING	/		

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KT Seminars & Events
Knowledge Transfer Seminars/Events organised by ORKTS (1 Jul 2023 - 30 Jun 2024)

52	31-May-24	Innovation Workshop for Targeted Poverty Alleviation	Prof WONG Hung/ Department of Social Work, CUHK Kenny NG/Team Leader, Group & Community Work Unit, HKSKH Lady MacLehose Centre Susanna LEE/Executive Director, P.C. Lee OneSky Global Centre for Early Childhood Development Anthony LAI/Head of Strategic Communication and Talent Development, Health in Action Prof Maggie MA/School of Architecture, CUHK Prof Suzanne LO/The Nethersole School of Nursing, CUHK	80	Hybrid	UGA / Zoom
53	12-Jun-24	Startup Coaching Session with Mr PETER DINGLE (HSBC)	Mr PETER DINGLE, Head of Ecosystems and Partnerships, Venture Capital Alternatives, HSBC Asset Management	26	Face to Face	UGA
54	21-Jun-24	Social Impact Academy Webinar Series: Environmental Sustainability Trends and Gaps – Opportunities for Creating Social Impacts	Ir Dr. Bruce Chong/Fellow and Director, Climate & Sustainability Group of Arup	30	Online	Zoom