2017-18
ANNUAL REPORT
Recurrent Funding for Knowledge Transfer
Submitted to University Grants Committee
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1 Executive Summary

The HKSAR government has identified innovation and technology to help power Hong Kong’s future economy and has urged academic institutions to help translate and develop their upstream research output into downstream applications. In 2017-18, we continued to enhance our administrative, organisational, operational and professional support for students and staff to “turn their research and knowledge into sustainable social impact”. We made significant progress in these activities during the report period. We processed 429 contracts and research agreements and received more than $219 million of committed contract research and consultancy income. The University also received $100 million in collaborative research income, representing an increase of 18% over the previous year. During the review period, CUHK inventors disclosed 52 new inventions, and 327 and 185 patent applications were filed and granted, respectively. We granted 78 licences in 2017-18 to local and overseas companies, and generated licencing income of $49.6 million. CUHK was ranked as the most innovative university in Hong Kong by “Reuters Top 75: Asia’s Most Innovative Universities” for the third consecutive year.
In addition to the Technology Support Scheme for Universities (TSSSU) offered by the Innovation and Technology Commission (ITC) for staff and students, we also used part of our University Grants Committee (UGC) knowledge transfer fund to support student-initiated startup projects known as Pre-incubation teams (Pi teams). These two programmes have aroused steady interest since their introduction in 2014, attracting a total of 111 TSSSU and 194 Pi applications. This year, we were able to fund 16 TSSSU companies and 11 Pi teams.

Our Knowledge Transfer Project Fund (KPF) and Sustainable Knowledge Transfer Project Fund (S-KPF) provide support for knowledge transfer activities into the community such as setting up community services, ecological tours, and programmes for the elderly. CUHK has developed a solid reputation and track record in social innovation since 2015, when it began incubating social enterprises dedicated to applying research findings to solve community problems. CUHK became the first university in Hong Kong to receive the Social Innovation and Entrepreneurship Development Fund (SIE Fund) of the HKSAR to promote social innovation originating from academia. In addition to committing a cap of HK$2 million in 2017 and HK$3 million in 2018, the SIE Fund will provide recurrent support to CUHK from 2019, at a cap of HK$3 million. This additional recurrent funding will allow CUHK to continue to play a leading role to support our staff to address societal needs.

To strengthen entrepreneurship education, CUHK launched a new Entrepreneurship and Innovation minor programme in 2017. To enhance entrepreneurship training, we established an Entrepreneurship and Innovation Hub (InnoHub) in Shenzhen Research Institute (SZRI) in May 2018 to provide affordable space, mentorship and industry/market access for CUHK-enabled startups to expand their business ventures in China.

During the report period, we strengthened our interactions with regional and international industrial partners and investment communities. We also saw a steady increase in research collaboration and licensing negotiations in both technology and social innovation. We will continue to strengthen our infrastructure and operational efficiency to accelerate the knowledge transfer process at CUHK to support academic-industry collaboration and the successful “re-industrialisation” of Hong Kong.


2 Building Momentum to Support “Re-industrialisation of Hong Kong” – Strategic Role of Knowledge Transfer

In her first policy address on 11 October 2017, the Chief Executive Mrs Carrie Lam pointed out that innovation and technology will help power Hong Kong’s future economy, improve people’s livelihood and create quality jobs for young people as well as opportunities for young entrepreneurs.

CUHK is a centre of excellence for knowledge creation and has generated many innovative ideas and upstream technology since its establishment in 1963. CUHK has been consistently ranked as the most innovative University in Hong Kong by “Reuters Top 75: Asia’s Most Innovative Universities” in the three years since 2016. It is well-positioned to take advantage of the strategic support by the Hong Kong government and industry sector to translate and develop its upstream knowledge into downstream applications. Two of Hong Kong’s so-called ‘unicorns’ (defined as startups valued over US$1 billion before they go public), SenseTime and Cirina (now merged with Grail), were started by CUHK faculty members based on technologies they developed at the University.

Such achievements are based on a solid foundation for entrepreneurship education and training. This allows us to take a two-pronged approach which aims: a) to develop and promote science and technology innovation for commercial applications; and b) to support and expand social innovation to maximise societal impact. In alignment with the HKSAR’s initiatives to apply innovative technologies to revitalise Hong Kong’s industry, we have identified the following specific priorities and strategic initiatives for the next three years:

- Build up CUHK’s entrepreneurial culture and support effective world class entrepreneurship education, and inspire all students and staff to unleash their creativity and growth potential;
- Expand entrepreneurial training and startup services to strengthen translational research and impact development in order to cross the so-called “Valley of Death” between research and commercial development;
• Strengthen and expand academic-industry partnership to support students and staff to develop and grow targeted innovative industries (including regenerative and precision medicine, molecular diagnostics, artificial intelligence (AI), robotics, and big data analytics); and
• Promote entrepreneurship and commercial development of CUHK enabled startups in the Guangdong-Hong Kong-Macao Greater Bay Area (GHM-GBA).

3 Supporting and Strengthening Entrepreneurship Education and Training

3.1 Nurture Interdisciplinary Entrepreneurship Education

To promote an entrepreneurial culture and mindset for all in the University, CUHK launched a new Entrepreneurship and Innovation (EPIN) minor programme in 2017. It adopts an interdisciplinary approach and is open to all undergraduate students. It aims at cultivating entrepreneurship among students with events that enrich their understanding of entrepreneurship and challenge their creativity and perseverance.

Its curriculum mimics the process of creating a new venture and goes through the Ideation, Realisation and Commercialisation stages and helps the students to develop the relevant mindset (including social responsibilities and proper conduct in research and development) and skill sets (such as problem solving, project management and business planning). Students are required to complete a minimum of 18 units of courses from three key areas, namely Mindset and Values, Knowledge and Skills, and Practices. To enhance the effectiveness of the EPIN minor programme, it is complemented by appropriate internship programmes and startup services.
3.2 Progress in the Establishment of a New Centre to Provide Comprehensive Startup Services

One common complaint from budding entrepreneurs in Hong Kong is the high cost of starting a business. In fact, this is a major deterrent for young people to start their own business ventures. To address this, the University will provide its own incubator on campus for CUHK-enabled startups to develop and refine their businesses until they can attract outside investment or gain access to other incubator/accelerator facilities, such as the Cyberport or the Hong Kong Science and Technology Park.

Providing a proper environment and stimulating atmosphere are essential to create an entrepreneurial culture on campus. Besides training in the relevant skills and mindset, we also need to develop a social environment that encourages entrepreneurs to meet one another to discuss and develop ideas. Presently our Pi Centre has limited floor space (232 square meters) and lacks the infrastructure to provide a centralised space for efficient interaction between stakeholders.

To ensure the effective and efficient management of entrepreneurship training and startup activities at CUHK, we will renovate a building on campus to serve as a new InnoHub. It will provide a coordinated, dynamic and vibrant co-creating environment to allow startups to pursue their specific business ventures under various Knowledge Transfer support schemes to advance our two-pronged development plans for technological innovation and social enterprises. This proposal has been endorsed by CUHK’s senior management, and planning for the building renovation is now underway.

3.3 Knowledge Transfer through Entrepreneurship and Translational Development

The performance of academic research has traditionally been measured largely by the quality and quantity indicators of publications. More recently, the commercial potential, economic benefit, societal and cultural impact have also been identified as important and meaningful parameters to assess the impact of academic research for the good of society.
Besides providing support under the Technology Support Scheme for Universities (TSSSU) introduced by the Innovation and Technology Commission (ITC) and the UGC’s Knowledge Transfer Fund, we established a dedicated Technology Liaison Team (TLT) in 2014 and an Entrepreneurship and Social Innovation Team (EASI) in 2016 to undertake the following knowledge transfer activities:

- Manage the Pi Centre to organise Innovation & Entrepreneurship training in pre-incubation programmes;
- Drive the design, administration and management of the TSSSU, KPF and S-KPF, and
- Facilitate licensing and sponsored research agreements.

Our TSSSU and Pi programmes have attracted steady participation from students and staff. A total of 111 TSSSU and 194 Pi applications have been received since 2014. This year, we were able to fund 16 TSSSU companies and 11 Pi teams. Some of our TSSSU companies and Pi teams have made significant progress in business development and fund raising.

At the same time, the existing programmes funded by the UGC’s Knowledge Transfer Fund will continue to support faculty members to engage in knowledge transfer and translational development:

- The Patent Application Fund (PAF) supports the development of patents for promising CUHK technologies;
- The Technology and Business Development Fund (TBF) helps CUHK academic staff to demonstrate the viability of commercialising their technologies;
- The Professional Enhancement Fund (PEF) assists CUHK researchers to learn about knowledge transfer and engage in related activities by attending conferences and workshops, as well as visiting companies to explore business collaboration opportunities; and
- KPF assists faculty members of all disciplines to develop community-based projects that can directly benefit Hong Kong’s society.
3.3.1 Pre-incubation Centre (Pi Centre)

We used part of our UGC knowledge transfer fund to support the running of the Pi Centre, established in 2014. The Centre is dedicated to conduct workshops, seminars, chit-chat sessions, Boot Camp and Hackathon to foster entrepreneurship among students from different disciplines as well as to mentor and incubate undergraduate and postgraduate initiated startup projects.

In 2017-18, the Pi Centre received 36 applications and admitted 11 teams in two batches. They were selected by a vetting panel which comprised both internal and external professional assessors. The Pi Centre organised more than 35 activities, including entrepreneur corner, talks, workshops and Boot Camp in the past year. These activities were organised by the Pi Centre alone or in partnership with other internal and external units, including Cyberport, Hong Kong Science and Technology Parks Corporation (HKSTP), Hong Kong Business Angel Network (HKBAN), Hong Kong Institute of Directors (HKIoD) and Gungho Space. Our reputation in the community is growing, and is gradually inspiring the formation of a startup community in CUHK.

One graduate Pi team, Pureform Technology, is a sports technology company dedicated to empowering runners in their pursuit of better performance through providing clinically proven smart running anklets to prevent injuries and enhance performance. Although Pureform Technology was established only recently, it has already connected with coaches and physiotherapy clinics. It has been admitted to the incubation programme of the HKSTP and the TSSSU funding scheme to continue developing its business.

3.3.2 TSSSU

In addition to Pureform, we also provided funding through TSSSU to 16 other CUHK startups this year from a range of industries, including educational technology, VR, optical technology, medical AI and biomedical and healthcare technology. Three of the funded startups have moved into the newly established InnoHub at SZRI to establish bases in Mainland China.
3.3.3 CUHK Alumni Torch Fund and Entrepreneur Day

CUHK Entrepreneur Day is a large scale two-day annual event on the theme of entrepreneurship initiated by the CUHK Alumni Torch Fund. The event was started in 2014 by a group of CUHK alumni representatives to help young CUHK alumni. This year, it was held on 11 and 12 May 2018 and included a series of talks, seminars, and exhibitions showcasing more than 50 startups projects, and the newly launched activity, “Innovation Demo Area”.

Visitors to the “Innovation Demo Area” were attracted by this showcase of various innovations, which included creative application of facial recognition technology, mobile payment demonstration, AR/VR technology application, innovative medical devices, and mobile apps and games. The semi-final of the Second CUHK Entrepreneurship Competition was also one of the highlighted activities. Five selected startup teams competed for a championship and the chance to sign a memorandum of understanding with investors.

There was also a large-scale exhibition showcasing more than 50 CUHK startup projects covering biomedical engineering, AI, fintech, big data, mobile app development, creative marketing, education and the arts. On the second day of the event, three seminars were conducted by prominent alumni on the themes of entrepreneurial experience, forecasting of future development trends, and advice for startups on attracting investors.
3.3.4 Student Competitions

3.3.4.1 The Vice-Chancellor’s Cup of Student Entrepreneurship (VCCE) Boot Camp

The VCCE Boot Camp is an entrepreneurship competition for all CUHK students and alumni. It aims to identify and support innovative new ideas, raise awareness of entrepreneurship and build a robust innovative and entrepreneurial spirit on campus. There were 14 teams with more than 40 CUHK students and alumni presented in the event held on 19 May 2018.

“WeCareBill”, a team dedicated to improving the transparency of treatment costs in private hospitals, won the VCCE grand award and also HK$8,000 in prize money. The team pursues its aims by researching open data and crowdsourcing information from patients’ medical bill information and then applying data science and machine learning technology to serve its social mission.

3.3.4.2 Social Venture Competition Asia (SVCA) & Global Social Venture Competition (GSVC)

Heycoins, one of the Hong Kong Social Enterprise Challenge (HKSEC) 2017 winning teams, won the Grand Award at SVCA in Korea and was granted the opportunity to enter into one of the most prestigious social competition with the largest global reach: GSVC – final round in Milan in April 2018. Heycoins is a social venture founded by two CUHK MBA students, Mr. Stephen Lam and Mr. Rocco Huang. It was among the top 19 social ventures from 550 global applications to the GSVC.

3.3.4.3 DBS-NUS Social Venture Challenge Asia (SVC Asia)

SVC Asia is an Asia-wide competition for social enterprises. It is organised jointly by NUS Enterprise, the entrepreneurial arm of the National University of Singapore (NUS), and DBS Foundation. SLCO Community Resources Ltd (SLCO-CR), a social enterprise enabled by CUHK through the S-KPF scheme, won the Asia for Good Reader’s Choice Award 2017, based on the highest number of votes by Asia for Good readers and received a full-length feature on the website (https://www.asiaforgood.com/article/bridging-communication-gap).
SLCO-CR is led by Prof. Gladys TANG, Director & Professor of CUHK Centre for Sign Linguistics and Deaf Studies. It aims to advocate social inclusion through sign bilingualism promotion and the co-enrolment of deaf and normal students in the same classroom.

3.4 Social Innovation

3.4.1 Partnership with SIE Fund

Thanks to the success of CUHK’s collaboration with the SIE Fund last year, the funding ceiling was raised to HK$3M in 2017-18 and is now recurrent each year. This regular source of external funding is a precious resource in supporting the growing number of KPF projects with great potential for bringing social benefits to the local community. This year, seven additional projects in line with SIE Fund’s objectives of poverty elimination and social inclusion were funded:

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Project Leader</th>
</tr>
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<tbody>
<tr>
<td>Promote Psychological and Behavioural Well-beings of Preschool Children with Autism Spectrum Disorders by Implementing a Traditional Chinese Medicine (TCM) Paediatric Massage Program (小兒推拿)</td>
<td>Prof SO Wing Chee, Catherine</td>
</tr>
<tr>
<td>Realizing children’s potential in language development: input and intervention</td>
<td>Prof YIP Choy Yin, Virginia</td>
</tr>
<tr>
<td>Intercultural Education in the Neighbourhood: Sustainable community innovation and women’s empowerment from the ground up</td>
<td>Prof TAM Siu Mi, Maria</td>
</tr>
<tr>
<td>3D-printed Soft Robotic Hand for stroke rehabilitation and elderly healthcare</td>
<td>Prof TONG Kai Yu, Raymond</td>
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<tr>
<td>Speech Therapy Services For Children With Motor Speech Disorders</td>
<td>Prof TONG Chi Fai, Michael</td>
</tr>
<tr>
<td>An Oral Exercise Training Software for Elders in Hong Kong</td>
<td>Prof LEE Yuet Sheung, Kathy</td>
</tr>
<tr>
<td>Train the trainers: Minority girls and gender justice</td>
<td>Prof Raees Begum BAIG</td>
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Prof Raymond TONG showing 3-D printing robotic hand in the Hong Kong International Medical Devices and Supplies Fair

Video showing massage treatment to the children with Autism Spectrum Disorders in Prof Catherine SO’s project
An important synergy has developed between the SIE Fund and our KPF projects. Collaboration with the SIE Fund allows our KPF projects to leverage their resources, especially in terms of marketing and publicity. Prof SO’s project, for instance, was featured in the Social Innovation Fair where she illustrated how massage techniques could be used to enhance the communication skills of children with autism. At the same time, the SIE Fund was able to tap into the field of applied research on social innovation by supporting CUHK’s proven KPF scheme.

3.4.2 Capacity Building

We continued hosting bi-monthly chitchat and sharing sessions as a means of bringing together faculty members, students and external partners from different disciplines. Besides learning from expert speakers who are invited to share each time, participants make use of this platform to exchange insights and challenges on social innovation in the academic sector.

3.4.3 From KPF to S-KPF: Applied Research to Social Enterprise

This year we saw even more KPF projects blossoming into initiatives to be sustained in the long run. One example is the project “UNEMIA” which was started in 2016-17 by Prof WONG Hung (Department of Social Work) based on his research on local poverty and social exclusion. He identified barriers which trap certain social groups in poverty and keep them on the fringes of society, and also studied cleavage between older and younger generations. This project engages students to conduct surveys for social research, partnering with members from some of the most socially excluded groups in Hong Kong. Besides being empowered with a job and receiving a financial return which relieves their burden, participants come to a better mutual understanding despite their diverse positions in society. Via collaborative work, they learn to recognise their own and each other’s strengths and abilities irrespective of educational backgrounds, as well as building trust across heterogeneous groups.

Once this model was shown to be feasible, Prof WONG founded Good Impact Assessment Limited with the support of S-KPF in 2017-18 to expand the scope and scale of surveying and data collection. The social enterprise will also offer social impact assessment services for public bodies, social enterprises and non-governmental organisations to evaluate their policy and project outcomes.
Another exciting example is a 2016-17 project on “Sustainable mushroom farming with social and educational perspectives”. With his many years of research on mushroom cultivation and biology, Prof KWAN Hoi Shan (School of Life Sciences) triggered a green movement on campus – growing edible mushroom with used coffee grounds from student cafes. He believes that urban farming is one of the answers to the global food crisis due to climate change and population expansion. Mushrooms, as a nutritive, low-carbon and locally available food source, would be an ideal vehicle to promote this practice. The project team’s caterer partner not only achieves self-sustained farming by turning coffee residues into raw materials for cooking, but also serves as a role model of fulfilling corporate social responsibility. Featuring upcycling, green diet, food access and literacy in a single initiative, the project provides enjoyable STEM educational opportunities for students and members of the public alike.

Prof KWAN’s team identified the potential for developing a successful business at an early stage, and established Mushroom-X Limited in 2017-18 under the S-KPF scheme. Besides running educational workshops, they are also developing mushroom powder as a nutritive taste enhancer for Hong Kong’s ageing population.
3.5 Reaching out to External Partners to Support Knowledge Transfer and Impact Development

Although many faculty members are trained to excel in research, most of them are not equipped with the mindset, knowledge and skills to translate their research into societal impact. It is increasingly clear that developing research impact is a long-term investment and we need to change our culture (e.g. striking a healthy balance between basic and applied research) and attitudes (e.g. risk taking vs risk averse; quality versus quantity of research output) toward translational research and embrace successful translation of research into societal impact in addition to the contribution to the academic community. To achieve this, we need to: (a) support and encourage interested academic staff to engage in productive academic-industry collaboration to foster successful translational development, and (b) recognise these accomplishments across all levels of the University under a more holistic research culture.

We plan to transform our Technology Liaison Team into a Knowledge Liaison Team (KLT) to strengthen and widen its current engagement with local and global industrial/business partners, investment communities and policy makers to promote knowledge transfer and impact on society. We will employ dedicated staff in KLT with suitable expertise in biomedical, engineering, fintech, government policy and inter-disciplinary cultural studies, and work with Faculties to provide consultations and to assist in the prioritisation of impact cases and the development of impact action plans.

As part of the process to generate social and economic impact via entrepreneurship and innovation, we continue to develop and strengthen our strategic alliance with external partners. In this regard, our teams have visited Johnson & Johnson Innovation JLABS in Boston, the Biomanufacturing Education and Training Center of Worcester Polytechnic Institute, the Massachusetts Biomedical Initiatives in Worcester, as well as the technology transfer offices or entrepreneurship centres of several academic and research institutes in Singapore (National University of Singapore, Singapore Management University, Nanyang Technological University and Agency for Science, Technology and Research). We have also received delegations from the Beijing Intellectual Property Office, and have continued our support of EmTech Hong Kong conference in 2018. In October 2017, we co-organised a Drug Discovery &
Development workshop with a multinational pharmaceutical company from the United States and the HKSTP. Fourteen CUHK researchers have learnt precious knowledge of drug development process from pre-clinical research through final approval from the Food and Drug Administration via the experienced senior scientific members of the company in this interactive event. Some of our researchers were also selected by the company to attend a private breakout session to discuss specific research projects for potential collaboration.

During the report period, our TLT and EASI teams visited a leading company in cell therapy at Cambridge, MA and a leading Japanese multinational company of precision instruments in Singapore. The teams have also attended various industrial conferences, including the Business of Intellectual Property Asia Forum (Hong Kong), EmTech Asia Conference (Singapore), AUTM (Association of University Technology Managers) Annual Meeting (Phoenix, USA), BIO International Convention (Boston, USA,) and EmTech Hong Kong. In these events, we showcased our innovative technologies, participated in related networking events, and took part in more than 40 one-on-one partnering meetings with high profile technology companies and investors. We also received five delegations: a media organisation from Hungary, one multinational pharmaceutical company from the United States, one leading telecommunication company from China, an investment company from the Sichuan province (China) and a leading Food and Beverage company in Hong Kong. These events provided fruitful opportunities for the team to understand the market need and seek for feedback of our technologies in the process of commercialisation.

To widen our knowledge of technology transfer development and entrepreneurship, our teams also attended professional workshops focusing on technology licensing / commercialisation strategies, technology marketing as well as business and financial planning.
4 Facilitating Knowledge Transfer and Commercialisation

4.1 Progress in the Update of University Intellectual Property Policy

During the report period, we began to restructure the current Policy on Research, Intellectual Property and Knowledge Transfer in order to provide clearer guidance for stakeholders.

To update the policy on intellectual property and knowledge transfer (New IP Policy), a task force consisting of experienced researchers and inventors from different Faculties undertook an in-depth study to identify possible approaches to promote knowledge transfer and foster entrepreneurship. After extended deliberation on areas ranging from ownership of intellectual property to income sharing, the task force has agreed on the direction and prepared a draft New IP Policy with the assistance of internal and external professionals. We believe the introduction of new domains, such as allowing the release of software under open source licence, could advance the University's mission. A consultation period for the New IP Policy will be held during the next reporting period.

4.2 Efficient Management of Intellectual Properties (IP) and Research Contracts and Agreements

Patent filing has been an essential tool for the University to protect its innovations which may be turned into new products or lead to the creation of new businesses. We have continued to protect our IPs in technological areas and territories of strategic importance, and our patent filing recorded a 47% increase this year. We have also achieved consistent performance in technology licensing, granting 78 licences to local and overseas companies, and receiving a total of HK$ 49.6 million in licensing income. Workshops and seminars were organised to promote the understanding of patenting and IP protection to our staff and students. Over 100 participants took part in these events, in which external speakers shared their expert views on patent application and new venture strategies.

Patenting and licensing of intellectual properties (IP) are key activities on the critical path to capitalise, develop and commercialise the University’s discoveries. In order to continue our good practice and effective measures in IP management to maximise the value of CUHK’s intellectual assets and promote the timely transfer of commercially viable knowledge to benefit society, we plan to:

- Strengthen the capability and capacity of the Legal and Contracts Team to handle increasing workload and complexity in legal and contracts matters. We have started to streamline our support by working with the Clinical Research Management Office (CRMO) on clinical trial agreements and with SZRI on China-related research agreements.
• Strengthen IP and Technology Licensing Team to expand its effort to promote IP protection and licensing activities among University researchers as well as provide tools and training for the IP team to handle new IP domains such as eLearning and open source software as well as patent prosecution in Mainland China.

4.3 Strengthening Academic-Industry Collaboration

CUHK has distinctive capabilities in biomedical and engineering research which accounted for over 70% of the patents granted in recent years. However, the lack of a translational development platform that meets the local and global regulatory standards has hampered the efficiency in knowledge transfer. In biotechnology, the progression of promising results in an academic laboratory to obtaining real interest from investors and biotech companies has been characterised as the “Valley of Death”. This is because most biotech product candidates fail at this stage. Developing new biomedical products require not just capital but also the relevant industrial and regulatory expertise.

The key to crossing the “Valley of Death” is to bring together the knowledge of the inventors and the skills of the developers. We plan to strengthen and expand our strong partnership with strategically important industrial and investment partners in healthcare, engineering and big data. For instance, in new drug discovery and development, we have been discussing with industrial partners with strong expertise in medicinal chemistry, formulation, toxicology, clinical trial design and regulatory sciences. Through these collaborative efforts, our research staff will undertake the best translational path to fill the gaps, so that the development project becomes attractive to investors and pharmaceutical companies to license. It is envisaged that such partnerships will streamline the academic industry collaboration and contribute to the successful development of an emerging pharmaceutical industry in Hong Kong.

4.4 Enhance our Contribution in the Guangdong-Hong Kong-Macao Greater Bay Area (GHM-GBA)

China offers many opportunities for businesses. At a Panel meeting of the National People’s Congress in March 2018, Mr. WANG Huning, a member of the Standing Committee of the Politburo of the Central Committee of the Communist Party of China (CPC) and secretary of the Secretariat of the CPC Central Committee indicated that “Hong Kong, in order to achieve greater development, has no choice but to integrate its own development into the country’s overall development strategy”. In May 2018, President XI Jinping announced several initiatives to enhance scientific and technological cooperation between Mainland China and Hong Kong, such as allowing direct application for Central Fiscal Science and Technology Plans by qualified scientists in Hong Kong and supporting Hong Kong’s development as
an International Innovative Technology Hub for China. With a strong reputation in research and development and a good track record in knowledge transfer, CUHK is well poised to contribute to the successful development of the GHM-GBA initiatives.

To assist CUHK-enabled startups to expand their business development in China, we established an InnoHub at SZRI in May 2018. It provides mentorship and professional services for companies with products or services which are near or ready to launch into the markets in China and serves as a launch pad to accelerate their growth and commercialisation.

In addition, we have actively participated in exhibitions, conferences and competitions to showcase and promote CUHK technologies in the Greater Bay Area. We have signed Memorandums of Understanding with city governments and industrial partners in Donguan, Foshan, Zhuhai and Guangzhou. We have started to explore collaboration opportunities to facilitate the business ventures of relevant Pi and TSSSU teams in order to expand our reach and significance in GHM-GBA. Moreover, we are leveraging our mainland alumni networks and engaging them as mentors, investors and ambassadors for these programmes.

We hosted a Pi Centre Boot Camp in Foshan in June 2018 which gave more than 20 students interested in entrepreneurship the opportunity to visit the entrepreneurship facilities and supports in Foshan. Students were also given training in pitching, fund raising and conducting business in China, and 7 teams were given the opportunity to present their business ideas in front of a panel of judges. We also set up the CUHK Pi Centre (Foshan) at Gungho Space, an incubator setup by the local government. It provides free co-working space for our students if they want to use it as a base to explore entrepreneurial opportunities in China.
CUHK’s booth at the First China (International) Science & Research Institution Innovation Achievements Fair, Dongguan

Prof Carmen POON (Department of Surgery) introduces CUHK’s medical technologies to Chief Executive Mrs Carrie LAM

Participants in the Pi Centre Boot Camp in Foshan

Mr Perkins HO, head of EASI, speaks at the opening forum of 2017 Guangdong International Applied Science & Technology Trade Expo

Opening ceremony of InnoHub at SZRI
5 Impact on Society

5.1 Impact of Technology Licensing on Society

Technology licensing allows the University-derived innovations to reach the market faster, thereby contributing to economic growth and benefiting society. We granted 78 licences in 2017-18 to local and overseas companies. For example, licences were granted to a Hong Kong-based cancer diagnostics startup which was co-founded by Professor Dennis Lo, Director of the Li Ka Shing Institute of Health Sciences and scientists from his team. In late 2017, the startup formed a Hong Kong-US diagnostics alliance with a Silicon Valley company which has raised more than US$1 billion funding since 2016. Based on the cutting-edge technologies licensed from the University, the new alliance aims to speed up the development of liquid biopsy tests for non-invasive early-stage molecular cancer diagnostics for the global market.

We have also successfully expanded the market for “Interactive Weight-bearing Exercise Platform”, a magnetic levitation system and actuator to generate vibration demonstrated to be effective for treating and preventing age-related bone and muscle weakness based on the research and clinical trials conducted by Professor LEUNG Kwok-Sui and CHEUNG Wing-Hoi Louis of our Department of Orthopaedics & Traumatology, to Southeast Asia and Europe by granting a licence to a manufacturer with business operations beyond the Greater China area. The product was first launched in Hong Kong and Macau in 2010 and has benefited over 100 organisations since then. The new licence will bring the technology to a larger market and benefit more communities and patients.

Moreover, in response to the Government’s recent focus on nurturing entrepreneurial development, the University has formulated specialised strategies to encourage and facilitate technology startups initiated by its staff and students. This year, the University granted 4 licences to the TSSSU companies, on inventions ranging from efficient human resource management system and high resolution laser manufacturing method to stem cell technology and toolbox for universal gene targeting.

5.2 Impact of Social Innovation on Society

5.2.1 SLCO-CR: Speaking in Sign Bilingual to Combat the Silence

There is a long-established misunderstanding in the Hong Kong community that signing slows down the process of learning lip-reading and speaking among deaf children. It is as if by copying the speaking behaviour of the hearing children, the deaf children could become “normal” again. Sign language is not being encouraged and deaf children are frustrated in the process of learning by using languages which they could not wholly embrace.
Prof Gladys TANG, with her research expertise in sign linguistics and language acquisition, has shown that optimal learning for deaf children can be achieved through signed language and spoken language trainings together (bimodal bilingualism). Sign language can tremendously facilitate their spoken language and literacy development.

She set up SLCO-CR in 2016 to provide bimodal bilingualism education programmes for deaf, hearing and other Special Educational Needs (SEN) children in the same classroom. The company is supported by S-KPF, and evolved from the Centre for Sign Linguistics and Deaf Studies in CUHK.

SLCO-CR has initiated many innovative classes to help deaf children and to support parents, educators and other professionals in learning and appreciating sign language. Examples of these classes are parent-child sign-bilingual story-telling experiential lessons for children with Autism Spectrum Disorder (ASD) and Intellectual Disabilities (ID) to improve communication between parents and children; deaf awareness workshops to hospital’s front-line staff to enhance their sensitivity towards deaf people; and sign language interest classes to nurture the public’s positive attitude towards sign language and deafness.

Besides providing a new learning model to help deaf children to learn and to enjoy a fair education environment, the bilingual learning model is beneficial to hearing children as well. The additional new language, sign language, helps in developing different areas of their brain. The model also enhances mutual support and positive social interaction among the deaf and hearing children. It cultivates a deaf-hearing inclusive society in which individual differences are appreciated and different languages are respected.

One of the major highlights for SLCO-CR was being an awardee of the “Asia for Good Reader’s Choice Award” in the SVA Asia 2017 with their “Fun with Speech and Sign – Early Sign Bilingual Development
Programme”. This was the first time a Hong Kong-based social enterprise received an award in one of the most prestigious social competitions in the region. Succeeding in a competition not confined to Hong Kong has strengthened SLCO-CR’s self-confidence and encouraged the team to expand its activities in other parts of the world.

The visitors from Singapore, Macau and Netherland were inspired by the bimodal bilingualism model. The support also came from other external funding, including SIE matching fund and private donors.

5.2.2 Planning Ahead: Preparing People with Chronic Progressive Diseases and their Carers to Plan for End of Life Care

We plan for a trip or retirement but we seldom plan for our deaths, even though death is the common fate of all of us. In Chinese tradition, talking about death or dying has long been a taboo subject. Because they believe that it is the duty of clinicians to bring up this topic, old people, patients with chronic progressive diseases and family carers are often inadequately prepared for the decision-making process for end-of-life care.

Prof CHAN Yue Lai Helen of the Nethersole School of Nursing implemented a KPF project called “Planning Ahead: Preparing People with Chronic Progressive Diseases and their Carers to Plan for End of Life Care” to address the poor awareness towards end-of-life care issues in the local community. In the project, she introduced a concept called Advance Care Planning (ACP) to the public. ACP involves a collaborative communication between patients, family members and health care professionals to plan for future medical treatment and personal care at the end of life before the patient is incapable to make decisions himself.

ACP is a global movement which places emphasis on the patient rights with the quality of dying. The public educational talks improved the awareness of patients and carers towards advance care planning and the complexity of end-of-life care issues.

This KPF project empowered individual persons to share their life experiences and express their own expectation. It was well received by the participants, as they felt relieved and peaceful after the “conversation” with themselves, and being able to communicate better with their significant others. The programme also reduced the sense of hopelessness, powerlessness and helplessness among the groups.

Website and app on end-of-life planning
6 Working Together to Make Things Happen

In summary, creating a collaborative entrepreneurial ecosystem is crucial for translating the innovative research of CUHK staff and students into a significant societal impact. With the support of the KT fund from the UGC, we have already made substantial progress towards this goal. To strengthen entrepreneurship education, we launched a new Entrepreneurship and Innovation minor programme in 2017. To enhance entrepreneurship training, we established an InnoHub in SZRI in May 2018 to provide affordable space, mentorship and industry/market access for CUHK-enabled startups to expand their business ventures in China. The renovation plan to convert a building on the Shatin campus into a new centre to provide entrepreneurial education and startup services is now underway. We are also in discussion with city governments of Tianhe, Foshan, Zhuhai and Dongguan to facilitate the business ventures of relevant Pi and TSSSU teams in the GHM-GBA. These innovation hubs will provide comprehensive startup services as well as stimulating co-creating spaces for University entrepreneurs to carry out translational research and development.

The ability to achieve translational development and commercialisation depends on effective external partnerships. We will be exploring new ways of facilitating mutually beneficial partnerships that speed up the development of solutions to meet society’s needs. For example, we will be working with leading pharmaceutical companies and biotech investors to facilitate new drug discovery and development via novel alliances. We believe these concerted efforts will position CUHK as a preferred partner and a leader to drive excellence in Innovation and Technology.

Last but not least, we would like to thank our funders and many partners within the University and in our community for their continued support. To accomplish the planned activities and new initiatives described in this report, we must continue to secure additional support from both private and public sources. The recurrent funding pledged by SIE to support our KPF programme at HK$3 million a year from 2019 is a notable step forward, which will help to contribute to our future success.

Professor Fanny CHEUNG, Pro-Vice-Chancellor
31 July 2018
Updates on Table 4.1 of Initial Statement
(1 July 2017 – 30 June 2018)

<table>
<thead>
<tr>
<th>UGC Performance Indicators</th>
<th>Last year</th>
<th>Current year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Number of patents filed in the year (with breakdown [Annex 4] by country and type)</td>
<td>223</td>
<td>327</td>
</tr>
<tr>
<td>2  Number of patents granted in the year (with breakdown [Annex 5] by country and type)</td>
<td>132</td>
<td>185</td>
</tr>
<tr>
<td>3  Number of licences granted (with breakdown [Annex 6] by type)</td>
<td>90</td>
<td>78</td>
</tr>
<tr>
<td>4  Income (on cash basis) generated from intellectual property rights</td>
<td>$68,864,366 (a)</td>
<td>$49,584,467 (a)</td>
</tr>
<tr>
<td>5  Expenditure involved in generating income from intellectual property rights</td>
<td>$3,787,986 (a)</td>
<td>$7,816,468 (a)</td>
</tr>
<tr>
<td>6  Number of economically active spin-off companies (with breakdown [Annex 11] by type)</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>7  Net income generated (or net loss arising) from spin-off companies</td>
<td>$9,968,505 (a)(b)</td>
<td>$15,585,610 (a)(b)</td>
</tr>
<tr>
<td>8  Number of collaborative research projects, and income thereby generated</td>
<td>203 cases $84,809,168 (a)</td>
<td>216 cases $100,066,013 (a)</td>
</tr>
<tr>
<td>9  Number of contract research projects (other than those included in “collaborative research projects” above), and income thereby generated</td>
<td>53 cases $29,560,712 (a)</td>
<td>66 cases $81,965,174 (a)</td>
</tr>
<tr>
<td>10 Number of consultancies, and income thereby generated</td>
<td>316 cases $118,452,611 (a)</td>
<td>363 cases $137,975,630 (a)</td>
</tr>
<tr>
<td><strong>Subtotal Income</strong> Item (4)+(7)+(8)+(9)+(10)</td>
<td><strong>$311,655,362</strong></td>
<td><strong>$385,176,894</strong></td>
</tr>
<tr>
<td>11 Number of equipment and facilities service agreements, and income thereby generated</td>
<td>1 (No. of facilities) $22,810</td>
<td>Nil</td>
</tr>
<tr>
<td>12 Income received from Continuing Professional Development (CPD) courses</td>
<td>$40,577,473 (a)(c)</td>
<td>$50,109,629 (a)(c)</td>
</tr>
<tr>
<td><strong>Total Income</strong> Item (4)+(7)+(8)+(9)+(10)+(11)+(12)</td>
<td><strong>$352,255,645</strong></td>
<td><strong>$435,286,523</strong></td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>428,768 hours (559 courses with 24,363 students)</td>
</tr>
<tr>
<td>---</td>
<td>-------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>13</td>
<td>Number of student contact hours in short courses or e-learning programmes specially tailored to meet business or CPD needs</td>
<td>428,768 hours (559 courses with 24,363 students)</td>
</tr>
<tr>
<td>14</td>
<td>Number of public lectures / symposiums / exhibitions and speeches to a community audience</td>
<td>1,227</td>
</tr>
<tr>
<td>15</td>
<td>Number of performances and exhibitions of creative works by staff or students</td>
<td>160</td>
</tr>
<tr>
<td>16</td>
<td>Number of staff engaged as members of external advisory bodies including professional, industry, government, statutory or non-statutory bodies</td>
<td>420</td>
</tr>
</tbody>
</table>

**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) Change in definition of social, community and cultural engagement.
Updates on Table 4.2 of Initial Statement
(1 July 2017 – 30 June 2018)

<table>
<thead>
<tr>
<th>Other Performance Indicators</th>
<th>Last year</th>
<th>Current year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016-17</td>
<td>2017-18</td>
</tr>
<tr>
<td>1 Knowledge Transfer Project Fund (KPF): Projects supported by the UGC KT Fund</td>
<td>2016-17: 10 Total: 157 Beneficiaries: 247,461 for 2016-17</td>
<td>2017-18: 7 Total: 164 Beneficiaries: 220,743 for 2017-18</td>
</tr>
<tr>
<td>2 Sustainable Knowledge Transfer Project Fund (S-KPF)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3 Technology and Business Development Fund (TBF)</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>4 Number of other KT projects and activities not funded by the UGC KT Fund</td>
<td>469 Beneficiaries: 43,447</td>
<td>390 Beneficiaries: 86,449</td>
</tr>
<tr>
<td>5 Number of websites on KT activities at Faculties / Departments / Centres</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>6 Number of publicity or media features related to KT, including print, online and electronic media</td>
<td>2,615</td>
<td>2,669</td>
</tr>
</tbody>
</table>
### Knowledge Transfer Project Fund (KPF) Project List

**Project completed (details in Annex 8.2)**

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Code</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>KPF15ICF05</td>
<td>Prevention of Stroke and Enhancement of Life with Aphasia</td>
</tr>
<tr>
<td>2</td>
<td>KPF15ICF16</td>
<td>Promotion of Healthy Lifestyle among Middle-Aged Chinese Population in Hong Kong: An Integrated Approach using Body Fat Measurement, Brief Counseling, and Mobile Apps</td>
</tr>
<tr>
<td>3</td>
<td>KPF15ICF17</td>
<td>Living with Heart: Online and Community-based Mindfulness and Compassion Programs for the Promotion of Public Mental Health in Hong Kong</td>
</tr>
<tr>
<td>4</td>
<td>KPF16ICF01</td>
<td>Developing and Sustaining the “Support Program for Secondary School Student Athletes – Fostering Different Levels of Academic and Athletic Development”</td>
</tr>
<tr>
<td>5</td>
<td>KPF16ICF03</td>
<td>Promoting Physical and Health Literacy in Hong Kong Pre-school Teachers, Children and their Families</td>
</tr>
<tr>
<td>6</td>
<td>KPF16ICF05</td>
<td>Robot-based Intervention to Reduce Challenging Behaviors in Children with Autism Spectrum Disorders</td>
</tr>
<tr>
<td>7</td>
<td>KPF16ICF07</td>
<td>StoryTaler: Fighting against Mental Illness Stigma Through Story-telling Online and Offline</td>
</tr>
<tr>
<td>8</td>
<td>KPF16ICF09</td>
<td>Promoting Integrative Chinese-Western Medicine Care Models through the Development of an Evidence-based Electronic Resource and Training Program</td>
</tr>
<tr>
<td>9</td>
<td>KPF16ICF10</td>
<td>An Evidence-based Knowledge Transfer Program Promoting HIV Self-testing with Real-time Online Counseling for Men Who Have Sex with Men in Hong Kong</td>
</tr>
<tr>
<td>10</td>
<td>KPF16ICF11</td>
<td>Development and Implementation of a Positive Psychology Intervention to Improve Mental Health among Secondary School Students and Teachers in Hong Kong</td>
</tr>
<tr>
<td>11</td>
<td>KPF16ICF13</td>
<td>Knowledge Transfer to Increase Access of Cervical Cancer Screening among the Difficult-to-reach Group in Hong Kong: Community-based Training on Screening by Self-sampling</td>
</tr>
<tr>
<td>12</td>
<td>KPF16INF07</td>
<td>Elder Law in Hong Kong: Advancing the Rights of Older Persons</td>
</tr>
<tr>
<td>13</td>
<td>KPF16INF10</td>
<td>Planning Ahead: Preparing People with Chronic Progressive Diseases and their Carers to Plan for End of Life Care</td>
</tr>
<tr>
<td>14</td>
<td>KPF16INF11</td>
<td>“TIME TO GET HELP! SAY NO TO FAECAL INCONTINENCE!” 「起來吧！請對大便失禁說不！」</td>
</tr>
<tr>
<td>15</td>
<td>KPF17ICF03</td>
<td>Public Education on Sarcopenia Awareness and Fracture Prevention by Online Video Content. An Extension of the Fall Prevention Campaign</td>
</tr>
<tr>
<td>16</td>
<td>KPF17ICF04</td>
<td>Sustainable Mushroom Urban Farming with Social and Educational Perspectives</td>
</tr>
<tr>
<td>17</td>
<td>KPF17ICF17</td>
<td>Interculturalism and Motherhood: Agents of Change in Multicultural Hong Kong</td>
</tr>
<tr>
<td>Project Code</td>
<td>Project Title</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>KPF17ICF19</td>
<td>Social Integration with the 5%: Social Empowerment of Migrant Workers and Intercultural Communication between Migrant Workers and Secondary Students</td>
<td></td>
</tr>
</tbody>
</table>

**Project in progress (details in Annex 8.3)**

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPF16ICF14</td>
<td>Mindfulness for Children with Attention Deficit Hyperactivity Disorder (ADHD) and their Parents: An Education and Practice Programme in the Community</td>
</tr>
<tr>
<td>KPF17ICF01</td>
<td>A Real-time Chinese Sentence Learning Platform for Ethnic Minority Students</td>
</tr>
<tr>
<td>KPF17ICF06</td>
<td>Development of Chronic Disease Self-management Program to Community-dwelling People with Mild Neurocognitive Disorder</td>
</tr>
<tr>
<td>KPF17ICF07</td>
<td>Robot Drama Therapy for Promoting Social Competence of Children with Autism Spectrum Disorders</td>
</tr>
<tr>
<td>KPF17ICF10</td>
<td>Pursuing Meaningful Goals as Intervention to Reduce Loneliness among Hong Kong Elders</td>
</tr>
<tr>
<td>KPF17ICF11</td>
<td>UNEMIA- Business for Social Cohesion and Understanding</td>
</tr>
<tr>
<td>KPF17ICF18</td>
<td>Hong Kong Sign Language Fundamental Medical Knowledge Databank</td>
</tr>
<tr>
<td>KPF17ICF22</td>
<td>The CUHK Eye SMART (Screening of Macular And Retinal diseases for knowledge Transfer) Campaign</td>
</tr>
<tr>
<td>KPF17ICF25</td>
<td>Development of a Culturally Sensitive Website to Promote Healthy Lifestyles and the Prevention of Chronic Illness among South Asians in Hong Kong</td>
</tr>
<tr>
<td>KPF17ICF28</td>
<td>What does Sexual Orientation and Gender Identity Equality Mean for Policy Makers, Service Providers and Legal and Business Communities? Using Diverse Ways to Disseminate Research Findings to Stakeholders and Creating an Interactive Database and a Knowledge Hub on LGBT Issues in Hong Kong</td>
</tr>
<tr>
<td>KPF17ICF30</td>
<td>Supporting Family Carers of People Living with Dementia with an Interactive Mobile Application</td>
</tr>
<tr>
<td>KPF18SCF01</td>
<td>Promote Psychological and Behavioural Well-beings of Preschool Children with Autism Spectrum Disorders by Implementing a TCM Paediatric Massage Program (小兒推拿)</td>
</tr>
<tr>
<td>KPF18CHF04</td>
<td>Realizing Children’s Potential in Language Development: Input and Intervention</td>
</tr>
<tr>
<td>KPF18HLF05</td>
<td>BASIC (Broad Antimicrobial-resistance Service-learning &amp; Intervention in the Community)</td>
</tr>
<tr>
<td>KPF18CHF10</td>
<td>Intercultural Education in the Neighborhood: Sustainable Community Innovation and Women’s Empowerment from the Ground Up</td>
</tr>
<tr>
<td>KPF18HLF12</td>
<td>3D-printed Soft Robotic Hand for Stroke Rehabilitation and Elderly Healthcare</td>
</tr>
<tr>
<td>KPF18HLP17</td>
<td>Online Parenting Programme for Families of Children Born Preterm</td>
</tr>
<tr>
<td>18</td>
<td>KPF18HLF20</td>
</tr>
<tr>
<td>19</td>
<td>KPF18HLF22</td>
</tr>
<tr>
<td>20</td>
<td>KPF18HLF26</td>
</tr>
<tr>
<td></td>
<td>(Funded by SIE)</td>
</tr>
<tr>
<td>21</td>
<td>KPF18HLF27</td>
</tr>
<tr>
<td></td>
<td>(Funded by SIE)</td>
</tr>
<tr>
<td>22</td>
<td>KPF18HLF28</td>
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<tr>
<td>23</td>
<td>KPF19HLF29</td>
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<tr>
<td>24</td>
<td>KPF18SCF30</td>
</tr>
<tr>
<td></td>
<td>(Funded by SIE)</td>
</tr>
<tr>
<td>25</td>
<td>KPF18HLF34</td>
</tr>
</tbody>
</table>
Knowledge Transfer Project Fund (KPF) Projects completed

KPF15ICF05
Prevention of Stroke and Enhancement of Life with Aphasia
Prof WONG Chun Man, Patrick (Department of Linguistics and Modern Languages)

PARTNERS
10 elderly centres
3 hospitals
2 associations

TALKS
9 talks in elderly centres on causes and preventive measures for stroke and aphasia

WORKSHOPS
9 workshops with games to foster understanding of the diseases

WEBSITE
http://bmi.cuhk.edu.hk/stroke/

ASSESSMENT & TRAINING
Free assessment on language and speech ability and free language training sessions for patients

PAMPHLETS
Distributed during talks and in centres

BENEFICIARIES
Total: 3715

- Post-stroke patients with aphasia receiving free assessment, 76
- Public talk/workshop participants, 615
- Pamphlet recipients, 3000
- Post-stroke patients with aphasia receiving trial treatment, 24

Public talk/workshop participants, 615
Post-stroke patients with aphasia receiving trial treatment, 24
Pamphlet recipients, 3000
Post-stroke patients with aphasia receiving free assessment, 76
KPF15ICF16
Promotion of Healthy Lifestyle among Middle-Aged Chinese Population in Hong Kong: An Integrated Approach using Body Fat Measurement, Brief Counseling, and Mobile Apps
Dr SU Xuefen (The Jockey Club School of Public Health and Primary Care)

PARTNER
1 NGO (Joyful Square)

INTERVENTION
Improvement in nutritional knowledge, attitudes and practice

WEBSITE & APP
https://justeechow.wixsite.com/website
Web-based intervention with nutritional knowledge and practical eating advice to promote healthy eating habits

EVALUATION
Participants scored better in the post-test than in pre-test in the effectiveness of the programme
Living with Heart: Online and Community-based Mindfulness and Compassion Programs for the Promotion of Public Mental Health in Hong Kong
Prof MAK Wing Sze, Winnie (Department of Psychology)

WORKSHOPS
8 workshops on mindfulness and storytelling

PARTNERS
2 registered clinical psychologists
1 UCSD professor
CUHK Student Counselling and Development Service

WEBSITE
http://www.livingwithheart.hk/
Mental health information, mental health promotion interventions and self-assessment centre on mental health status

FEEDBACK
“interesting and practical”
“effective in increasing understanding of the self and promoting physical and psychological health”
“agree that mindfulness can help relieve stress and relax”
“will try applying in work settings”
Developing and Sustaining the “Support Program for Secondary School Student Athletes – Fostering Different Levels of Academic and Athletic Development”
Prof SUM Kim Wai, Raymond (Department of Sports Science and Physical Education)

PARTNERS
39 secondary schools
7 sports / athlete associations
Meiriki JP; Nike Hong Kong
Chow Tai Fook Charity Foundation

FEEDBACK
“Eager to try and apply sports taping techniques”
“Systematic and informative workshop on sports injuries”

TALKS & WORKSHOPS
1 talk and 9 workshops on sports injury prevention, high-intensity interval training, and nutrition in sports etc.
3 sharing sessions by student ambassadors

EXTENSION
Sports gear donation and recycling allocated proper sports gear to 33 schools, with a video produced

WEBSITE
http://sasp.spe.cuhk.edu.hk/eng/index.asp

Total: 1110 BENEFICIARIES
PE teachers / coaches, 37
CUHK elite student athlete ambassadors, 33
Secondary school students athletes, 1040
KPF16ICF03
Promoting Physical and Health Literacy in Hong Kong Pre-school Teachers, Children and their Families
Prof HA Sau Ching, Amy (Department of Sports Science and Physical Education)

PARTNERS
10 pre-primary schools

WORKSHOPS
2 whole-day workshops for 100 teachers

EVENTS
2 whole-day family events with physical activities for >150 families

INTERVENTION
Positive changes for children’s balance, jump and run tests
Increase in parents’ enjoyment towards physical activity

PUBLICITY
Project Leader presented a talk on the project at the Learning & Teaching Expo 2017
Produced a set of printed teaching and reference materials

FEEDBACK
“Valuable training since important concepts taught, like fundamental movement skills and physical literacy, are very new to teachers”

Total: 490

Teachers of pre-primary students, 110
Parents of pre-primary students, 210
Pre-primary students, 170

BENEFICIARIES
Robot-based Intervention to Reduce Challenging Behaviors in Children with Autism Spectrum Disorders

Prof SO Wing Chee, Catherine (Department of Educational Psychology)

PARTNERS
3 centres in SAHK
Christian Service Centre (CSC)
Hong Chi Morninghill School in Tsui Lam

INTERVENTION
Robot-based programme teaching 8 gestures to 85 preschool and school-age children with autism
Number of gestures recognised and produced appropriately increased >55% after intervention
~Half of the children can apply the gestures at school / home

AWARDS
Finalist of South China Morning Post’s Spirit of Hong Kong Awards (Innovating for Good)
Merit Award at Hong Kong ICT Awards 2018: Smart People (Smart Inclusion)

FEEDBACK
“User-friendly programme”
KPF16ICF07
StoryTaler: Fighting against Mental Illness Stigma Through Story-telling Online and Offline
Prof MAK Wing Sze, Winnie (Department of Psychology)

PARTNERS
New Life Psychiatric Rehabilitation Association
Baptist Oi Kwan Social Service
Baptist University; Mad World
Diocesan Girls’ School
Self-help group of people with mental illness
Red Cross; The Edu Lab
Hong Kong Eating Disorders Association Limited

SOCIAL MEDIA
http://www.facebook.com/storytaler.hk/
Facebook page with mental illness information reached 31,556 likes

FEEDBACK
Reduced stigma against people with mental illness
Improved empathy and attitudes towards recovery and outcome of mental illness

PUBLICTITY
>15 published media interviews

BENEFICIARIES
Total: 85658
Sharing session attendees, 748
Video viewers, 53000
Facebook page followers, 31556
StorTelling Day attendees, 354
KPF16ICF09
Promoting Integrative Chinese-Western Medicine Care Models through the Development of an Evidence-based Electronic Resource and Training Program
Prof CHUNG Chi Ho, Vincent (The Jockey Club School of Public Health and Primary Care)

**PARTNERS**
- 18 Chinese medicine centres
  - HKBU School of Chinese Medicine Alumni Association
  - Union of Frontline Chinese Medicine Practitioners (Hong Kong)
  - 13 Tong Ren

**WEBSITE**
http://hkiim.cuhk.edu.hk/ceim/en/
Integrative Medicine Clinical Evidence Portal with 200 bilingual synopses on Chinese and integrative medicine with evidence grading, videos of training workshops and relevant materials

**TRAINING**
3 workshops for Chinese medicine practitioners and students

**FEEDBACK**
Significant improvement in attitudes towards evidence-based healthcare concepts

**PUBLICITY**
Held a press conference and reported by 9 media outlets Constant information dissemination through Facebook page

**BENEFICIARIES**
Total: 64483
- Chinese medicine practitioners, 350
- Facebook page followers, 22388
- Website viewers, 41745
An Evidence-based Knowledge Transfer Program Promoting HIV Self-testing with Real-time Online Counseling for Men who Have Sex with Men in Hong Kong

Prof LAU Tak Fai, Joseph (The Jockey Club School of Public Health and Primary Care)

PARTNERS
7 AIDS concern groups

WEBSITE
http://www.hivstonline.com
Promotional and demonstrational videos on how to perform the test, information on the project and HIV, and a discussion forum

INTERVENTION
Invited 517 eligible men who have sex with men (MSM) to use the HIV self-testing (HIVST) online service, discovering 4 positive cases who have been referred to care and treatment

TRAINING
3 training workshops for staff and fieldworkers on HIVST implementation

CONFERENCE
Presented project findings at 3 conferences

FEEDBACK
“>85% satisfied/very satisfied with service and health promotion”
“the service helps remove barriers against testing, such as showing up at a testing clinic”

SUSTAINABILITY
Project materials and online service to be transferred to interested NGOs

Men who have sex with Men
Total: 909

BENEFICIARY
KPF16ICF11
Development and Implementation of a Positive Psychology Intervention to Improve Mental Health among Secondary School Students and Teachers in Hong Kong
Prof MO Kit Han, Phoenix (The Jockey Club School of Public Health and Primary Care)

PARTNERS
5 secondary schools

INTERVENTION
9 lesson plans and class activities were produced to trained teachers to execute programme at school
Provided students with logbooks and bookmarks to record Three Good Things (TGT)
~Half of the students reported decreased depression after intervention, ~40% reported decreased anxiety

TRAINING
5 training workshops for teachers of participating schools to promote positive psychology and explain programme execution

FEEDBACK
“informative and practical workshop”
“helped increase sense of gratitude and positive emotions”

WEBSITE
http://threegoodthingshk.wixsite.com/threegoodthings

Total: 3103

BENEFICIARIES
Student referrals, 1602
Secondary 1-5 students from 5 schools, 1376
Class teachers from 5 schools, 125

Annex 8
**Knowledge Transfer to Increase Access of Cervical Cancer Screening among the Difficult-to-reach Group in Hong Kong: Community-based Training on Screening by Self-sampling**

Prof WONG Lai Yi, Eliza (The Jockey Club School of Public Health and Primary Care)

**PARTNERS**
Community centres in Kwai Tsing District
Sha Tin District Council

**INTERVENTION**
Recruited 217 individuals to perform HPV self-sampling

**TRAINING**
Training university students and community volunteers as health ambassadors to promote cervical cancer prevention

**FEEDBACK**
“Educational materials were easy to follow and clear”
“~2/3 of respondents showed preference for self-sampling over screening at healthcare centres”

**PAMPHLETS**
Disseminated via partners and health promotion events

**WEBSITE**
http://www.cuhk.edu.hk/sphpc/hpvselfsampling/
With promotional video and pamphlet

**BENEFICIARIES**
Self-sampling participants, 47
Student health ambassadors, 36
Community volunteer health ambassadors, 77
Total: 160

**PARTNERS**
Community centres in Kwai Tsing District
Sha Tin District Council

**INTERVENTION**
Recruited 217 individuals to perform HPV self-sampling

**TRAINING**
Training university students and community volunteers as health ambassadors to promote cervical cancer prevention

**FEEDBACK**
“Educational materials were easy to follow and clear”
“~2/3 of respondents showed preference for self-sampling over screening at healthcare centres”

**PAMPHLETS**
Disseminated via partners and health promotion events

**WEBSITE**
http://www.cuhk.edu.hk/sphpc/hpvselfsampling/
With promotional video and pamphlet
Elder Law in Hong Kong: Advancing the Rights of Older Persons

Prof Mimi ZOU (Faculty of Law)

PARTNERS
3 elderly service organisations
4 health and medical professionals
2 government officials
3 social workers; 3 lawyers

WORKSHOP
Group discussions exploring elder law issues in Hong Kong and generating suggestions on law reform to better protect the elderly

FEEDBACK
“95% respondents agreed the workshop enhanced their knowledge and contributes practically to their everyday work”

IMPACT
Project Leader invited to draft a Private Member’s Bill to address elder abuse issues with a LegCo member

PUBLICITY
Press conference with 20 media outlets
Planning Ahead: Preparing People with Chronic Progressive Diseases and their Carers to Plan for End of Life Care

Prof CHAN Yue Lai, Helen (The Nethersole School of Nursing)

PARTNERS
The Hong Kong Society for Rehabilitation
Hong Kong Association of Gerontology
Hong Kong Housing Society
Hong Kong Christian Service

TALKS
13 public talks at community and elderly centres for patients and caretakers

TRAINING
7 volunteer/staff training workshops at hospitals and NGOs

WEBSITE
Platform introducing concept of advance care planning, adopted by nurses and social workers in their own training

FEEDBACK
“Significant improvement in awareness and readiness to discuss about end-of-life care issues”

PUBLICITY
Project presented at International Ethics Consultation Conference and received Best Poster Award, also at Hong Kong Palliative Care Symposium
Reported in newsletters and broadcasted on a series of radio programme

SUSTAINABILITY
Continued receiving enquiries and invitations from NGOs to conduct similar training/workshops

Total: 740

Chronic progressive disease patients and their caretakers, 600
Volunteers having frequent contact with patients and caretakers, 40
Health professionals, 100
Beneficiaries, 740

Annex 8
“TIME TO GET HELP! SAY NO TO FAECAL INCONTINENCE!” [起來吧！請對大便失禁說不！]
Prof MAK Wing Chung, Tony (Department of Surgery)

PARTNERS
- 1 dietician
- 1 nurse specialist
- 1 community tai chi teacher

INTERVENTION
- Talks and exercise sessions for relieving symptoms
- Organised a revision course and experience sharing session

FEEDBACK
- “Enabled mutual support among patients who have not been actively undergoing medical treatment due to cultural embarrassment”
- “50% reduction in symptoms after training in 85% subjects”

PUBLICITY
- Presented the project on radio show

BENEFICIARIES
- Total: 94
- Patient relatives, 15
- Faecal incontinence patients, 79
KPF17ICF03
Public Education on Sarcopenia Awareness and Fracture Prevention by Online Video Content. An Extension of the Fall Prevention Campaign
Prof CHOW Kwoon Ho, Simon (Department of Orthopaedics and Traumatology)

PARTNERS
14 community/elderly service centres

VIDEOS
Videos to raise public sarcopenia awareness produced, shown to 2755 people directly or indirectly, also published on online channels http://www.youtube.com/channel/UCB5MQaV5gXhPw1Qn_8p5vX8w

FEEDBACK
2738 minutes of watch time and 1338 views as at 7 March 2018 96% satisfied with the video

PROMOTION
2 educational talks held 5000 handbooks, 1000 flyers and 1000 posters distributed to community/elderly centres

EXTENSION
Project as an addition to the no-fall campaigns previously supported

BENEFICIARIES

- Community partners (members of community/elderly centres and healthcare professionals), 1075
- Middle aged individuals and beyond, 560
- Caretakers, 1120
- Total: 2755
Sustainable Mushroom Urban Farming with Social and Educational Perspectives
Prof KWAN Hoi Shan (School of Life Sciences)

PARTNERS
- Shaw College
- Shaw College canteen caterer
- The Mushroom Initiative

PRODUCTION
- Produced 32kg (800 bottles) of mushroom and 5kg nourished substrate as fertiliser

UPCYCLING
- Upcycled 80kg of soya bean dreg and 5kg of spent coffee ground, recycled 16 sofas and 12 tables

TALKS
- 10 talks at secondary schools, meetings and expos

BOOTHs
- 2 event booths at local expos displaying the mushrooms (HK Food Expo and Peacemaker’s Cultural Celebration by UNSECO)

EXHIBITION
- “The Beauty of Mushroom” mini-exhibition on campus to showcase the diversity of mushrooms and introduce the sustainable urban mushroom farming system

PATENT
- Filed a US Provisional Patent on the regulation of mushroom development

SUSTAINABILITY
- Proceeded to set up social enterprise under the Sustainable Knowledge Transfer Project Fund

Total: 1270

- Lab members, 11
- Student mushroom ambassadors, 9
- Community members, 500
- CUHK students and staff, 500
- Family members of CUHK students and staff, 50
- Secondary school students and teachers, 200
- Family members of CUHK students and staff, 50

Annex 8
**KPF17ICF17**

**Interculturalism and Motherhood: Agents of Change in Multicultural Hong Kong**

Prof TAM Siu Mi, Maria (Department of Anthropology)

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**PARTNERS**

36 individuals; 24 groups

**INTERVENTION**

Programme of 6 training workshops and team projects
Trained 30 mothers of different ethnic backgrounds to be agents of change for a better society

**VIDEOS**

5 documentaries capturing project moments, premiered at the programme closing ceremony and published online

**PUBLICITY**

Public education activities including 10 talks/public lectures/workshops, covered/interviewed 9 times by media

**PUBLICATION**

Published bilingual book introducing 18 ethnic festivals in Hong Kong with 3 book sharing sessions

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Total: 2822

- Ethnic minority mums, participants and book contributors, 88
- Volunteers, 10
- Members of education institutions, social service, ethnic community organisations and consulates, 1500
- Documentary viewers, 331
- General public participants, 876
- Members of education institutions, social service, ethnic community organisations and consulates, 1500
KPF17ICF19
Social Integration with the 5%: Social Empowerment of Migrant Workers and Intercultural Communication between Migrant Workers and Secondary Students
Prof HUA Weishan (Department of Cultural and Religious Studies)

**PARTNERS**
8 labour unions
2 social enterprises
6 NGOs/religious organisations

**TALKS**
9 talks and 9 practical Cantonese classes for migrant workers to integrate into Hong Kong society and culture

**SHARING**
Sharing session attended by all leaders from prominent labour unions of migrant workers in Hong Kong

**OUTREACH**
3 secondary school talks to raise students’ awareness on migrant workers issues and their culture

**FEEDBACK**
100% satisfaction with the sharing ~88% agreed it enriches their understanding of the topic

**BENEFICIARIES**
Total: 845
- Migrant workers, 274
- NGO, union and local community group representatives, 14
- Students, 557
Knowledge Transfer Project Fund (KPF)
Projects in progress

KPF16ICF14
Mindfulness for Children with Attention Deficit Hyperactivity Disorder (ADHD) and their Parents: An Education and Practice Programme in the Community
Prof WONG Yeung Shan, Samuel (The Jockey Club School of Public Health and Primary Care)

- PARTNER: Heep Hong Society
- TRAINING: Workshops for social workers, educational and clinical psychologists from NGOs providing services for children with ADHD and their families
- SEMINARS: 3 community-based seminars for parents of children with ADHD
- BENEFICARIES: 156 parents of children with ADHD, 25 healthcare professionals, 1000 exhibition attendees

KPF17ICF01 (funded by SIE)
A Real-time Chinese Sentence Learning Platform for Ethnic Minority Students
Prof CHAN Wai Kwong, Samuel (Department of Decision Sciences and Managerial Economics)

- PLATFORM: http://hm-learn.baf.cuhk.edu.hk/
  Chinese learning from sentence, word to character and component level with information on >6000 Chinese characters and >12,000 Chinese to English word-to-word translations, Cantonese pronunciation, online quizzes and 4 demo videos on functionality of learning site
- BENEFICARIES: 200 ethnic minority students, 6 Chinese teachers for minorities, 1000 Other Chinese learners
- PARTNERS: Heep Hong Society
- FEEDBACK: Current hit count ~3000 and user registration ~50
KPF17/ICF06 (funded by SIE)
Development of Chronic Disease Self-management Program to Community-dwelling People with Mild Neurocognitive Disorder
Prof KWOK Chi Yui, Timothy (Department of Medicine and Therapeutics)

**BENEFICIARIES**

387 people imminent to be with mild Neurocognitive Disorder
60 staff undergoing intervener training

**PARTNER**
Jockey Club Centre for Positive Ageing

**INTERVENTION**
In progress at participating centres

**TRAINING**
3 intervener trainings for 60 staff

KPF17/ICF07 (funded by SIE)
Robot Drama Therapy for Promoting Social Competence of Children with Autism Spectrum Disorders
Prof SO Wing Chee, Catherine (Department of Educational Psychology)

**BENEFICIARIES**

46 4 to 5-year-old children with Autism Spectrum Disorders (ASDs)

**PARTNERS**
Heep Hong Society
Hong Kong Sheng Kung Hui Welfare Council Limited

**PROGRAMME**
An additional 53 autistic children from various special care centres finished training and assessment
In process of coding and data analysis

**PUBLICITY**
Covered 9 times in media including radio and TV programmes
KPF17/CF10
Pursuing Meaningful Goals as Intervention to Reduce Loneliness among Hong Kong Elders
Prof FUNG Hoi Lam, Helene (Department of Psychology)

PARTNERS
3 elderly centres
The Christian & Missionary Alliance
Church Union of Hong Kong (Tai Po)
Mutual Aid Committee of the Fu Shin Estate (Tai Po)

WORKSHOP
1 workshop to working professionals in elderly services and students studying relevant subjects

INTERVENTION
140 older adults completed 11-week programme with site visits and indoor activities

ASSESSMENT
Conducted telephone-based follow-up assessments and focus group interviews

Adults aged over 75 showed reduced loneliness and increased meaning in life compared to a control group

PUBLICITY
A promotional video and a guidebook under development

FEEDBACK
“Fun and interactive”
“Happy and warm to be surrounded by friends and have people to chat with”
“Visits revived childhood memories”

BENEFICIARY
Lonely older adults (aged 60 or above)
Total: 140
UNEMIA- Business for Social Cohesion and Understanding
Prof WONG Hung (Department of Social Work)

PARTNERS
Sham Shui Po District Council
2 neighborhood elderly centres
9 secondary schools with EM youths
13 NGOs

COMMUNITY MAP
Produced a series of “Ma On Shan Community Asset Map for the Elderly” covering 4 sub-districts

SURVEYS
Completed 5 surveys targeting low-income families, wet market food recycling procedures, elderly in Ma On Shan community, Sham Shui Po street sleepers and urban renewal studies

FACE-TO-FACE INTERVIEWS
>100 street sleepers in Sham Shui Po and 90 elderly members in Ma On Shan interviewed by CUHK students and community members

FEEDBACK
“Learnt more about the living patterns of elderly”
“Understood the complexity of communities”
“The interaction enabled reflections on stereotypes on street sleepers”

Total: 217 BENEFICIARIES

University students, 182
Community members, 10
Ethnic Minority (EM) youth, 7
Street sleepers, 5
Elderly, 13
KPF17/ICF18 (funded by SIE)
Hong Kong Sign Language Fundamental Medical Knowledge Databank
Prof SZE Yim Binh, Felix (Department of Linguistics and Modern Languages)

SURVEY
20 deaf informants shared their understanding of basic medical concepts for identifying knowledge gaps

INTERDISCIPLINARY
Medical students will check and proofread the medical concepts while deaf colleagues will polish the sign language translation

PLATFORM
Chose 100 medical concepts and prepared explanation scripts in written Chinese
Produced videos of 61 medical concepts in sign language

INTERVENTION
Designed an online questionnaire for deaf patients to generate a note with description of symptoms

KPF17/ICF22
The CUHK Eye SMART (Screening of Macular and Retinal diseases for knowledge Transfer) Campaign
Prof NG Siu Chun, Danny (Department of Ophthalmology and Visual Sciences)

TALKS
Educational lectures with partners to 600 public members

SCREENING
20 eye screenings

PAMPHLETS
Distributed during talks

BENEFICIARIES
Total: 1200

PARTNERS
2 elderly centres
2 local universities
Hang Lung Properties Ltd
Hong Kong Institute of Human Resource Management
Hong Kong Former Senior Civil Servants Association Ltd

Educational pamphlet recipients and online material viewers, 600

Public attendees of educational lectures, 600
KPF17/CF25
Development of a Culturally Sensitive Website to Promote Healthy Lifestyles and the Prevention of Chronic Illness among South Asians in Hong Kong
Prof SO Kwok Wei, Winnie (The Nethersole School of Nursing)

PARTNERS
7 local NGOS; 2 Nepali organisations

WEBSITE
http://minorityhealth.nur.cuhk.edu.hk/
Finalised content, graphics and videos

STAKEHOLDERS
Formed advisory panel with South Asian members and held 2 meetings to discuss strategies on website presentation

KPF17/CF28
What does Sexual Orientation and Gender Identity Equality Mean for Policy Makers, Service Providers and Legal and Business Communities? Using Diverse Ways to Disseminate Research Findings to Stakeholders and Creating an Interactive Database and a Knowledge Hub on LGBT Issues in Hong Kong
Prof SUEN Yiu Tung (Gender Studies Programme)

SEMINAR
A seminar on “Why does research on LGBT+ issue matter?” attracted more than 100 participants in business, legal and social service sectors

OUTREACH
4 policy and social engagements covered >50 times by media outlets

BENEFICIARIES
44000 Forum online viewers
800 Legal and business community members
120 Service providers/NGOs; 50 Policy makers

PARTNERS
5 policy makers
50 service providers/NGOs
15 academics
20 members of legal and business community
KPF17/CF30
Supporting Family Carers of People Living with Dementia with an Interactive Mobile Application
Prof CHAN Yue Lai, Helen (The Nethersole School of Nursing)

**BENEFICIARIES**
10 family carers of people living with dementia

**PARTNER**
Jockey Club Centre for Positive Ageing

**MOBILE APP**
Integrating clips into mobile application and conducting pilot study to test its feasibility

**MULTIMEDIA**
Produced 8 video clips on how to manage behaviors and emotional problems in people with dementia, and 7 audio-clips with mindfulness exercises for family carers

KPF18SCF01 (funded by SiE)
Promote Psychological and Behavioural Well-beings of Preschool Children with Autism Spectrum Disorders by Implementing a TCM Paediatric Massage Program (小兒推拿)
Prof SO Wing Chee, Catherine (Department of Educational Psychology)

**WEBSITE**
http://www.rabimassage.com/massage

**PROGRAMME**
Designed assessments and creating online educational resources

**SEMINAR**
Attended by 113 parents and recruited 139 autistic children for the paediatric massage programme

**EXHIBITION**
Booth and workshop at SiE’s Social Innovation Fair
KPF18CHFO4 (funded by SIE)

Realizing Children’s Potential in Language Development: Input and Intervention
Prof YIP Choy Yin, Virginia (Department of Linguistics and Modern Languages)

BENEFICIARIES

Total: 280

Parents of K1-K3 children, 260

Kindergarten principals, teachers and educators, 20

PARTNERS

2 kindergartens

STAKEHOLDERS

Meetings with principals and teachers

INTERVENTION

Programme materials and mobile app are under development

QUESTIONNAIRES

Collected pre-intervention questionnaires and test data from 132 children

PUBLICITY

Relevant research outputs reported in 5 print media/TV outlets
KPF18HLF05
BASIC (Broad Antimicrobial-resistance Service-learning & Intervention in the Community)
Prof LEE Wing Yan, Vivian (School of Pharmacy)

**PARTNERS**
- 38 elderly and community centres
- 10 housing societies
- 7 secondary schools
- 7 other associations

**TRAINING**
- 6 training workshops for CUHK and secondary student volunteers covering geriatric care and disease prevention topics

**OUTREACH**
- 5 community outreach sessions for the elderly with pharmacist consultation
- 1 on-campus diabetes screening event with blood glucose monitoring service

**TALKS**
- Monthly public lectures on antimicrobial resistance in collaboration with School of Pharmacy

**PUBLICITY**
- Social media channels (YouTube, Facebook and Instagram) for event promotion
- Produced 3 educational animations about antimicrobial resistance, hypertension, and diabetes

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**BENEFICIARIES**
- Total: 1807
- CUHK students, 170
- Secondary school students, 110
- Professional healthcare practitioners, 15
- Members of elderly community centres, 320
- Public lecture attendees, 392
- Participants in on-campus health events, 800
Intercultural Education in the Neighborhood: Sustainable Community Innovation and Women’s Empowerment from the Ground Up
Prof TAM Siu Mi, Maria (Department of Anthropology)

PARTNERS
3 secondary schools
3 public libraries/book centres
5 community organisations/social centres
5 other parties

PROGRAMME - HANDICRAFT
Naya Craft, an intercultural handicraft group, set up a booth at Multiculturalism Carnival @ Kwai Fong

PROGRAMME - FOOD CULTURE
Launched a women-led neighbourhood innovation cookbook project for creating recipes and food stories

PROGRAMME - SPORTS
Held presentation, workshop and outreach programme regarding Kabaddi, a traditional sport played throughout South Asia

FEEDBACK
Participants gained cross-cultural knowledge and positive intercultural experiences

PUBLICITY
Covered/interviewed 6 times by media
KPF18HLF12 (funded by SIE)
3D-printed Soft Robotic Hand for Stroke Rehabilitation and Elderly Healthcare
Prof TONG Kai Yu, Raymond (Department of Biomedical Engineering)

BENEFICIARIES
Completed design of 3D-printed soft robotic hand
6 patients received rehabilitation training

PUBLICATION & PATENT
2 papers generated;
1 patent under review

PUBLICITY
Attended Hong Kong International Medical Devices and Supplies Fair 2018 with ~20 patients showing their interest in joining the training

FEEDBACK
Currently 2 patients achieve more hand function tasks after training

KPF18HLF17
Online Parenting Programme for Families of Children Born Preterm
Dr LAM Hugh Simon Hung San (Department of Paediatrics)

FOCUS GROUP
50 families to be recruited for knowledge testing and evaluating the online programme

YOUTUBE CHANNEL
Video shooting in progress and will be uploaded upon completion to allow comments and feedback from viewers

SOCIAL MEDIA
Facebook page for parents to interact with one another is under development

WEBSITE
Edited and uploaded workshop materials and health talk information
**KPF18HLF20**
**Young Onset Diabetes Care Community Campaign**
Prof CHAN Chung Ngor, Juliana (Hong Kong Institute of Diabetes and Obesity)

**BENEFICIARIES**
- 30 Undergraduate students from the CU Champion team and the Faculty of Medicine
- 800 Young adults with high risk of onset diabetes

**PARTNERS**
- CU Champion
- Association of Hong Kong Diabetes nurses
- Caritas

**MOBILE APP**
Participants of CUHK Diabetes Day learnt about the self-assessment RUBY app and gained updated knowledge about diabetes

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**KPF18HLF22**
**An Evidence-based Knowledge Transfer Program Promoting HPV Vaccination among Men who Have Sex with Men in Hong Kong**
Prof WANG Zixin, Johnson (The Jockey Club School of Public Health and Primary Care)

**PARTNERS**
- AIDS Concern
- NeoHealth

**BRIEFING**
Conducted a briefing session for community partner’s staff

**PUBLICITY**
Designing project webpage and modifying health promotion video

**TRAINING**
Training workshops to commence in August
KPF18HLF26 (funded by SIE)
Speech Therapy Services for Children With Motor Speech Disorders
Prof TONG Chi Fai, Michael (Department of Otorhinolaryngology, Head and Neck Surgery)

BENEFICAIIES
311 speech therapists

PARTNERS
1 NGO
Recruiting more NGOs as community collaborators to serve children with severe speech sound disorders

SEMINAR
1 professional seminar on assessment and treatment of childhood apraxia of speech cum project briefing session, attended by 30% of total practicing speech therapists in Hong Kong

FEEDBACK
“Relevant to work”
“Gained new skills and knowledge on assessing and treating children with childhood apraxia of speech”

KPF18HLF27 (funded by SIE)
An Oral Exercise Training Software for Elders in Hong Kong
Prof LEE Yuet Sheung, Kathy (Department of Otorhinolaryngology, Head and Neck Surgery)

PARTNERS
Inviting and connecting with potential partners

VIDEO
Produced a trial video with 4 training modules for professional and user comments

PROGRAMME
Composed a list of oro-motor training exercises for elderly
4 speech therapists commented on the presentation method of the oro-motor exercises
### KPF18HLF28
**Enhance Frontline Social Workers and Caregivers’ Knowledge in Dementia Screening**
Prof TSOI Kam Fai, Kelvin (Stanley Ho Big Data Decision Analytics Research Centre)

- **Total Beneficiaries:** 26
  - Elderly, 24
  - Caregivers, 2

**Partners:**
Caritas Elderly Centre – Sai Kung

**Outreach:**
- Contacted several community centres to introduce the project

**Talks:**
- Training materials prepared
  - 1 pilot talk delivered with satisfactory feedback

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### KPF18HLF29
**Innovative Healthy Lifestyle Promotion Program with ARIA**
Prof ZEE Chung Ying, Benny (The Jockey Club School of Public Health and Primary Care)

- **Partners:**
  - 13 community/elderly centres
  - Hong Kong Professional Teachers’ Union

- **Beneficiaries:**
  - 1142 public members

- **Outreach:**
  - Health talk sessions, free ARIA-stroke risk assessments and referral to eye check-up

- **Exhibitions:**
  - Demonstrated at 5 local exhibitions
KPF18SCF30 (Funded by SiE)
**Train the Trainers: Minority Girls and Gender Justice**
Prof Raees Begum BAIG (Department of Social Work)

WEBSITE
Webpage and social media pages under development

PARTNERS
Contacted 7 associations/centres

PUBLICITY
Drafted the promotion material content and approached different local media outlets

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KPF18HLF34
**Improving Access to Psychological Interventions: Developing and Disseminating an E-Mental Health Portal in Hong Kong**
Prof HO Yan Yee, Fiona (Department of Psychology)

PARTNERS
Invited 4 clinical psychologists to conduct focus groups

BASELINE SURVEY
254 responses to 4 surveys regarding barriers of mental health services and perceptions on e-mental health services
243 respondents completed the Hospital Anxiety and Depression Scale for mental health screening

WEBSITE
E-mental health portal under development
Preparing fact sheets on different common mental disorders at clinical or sub-clinical range

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**BENEFICIARIES**
- People with anxiety-only symptoms, 97
- People with depression-only symptoms, 24
- People with anxiety and depression symptoms, 133
- Local mental health practitioners, 4
- Total: 258
Sustainable Knowledge Transfer Fund (S-KPF)
Social Enterprise List

S-KPF graduates
1 SKPF17ART01 Pro-talent Association Limited
2 SKPF17SSC01 SLCO Community Resources Limited

S-KPF social enterprises
1 SKPF18SSC01 Mars Media Academy Limited
2 SKPF18SSC02 Institute for User Participation Limited

Social enterprises newly funded (2017-18)

SKPF18SSC03 – Good Impact Assessment Institute Limited
Prof WONG Hung (Department of Social Work)
The social enterprise will offer quality research services, specializing in face-to-face surveys, focus group discussions and social impact assessment (SIA), primarily for social enterprises (SEs) and non-governmental organisations (NGOs) in hope of promoting a sustainable and just society. The company will provide quality survey service to government and public bodies requiring evaluation and assessment of their policy and project outcomes, which in turn provides secure financial resources for the company’s economic sustainability. The social mission of this company is to facilitate the Social Impact Assessment practice in Hong Kong. Most SEs and NGOs lack expertise in evaluating their impacts systematically that is conducive to their development and allows them to be accountable to the funders and the public. The company supports SEs and NGOs with affordable evaluation research and SIA to encourage their continuous development.

SKPF18SCI04 – Mushroom-X Limited
Prof KWAN Hoi Shan (School of Life Sciences)
The social enterprise is committed to bringing humanity’s needs in balance with the resources of our planet. It advocates “using mushroom to love the world” and encourages the consumption of mushrooms and local produce. The company develops sustainable systems to produce food, as well as nutritional supplements. Apart from edible usage, with their to-be-patented fungal technology, they are developing products including fertilisers, bio-feed, as well as a fungal-based material as a plastic substitute and construction materials for a sustainable world. The company promotes sustainability awareness, reducing food waste and caring for the environment via educational workshops, mushroom products and technology services to farming industry.
Knowledge Transfer Seminar Series

Number of seminars participants in 2017-18

7 Aug 2017


Dr CHAN Wai Kit Albert, Dr Dirk BROWN, Mr Rong XIE and Dr WONG Yuen Ting Alice

Participants: 40

Participant feedback: Learned more about claiming a patent with appropriate wordings and details of practical steps

Inspiration from the seminar

10 Oct 2017

Knowledge Transfer Seminar Series: Patents- What They Are, Why They Matter and How They can be Handled in a Grant Application

Dr CHAN Wai Kit Albert and Dr WONG Yuen Ting Alice

Participants: 41

Participant feedback: Learned how to file and protect their inventions

Inspiration from the seminar
13 Oct 2017

Knowledge Transfer Project Fund (KPF) Information Session
Prof Simon CHOW, Prof Catherine SO, Ms Beatrice HO, Mr Perkins HO

Participant feedback: Benefited from experience sharing by successful applicants

27 Oct 2017

Technology Start-up Support Scheme for Universities (TSSSU) Information Session
Mr Jonathan CHEE, Mr Perkins HO, Ms Charlotte TSANG

Participant feedback: Benefited from tips about pitching business ideas

15 Nov 2017

Sustainable Knowledge Project Fund (S-KPF) Information Session
Prof Terry LEUNG, Prof Donna CHU, Ms Elsie TSUI, Mr Antony PANG, Ms Olivia AU-YEUNG, Mr Perkins HO

Participant feedback: The speakers are very impressive
Knowledge Transfer Seminar Series: Are Biotechnology Inventions Still Eligible for Patent Protection in the U.S.

Dr Jasemine CHOY CHAMBERS

Participant feedback: Understood what can be patented and the requirements

Inspiration from the seminar:

- Very much: 67%
- Some: 22%
- No comment: 11%
# Networking Building:
## Activities Conducted or Participated by ORKTS 2017-18

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<td>Seminar &quot;Global Competitiveness and Business Value Through Innovation&quot;, by Law Offices of Albert Wai-Kit Chan, PLLC, August 2017</td>
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<td>3</td>
<td>Meeting by Committee on Research and Development of Chinese Medicines, by Innovation and Technology Commission, August 2017</td>
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<td>Orientation for New Teachers 2017, by the Centre for Learning Enhancement And Research (CLEAR), August 2017</td>
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<td>5</td>
<td>APAC Innovation Submit, by Hong Kong Science Park, September 2017</td>
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<td>6</td>
<td>Seminar on Research and Development of Chinese Medicines 2017, by Innovation and Technology Commission, September 2017</td>
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<td>Hong Kong Innovation and Technology Forum 2017, by the Government of the Hong Kong Special Administrative Region, September 2017</td>
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<td>内地廠房深度行, by 雷小貝設計有限公司 and 貝禹電子科技有限公司, 17 October 2017</td>
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<td>9</td>
<td>InnoCarnival 2017 Startup Pavilion, by Innovation and Technology Commission, 21-29 October 2017</td>
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<td>Cyberport Venture Capital Forum 2017, by Cyberport, 1 November 2017</td>
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<td>11</td>
<td>Cyberport University Partnership Program (CUPP) 2017 Demo Day, by Cyberport, 14 November 2017</td>
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<td>12</td>
<td>Hong Kong &amp; Guangzhou International Conference on Stem Cell &amp; Regenerative Medicine, by Hong Kong Science and Technology Parks, November 2017</td>
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<td>13</td>
<td>科技「一帶一路」與粵港澳大灣區創新論壇, by HKSTP, November 2017</td>
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<td>HKPC China Delegates Visit on learning and networking, by HKPC, 7 December 2017</td>
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<td>中國（東莞）國際科技合作周暨首届中國（國際）科研機構創新成果交易會, 8-10 December 2017</td>
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<td>廣東國際應用科技交易博覽會暨粵港澳大灣區創新與投資展, 18-20 December 2017</td>
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<td>Pitch Day - Uptown x HKUSTEC E-commerce Challenge, by Uptown Co-workshop, 13 January 2018</td>
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19 CUHK AI Forum, 18 January 2018
20 EmTech Asia, Singapore, 30-31 January 2018
21 AUTM (Association of University Technology Managers) Annual Meeting, Phoenix, AZ, USA, 17-21 February 2018
22 珠港澳創新創業建設科技合作交流會, by 珠海市駐香港經貿代表處, 28 March 2018
23 Visit of Impact Experts from the University of Exeter on the Research Assessment Exercise 2020, by ORKTS, March 2018
24 粵港澳高校聯盟會議, 11 April 2018
25 China Angel Investor Conference 2018 and HKX Startup Master Campus and X-Plan Launching Ceremony, by China Angel Investor Club, Hong Kong X Foundation & X-Tech Startup Platform, 24 April 2018
26 「內地與香港創科合作」研討會, by HKSAR, May 2018
27 上海同濟大學創新創業博覽會開幕週, 18 May 2018
28 第二屆中國高校科技成果交易會, 25-27 May 2018
29 香港科技人才廣州交流團, by 廣州市政協, 29-30 May 2018
30 珠海高新區考察交流團, by 珠海高新區珠海市駐香港經貿代表處 朱自琴首席代表, 1 June 2018
31 AVPN Conference, 4 June 2018
32 BIO International Convention, MA, USA, 4-7 June 2018, Boston
33 Foshan Bootcamp, by Construction Bureau of Sanshan New Town, Nanhai, Foshan and Gungho Space, 12-14 June 2018
34 香港廣州創新及科技協會中國創新創業成果交易會 2018, 21 June 2018
35 珠海高新區港澳科技創新交流活動, by 珠海高新區珠海市駐香港經貿代表處 朱自琴首席代表, 27-28 June 2018
36 EmTech Hong Kong, 27 -28 June 2018
37 前海大灣區創科建設座談會, 5 July 2018
38 Cyberport University Partnership Program (CUPP) Opening Ceremony 2018, by Cyberport, 6 July 2018
39 Austrian Startup Pitch Night, 11 July 2018
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<td>第十屆「內地高校對外交流人員赴港研習班」, November 2017</td>
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<td>前海管理局, January 2018</td>
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<td>國家自然科學基金委員會, March 2018</td>
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