# How do we pick the highlights from 2020/21? It's a tough task. There are

# Highlights of the Year 年度大事摘要

How do we pick the highlights from 2020/21? It's a tough task. There are so many great moments to choose from! For us, the best parts of the last academic year are most definitely those that underscore our passion, grit and determination to push on, no matter how many obstacles block our path.

選取2020/21年度大事摘要有點困難,因為去年的重大事項實在太多,令人 難於取捨。大部分被選取的事項均顯示,無論前路多麼艱難,我們始終滿 腔熱誠,充滿勇氣和毅力,昂首闊步向前。

# Climbing high

Our milestone achievements in rankings are certainly among the most memorable, ones that make us believe we can soar. Additionally, ranked against the best universities in the world, we are placed 53rd, according to QS (Quacquarelli Symonds) University Rankings 2022 (released in June 2021). We are also ranked 4th globally in the QS 2021 Top 50 under 50.

Moreover, our performance has global reach. In February 2021, we learned that over 140 CityU faculty members had been ranked among the top 2% of the world's most highly cited scientists, according to metrics compiled by Stanford University. Given our faculty size, the proportion of our faculty members who are recognised in the top 2% of their respective fields is among the highest in Asia. A few months later, in June 2021, we were ranked top among local universities for the 5th consecutive year in the top 100 worldwide universities granted US utility patents by the National Academy of Inventors. Overall, we were ranked 51st in the world, our highest ever position.

### Innovative and inventive

We were very excited to learn that our faculty won the highest number of awards among all universities in Hong Kong at the Inventions Geneva Evaluation Days 2021, taking home a clutch of awards including the Gold Medal with Congratulations of the Jury (Dr Edwin Tso Chi-yan, Assistant Professor, School of Energy and Environment), five Gold Medals, three Silver and three Bronze Medals.



# 世界排名穩步高升

我們在大學排名方面取得卓越成績,毫無疑問是一件重要大事,令人確信城大有實力續創新高。根據QS(Quacquarelli Symonds)於2021年6月公佈的2022年世界大學排名,我們位居第53位,與全球最佳學府並列;在QS 2021年「建校未滿50年的全球50所最佳學府」排名中,城大名列第4位。

此外,城大的學術表現媲美世界一流大學。根據史丹福大學於2021年2月公佈的排名指標,城大有逾140位教研人員的論文獲高度引用,被列為全球排名前2%的頂尖科學家。按大學教研人數而論,城大頂尖科學家位列相關學科領域前2%的比例,在亞洲大學中獨佔鰲頭。數月後,在2021年6月,城大獲美國國家發明家科學院連續第五年選為全球頂尖100所獲頒最多美國專利的大學,全球排名第51位,是城大歷年來的最佳排名。

### 創新發明

城大教研人員於2021年網上日內瓦國際發明展囊括12個獎項,數量為全港大學之冠,令人振奮。除了能源及環境學院助理教授曹之胤博士的項目榮獲評審團嘉許金獎之外,城大人員還獲得五項金獎、三項銀獎和三項銅獎。

CityU researchers won 12 awards at the Inventions Geneva Evaluation Days 2021. President Way Kuo (seventh from right); Professor Michael Yang Mengsu, Vice President (Research and Technology) (sixth from right); and CityU winners attended the special reception in May.

城大於日內瓦國際發明展囊括12個獎項,郭位校長(右七)、副校長(研究及科技)楊夢甦教授(右六)與城大得獎者於5月出席嘉許禮。

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### HK Tech 300

A wide-ranging and highly ambitious plan, HK Tech 300 aims to establish 300 start-ups in three years with an investment of HK\$500 million. Launched in March 2021, HK Tech 300 embodies our vision for nurturing talent and developing a knowledge-based society. The programme will enable young people to strengthen their innovation and entrepreneurship skills and prepare to meet future challenges.

One of the many great benefits of HK Tech 300 is the guidance provided by our faculty, many of whom received major honours and awards in the past 12 months. CityU's students, alumni and research staff, and members of the public wishing to leverage the University's intellectual properties to set up start-ups in Hong Kong are welcome to apply for the programme.

### Honours and awards

Our research reputation was boosted by achievements across the disciplines. In the sciences, three scholars were elected to the rank of Foreign Member of Academia Europaea: Professor Liew Kim-meow, Chair Professor of the Department of Architecture and Civil Engineering (ACE), Professor Andrey Rogach, Chair Professor of the Department of Materials Science and Engineering, and Professor Wang Jun, Chair Professor of the School of Data Science and the Department of Computer Science (CS).



Professor Liew Kim-meow 劉錦茂教授



Professor Andrey Rogach Andrey Rogach教授

### HK Tech 300

城大投入5億港元資金,於2021年3月推出大型創 新創業計劃「HK Tech 300」,目標是在三年內協助 年輕人成立300家初創企業。我們希望透過本計劃 實現培育人才、發展知識型社會的願景,並致力提 升年輕人的創新創業能力,協助他們為應付未來的 挑戰做好準備。

計劃的一大優點是,參與者可獲得城大教研人員的 指導。這些城大學者大部分在過去一年中榮獲重要 獎項或名銜。有志借助城大知識產權以成立初創企 業的城大學生、校友、科研人員以及其他人士,皆 可申請參與此計劃。

### 獎項與榮銜

城大在多個學科領域取得成果,進一步提升大學的 研究聲譽。在科學領域方面,我們共有三位學者膺 選為歐洲人文和自然科學院外籍院士,他們分別是 建築學及土木工程學系講座教授劉錦茂教授、材料 科學及工程學系講座教授Andrey Rogach教授、數 據科學學院與電腦科學系講座教授王鈞教授。



Professor Wang Jun 王鈞教授



Professor Raymond Chan Hon-fu 陳漢夫教授



Professor Yang Tong 楊彤教授



Professor Joe Qin Sizhao 秦泗釗教授

Professor Raymond Chan Hon-fu, Vice-President (Student Affairs) and Chair Professor in the Department of Mathematics (MA); and Professor Yang Tong, also Chair Professor in MA, were elected to the position of Fellow in the American Mathematical Society.

Professor Joe Qin Sizhao, Chair Professor of Data Science, was elected to the rank of Fellow of the National Academy of Inventors.

Dr Wang Cheng, Assistant Professor in the Department of Electrical Engineering (EE), received the Croucher Innovation Award 2020 for his contributions to developing compact and high-performance integrated photonic chips for optical communications. In addition, Professor Wang Xunli, Chair Professor of Physics and Head of the Department of Physics, was presented with the Croucher Senior Research Fellowship 2021 for advancing neutron scattering studies.

A collaboration on geotechnical structures in hydraulic engineering and another on video coding technology won major Ministry of Education awards. The two projects took home the 2020 First-Class and Second-Class Awards, respectively, in the Natural Science category at the Higher Education Outstanding Scientific Research Output Awards (Science and Technology). Winning the First-Class Award was the project "Uncertainty Analysis and Reliability Control of Geotechnical Structures in Hydraulic Engineering" by Professor Wang Yu of ACE and his team. The Second-Class Award was won by Professor Sam Kwong Tak-wu, Chair Professor of Computer Science in CS, and his collaborators.

副校長(學生事務)兼數學系講座教授陳漢夫教授、 數學系講座教授楊彤教授,獲美國數學學會頒授院 士銜。

數據科學講座教授秦泗釗教授,膺選為美國國家發 明家科學院院士。

電機工程學系助理教授王騁博士榮獲「裘槎前瞻科 研大獎2020」,以表彰他在研發應用於光通訊的小 型、高性能集成光子芯片的貢獻。此外,物理學系 系主任兼講座教授王循理教授榮獲2021年裘槎基 金會「優秀科研者獎」,以表揚他推動中子散射研 究。

城大憑藉提升水工岩土工程安全研究及推進視頻 編碼技術研究的兩個合作項目,分別獲得教育部 2020年度高等學校科學研究優秀成果獎(科學技術) 自然科學獎一等獎及二等獎。建築學及土木工程學 系王宇教授及其團隊的研究項目「水工岩土工程不 確定性分析與可靠性控制」榮獲一等獎;電腦科學 系電腦科學講座教授鄺得互教授及其團隊的研究 項目獲頒二等獎。







Professor Richard M. Walker 華樂勤教授



Dr Nicholas Thomas Nicholas Thomas博士

Professor Kuo Tei-wei, Lee Shau Kee Chair Professor of Information Engineering and Dean of the College of Engineering, was awarded the Humboldt Research Award from the Alexander von Humboldt Foundation in recognition of his achievements as a pioneer in system and software designs of non-volatile memory.

In the social sciences, the Dean of the College of Liberal Arts and Social Sciences, Professor Richard M. Walker, was elected Fellow of the Academy of Social Sciences, while Dr Nicholas Thomas, Associate Professor in the Department of Asian and International Studies, was elected Fellow of the Royal Society of Public Health.

Staying with the social sciences, Professor Christine Huang Yi-hui, Chair Professor of Communication and Media and Associate Dean (Faculty and Research) in the College of Liberal Arts and Social Sciences, was elected Fellow of the International Communication Association in recognition of her distinguished scholarly achievements. She is the first Chinese female in the four places across the Strait to earn this accolade.

李兆基資訊工程講座教授兼工學院院長郭大維教 授,榮獲德國洪堡基金會頒發洪堡研究獎,以表彰 他在非揮發性記憶體系統及軟件設計的先驅研究 成就。

在社會科學領域方面,人文社會科學院院長華樂勤 教授膺選為英國社會科學院院士,而亞洲及國際學 系副教授Nicholas Thomas博士膺選為英國皇家公共 衞牛學會院十。

此外,傳播及媒體講座教授、人文社會科學院副院 學會會士,以表彰其傑出學術成就。黃教授是兩岸 四地首位獲此殊榮的華人女學者。

In terms of other international recognition, President Way Kuo was bestowed the Cavaliere dell'Ordine della Stella d'Italia (the Knight of the Order of the Star of Italy) by His Excellency Sergio Mattarella, President of the Italian Republic, in June 2021. The award recognises President Kuo's efforts to develop cooperation between Italy and Hong Kong in the fields of science and culture. In addition, President Kuo was elected to the position of International Fellow of the Canadian Academy of Engineering in recognition of his influential contributions to engineering.

Alumna Ms Grace Lau Mo-sheung won a Bronze medal for Hong Kong in the Karate Women's Kata in the 2020 Tokyo Olympics. She spent time with staff and students at a celebratory gathering at CityU in August. Grace is a model for the CityU community, excelling in both academics and sports, according to President Kuo at the gathering.

# Sing it loud

Everyone needs a lift, and music is a great way to set the soul soaring. In February 2021, we performed our inaugural University Anthem, themed "Beyond Boundaries". With lyrics penned by President Kuo, the song encourages students, faculty, and staff to pursue excellence, keep our mission firmly in mind, develop cutting-edge curricula and research, and promote well-being in Hong Kong and globally.

在其他國際榮銜方面,校長郭位教授於2021年6月 獲意大利共和國總統塞爾焦 ● 馬達雷拉頒授 「意大 利之星 | 騎士勳章,以表彰郭校長致力推動意大利 與香港在科學與文化領域的合作。郭校長亦膺選為 加拿大工程院外籍院士,以表彰他對國際工程界的 影響力。

城大校友劉慕裳女士(Grace)在2020東京奧運空手 道女子個人形項目中為香港贏得銅牌,她於8月回 母校出席祝捷會,與教職員及學生會面。郭校長在 祝捷會上說,Grace是城大人文修武德、力爭優異 的楷模。

# 引吭高歌

人有七情,隨感而發,而音樂是抒發感情的妙法良 方。城大於2021年2月推出校歌,由郭校長親自撰 寫歌詞,以「學研出塵」為主題,鼓勵學生及教職員 追求卓越,常懷使命於心,專注教學和先進研究, 為香港乃至全球作出貢獻。



Mr Clemente Contestabile, Consul General of Italy in Hong Kong, presented to President Kuo (right) a diploma signed by the President of the Italian Republic and a Knight pin.

意大利駐香港總領事孔德樂先生向郭校長(右)授予意大利共和國總統簽署的證書及騎士別針。



Ms Grace Lau Mo-sheung won a Bronze medal in the 2020 Tokyo Olympics.

劉慕裳女士在2020東京奧運贏得銅牌。

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# **HK Tech Tiger**

An exciting new programme for advanced learning created in the 2020/21 academic year offers an enriched curriculum for highly motivated students determined to play leadership roles in tomorrow's rapidly changing, hi-tech world. Launched in May 2021, the unique HK Tech Tiger allows brilliant young students to benefit from the University's highly interdisciplinary, technology-enriched courses that will ensure greater chances of success in attaining their career goals and aspirations for further studies.

### Energising the energy issue

In keeping with our mission to explore critical issues that affect society, we brought together world-leading scholars, industry leaders and policy makers to debate recent advances in low-carbon energy technology and nuclear safety in a specially convened online forum on clean energy and nuclear safety in March 2021. Titled "Clean Energy and Nuclear Safety—10 Years after Fukushima", the Forum offered two streams, namely clean energy and nuclear safety, and approximately 2,500 participants from over 20 countries and territories participated.

### HK Tech老虎班

我們在2020/21學年制訂了別出心裁的「HK Tech 老虎班」,內容充實豐富,專為積極學習、鋭意進取,有志在未來瞬息萬變的高科技社會中成為領袖的學生而設。獨特的「HK Tech老虎班」於2021年5月推出,協助才華洋溢的學生在以科技為主的跨學科課程薰陶下,實現事業目標或繼續進修的抱負。

### 為能源問題注入研究動力

城大一直致力探討對社會有重大影響的議題。我們在2021年3月特別舉行網上論壇,討論低碳能源技術和核能安全的最新發展,邀請多位領先學者、企業領袖及政策制訂者出席。論壇題為「潔淨能源與核能安全——福島事故十周年」,以潔淨能源及核能安全為雙主軸,吸引近2,500名來自逾20個國家及地區的人士參與。



The Jockey Club One Health Tower (illustration)

賽馬會健康一體化大樓(設計圖)

### Developing and growing

We held a ground-breaking ceremony for our veterinary teaching farm located in Lam Tsuen, Tai Po, in November 2020. The farm will form a core element in training our vet students and will provide delicious milk and ice cream for the campus community.

Meanwhile, the commencement of the superstructure work in March 2021 marked a new milestone for the Jockey Club One Health Tower. Equipped with first-class facilities, the Tower will promote multidisciplinary collaboration that enhances the health of humans, animals and the environment under the One Health paradigm.

### Funding success

Despite the challenges presented in recent times, CityU secured significant amounts of funding for a range of urgent projects. Our researchers found tremendous support for their Covid-19 projects. In November 2020, research aimed at tackling Covid-19 attracted over HK\$7.1 million from the Innovation and Technology Fund under the Innovation and Technology Commission. In January 2021, three projects were granted HK\$8.3 million in funding by the Health and Medical Research Fund under the Food and Health Bureau. Two

### 建設發展

位於大埔林村的動物醫學教學農場於2020年11月舉行動土儀式。教學農場將主要用作培訓獸醫課程的學生,並可為城大社群供應美味可口的牛奶及雪糕。

此外,賽馬會健康一體化大樓的主工程於2021年 3月正式動工,標誌大樓的發展邁入新里程。這幢 配備一流設施的大樓,將在「健康一體化」的概念 下,推動跨學科合作,以促進人類、動物和環境的 健康。

### 成功爭取研究撥款

雖然過去一年來面對重重挑戰,城大仍獲得大量撥款,資助多個針對迫切問題的研究項目。2020年11月,我們獲創新科技署轄下創新及科技基金資助逾710萬港元,從事應對新型冠狀病毒的研究。2021年1月獲食物及衞生局轄下醫療衞生研究基金撥款共830萬元,資助三個研究項目。兩個項目屬於「有效檢測及監控」類別,第三個項目屬於「改進傳染

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of the funded projects fall under the area of "effective detection and surveillance". The third funded project falls under the tier "enhanced infection control and prevention strategies". In March 2021, a bioaerosols research project aimed at developing innovative and effective methods for detecting and disinfecting bacteria and viruses, including SARS-CoV-2, in indoor environments secured HK\$6.15 million from the Research Impact Fund. Also in March 2021, funding worth HK\$19 million was secured for four highly competitive collaborative research projects on Covid-19. The funding comes from the One-off CRF Coronavirus Disease and Novel Infectious Disease Research Exercise of the Collaborative Research Fund under the University Grants Committee.

病防控策略」類別。2021年3月獲研究影響基金撥款615萬港元,以研發創新有效的方法偵測室內環境中的生物氣溶膠,並殺滅其中的細菌及病毒,包括新冠病毒。同月,有關新冠病毒的四個甚具競爭力的協作研究項目,共獲撥款1,900萬港元資助。該筆撥款來自大學教育資助委員會轄下「協作研究金與2019冠狀病毒病及新型傳染病相關的一次性研究計劃」。

As an indication of the strength of our research output across campus, outstanding faculty members were recognised by the Research Grants Council (RGC) in November 2020 for their distinguished research achievements and significant contributions to higher education. Awards were presented to 12 CityU winners on five RGC schemes including the inaugural RGC Senior Research Fellow Scheme, RGC Research Fellow Scheme and RGC Postdoctoral Fellowship Scheme; as well as the Humanities and Social Sciences Prestigious Fellowship Scheme and Early Career Scheme. The award-winning CityU faculty were granted around HK\$34 million in funding for their research in a broad range of disciplines.

2020年11月在研究資助局(研資局)的五項計劃中獲獎,以表彰他們的卓越研究成果及對高等教育界作出的重大貢獻。該五項計劃包括首屆「研資局高級研究學者計劃」、「研資局研究學者計劃」、「研資局博士後獎學金計劃」,以及「人文學及社會科學傑出學者計劃」、「傑出青年學者計劃」。得獎城大學者共獲近3,400萬港元資助,從事一系列廣泛學科的研究。

城大展現強大的整體研究實力,共有12位教師於

The Greater Bay Area Joint Laboratory of Big Data Imaging and Communications was established by EE and the State Key Laboratory of Terahertz and Millimeter Waves in December 2020 with funding worth RMB21 million, including RMB5 million from the Designated Strategic Fund for Innovative Technology approved by the Department of Science and Technology of Guangdong Province, and RMB16 million in contributions from members of the Joint Lab.

電機工程學系與太赫茲及毫米波國家重點實驗室成立的「粵港大數據圖像和通信應用聯合實驗室」,於2020年12月獲得2,100萬元人民幣資助,當中包括廣東省科學技術廳的科技創新戰略專項資金撥款500萬元人民幣,以及由實驗室成員籌募所得的1,600萬元人民幣。

In May 2021, the sustainable development of local fisheries was the major beneficiary of a HK\$12 million government grant awarded by the Sustainable Fisheries Development Fund under the Agriculture, Fisheries and Conservation Department to the Jockey Club College of Veterinary Medicine and Life Sciences. The grant will support a three-year project titled "Improving Fish Health and Production in Hong Kong 2020".

賽馬會動物醫學及生命科學院於2021年5月獲漁農自然護理署漁業持續發展基金撥款1,200萬港元,資助名為「改善香港的魚類健康和生產2020」的研究項目,為期三年,目標是促進本地漁業的可持續發展。

### Taking fundraising to new levels

A comprehensive fundraising campaign named "United, We Soar" signalled the start of a new era. The campaign, the first of its kind for CityU, was launched in December 2020 with a public phase after a long period of preparation. The campaign demonstrates CityU's confidence, passion, and unity in pursing university progress. The funds raised will contribute to advancing the well-being of society, including research breakthroughs needed to tackle Covid-19.

### Honouring the great and the good

In October 2020, we conferred honorary doctorates on five distinguished persons in recognition of their significant contributions to education and the well-being of society. This year's ceremony conferred honorary doctorates for 2019 (Professor Michael I. Kotlikoff, Provost of Cornell University; and Dr the Honourable Edward Leong Che-hung, GBM, GBS, OBE, JP, Chairman of the Hong Kong AIDS Foundation and President of the Hong Kong Anti-Cancer Society); and for 2020 (Mr Harry S Banga, Chairman and CEO of The Caravel Group Limited; Mr Norman Chan Tak-lam, GBS, former Chief Executive of the Hong Kong Monetary Authority; and Mr Wong Chun-hong, BBS, Chairman of Top Spring International Holdings Limited).

Three distinguished persons were conferred the title of Honorary Fellow in September 2020 in recognition of their distinctive contributions to the development of, and service to, the University and the community. They were Ms Jenny Chan Pik-ha, Sales Director of KGI Asia Limited; Mr Lau Tat-chuen, Director of Sino International Industrial (Group) HK Limited; and Dr Jennifer Ng Chui-yiu, JP, Vice-Chairman and CEO of Marshall-Karson Construction and Engineering Limited.

### Powering up campus

A new state-of-the-art High-Performance Computing facility offering the most powerful computational platform ever assembled for a higher education institution in Hong Kong was launched in September 2020. This HK\$20 million facility named "CityU Burgundy" has increased computational power on campus and boosted our researchers' ability to make scientific breakthroughs, especially in our strategic interdisciplinary research areas.

### Alumni care

In May 2021, the Student Career Centre was named "Judith and Gary Cheng Student Career Centre" in appreciation of the support and generous donations made by our alumnus Gary and his wife Judith to the University.

### 籌款募捐新紀元

我們籌備多時的「城就未來 共創明天」大型籌款計劃,於2020年12月進入公眾募捐階段,為大學發展開創新紀元。計劃展示城大致力發展的信心、熱誠和團結精神。籌得的款項將對促進社會福祉作出貢獻,包括為應對新冠病毒所需要取得的研究突破。

### 表彰傑出人士

大學於2020年10月舉行典禮,向五位傑出人士頒授2019及2020年榮譽博士學位,以表彰他們對教育及社會福祉的重大貢獻。獲頒2019年榮譽博士學位的是:美國康奈爾大學學務副校長Michael I. Kotlikoff教授;香港愛滋病基金會主席、香港防癌會會長梁智鴻醫生,GBM, GBS, OBE, JP。獲頒2020年榮譽博士學位的是:拓維集團主席兼行政總裁哈利・般哥先生;香港金融管理局前總裁陳德霖先生,GBS;萊蒙國際集團有限公司主席黃俊康先生,BBS。

此外,大學於2020年9月頒授榮譽院士銜予三位傑出人士,以表彰他們為城大及社會服務並促進其發展作出的傑出貢獻。他們是:凱基證券亞洲有限公司營業部業務董事陳碧夏女士:香港華創國際實業(集團)有限公司董事長劉達泉先生;馬素加信建築工程有限公司副主席及行政總裁伍翠瑤博士,JP。

### 高效能電腦促進研究

城大於2020年9月設立全新先進高效能電腦運算設施,創本地高等院校先河。設施名為「CityU Burgundy」,耗資達2,000萬港元,將大幅提高城大的電腦運算能力,並有助研究人員取得科研突破,特別是在大學策略性跨學科研究領域。

### 校友回饋母校

大學於2021年5月將學生事業中心命名為「鄭發丁 伉儷學生事業中心」,以感謝校友鄭發丁博士伉儷 對大學的支持和慷慨捐助。