



Research and Knowledge Transfer 研究與知識轉移





The UGC supports academic research activities through the allocation of the Block Grant, funding research postgraduate places and competitive research funding schemes. Through financial incentives and promoting best practices among universities and with overseas counterparts, the UGC also encourages universities to strengthen and broaden their endeavours in transferring knowledge, technology and other forms of research outputs into socio-economic benefits with wider impacts.

The UGC's Research Group (RG) has been tasked with advising on the strategy to promote excellence and review the assessment and funding methodology on research. The RG examines issues such as the distribution of research funding¹ and research postgraduate student places so as to encourage research while keeping an appropriate balance with teaching, and the maintenance and promotion of role differentiation, as well as the best and most effective way of research resources allocation. The UGC also set up the RAE Group under the RG to oversee the planning and implementation of RAE 2020.

The RGC is a semi-autonomous advisory body on research matters operating under the aegis of UGC. It is responsible for administering various competitive research funding schemes. The funding of the research funding schemes of RGC mainly comes from the investment income of the Research Endowment Fund (REF). The RGC has also continued its efforts in taking the research results to the community by organising lectures and regularly share the research findings with the community in our publications.

教資會積極為學術研究提供各項支援，包括提供整體補助金、資助研究院教資會積極為學術研究提供各項支援，包括提供整體補助金、資助研究院研究課程學額，以及推行以競逐方式分配資源的研究資助計劃。此外，教資會給予大學額外撥款，鼓勵他們與本地其他院校及海外院校分享良好做法，藉此推動大學進一步加強知識轉移的工作及擴大知識轉移的學術範疇，使知識、技術及其他形式的研究成果能轉化為實質的社會經濟效益，帶來更廣泛的影響，惠及社羣。

教資會成立的研究小組負責就推動卓越研究的策略提供意見，以及就研究評審和撥款方法進行檢討。研究小組積極探討不同議題，包括分配研究撥款¹及研究院研究課程學額，以鼓勵院校在加強研究工作的同時亦適當平衡教學的需要；維持及推動角色分工；以及制訂最佳和有效的方法分配研究資源等。教資會亦於研究小組下設立研究評審工作小組，監督「2020年研究評審工作」的規劃和執行工作。

研資局是教資會轄下一個半獨立的研究事宜諮詢組織，負責管理多項競逐研究資助計劃。研資局各項研究資助計劃的經費主要來自「研究基金」的投資收益。研資局繼續向市民宣揚學者的研究成果，藉舉辦公眾講座和出版通訊，讓大眾瞭解學者的研究成果。

¹ The Research Portion (R-portion) of the UGC Block Grant is disbursed as infrastructure funding to enable universities to provide both the staffing and facilities necessary to carry out research, and to fund a certain level of research.

¹ 研究用途撥款是教資會發放予大學的基礎設施撥款，以聘請研究所需的職員、提供所需設施，以及資助一定程度的研究活動。

UGC Funding Support

(a) Research Endowment Fund

The \$18 billion REF was established in February 2009. The Fund has been set up as a trust under the Permanent Secretary for Education Incorporated. With the \$5 billion, \$3 billion and \$20 billion Government injections in 2012, 2018 and 2019 respectively, the total amount has been increased to \$46 billion. After rationalising the use of different pots of endowment of the REF as recommended by the Task Force on Review of Research Policy and Funding of UGC, RGC can redeploy the investment income, hence facilitating the achievement of greater efficiency and enhanced effectiveness in channeling resources strategically to meet the higher education sector's research requirement.

(b) Research Matching Grant Scheme

The novel Research Matching Grant Scheme (RMGS), with a commitment of \$3 billion from the Government, aims to diversify research funding sources and incentivise more contribution and collaboration from the private sector. The RMGS began accepting applications from 1 August 2019 for an operation period of three years. Donations/ funding from non-government/ non-public sectors secured by an individual university/ institution for designated research-related purposes, with no restriction on any academic discipline, are eligible for matching. Applications from eight UGC-funded universities and 13 local self-financing degree-awarding institutions are generally processed in cycles on a quarterly basis. Upon the completion of six processing cycles (Q4 2020), applications covering private donations/ research contracts of around \$2.27 billion have been received. The corresponding matching grant of around \$1.36 billion has been disbursed to the concerned universities/ institutions. Seven UGC-funded universities and one self-financing degree-awarding institution have already reached the matching "floor" (\$50 million), without exceeding the matching "ceiling" (\$500 million). The

教資會提供的資助

(a) 研究基金

政府於 2009 年 2 月撥款 180 億元成立研究基金。研究基金以信託基金形式在教育局常任秘書長法團下成立。政府其後分別在 2012 年、2018 年及 2019 年向研究基金注資 50 億元、30 億元及 200 億元，令基金的總注資額增加至 460 億元。研資局按檢討研究政策及資助專責小組的建議，理順研究基金內不同款項的運用限制後，可以調配撥款，以更具效率和成效的方式，策略性地調配資源以應付高等教育界的研究需要。

(b) 研究配對補助金計劃

全新推展的研究配對補助金計劃獲政府提供共 30 億元，為高等教育界開拓更多研究經費來源，並鼓勵私營機構加強在研發方面的財政支援及協作。為期三年的計劃於 2019 年 8 月 1 日開始接受申請，大學 / 院校從私營機構及慈善家籌募的研發開支和捐款，不限學科，均可獲政府提供配對款項，作研究相關用途。由八所教資會資助大學及 13 所參與計劃的本地自資學位頒授院校遞交的申請，一般會以每個季度為一個申請期處理。截至 2020 年第四季（即第六個申請期）結束，配對的申請已涉及共約 22.7 億元捐款 / 贊助 / 研究合約，而累積發放予相關大學 / 院校的配對補助金已達 13.6 億元。目前已有七間大學及一間院校獲發放超過 5,000 萬元「最低款額」的



donation/ sponsorship/ research contract above the "floor" will be matched on a \$1 for \$2 matching basis.

(c) RGC Fellowship Schemes

Following the approval by the LegCo on the recurrent annual funding of \$190 million, three new RGC research fellowship schemes, namely SRFS, RFS and PDFS were launched in the 2019/20 academic year. SRFS and RFS provide sustained support and relief from teaching and administrative duties for exceptionally outstanding researchers at Associate Professor rank and full Professor rank at UGC-funded universities; while PDFS aims to encourage doctoral graduates in pursuing career in research and provide promising researchers with support at a pivotal time in their very early career. The three new schemes, conferring fellowship to 10 SRFS, 10 RFS and 50 PDFS awardees in each exercise operated on an annual basis, will help universities attract and retain research talent for the betterment of research and development in Hong Kong. The inaugural exercise of the three new schemes had concluded smoothly by mid-2020, with high commendation from the assessment panels on the quality of nominees.

(d) Hong Kong PhD Fellowship Scheme

The objective of the Hong Kong PhD Fellowship Scheme is to attract the best and brightest students in the world, irrespective of their country of origin and cultural background, to pursue their PhD studies and research in the UGC-funded universities. It helps widen our pool of research talent and network. It also furthers internationalisation of the higher education sector. The Fellowship provides a monthly stipend of \$26,600 and conference and research-related travel allowance of \$13,300 per year for the awardees for a period of three years. In 2020/21, the scheme awarded 250 top students from 37 countries/regions.

配對補助金 (而未超過五億元的「預設上限」)。於配對補助金超過「最低款額」後，大學 / 院校就每 2 元捐款 / 贊助 / 研究合約，可申請發放 1 元的配對補助金。

(c) 研資局傑出學者計劃

隨著立法會通過 1.9 億元的年度經常性撥款，研資局高級研究學者計劃、研資局研究學者計劃及研資局博士後獎學金計劃三項新計劃已於 2019/20 學年推行。研資局高級研究學者計劃及研資局研究學者計劃旨在為卓越非凡的副教授級和教授級學者提供教學及行政職務方面的持續支援，而研資局博士後獎學金計劃則旨在鼓勵博士畢業生投身研究工作，以及為具潛質的研究人員在事業里程早期提供支援。三項新計劃每屆頒發各 10 個獲獎名額予研資局高級研究學者計劃及研資局研究學者計劃，以及 50 個獲獎名額予研資局博士後獎學金計劃。三項新計劃於每年度推行，將有助大學吸引和挽留人才以完善香港的研究及發展工作。而三項計劃的首屆評選工作亦已於 2020 年中或之前完成，競逐各獎項的候選者均獲遴選小組高度讚賞其質素。

(d) 香港博士研究生獎學金計劃

香港博士研究生獎學金計劃的目的，是吸引世界各地最優秀的尖子研究生 (不論國籍和文化背景) 來港修讀教資會資助博士研究生課程及進行研究。本計劃推動本港研究工作更上層樓，擴大本地人才庫及聯絡網，進一步促進本地高等教育



院校國際化。獎學金計劃為獲獎的博士研究生提供每月津貼 26,600 元，以及每年的會議及研究活動交通津貼 13,300 元，為期三年。2020/21 學年，本計劃頒發獎學金予來自全球 37 個國家及地區共 250 位優秀學生。

(e) One-off CRF COVID-19 and Novel Infectious Disease Research Exercises

In response to the COVID-19 pandemic and its evolving global impact, the UGC and the RGC allocated a total of \$250 million additional funding for two rounds of one-off exercises under the Collaborative Research Fund administered by the RGC in May 2020 and January 2021 to support the UGC-funded sector in conducting research related to COVID-19 and other novel infectious diseases (NIDs). The research community responded actively and swiftly to the call. In the first round of the one-off exercise completed in January 2021, 174 full group research proposals were received in two months, with 27 proposals eventually supported at a total amount of \$150 million (exclusive of on-costs). Among the 27 funded proposals, ten are under the biology and medicine disciplines, eight under business studies and humanities and social sciences and nine under engineering and physical sciences. The positive response from our academic community has demonstrated the versatility and capability of our universities in development good research projects in addressing the widespread impact of the COVID-19 pandemic from different disciplines and also longer-term challenges of other similar pandemic in future.

Details of all funding schemes administered by the RGC can be found on the RGC website (www.ugc.edu.hk/eng/rgc) and in its Annual Report.

(e) 一次性計劃資助 2019 冠狀病毒病及其他新型傳染病相關研究項目

因應新冠病毒疫情及其帶來的全球性影響，教資會及研資局於 2020 年 5 月及 2021 年 1 月，共增撥 2 億 5,000 萬元，透過協作研究金進行兩輪一次性計劃，資助教資會資助界別進行與新冠病毒及其他新型傳染病相關的集體研究項目。計劃推出後，研究界別反應積極及迅速。第一輪計劃已於 2021 年 1 月完成，研資局於兩個月的申請時間內共收到 174 份正式研究計劃書，最終有 27 份獲批，涉及研究撥款共 1 億 5,000 萬元（不包括附加行政費用）。在 27 份獲資助的研究項目中，有十個關於生物學及醫學、八個關於商業、人文科學及社會科學，以及九個關於工程學及自然科學。學術界對是次計劃反應正面，亦充分反映我們的大學有足夠能力在不同學科範疇靈活制定優質的研究項目，以應對新冠病毒疫情及將來類似流行病（如流感、新型傳染病等）所帶來的影響。

所有由研資局管理的研究資助計劃，詳見研資局網站 (www.ugc.edu.hk/big5/rgc/) 和該局年報。



Policy Issues

(a) Greater Competitiveness on Allocation of Research Resource

As elucidated in the "Aspirations for the Higher Education System in Hong Kong" report, the UGC has introduced greater competitiveness in allocating research funding and research postgraduate places in order to promote research excellence, enabling all our universities to compete with the best in the world. The funding arrangement of using achievement in the RGC's Earmarked Research Grant to determine the distribution of part of the R-portion of the Block Grant has been implemented starting from 2012/13. The mechanism serves as a proxy reference, an indicator, for the allocation of the R-portion. Over a period of five years starting from 2012/13, an increasing portion of the 5 595 research postgraduate places had been allocated through competitive methods, and 50% of such places had been competitively allocated by 2016/17.

In implementing its plan to enhance competitiveness, the UGC noted stakeholders' concern about the need to support humanities and social sciences (HSS) projects. The UGC has taken measures to strengthen research in such disciplines, including ring-fencing 18% of the competitive element in the R-portion of the Block Grant for HSS research, so that each HSS project may receive an HSS premium if there is a balance after paying the Principal Investigator (PI)'s costs and non-PI costs to HSS projects; providing additional annual funding of \$20 million to the RGC for HSS research, in particular to recognise the greater need of HSS projects for PI's time (in the form of teaching relief); and setting up the Humanities and Social Sciences Prestigious Fellowship Scheme.

政策事項

(a) 提高研究資源分配的競逐程度

一如《展望香港高等教育體系》報告所述，教資會已在分配研究撥款及研究院研究課程學額方面，引入更多競逐元素，以推動資助大學進行卓越研究，與世界頂尖學府並駕齊驅。有關資助安排根據各大學申請研資局研究用途補助金的結果，分配部分整體補助金研究用途撥款予院校，由 2012/13 學年起實施，作為分配研究用途撥款的參考指標。由 2012/13 學年開始，5 595 個研究院研究課程學額中，透過競逐方法分配的比例分五年逐步增加，到 2016/17 學年有 50% 的學額以競逐方式分配。

教資會在推行計劃以增加研究撥款分配的競逐元素時，注意到持份者對人文學及社會科學的研究項目支援需要的關注。因此，教資會已採取多項措施，推動人文學及社會科學的研究，包括在整體補助金研究用途撥款中競逐性質的部分，預留 18% 予人文學及社會科學研究，在分配首席研究員的開支和非首席研究員的開支予有關項目而仍有餘額的情況下，為每個人文學及社會科學的研究項目提供額外資助。又鑑於人文學及社會科學研究一般需要首席研究員投放較多時間，每年增撥 2,000 萬元予研資局，以聘請替假教師的形式讓有關學者騰出時間進行研究。另外，研資局亦設立了人文學及社會科學傑出學者計劃。

(b) Research Assessment Exercise

The RAE is part of the UGC's commitment to assessing the research performance of UGC-funded universities, and is intended to drive excellence and encourage world-class research. RAE 2020 is the sixth such exercise conducted by the UGC since 1993. It assesses research outputs, impact and environment, using international benchmarks to delineate universities' areas of relative strengths and identify areas and opportunities for development. RAE 2020 was concluded successfully despite the COVID-19 pandemic. Since the early stage of the pandemic, the UGC worked closely with the 13 RAE panels and the universities to swiftly implement alternative arrangements to take forward the assessment process commencing in March 2020 in virtual settings whilst maintaining the assessment standard as robust and credible as if they were conducted physically. In particular, the panel assessment meeting period was extended from the original four days for each panel during August and September 2020 to six months from August 2020 to January 2021 to ensure sufficient discussion on each submission and opportunity for panel members to express their opinion.

The RAE assessment was fully completed by January 2021. The 13 RAE panels conducted more than 140 virtual meetings with over 340 meeting hours in total from August 2020 to January 2021, the duration of which is on par with RAE 2014. These meetings were usually held in late evening in Hong Kong to cater for panel members at different time zones. The UGC is deeply obliged to the dedicated effort and tremendous contributions made by over 360 panel members who have gone the extra mile in completing the assessment rigorously under the challenging situation. Behind the scene, the Panel Convenors/Deputy Convenors and the Secretariat also worked very hard throughout the assessment period to ensure the effective and smooth operation of the assessment system as well as efficiency of the discussion process and meetings.

After the results announcement in May 2021, engagement and publicity activities were arranged to showcase the wider

(b) 研究評審工作

研究評審工作是教資會評核各資助大學研究表現的其中一環，旨在推動學者追求卓越，進行世界級的研究。「2020年研究評審工作」是教資會自1993年以來第六次安排此項工作。研究評審工作採用國際基準，就各大學研究的成果、影響和環境方面作評估，以勾劃各大學的相對優勢，並就可發展的相關領域和機遇給予意見。「2020年研究評審工作」在新冠病毒疫情影響下，仍能順利完成。自疫情爆發初期，教資會便一直與大學及13個評審小組緊密合作，迅速實行應對措施，將2020年3月開始的評審流程改以網上及視像會議形式進行，並確保評審水準維持像實體會議一樣的嚴謹及具公信力。其中，各評審小組的會議時間由原來安排於2020年8月至9月內的四天，延長至由2020年8月至2021年1月為止的六個月，以確保小組成員有足夠機會發表意見，並對每個院校提交的項目有充分的討論。

所有評審工作已於2021年1月底完成。自2020年8月至2021年1月期間，13個評審小組共進行了超過140場、逾340小時的視像會議，會議時間與「2014年研究評審工作」相約。為配合身處不同時區的評審小組成員，這些會議通常在香港的深夜時間進行。教資處深深感激這360多位評審小組成員的全心投入和重大貢獻，特別是在疫情挑戰下額外付出的努力，以保持評審工作的嚴謹。在整個評審期間，教資會秘書處與評審小組的召集人 /



social benefits and impact of the research conducted by our universities and to bring the research community closer to members of the public.

Review of the RGC

The RGC Review, conducted in two phases, was concluded in 2019. Phase I studied macro issues such as the portfolio balance of the RGC funding schemes, the RGC and assessment panels / committees' structure and good practice in overseas funding agencies; and was completed in September 2017. It concluded, based on the circumstances at that time, that the system had worked well and kept reasonable pace with comparable jurisdictions. Phase II examined operational issues such as the quality of assessment and monitoring processes, means of communication among members of the panels / committees, timeline of funding schemes and arrangement guarding against conflicts of interest in the assessment process. The RGC released the final review report in October 2019. The recommendations covered the aims and objectives of different funding schemes, assessment processes, time commitment of Principal Investigators, forms and documents, communication and engagement, open access policy, conflicts of interest and academic misconduct.

In late 2019, the RGC formulated an implementation plan to take forward the review recommendations. Good progress has been made with most of the measures implemented progressively. For example, a new RGC website was officially launched in August 2020 to establish an information platform with enhanced transparency and effectiveness. The review

副召集人一直在背後努力工作，確保評審系統能夠有效運作，以及提升討論及會議過程的效率。

評審工作結果於在 2021 年 5 月公布。教資會在公布評審工作結果後，進行了一連串宣傳及推廣活動，以展示大學進行的研究所帶來的廣泛社會效益和影響，並讓研究界別更接近大眾市民。

研資局檢討

研資局的檢討工作分兩個階段進行，於 2019 年完成。第一階段涵蓋宏觀事宜，例如研資局研究資助計劃的組合分配、研資局及其評審小組 / 委員會的架構、以及海外研究資助機構的良好做法。第一階段檢討於 2017 年完成，檢討報告總結，根據當時的情況，研資局現行的制度運作良好，並能緊貼其他可作比較地區的發展。第二階段檢討探討運作事宜，例如評審及監察程序的質素、小組 / 委員會成員之間的溝通方法、資助計劃的推行時間，以及在評審過程中防止利益衝突的安排等。研資局於 2019 年 10 月發表最終報告，報告的建議涵蓋資助計劃的宗旨和目標、評審過程、首席研究員投放的時間、表格與文件、溝通及參與、開放取用政策、利益衝突及不當學術行為。

研資局於 2019 年年底就檢討建議制定行動計劃，跟進工作的進度理想，大部分措施已陸續落實。例如，新研資局網站已於 2020 年 8 月正

on the RGC documents and external reviewer database was completed in late 2020, and relevant enhancement measures will be implemented in phases starting from 2021. Upon consultation by the RGC, universities were invited to set up an approval mechanism by the fourth quarter of 2021 to ensure the ethical standards of research projects involving artefacts. The RGC also completed the review on the open access policy and formulated the Open Access Plan to work with the universities for rolling out a series of initiatives by phases. The RGC is proactively working on the remaining recommendations, which include communication with the research community and more engagement activities, as well as developing a new electronic submission and processing system to enhance the efficiency in handling applications and relevant documents in respect of various RGC funding schemes.

Liaison Group on Research

The Liaison Group, comprising representatives from the EDB, the Innovation and Technology Commission, the Food and Health Bureau, the Policy Innovation and Coordination Office, the Environmental Protection Department as well as the UGC Secretariat was set up in May 2019 with the objective to serve as an interdepartmental platform for sharing research directions, latest trends and best practices in administration of research funding schemes, enhancing communication and facilitating any possible collaboration for the benefits of the research sector. Pursuant to the endorsement of the Liaison Group, the UGC Secretariat is working on several coordination initiatives. One of those is to devise a technical solution to crack down duplicate applications. The technical solution aims to identify suspicious duplicates of a previously funded project and alert funding agencies for further investigation. The development of the technical solution was completed in March 2021 for a two-year of pilot run.

式推出，以建立更透明和有效的資訊平台。有關研資局文件及外部評審員資料庫的檢討已於 2020 年年底完成，優化措施將於 2021 年起分階段落實。經研資局諮詢後，大學將於 2021 年第四季設立審核機制，以確保涉及文物之研究行為的操守水平。研資局已完成檢討開放取用政策，並已制定新的開放取用計劃，與大學攜手合作，分階段推行一系列措施。研資局正積極跟進餘下建議，包括繼續加強與研究界別溝通和增加界別參與的活動、開發新電子資料呈交及處理系統，以提升秘書處處理研資局各項資助計劃的申請及文件的工作效率等。

研究聯絡小組

研究聯絡小組於 2019 年 5 月成立，由教育局、創新科技署、食物及衛生局、政策創新及統籌辦事處、環境保護署以及教資會秘書處的代表組成，旨在提供跨部門平台以分享研究方向、最新趨勢、管理研究資助計劃的最佳做法，以及加強研究資助機構間的交流，促進不同形式的合作，從而讓研究業界得益。在聯絡小組的支持下，教資會秘書處現正籌備推行多項協調措施。其中一項協調措施是以技術方案打擊重複資助申請，該技術解決方案旨在識別出與先前已獲資助項目相似的可疑重複申請，並提醒資助機構作進一步調查。該技術解決方案的開發於 2021 年 3 月完成，並開始為期兩年的試行計劃。



Research Expenditure of the Academic Departments of UGC-funded Universities 2019/20

The UGC-funded universities continue to pursue excellent research. Their reported aggregate expenditure of their academic departments on research in 2019/20 amounted to HK\$12,683 million, representing 45% of the total expenditure in the academic departments of the universities, and 0.46% of Hong Kong GDP. The UGC and the RGC funding, in the form of Block Grants and competitive research grants respectively, constituted the bulk of research funding for the universities. The two sources of funding made up about 71% of the total research expenditure in 2019/20 with the following breakdown at Table 1.

2019/20 學年教資會資助大學學術部門的研究開支

教資會資助大學繼續從事卓越研究工作。2019/20 學年，各大學的部門研究總開支達 126.83 億港元，佔大學學術部門總開支的 45%，相當於本地生產總值的 0.46%。教資會及研資局分別以整體補助金及具競逐性研究補助金形式提供的資助，是各大學主要的研究經費。2019/20 學年，該兩種資助來源約佔研究總開支的 71%，分項數字載於下面表一。

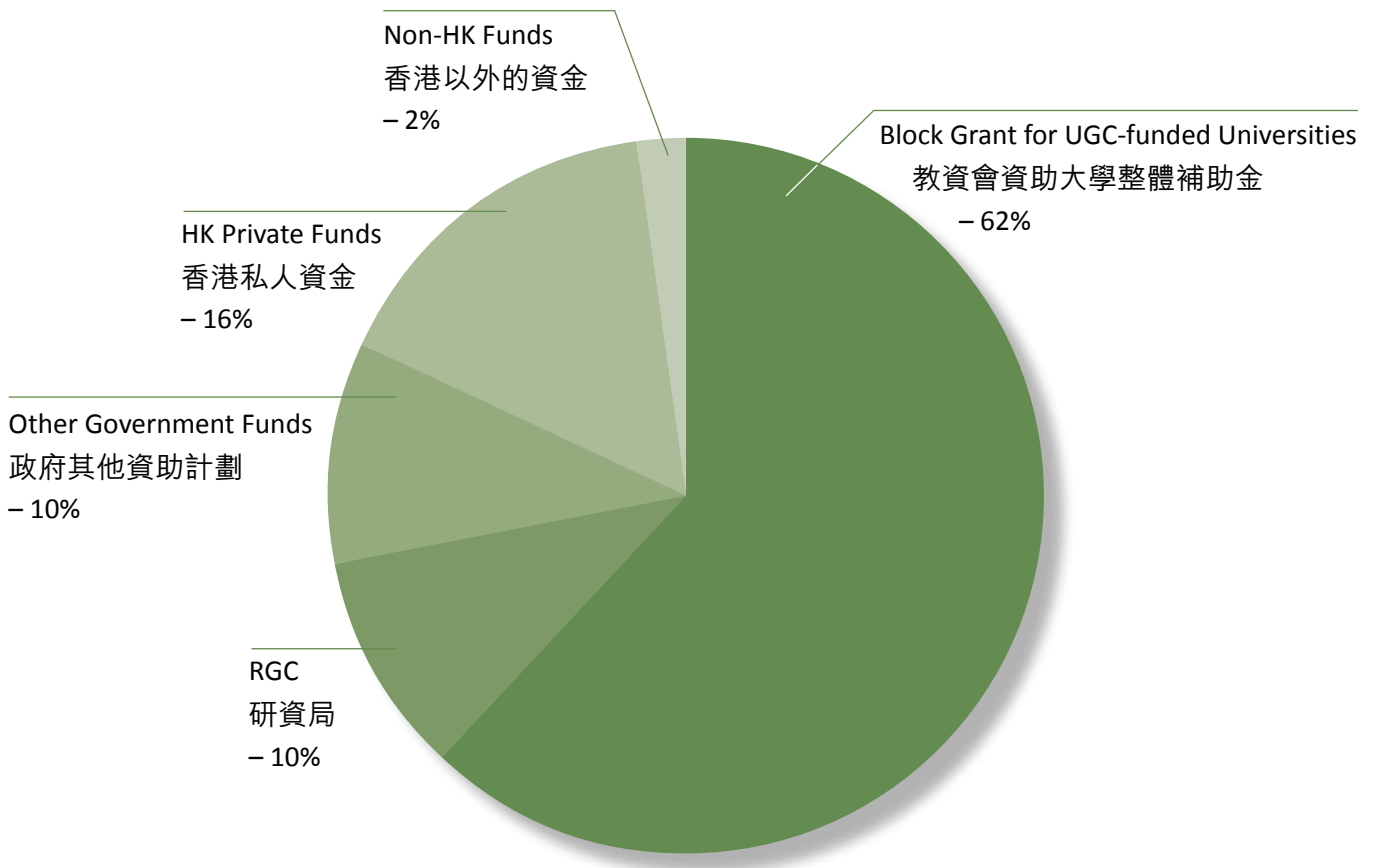


Table 1: Research Expenditure of the Academic Departments of UGC-funded Universities 2019/20
表一：2019/20 學年教資會資助大學學術部門的研究開支

Source of Funding 資助來源	Amount (HK\$m) 金額 (百萬港元)
Block Grant for UGC-funded Universities 教資會資助大學整體補助金	7,873.7
RGC 研資局	1,194.5
Other Government Funds 政府其他資助計劃	1,267.3
HK Private Funds 香港私人資金	2,058.6
Non-HK Funds 香港以外的資金	289.9
Total 總額 (Ratio of expenditure on research to Hong Kong's GDP) 研究開支佔本地生產總值的比率	12,683.9 (Up 9.4% compared with 2018/19) (較 2018/19 學年增加 9.4%)

Notes:

1. Figures do not add up to the total due to rounding.
2. The amount of research expenditure by academic departments is affected by how a university apportions its departmental expenditure between teaching and research as well as how it apportions total expenditure between academic departments and central activities.

註：

1. 由於四捨五入，數字的總和可能與實際的總計略有出入。
2. 大學如何劃分教學和研究兩者的部門開支，以及如何劃分學術部門和中央活動兩者的總開支，皆影響學術部門的研究開支額。



Open Access Plan

Following up on the recommendation by the RGC Review (Phase II), the RGC commenced the review of its open access policy in 2020. Two rounds of consultation with the UGC-funded universities were conducted on the preliminary directions for the review and the proposed initiatives for open access respectively. With the feedback from the consultations, the RG adopted in January 2021 the Open Access Plan, which adopts a phased approach with initiatives for open access to be implemented progressively and reviewed regularly in the span of five and a half years. The UGC and the RGC will collaborate closely with the universities for the implementation of the Open Access Plan, to ensure that it will benefit both the UGC-sector and the general public.

Review of Research Portion

Around 20% of the Block Grant is disbursed to the universities, known as the Research element, i.e. the R-portion, as infrastructure funding for staffing and facilities (e.g. accommodation and equipment) necessary to carry out research, and to fund a certain level of research. To promote research excellence, the funding of the R-portion is driven by two engines: the results of the RAE and the universities' success in obtaining peer-reviewed RGC Earmarked Research Grants (ERG).

Prior to 2012/13, allocation of the R-portion was driven by the universities' performance in the RAE. After a review on the then RAE mechanism, there was general agreement that the arrangement of allocating the R-portion solely on the basis of the RAE did not sufficiently capture vitality in the system as the RAE is conducted only once every six years. It was therefore suggested that the percentage informed by the RGC ERG would be ultimately increased from 0% to 50% of the R-portion over a period of nine years from 2012/13 to 2020/21. In 2017, in response to the stakeholders' views expressed in the Review of

開放取用計劃

根據研資局檢討（第二階段）的建議，研資局於 2020 年檢視其開放取用政策，並分別就其檢討方向及開放取用措施完成兩輪與教資會資助大學的諮詢。根據諮詢的意見，教資會轄下的研究小組於 2021 年 1 月採納為期五年半的開放取用計劃，分階段循序漸進推行並定期檢視一系列開放取用措施。教資會與研資局將與院校緊密合作，積極推行開放取用計劃，使整個界別及公眾均能獲益。

檢討研究用途撥款

研究用途撥款是教資會發放予大學的基礎設施撥款，佔整體補助金約 20%，以聘請研究所需的職員、提供所需設施（例如辦公地方及設備），以及資助一定程度的研究活動。為推動研究工作達至卓越水平，研究用途撥款主要由兩方面釐定：一方面根據研究評審工作的結果，另一方面參考各大學申請研資局經學者評審的研究用途補助金的結果。

早於 2012/13 以前，研究用途撥款的分配是由大學在研究評審工作中的表現所計算的。因該評審工作僅每六年進行一次，在檢討當時的研究評審工作機制後，普遍認為僅僅基於研究評審工作的結果分配研究用途撥款的安排沒有充分地反映大學研究方面的發展。因此，教資會建議在 2012/13 至 2020/21 學年

the RGC (Phase I) that the competitive allocation mechanism had amplified some institutional behaviours, the UGC approved the interim arrangement to “freeze” the percentage of the competitive part of the R-portion at the 2016/17 level, i.e. 26%, since 2017/18 pending a further R-portion Review. For the 2019-22 triennium, the existing arrangements have remained unchanged with the percentages of the R-portion informed by RAE and RGC ERG at 74% and 26% respectively.

In January 2019, the Working Group on the Review of R-portion was established to take forward the Review of the R-portion with the purview to consider the purposes of funding, coverage of various drivers and their weighting in the calculation methodology, and the importance of promoting research excellence in Hong Kong. With an independent consultant who assist in the review, series of consultation sessions were conducted in 2019 and the views of the stakeholders including senior management of the universities and frontline researchers were carefully considered by the Working Group. The independent consultant also conducted statistical modelling to simulate the effects on funding allocation to the universities under different scenarios, and reviewed international experiences to facilitate the Working Group’s decision making. The UGC conducted another round of consultation with the universities to explain the proposed amendments to the funding formula for allocation of the R-portion in July 2020. The final report prepared by the independent consultant was endorsed by the UGC in September 2020. Heads of Universities were informed of the results of the R-portion Review in October 2020. To follow-up on the R-portion Review, another consultancy was appointed by the UGC to apply the RAE 2020 results with the statistical models derived in the R-portion Review and study the implications of the recommendations of the said Review before finalising the parameters of the funding methodology for the R-portion by September 2021.

的九年間將研資局研究用途補助金所佔的百分比由 0% 逐漸增加至 50%。鑑於有持份者在研資局檢討 (第一階段) 中表示，競爭性分配機制加劇了某些院校行為，教資會遂於 2017 年通過臨時安排，由 2017/18 學年起，把研究用途撥款以競逐形式分配的部分所佔百分比「凍結」在 2016/17 學年的水平 (即 26%)，直至進一步檢討研究用途撥款。至於 2019-22 三年期的撥款安排，教資會會沿用現有安排。現時根據研究評審工作的結果和研資局研究用途補助金申請結果分配的研究用途撥款百分比，分別維持在 74% 和 26%。

檢討研究用途撥款專責小組於 2019 年 1 月成立，負責進行研究用途撥款的檢討工作，並聘請獨立顧問提供協助。有關檢討會考慮資助的目的、計算機制中覆蓋的研究資助項目及個別項目的比重、對促進香港研究工作卓越發展的重要性等。專責小組已於 2019 年進行一系列的諮詢工作，並仔細考慮各持份者 (包括大學管理層及前線研究人員) 意見。獨立顧問並已根據數據模型分析，模擬不同情況下對撥款分配的影響，並檢視海外的經驗以協助專責小組作出決定。教資會於 2020 年 7 月與各大學進行另一輪的諮詢，以解釋計算機制上的建議改動。獨立顧問已於 2020 年 9 月提交最終報告，並獲教資會接納。教資會並於 2020 年 10 月告知各大學校長有關檢討的結果。教



Knowledge Transfer

The UGC believes that the transfer of knowledge between universities and the society would help bring about positive socio-economic impact and improvements to the wider community. This in turn would also help enrich universities' research mission, thereby enhancing the international competitiveness of the local higher education sector.

The UGC recognises that UGC-funded universities have different strategies and encourages KT activities which commensurate with their diverse institutional roles, missions and strengths. Over the years, KT activities have taken roots in multiple disciplines, including health sciences, arts and humanities, social sciences, business and economics, architecture, city planning and the environment, science and technology as well as engineering. KT has been embedded in universities' strategies and operations in response to the constantly changing environment. All universities have either established or strengthened their KT offices for better institution-wide coordination and promotion. There has also been increased recognition of the importance of promoting entrepreneurship as an integral element of their KT efforts.

Since 2009/10, the UGC has introduced an additional stream of recurrent funding earmarked for the universities to strengthen and broaden KT. The funding amounted to \$68.5 million per year for the UGC-funded universities in the 2019-22 triennium. Universities have made use of the funding to conduct a wide range of KT activities, for example engaging in consultancy, researches, spin out companies and licensing. The promotion

資會現正進行另一輪顧問檢討，將「2020年研究評審工作」結果加入研究用途撥款檢討的數據模型，並檢視研究用途撥款檢討建議的影響，以敲定研究用途撥款的計算方式。

知識轉移

教資會相信，大學在社會上進行知識轉移，不但有利民生經濟，亦可惠及社會，更有助充實大學的研究政策方針，從而提升本地高等教育界在國際間的競爭力。

教資會認同教資會資助大學按他們不同的角色、宗旨及優勢，採取不同策略，進行各種知識轉移活動。經過多年努力，教資會喜見知識轉移已在多個學科扎根，包括衛生科學、文科、人文學、社會科學、商學與經濟、建築、城市規劃與環境、科學與科技，以及工程學科。大學亦因應不斷轉變的環境將知識轉移融入其策略及運作中。各大學已成立或擴充負責知識轉移的部門，從而改善跨大學整體的協調及加強推廣。此外，大學越發明白，在知識轉移方面，推廣企業精神是關鍵的一環。

自2009/10學年起，教資會每年為大學撥備額外經常補助金，供大學鞏固並深化其知識轉移工作。補助金在2019-20三年期為每年6,850萬元。各大學善用資助進行不同形式的知識轉移活動，例如參與顧問工作、研究，又或成立公司，以特

of entrepreneurship resonated with more opportunities for students to work with start-ups and more networks to link undergraduate and postgraduate students, researchers, alumni, faculty members and other staff. Meanwhile, universities have also conducted KT through other means, such as engaging in Continuing Professional Development courses directed at business and social enterprises, as well as setting up of websites for dissemination of knowledge, organising seminars, workshops, conferences, exhibitions and other public events.

The UGC noted that as indicated in their 2019/20 annual reports on Usage of Recurrent Funding for Knowledge Transfer, the universities fully recognised their vital role in promoting impactful research, and had stepped up their efforts in meeting the evolving needs of the society. In particular, universities have launched KT activities and projects focusing on helping the fight against the COVID-19 pandemic.

許方式讓其他人應用其研究成果。推廣建立企業亦讓學生會有更多機會參與新創辦公司的工作，培養企業精神，並期望學士學位課程學生可與研究生、研究人員、校友、教學人員及其他員工建立聯繫網絡。同時，大學也以採用其他多種方法進行知識轉移，例如以商業或社會企業為對象，開設持續專業發展課程，設立網站傳播知識，以及舉辦研討會、工作坊、會議、展覽和其他公眾活動。

正如 2019/20 年度知識轉移經常性撥款年度報告所述，教資會得悉大學充分意識到其在促進具影響力研究的重要角色，並加緊努力滿足社會不斷變化的需求。尤其是，大學已開展多項知識轉移活動和計劃，旨在為對抗新冠病毒疫情出一分力。



Examples of Impact Cases

City University of Hong Kong

CityU's research team developed a technology which can accurately perform early screening for cancer cells and effectively monitor disease status. With an accuracy rate of over 90%, the new technology can detect cancer cells with as little as 4 ml of blood in no more than five minutes. CityU has licensed this newly developed technology to Cellomics Holdings Limited (Cellomics), a CityU spin-off company set up by the research team.



Lingnan University

LU, Caritas Youth and Community Service, Health In Action, and Grassroots' Livelihood Alliance jointly launched the "Project Ultra Violite" with a \$500,000 donation from the Hong Kong Jockey Club's "COVID-19 Emergency Fund" to provide free



影響個案範例

香港城市大學

城大的研究團隊，成功研發出精準癌症早期篩查和疾病監測的突破性技術，病人只需透過 4 毫升血液檢查，五分鐘後即可分選出癌細胞，準確率逾九成。城大已將此嶄新技術授權予由研究團隊成立的初創企業—晶准生物醫藥集團有限公司。



嶺南大學

嶺大聯同明愛青少年及社區服務、醫護行者及關注草根生活聯盟等社福機構合辦「紫『礙』線計劃」。此計劃獲得賽馬會「新冠肺炎緊急援助基金」資助 50 萬港元，為 1,000 個劏房戶免費提供快速家居紫外光燈消毒服務。輕便的紫外光燈消毒器由嶺大團隊自行設計及組裝，專為劏房狹窄的環境及衛生條



and efficient UV disinfection service for 1,000 subdivided flats. This light-weight, mobile protection device is designed and assembled by the LU team. 120 Health Ambassadors trained by LU have volunteered to provide the service in older districts and help reduce the risks of household infection and community outbreaks. The service has been conducted 1,032 times with positive response from the beneficiaries. The team is developing a UVC robot to navigate larger spaces such as hotels and examination venues.

The Education University of Hong Kong

EdUHK promotes computational thinking education and digital creativity in primary schools of Hong Kong through the CoolThink@JC Programme. With the funding support from The Hong Kong Jockey Club Charities Trust, the project is in partnership with the Massachusetts Institute of Technology



件而製作。此計劃更培訓了 120 名抗疫大使，義務到各舊區進行消毒服務，減低住戶受感染及社區爆發風險。團隊已進行了 1,032 次消毒服務，用戶反應極佳。團隊現正設計「智能紫外光消毒機械人」，專為大型場所如酒店、考試場地而設。

香港教育大學

教大致力推動運算思維教育及數碼創意。承蒙香港賽馬會慈善信託基金支持，並聯同美國麻省理工學院及香港城市大學，教大透過「賽馬會運算思維教育」計劃為本地小學編寫課程，提供專業的教師培訓，以及支援學校發展校本編程課程。教大並通過舉辦國際會議和編程嘉年華將運算思維教育帶入社區。自二零一六年推行以來，計劃共培訓了來自三十二間小學逾一百一十名教師，並讓超過二萬名高小學生受





and CityU. EdUHK develops the curriculum for students, offers professional development for teachers, provides support to schools for school-based development, and organises an international conference and Coding Fair to reach out to the public. Since 2016, the Programme has trained more than 110 teachers from 32 pilot schools and benefited over 20,000 primary students. The second phase of Cool Think launched in September 2020, with the aim of extending support to 40% of local primary schools in Hong Kong.

The Hong Kong Polytechnic University

PolyU's research team has developed an automated multiplex diagnostic system which includes a fully automated machine and a multiplex full-screening panel for point-of-care genetic testing of up to 40 infectious respiratory pathogens, including the COVID-19 virus. It could relieve the challenge of frontline diagnostics in hospitals, clinics and ports with early and accurate detection of pathogens for effective and efficient disease control. The project was initially funded by the industry and is now supported by the Government for trial on a wider scale.



惠。計劃已於二零二零年九月進入第二階段，期望可助本港四成小學開展運算思維教育。

香港理工大學

理大研發了一套全自動快速多重診斷系統，由全自動快速檢測儀和多重微流檢測元件組成，可用於即時基因檢測（Point-of-care genetic testing, POCT），並能區分出多達40種引起呼吸道疾病的病原體，包括新冠肺炎病毒（COVID-19）。此系統能及早和準確地檢測病原體，有效和快速地控制和管理疾病，減輕醫院、診所及口岸前線診斷工作的挑戰。此項目發展初期獲業界資助，並在政府支持下進行更廣泛的測試。

