

THE HONG KONG POLYTECHNIC UNIVERSITY ANNUAL REPORT 2014/15 香港理工大學年報

OPENING MINDS SHAPING THE FUTURE

啟迪思維•成就未來

ABOUT THIS ANNUAL REPORT 關於本年報

In 2014/15, The Hong Kong Polytechnic University continued to make great progress with our new brand promise for research and education —

Opening Minds · Shaping the Future.

We launched new initiatives and programmes to enhance academic excellence and achieved research breakthroughs for the benefit of mankind. This annual report illustrates how PolyU has been realizing this brand promise in the following key areas:

- learning and teaching
- research and development
- knowledge transfer and industry partnerships
- world connections
- campus development and environmental protection

With a solid foundation of nearly eight-decade long heritage and a brand new promise, PolyU will continue to forge ahead with even greater achievements and contributions to the world.

2014/15年度,香港理工大學秉持「**啟迪思維**·成就未來」的教研承諾,不斷進步。大學推出新的計劃和項目,提升教學質素,開拓科研領域, 造福世界。本年報展現理大在下列主要範疇中 實現其教研承諾的進展:

- ▶ 學與教
- ▼ 研究與發展
- 知識轉移與夥拍業界
- ▶ 環球網絡
- ▼ 校園發展與環境保護

理大在其近八十年的穩固根基上,懷抱新的教研 承諾,將會繼續向前邁進,爭取更大的成就,以及 對世界作出更多貢獻。

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MOTTO 校訓

To Learn and to Apply for the Benefit of Mankind 開物成務 勵學利民

MISSION 使命

To nurture graduates who are critical thinkers, effective communicators, innovative problem solvers, lifelong learners and ethical leaders.

To advance knowledge and the frontiers of technology to meet the changing needs of society.

To support a University community in which all members can excel through education and scholarship.

培育敏於思辨、善於溝通、富於創見、精於解難、 樂於學習、立於仁德的領導人才。

推動知識創新,拓展科技前沿,以回應不斷變化的社會需求。

營造優良的大學環境,讓員生透過教育及學術追求 卓越。

VISION

願景

Be a leading university that excels in professional education, applied research and partnership for the betterment of Hong Kong, the nation and the world.

成為一所在專業教育、應用研究及夥伴協作方面 表現卓越的大學,為香港、國家及世界作出貢獻。

Opening Minds Shaping the Future

Through an innovative education model combining professional knowledge with service-learning and real-world experience, PolyU has nurtured many bright minds who are contributing to society. We also challenge boundaries and uncover knowledge, bringing many practical, yet world-changing, ideas to life for the benefit of mankind.

啟迪思維・成就未來

理大的嶄新教育模式,將專業知識、服務學習和現實社會體驗結合 起來。我們致力培育貢獻社會的傑出人才,更挑戰極限,開拓知識, 讓開天闢地的構思意念孕育成長,造福世界。

Following a series of consultation and engagement exercises with internal and external stakeholders, in May 2015, PolyU adopted *Opening Minds • Shaping the Future* as its new brand promise for education and research. Since then, the new brand has been publicized through different channels at home and abroad.

2015年5月,理大在舉辦多次諮詢及討論會,並收集校內及校外持分者的意見後,決定採用「**啟迪思維,成就未來**」作為全新的教研承諾,隨後更在本地及海外不同媒體進行推廣。





Opening Minds • Shaping the Future 啟迪思維 • 成就未來

Corporate and Brand Story Videos 大學與品牌故事短片



Awards 獎項

- F Grand Award Best of Category Award in the 2015 Galaxy Awards (Videos Category) 2015 年 Galaxy Awards(錄像組別)大獎
- ▼ Gold Award 2015 Galaxy Awards (Videos & DVDs: Corporate Identity Category) 2015 年 Galaxy Awards (錄像及影音光碟:企業形象組別)金獎
- ▶ Bronze Telly Award 36th Annual Telly Awards (Online Video Category)第三十六屆美國特勒電視節(網上錄像組別)銅獎

http://www.polyu.edu.hk/cpa/Corporate_Video/2015

Brand Advertisements 品牌廣告



Advertisements are placed in different platforms to bring out the essence of the PolyU brand.

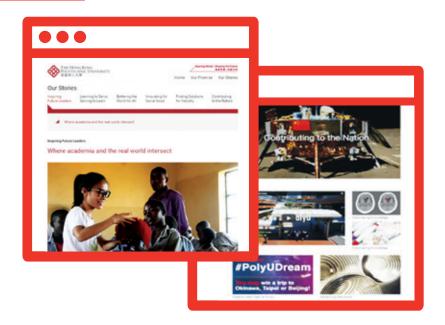
在不同平台刊登廣告,以傳達理大品牌的精髓。

Award 獎項

- ▼ Bronze Award Best International Print Advertisement
 - 11th QS-APPLE Creative Awards

第十一屆 QS-APPLE 創意大獎 - 最佳國際平面廣告銅獎

Brand Website 品牌網頁



Features 特色

- ▼ Corporate Video 大學短片
- ▼ Our Promise 我們的承諾
- ▶ Brand Stories 品牌故事
- ▶ Photo Gallery 相片集

Award 獎項

▶ Best in Class - Interactive Media Award (University Category)
 2015 年互動媒體大獎-最優秀網站(大學組別)

www.polyu.edu.hk/openingminds

Research Hub Microsite 大學科研網站



PolyU's impactful breakthrough, research excellence and knowledge transfer achievements are showcased on this microsite.

此網站展示理大影響深遠的突破發明、卓越科研,以及知識轉移方面的成就。

http://timeshighereducationonline.com/ the-hong-kong-polytechnic-university

Publications 刊物



PolyU Milestones Special Edition (June 2015) 《理程》特別版(2015年6月)

http://www.polyu.edu.hk/cpa/milestones/en/201506



excel @ PolyU e-newsletter 電子通訊

http://www.polyu.edu.hk/cpa/excel/en/201505



Brand stories published in overseas magazines 在海外雜誌刊載品牌故事

Social Media Campaigns/ Online Platforms 社交媒體活動 / 網上平台







Social Media 社交媒體

http://www.polyu.edu.hk/PolyUDream

Other Publicity Channels 其他推廣渠道





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PolyU is a university where academia and the real world intersect. We have never been an ivory tower. We are socially engaged, dedicated to excellence, and committed to delivering an education that benefits not only the individual but society as a whole.

These values are aptly reflected in the PolyU promise — *Opening Minds • Shaping the Future*. Through our enriched curriculum, we are opening young minds to new ideas and knowledge that will enable graduates to serve as professionals and caring citizens in the community. Through our world-class research, we are shaping the future with ground-breaking discoveries and knowledge transfer.

Opening the minds of learners

Recently, we broadened our educational reach by launching three Massive Open Online Courses (MOOCs). These courses — Knowledge Management and Big Data in Business, Human Anatomy, and English@Work in Asia — were launched in 2015 on the HKPolyUx platform. The response has been overwhelming, with very encouraging enrolments.

MOOCs blend education, multimedia and social networking, and are designed with the learner in mind. To make these courses even more immersive, the University has set up a dedicated studio to produce highly interactive videos for MOOC development.

理大從來不是象牙塔,是一所學術與現實 世界匯聚一起的大學。我們與社會緊密 相連、矢志追求卓越,並致力提供對個人 和整體社會皆有裨益的優質教育。

這些核心價值在理大的教研承諾 「啟迪思維・成就未來」中體現出來。 透過豐富多元的課程,我們致力啟迪年青 一代的思維,傳授知識,栽培畢業生成為 專業人才和關心社會的公民:憑藉世界級的 科研,我們以具突破性的創新發明、以及 科技轉移,成就未來。

擴闊視野 懷抱世界

最近我們推出三項大型開放式網絡課程(MOOCs),以期進一步拓展與世界在教育上的聯繫。透過HKPolyUx平台,我們在2015年推出了「商業的知識管理和大數據」、「人體解剖學」和「English@Work in Asia」課程,反應非常熱烈,報讀人數令人鼓舞。

大型開放式網絡課程將教育、多媒體和 社交網絡糅合一起,按學習者的需要而設計 課程。為了讓這些課程更加充實,大學成立 了一所製作室,製作高度互動錄像,以配合 MOOCs 的發展。









By offering MOOCs, we have created a model for group-design, group-delivery and group-learning, shaping a future trend for tertiary institutions and inspiring more teachers to adopt blended learning. We have no doubt that this initiative will broaden the global exposure of our students and teachers, as well as contribute to the internationalization of our programmes.

藉著提供 MOOCs, 我們為集體設計和集體 教學創新模式、帶動了未來高等學府的 潮流,並啟發更多教師採用混合式教學法。 我們深信這項嶄新發展將可開拓師生的環球 視野, 有助理大課程進一步國際化。

PolyU supports students in reaching out to the world and widening their international perspectives through numerous valuable opportunities in overseas exchange, internships and academic partnership programmes.

理大支援學生面向世界,通過大量海外交流 和實習的寶貴機會,以及學術協作計劃, 擴闊他們的國際視野。

One example of the innovative programmes being offered is the tripartite MSc in Global Hospitality Business introduced by our School of Hotel and Tourism Management in collaboration with the Ecole hôtelière de Lausanne in Switzerland and the Conrad N. Hilton College of Hotel and Restaurant Management at the University of Houston in the United States.

其中一個創新的學術協作計劃,就是理大 酒店及旅遊業管理學院與瑞士洛桑酒店管理 學院及美國休斯頓大學康拉德·希爾頓酒店 及餐飲管理學院三方合辦的環球酒店管理 碩士課程。

This programme aims to prepare future leaders for a successful career in the rapidly-growing field of hospitality management by giving them strong international exposure. Students will first attend classes in Switzerland and then move to our School in Hong Kong for their second semester, before completing their third semester in Houston. They will benefit from the exposure and knowledge to be gained across three continents with significantly different cultures.

這項課程致力為發展蓬勃的酒店管理業培養明日領袖,積極開拓他們的國際視野。學生首先在瑞士上課,第二學期則到香港的理大酒店及旅遊業管理學院學習,最後前赴美國休斯頓完成第三學期的課程。學生涉足三大洲,感受截然不同的文化,這些學習經驗定必令他們獲益良多。



Opening the door to cutting edge research

PolyU supports a culture of research excellence that challenges boundaries and discovers new knowledge for the benefit of mankind. By exploring the intersections of various disciplines, our researchers have continued to make valuable discoveries throughout the year.

In one of the year's significant research advances, our researchers have developed a big data analysis platform that can process massive amounts of data to analyse 0.2 billion gene pairs in just two days. The platform is being used to explore the interactions among genes, and identify potential diagnostic and therapeutic target genes in chronic myelogenous leukemia. It can also be readily applied to the investigation of gene markers in other diseases.

In another scientific study, PolyU researchers have found that 87% of nasopharyngeal carcinoma patients who received radiotherapy developed carotid atherosclerosis, thus placing them at higher risk of stroke. The reason for this was that ionizing radiation in that therapy damages the carotid artery and can lead to carotid atherosclerosis, resulting in a bigger chance of transient ischemic attack and stroke. The findings supported our recommendations for surgeons to effectively control doses of radiotherapy and for patients to undergo ultrasound carotid evaluation regularly.

In addition to studies aiming to improve human health, our researchers also explore ways to protect the environment. A PolyU team has developed a new catalyst for green biodiesel production from unrefined feedstock such as waste cooking oil. The catalyst can be reused over 30 times, making it a clean and energy-saving innovation.

尖端科研 開拓無限

理大推崇卓越的科研文化,挑戰極限,開拓知識,造福世界。年內,科研人員積極 進行跨學科研究,成就多項極具價值的創新 發明。

年內其中一項重大科研成果,就是科研人員 開發的大數據分析平台,它只需兩天便完成 分析兩億個基因對。這個平台用以分析基因 之間的相互作用,亦用於識別診斷及治療 慢性骨髓細胞白血病的潛在標靶基因,更可 廣泛應用於研究其他疾病的基因。

在另一項科學研究中,理大科研人員發現百分之八十七曾接受放射治療的鼻咽癌患者出現頸動脈粥樣硬化,增加他們中風的危險。原因是這類治療產生的電離子輻射會破壞頸動脈,可引致頸動脈粥樣硬化,造成短暫性腦缺血發作及中風。根據研究結果,我們建議外科醫生適當控制及調校放射治療劑量,而患者亦應定期進行頸動脈超聲波檢查。

除了有助改善人類健康的研究,我們的研究 人員還探討如何保護環境。一支理大團隊研 發出從廢棄食用油等未經提煉的原料,合成 為新的綠色生物柴油催化劑。它可重用三十 多次,是一項環保及節能的創新發明。









Opening up opportunities in knowledge transfer

We are also working to find new ways to facilitate knowledge transfer to industry. One such avenue was the International Knowledge Transfer Conference, organized in December 2014 as the first-day event of the APAC Innovation Summit. During the Conference, a President Forum with the theme Leveraging Knowledge Transfer for Institutional Advancement was held for heads of institutions to discuss their respective efforts and achievements in driving university-industry knowledge transfer.

PolyU's technology transfer initiatives span various industries. In 2014/15 alone, our turnover from consultancy and licensing grew to HK\$113.8 million. Throughout the year, examples abound of PolyU providing solutions for industry.

Our Aviation Services Research Centre developed an automated process that uses a portable laser drilling template to streamline the workflow for replacing the outer skin parts of aircraft. This industrial breakthrough has led to a substantial improvement in the accuracy and quality of repair work, with a reduction in the replacement time for an aircraft outer skin panel from five hours to less than half an hour.

Partnered with the Hong Kong Research Institute of Textiles and Apparel, our researchers have developed a novel wearable electronic technology and thermal fabric. With batteries the size of those in mobile phones, the fabric can be customized and produced in various patterns, with different heating positions and temperatures for household and medical applications.

轉移知識 締造機遇

此外,我們積極尋求推動知識轉移的新方法。2014年12月,理大舉辦了「國際知識轉移論壇」,作為「亞太創新峰會」的首天活動。論壇中,理大舉辦了題為「利用知識轉移促進院校發展」的校長論壇,匯聚大學領導層,分享大學與業界在知識轉移方面的努力和成果。

理大的技術轉移項目惠及各行各業。僅在 2014/15 年度,來自顧問服務和技術授權 的收入已達港幣一億一千三百八十萬元。 年內,理大繼續為各行各業提供解難方案, 例子比比皆是。

航空服務研究中心完成了「雷射投影鑽孔 模板與自動化機械鑽孔」項目,利用手提 雷射鑽孔模板的自動化程序,精簡更換飛機 外層組件的工作流程。這工業上的突破大幅 提升維修工作的準確度和質量,並讓更換 飛機外層面板的工序時間由五個小時縮減至 少於半小時。

我們的科研人員與香港紡織及成衣研發中心 合作,研發出嶄新的電子服裝技術及發熱 織物。這種織物僅需配上如手機電池般大小 的電池,便可按照圖案在不同的位置供熱和 產生不同熱度,可應用於家居及醫療護理等 領域。

Opening new horizons in social innovation

The University has been contributing to social innovation in creative ways. The PolyU Running Team at the Standard Chartered Hong Kong Marathon 2015 joined with FOODSPORT to convert the calories burned during the run into food units that were donated to Food Grace. With a record high of 4,000 students, staff, alumni, family members and friends joining this meaningful event, PolyU was awarded the Top Prize of Most Supportive Group Award for the sixth consecutive year.

In another demonstration of our commitment to social innovation, PolyU students initiated the Enlighten project in September 2014. More than 1,500 members from the University community successively pedalled static bikes over a 24-hour period to generate clean electrical energy and promote renewable energy, sustainable development and a healthy lifestyle.

社會創新 創建新猷

一直以來,大學以具創意的方法推動社會創新。參與查打香港馬拉松2015的理大長跑隊與本地社會企業「膳動衡FOODSPORT」合作,將隊員在賽事中所消耗的卡路里轉化為食物單位,然後捐贈給另一社企「食德好」。由四千多名學生、教職員、校友及其親友組成的理大長跑隊,參與這次饒富意義的活動,人數創下歷史新高,讓我們連續第六年奪得「最鼎力支持大獎」冠軍。

另一社會創新項目,是理大學生 2014 年 9 月 發起的「燃啟理大」項目,集合一千五百多 名大學成員在二十四小時內持續不斷地踏 單車以產生環保電力,藉此宣揚可再生 能源、可持續發展及健康生活。







We are socially engaged, dedicated to excellence, and committed to delivering an education that benefits not only the individual but society as a whole.

我們與社會緊密相連、矢志追求卓越,並致力提供 對個人和整體社會皆有裨益的優質教育。

The journey ahead

Our achievements throughout the year are just some of the many possible openings for us to benefit our world and shape a better future for us all. There is still a long way to go in this journey. However, I am certain that, with the continued dedication of the PolyU community, we can contribute many positive changes in our efforts towards reaching these goals.

I would like to take this opportunity to extend my appreciation to our Council and Court Members, as well as our University management, staff, students and alumni, for their support and contributions in this exciting journey.

全力以赴 開闢前路

年內我們取得的豐碩成果,只是眾多造福 世界和建設未來的工作中,可供理大參與的 一部分。前路仍然漫長,但我深信憑著理大 社群的全情投入,我們會朝著目標努力,為 社會帶來更多的正向改變。

本人衷心感謝各校董會及大學顧問委員會 成員、大學管理層、教職員、學生和校友, 在這個精彩旅程中給予的支持和作出的貢獻。

mainismutary 8

Marjorie Yang, GBS, JP Chairman of Council

December 2015

楊敏德

校董會主席 楊敏德, GBS, JP

2015年12月



The Council 校董會

BACK ROW FROM LEFT 後排左起

Dr Jonathan Chan Ming-yin 陳銘賢博士

Dr Rodney Chu Wai-chi 朱偉志博士

Prof. Iris Benzie

Ir Prof. Johnny Fan Siu-kay 樊紹基教授、工程師

Mr Stephen Liu Ling-hong 廖凌康先生

Prof. Raymond Leung Siu-hong 梁少康教授

Ms Amy Lung Pui-ying 龍佩英女士

Mrs Yvonne Law Shing Mo-han 羅盛慕嫻女士

The Hon. Chan Kam-lam 陳鑑林議員 Ir Dr Humphrey Leung Kwong-wai 梁廣偉博士、工程師

Mr Peter Sit Kien-ping 薛建平先生

Mr Augustus Tang Kin-wing 鄧健榮先生

Mr Jaime Sze Wine-him 施榮忻先生

Mr Lau Ping-cheung 劉炳章先生

Mr Jimmy Kwok Chun-wah 郭振華先生

FRONT ROW FROM LEFT 前排左起

Prof. Philip C.H. Chan 陳正豪教授

Ms Marjorie Yang Mun-tak (Chairman) 楊敏德女士 (主席)

Prof. Timothy W. Tong 唐偉章教授

Mr Chan Tze-ching (Deputy Chairman) 陳子政先生 (副主席)

Dr Lawrence Li Kwok-chang (Treasurer) 李國祥醫生 (司庫)

Mr Alex Lui Chun-wan 雷震寰先生







PolyU is a university committed to turning today's potential into tomorrow's accomplishments. During the year under review, we embedded this ideal into a new brand promise — *Opening Minds • Shaping the Future* — that describes our efforts to empower our students, staff and graduates to make their dreams a reality.

We are well aware of the problems our community, our nation and our world face today and will face tomorrow. We address climate change and support disaster recovery. We find cures and fight poverty. We explore ways to enhance safety and boost efficiency. We open up new horizons in space and at nano-level.

All change begins with a dream. PolyU encourages the university community to face up to the challenges of our complex world and follow their dreams in the spirit of "doing well and doing good". This, in turn, will help to shape the next generation as drivers of innovation that brings positive change, and as ethical and socially responsible leaders who will play an instrumental role in advancing our society. We count on them for a sustainable and prosperous future.

Shaping the leaders of the future

The University is keen to shape the next generation who do not only possess the skills and knowledge to excel in their chosen profession, but are also ready to serve the global community with a strong sense of social responsibility. Supported by the breadth and depth of our curriculum, PolyU's innovative education model includes our Service-Learning and Work-Integrated Education initiatives.

理大致力開發今日的潛能,以期共享明天的碩果。年內我們將這份信念體現於我們對教研工作所作的新承諾一「**啟迪思維。成就未來**」。我們努力不懈裝備學生、教職員和畢業生,幫助他們實現夢想。

我們充份理解現時及將來社會、國家和世界 面對的問題。我們要應對氣候變化,支援 災後重建;我們要悉心研發有效藥物,對抗 貧窮困擾;我們要探究如何保障安全,提升 效益。我們的研究既要窮究浩瀚的太空,也 要兼顧納米的細微。

所有改變都始於夢想。理大鼓勵大學社群 勇於面對複雜世界的挑戰,秉持「創富創善」 的理念,追尋夢想。這有助於培育下一代 成為創新先驅,並為社會帶來正向改變, 成為立於仁德、懷抱社會責任感的領導人才, 在推動社會進步中擔當重要的角色。我們 期盼年青人為可持續發展和繁榮的未來作出 貢獻。

悉心栽培 明日領袖

大學致力培育下一代,除了具備所選專業的 技能和知識之外,亦肩負社會責任,懷抱 服務社群的心志。在既廣且深的課程以外, 理大的創意教學模式亦包括服務學習和校企 協作教育。



The University staunchly advocates Service-Learning to provide opportunities for students to gain a deeper understanding of society and those in need. All PolyU undergraduate students will have to take a mandatory three-credit Service-Learning subject through which they will apply their professional knowledge to serve the community. I am proud to report that the total number of Service-Learning subjects has increased to 58 during the year, taken by more than 3,000 students. Many of our students have undergone life-changing experiences through participating in a variety of projects around the world.

After our service trip to Myanmar, for example, one student came to believe that service is 'sharing', not 'giving'. I am sure that student's passion to share his love and dreams with the underprivileged will continue to grow in the days and years ahead.

Closer to home, biomedical engineering students who worked with rehabilitation centres in Guangdong have also been inspired. Having provided prosthetic and orthotic services for children with cerebral palsy, they returned with a greater commitment to the profession they had chosen. In all our Service-Learning projects, the benefits flow both ways.

These are not isolated examples. Many students, through their rating of the learning outcomes of this subject, have told us that they understand the real world better and are more confident that they could help make a positive change. They have also developed their leadership, communication and problem-solving skills.

大學提倡服務學習,並為學生提供機會更深入了解社會和有需要人士。所有理大本科生必須修讀三個學分的服務學習科目,藉此善用其專業知識,服務社會。我喜見年內服務學習科目已經增至五十八科,共有三千多名學生修讀。很多學生參與世界各地多元化的服務學習項目後,均經歷了改變生命的難忘體驗。

例如一位學生在完成緬甸服務學習之旅後, 理解到服務其實是「分享」而非「施予」。 我深信他盼望與弱勢社群分享愛與夢想的 熱誠將繼續隨年月而增長。

在廣東省康復中心工作的學生,同樣透過 服務得到啟發。他們經過為腦癱兒童提供 義肢和矯形服務後,對所選擇的專業更加 投入。服務學習計劃確實讓學生與受惠者 雙方都有所得著。

以上都不是個別的例子。很多學生透過對 服務學習成效的評估告訴我們,他們對現實 世界已有更深入的了解,並更有信心自己 可以帶來正向改變。他們的領導才能、溝通 技巧和解難能力亦得以提升。









PolyU is a university committed to turning today's potential into tomorrow's accomplishments.

理大致力開發今日的潛能,以期共享明天的碩果。

Shaping a better future through innovation

One of the hallmarks of PolyU is its ground-breaking research that helps to save people's lives and create a more sustainable future.

In research led by Professors Larry Chow and Bill Chan of the Department of Applied Biology and Chemical Technology, a PolyU team developed an inhibitor called Apigenin Flavonoid Dimer that reverses cancer drug resistance in patients suffering from breast cancer. Using a nutrient found in fruits and vegetables, the inhibitor can prevent drug rejection by cancer cells and offer better treatment outcomes. More importantly, this new inhibitor is ten times more potent and three times safer than the best inhibitor currently available.

Another medical breakthrough made during the year was a computer-aided system that accurately diagnoses acute strokes shortly after their onset. Developed by Dr Tang Fuk-hay and his team at the Department of Health Technology and Informatics, the system combines artificial intelligence and a sophisticated algorithm to detect ischemic or haemorrhagic stroke. The system can make diagnoses with 90% accuracy.

Our researchers are also developing innovative technologies that will help to create a greener world. These include a novel energy storage device developed by Prof. Daniel Lau and Dr Yuan Jikang of the Department of Applied Physics, which makes use of synthetic manganese dioxide to produce ink for wearable devices and radio-frequency identification systems.

非凡創意 改善將來

理大其中重要的一環是創新科研,這不但有助 拯救生命,亦創造可持續發展的未來。

在應用生物及化學科技學系周銘祥教授及陳德恒教授帶領的研究中,理大團隊研發出名為「芹菜素黃酮類二聚體」的抑制劑,可逆轉乳癌患者服用藥物之抗藥性。這種抑制劑由蔬果的一種天然營養素製成,能夠防止癌細胞抵抗藥物,並達致更佳的治療效果。更重要的是,與現時市面最有效的抑制劑比較,這種嶄新抑制劑的逆轉抗藥性效力高出十倍,安全性更高出一倍。

電腦輔助偵測中風系統是理大年內另一項醫學突破,它能夠在急性中風病發後在極短時間內作出診斷。該系統由理大醫療科技及資訊學系鄧福禧博士及其研究團隊研發,結合人工智能和精密的運算技術,可偵測缺血性中風或充血性中風,診斷準確度高達百分之九十。

我們的科研人員亦為建立綠色世界而開發了不少創新科技,其中包括由應用物理學系 劉樹平教授及袁嵇康博士研發的新型儲能 裝置,利用化學合成的二氧化錳製造墨水, 應用於可穿戴設備和射頻識別系統。



Also making inroads into green technology are Dr Yan Feng and his team of the same department, who developed the first-ever semi-transparent perovskite solar cells with graphene electrodes. Distinguished by their high power conversion efficiencies, the new solar cells can absorb light from both sides to significantly increase the surface area for collecting solar energy on windows, facades, louvers and building rooftops.

同一學系嚴鋒博士及其團隊亦在環保科技 領域取得突破,他們成功首創利用石墨烯配合 鈣鈦礦,開發半透明太陽能電池。這種電池的 特點是有較高的能量轉換效率,並可從底面 兩邊吸光,大大增加了窗戶、外牆、天窗和 大廈屋頂等建築結構吸收太陽能的面積。





Shaping our world through social good

In the face of pressing world issues, we believe that the public good can best be served by a concerted global effort. PolyU can contribute to these by mobilizing like-minded universities to share expertise, experience and creativity. With this in mind, we established the University Social Responsibility Network with eleven universities in Australia, the Chinese mainland, Israel, Japan, Korea, the United Kingdom and the United States. The objective is to pool ideas and resources for developing collaborative projects that advance higher education as a catalyst for social change.

建設社會 塑造世界

面對全球各種迫切的議題,我們認為全球 同心協力是締造公眾福祉的最佳方法。 因此,理大鼓勵志同道合的大學一起分享 專業知識、經驗和創意,為此目標作出貢獻, 並與來自澳洲、中國內地、以色列、日本、 韓國、英國及美國的十一所大學攜手成立 「大學社會責任網絡」,目的是集結意見和 資源,開發協作項目,讓高等教育界成為 推動社會改變的催化劑。



In January 2015, PolyU hosted the Empowering Global Food Safety event for discussing the latest challenges in global food safety and sharing best practices to safeguard public health. Concurrently, the University initiated the establishment of a Food Safety Consortium as a unique technology exchange platform for assisting the industry and community to tackle food safety issues, supported by PolyU's technologies.

Our initiatives are manifestations of the University's commitment to engaging the university community, the nation and the world to address world challenges and shape a better future. 2015年1月,理大舉辦以「全球食品安全」 為題的活動,探討現時全球食品安全面對的 挑戰,以及分享保障公共衞生的最佳範例。 理大同時發起成立「食品安全聯盟」,並 以此作為科技交流平台,以期藉著理大的 科研技術,協助業界及社區解決食品安全 問題。

我們倡議的各項新猷,正好反映理大矢志 推動大學社群、國家及世界各地積極參與, 一起應對全球挑戰及建設更美好的將來。

Shaping the future of our University

As much as PolyU is concerned about the world around us, we have not lost sight of the advancement of the University. As staff members are key players in shaping the future of PolyU, we facilitate their development and recognize excellence in performance. During the year, we have refined the operation workflow of our framework for the appointment, promotion and retention of academic staff. We have also developed the framework for our non-academic staff in order to provide them with career development opportunities in a more structured manner.

While PolyU strives to shape the future through education, research and knowledge transfer, its evolution and advancement is shaped by the concerted efforts of students, staff and alumni. I would like to take this opportunity to thank the University Council, Court, staff, students, alumni and our partners for their continuing support. I pledge to work closely together with the entire PolyU community to forge ahead and stride forward into a brighter future.

攜手共建 理大未來

理大關心世界之餘,亦不忘推動本身更上層樓。由於教職員在建設理大未來的過程中擔任重要的角色,我們正致力促進他們的發展,並表彰優秀的表現。年內,我們完善了聘任、晉升和挽留學術人員的程序。我們同時重新規劃非學術人員的事業發展進程,長遠而言,改善他們的晉升前景。

理大積極透過教育、科研及知識轉移成就 未來,而大學的演變和進步則有賴學生、 教職員和校友的群策群力。我衷心感謝 校董會、大學顧問委員會、教職員、學生、 校友和合作夥伴的長久支持,並承諾與理大 同仁繼續並肩攜手,讓理大邁向更燦爛的 明天。

Timothy W. Tong, *Ph.D.*President

December 2015

唐偉章

校長 唐偉章, *Ph.D.*

2015年12月



HIGHLIGHTS OF THE YE 大事紀要

6 0 4

Partnership to advance the development of high-speed rail 聯手促進高鐵發展

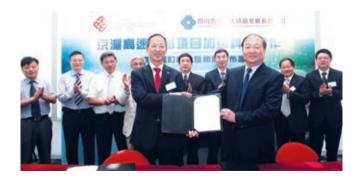
PolyU Base for Commercialization, Training and Research in Shenzhen and Southwest Jiaotong University Railway Development Co. Ltd. of the Southwest Jiaotong University signed an agreement to collaborate on cross-disciplinary research and technology development for mainland China's high-speed rail network.

理大位於深圳的產學研基地與西南交通大學的西南交大鐵路發展 有限公司簽訂合作協議,為中國內地高速鐵路進行跨學科研究與 科技發展。 September 27加月

New building in Xi'an regional base opened 西安合作基地新大樓啟用

A new building at Xi'an Jiaotong University — The Hong Kong Polytechnic University Collaboration Base was officially opened by the President of Xi'an Jiaotong University, Prof. Wang Shuguo, and PolyU President Prof. Timothy W. Tong. The new building provides more facilities for joint academic programmes and research by the two universities, contributing to the economic development of the western region of China.

香港理工大學—西安交通大學合作基地新大樓正式啟用,由西安 交通大學校長王樹國教授及理大校長唐偉章教授聯袂主持開幕禮。 新大樓為兩校的協作提供更多設施,通過合作辦學及聯合科研, 為中國西部地區的經濟發展作出貢獻。





AR

October 10-19 +A

October 25 + F

Festival Vernissage: Social Gastronomy opens 10DAYFEST 「盛食當灶 | 為「十日節 | 揭開序幕

The Jockey Club Design Institute for Social Innovation organized the second 10 DAYFEST under the theme Social Innovation — Be a Practical Dreamer. The opening event, Festival Vernissage: Social Gastronomy, brought together chefs, disadvantaged families and corporate representatives to make dishes using food waste and was subsequently honoured with the Silver A' Design Award (Event and Happening Design category). Another highlight of the event was the display of the Green Deck — a PolyU-initiated solution for tackling air quality and connectivity problems in the Cross Harbour Tunnel vicinity.

賽馬會社會創新設計院舉辦第二屆「十日節」,主題為「十日・一同・社會創新」。開幕活動——「盛食當灶」匯聚名廚、基層家庭及機構高層,利用剩食創造佳餚。活動其後在 A' Design Award 比賽中獲得銀獎(大型活動及事件設計組別)。「十日節」另一亮點為「綠化平台計劃」展覽,綠化平台是理大為解決海底隧道周邊空氣污染和連接問題而提出的創新方案。



Presentation of degrees at the 20th Congregation 第二十屆畢業典禮

At the University's 20th Congregation, PolyU conferred degrees on 11,072 graduates, including 182 Doctors of Philosophy, 56 discipline-based doctorate degrees, 52 Masters of Philosophy, 3,974 master degrees, 5,284 bachelor degrees, 39 postgraduate diplomas and certificates, and 1,480 sub-degrees.

在第二十屆畢業典禮上,理大頒授學術榮銜予 11,072 名畢業生,當中包括 182 位哲學博士、56 位專業範疇的修課式博士、52 位哲學碩士、3,974 位碩士、5,284 位學士、39 位深造文憑及證書畢業生,以及 1,480 位非學位文憑及證書畢業生。





November 1

November 19-23

Artist-in-Residence brings music to campus 駐校藝術家將音樂注入校園

The year's Artist-in-Residence programme was kicked off by an open air concert on campus, featuring artist-in residence Yao Jue, the world-renowned violinist, and her Hong Kong String Orchestra. The event brought PolyU students and staff closer than ever to Ms Yao's world of music. (More on p. 46)

年度駐校藝術家計劃以一場露天音樂會揭開序幕,由駐校藝術家、 蜚聲國際的小提琴家姚珏及其香港弦樂團演譯名曲,讓理大學生 及教職員融入姚女士的音樂世界。(詳見第 46 頁)

Social responsibility in global academia 全球學界關注社會責任

PolyU hosted the 2nd Summit on University Social Responsibility, during which university heads and participants exchanged views on nurturing students to be socially responsible citizens, as well as promoting social responsibility in universities and higher education as a catalyst for social change.

理大主辦第二屆大學社會責任高峰論壇,各地大學領導層及與 會者積極交流,就培育學生成為具社會責任的公民、推行大學 社會責任,以及推動高等教育界作為社會改變的先鋒等議題交換 意見。





December 01-06 += 1

December +=A

New dimensions in knowledge transfer 知識轉移新領域

The University organized the International Knowledge Transfer Conference as the first day event of the APAC Innovation Summit for exploring knowledge transfer models, best practices and opportunities. During the Conference, a forum under the theme Leveraging Knowledge Transfer for Institutional Advancement was held for presidents of universities to share the achievements in driving university-industry knowledge transfer.

理大舉辦「國際知識轉移論壇」,作為「亞太創新峰會」首天的活動,探討知識轉移模式、最佳實踐案例及潛在的機遇。同時,大會亦邀請各大學校長在以「利用知識轉移促進院校發展」為題的論壇上,分享推動大學與業界知識轉移的成果。

Global hospitality programme launched with three partners 三方攜手推出環球酒店管理課程

Three institutions — PolyU's School of Hotel and Tourism Management, the Ecole hôtelière de Lausanne, Switzerland and the Conrad N. Hilton College at the University of Houston from the US — announced a partnership to offer the Master's programme in Global Hospitality Business. Starting in September 2015, the programme will take a holistic and cultural immersion approach to hospitality industry training.

理大酒店及旅遊業管理學院、瑞士洛桑酒店管理學院,以及美國 休斯頓大學康拉德·希爾頓酒店及餐飲管理學院聯合公布,合作 開設環球酒店管理碩士課程。該課程於2015年9月開課,為酒店 行業提供全面及以沉浸異國文化為焦點的培訓。







January 22

PolyU sets up consortium for improved food safety 理大倡結盟 促食品安全

The University hosted the "Empowering Global Food Safety" event for discussing the latest challenges in global food safety and sharing best practices to safeguard public health. Concurrently, PolyU set up the Food Safety Consortium as a unique technology exchange platform for assisting the industry and community to tackle food safety issues, supported by PolyU's applied technologies.

大學舉辦以「全球食品安全」為題的活動,討論全球食品安全的新挑戰及分享維護公眾健康的範例經驗。同時,理大發起成立一個獨特的食品安全科技交流平台——「食品安全聯盟」,在理大的應用科技支援下,協助業界及社區解決食品安全問題。

Creativity for social good 創意改善社會

PolyU's Institute for Entrepreneurship and the Jockey Club Design Institute for Social Innovation jointly launched the Good Seed programme for students and graduates of higher education institutions to unleash their creativity for social issues. The programme will help to promote social innovation and poverty alleviation through design and technology.

理大企業發展院及賽馬會社會創新設計院聯合舉辦「好薈社」 計劃,鼓勵專上院校學生及畢業生以創意解決社會問題。計劃 旨在透過應用設計與科技,推動社會創新及解決貧窮問題。





lanuary 25

P. 13-14

Record number of PolyU runners at Hong Kong Marathon 理大跑手人數刷新香港馬拉松紀錄

With a 4,000-strong running team, PolyU set yet another record in the Standard Chartered Hong Kong Marathon and won the top prize for the Most Supportive Group Award for the sixth consecutive year. In partnership with FOODSPORT, the runners' calories burnt during the run were converted into food units that were donated to those in need through social enterprise Food Grace.

理大組成四千多人的長跑隊參加渣打香港馬拉松,參與人數再次刷新紀錄,連續六年蟬聯「最鼎力支持大獎」冠軍。理大與「膳動衡」合作,透過社企「食德好」,將跑手所燃燒的卡路里轉化為食物單位,捐贈有需要人士。

Summit on innovation and technology development 創新科技發展論壇

PolyU organized the CAE-HKAES Joint Summit on Innovation and Technology Industry in Hong Kong and the Pearl River Delta together with the Chinese Academy of Engineering (CAE) and the Hong Kong Academy of Engineering Sciences (HKAES). During the event, participants shared insights on government policies and roles, research funding, research and development, knowledge transfer/exchange, and collaboration between Hong Kong and the Pearl River Delta region.

理大與中國工程院和香港工程科學院合辦「香港及珠三角地區創新 科技產業高端論壇」,就政府政策和角色、科研經費、產業 研發、知識轉移和交流,以及香港和珠三角地區合作等方面分享 意見。







15-19 m

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PolyU wins 15 awards at Geneva's Invention Expo 於日內瓦發明展勇奮十五獎

PolyU researchers brought home 15 awards at the 43rd International Exhibition of Inventions of Geneva, including two Grand Prizes, two Special Gold Medals, four Special Merit Awards, three Gold Medals and four Silver Medals. (More on p. 87)

理大科研人員在第四十三屆日內瓦國際發明展中奪得十五個獎項, 包括兩項特別大獎、兩項特別金獎、四項特別優異獎、三項金獎及 四項銀獎。(詳見第87頁)

New brand promise for education and research 全新教研承諾

The University adopted a new brand promise — **Opening Minds • Shaping the Future**, for education and research. It summarizes PolyU's commitment to nurturing bright young minds, who will shape tomorrow's world and bring innovative ideas to life for the advancement of society. PolyU's new brand promise was featured in a series of brand stories and a new corporate video. (More in brand campaign booklet.)

理大採用「啟迪思維・成就未來」作為其新的教研承諾,正好 展示理大矢志培育傑出人才,啟發年青一代開拓明天,讓開天 闢地的構思意念孕育成長,以推動社會進步。理大並透過一系列 的故事及全新大學短片來分享其教研承諾。(詳見品牌活動小冊子)





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The spirit of innovative entrepreneurship on display 發揮創新企業家精神

The fourth PolyU Innovation and Entrepreneurship Global Student Challenge attracted 130 secondary school and university teams from 22 countries and regions. Business proposals under the themes of health and wellness, lifestyle, environment and sustainability, and corporate social responsibility/social enterprise were submitted for the competition. (More on p. 111)

第四屆理大「國際學生創新挑戰賽」吸引到來自二十二個國家及 地區共一百三十支中學及大學團隊參加,他們分別以健康人生、 時尚生活、環保與可持續發展,以及企業社會責任/社會企業為 主題撰寫商業計劃書,競逐各個獎項。(詳見第111頁)

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Asia-Pacific Healthcare Hub of Charter for Compassion 仁愛憲章亞太區護理樞紐

The International Research Centre for Communication in Healthcare, set up by PolyU and the University of Technology Sydney, launched the Asia-Pacific Healthcare Hub of Charter for Compassion. A total of 1,300 partners from 50 countries came together to promote compassionate healthcare education under the Charter, which provides the foundation for research, education and practice initiatives. It also promotes values in healthcare such as compassion, respect for persons, commitment to integrity and ethical practice, commitment to excellence and justice in healthcare.

理大與雪梨科技大學聯合成立的醫療傳意國際研究中心設立了仁愛 憲章亞太區護理樞紐。這憲章匯聚來自五十個國家的一千三百個 合作夥伴,共同推廣仁愛的護理教育,為教研及實踐新猷建立基礎, 並推動仁愛、尊重、誠信及道德操守、優質服務,以及公平的護理 制度等護理價值。







FACILITY DEDICATIONS AND COMMUNITY SUPPORT

命名活動及各界捐助

September

October

PolyU named a lecture theatre after the world-renowned Chinese manufacturer of die cast replica vehicles,

Mr Ngan Pui-ying, as a tribute to his valued contributions towards education and the development of the University.

理大舉行「顏培英演講廳」命名典禮, 以表彰世界著名華人合金模型車生產商 顏培英先生積極推動教育及理大發展的 卓越貢獻。 A campus building and a square were named respectively after the late Mr Ho Iu-kwong, Founder of the Fook Lee Group of Companies, and Mr Ho Iu-kwong and Ms Kwok Pui-chun in appreciation of their family's generous contributions to education, social wellbeing, and PolyU's teaching and research.

理大舉行「何耀光樓」及「何耀光郭佩珍 伉儷廣場」命名典禮,以表彰福利集團 創辦人何耀光先生、其夫人郭佩珍女士及 其家族慷慨支持教育、社會公益事務,以 及理太的教研工作。





The Inauguration of the PolyU Foundation and PolyU Fundraising Dinner 2014 were held at the Hong Kong Convention and Exhibition Centre. The objectives of the PolyU Foundation are to support the enhancement of learning and teaching quality at the University, research and technology development, and the all-round development of students. The proceeds from the dinner would go towards student international exchange programmes.

「香港理工大學基金成立典禮暨理大籌款晚宴 2014」假香港會議 展覽中心舉行。理大基金的成立,旨在支持大學提升學與教的 質素、科研及學生全人發展。晚宴籌得的款項將用作資助學生 參加國際交流計劃。



Over 40 teams comprising friends and supporters of PolyU participated in the PolyU National Agricultural Holdings Invitational Golf Tournament held at the Palm Island Resort, Huizhou. The proceeds of the event would be used to support all-round student development.

理大友好組成超過四十支隊伍參加於惠州 棕櫚島高爾夫球會舉行的「理大國農控股 高爾夫球邀請賽」,有關收益用作支持 學生的全人發展。

PolyU received a generous donation from an alumnus, Mr Wong Tit-shing, Chairman of Jetta Company Limited, to establish scholarships and support service-learning projects with the aim of enhancing student development.

理大校友、鎮泰有限公司主席黃鐵城先生 慷慨捐贈母校, 並成立獎學金及支持服務 學習項目,以促進學生的發展。

The Hong Kong Jockey Club Charities Trust made a pledge to support a district-based project, the Jockey Club "PolyU Serves" Community Service Project, in Yau Tsim Mong and Kowloon City for the three years from 2015 to 2017 to provide services for the needy.

香港賽馬會慈善信託基金撥款資助為期 三年(2015-2017年)的「賽馬會『理有 心』社區服務計劃(油尖旺及九龍城)」, 為這些地區有需要人士提供服務。











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The Second Inauguration of Endowed Professorships was held to honour distinguished PolyU scholars for their outstanding achievements, and to pay tribute to benefactors for their generous support. The ceremony saw the establishment of six Endowed Professorships, bringing the total number of Endowed and Named Professorships at PolyU to sixteen.

大學舉行第二屆勵學教授席就職典禮,成立六個勵學教授席,藉此表彰優秀的學者及鼎力支持理大的善長。理大至今設立了十六個勵學教授席和冠名教授席。

The six Endowed Professorships inaugurated in the year were (in alphabetical order of discipline):

本年六個勵學教授席如下(按學術領域的英文字母排序):

Fung Yiu King – Wing Hang Bank Endowed Professorship In Business Administration 馮堯敬 — 永亨銀行工商管理教授席

Endowed by Fung Yiu King Charitable

Foundation

Appointee: Prof. Edwin T.C. Cheng, Faculty of Business

捐贈者 : 馮堯敬慈善基金會 履任教授: 工商管理學院鄭大昭教授

Cheng Yik Hung Endowed Professorship in Fashion Design 鄭翼雄時裝設計教授席

Endowed by Sau Ching Charity Foundation

Appointee: To be announced 捐贈者 : 秀清慈善基金 履任教授: 待聘

Walter Kwok Foundation Endowed Professorship in International Hospitality Management

郭炳湘基金國際酒店服務業管理教授席

Endowed by Walter Kwok Foundation

Appointee: Prof. Kaye Chon,

School of Hotel and Tourism

Management

捐贈者 : 郭炳湘基金

履任教授: 酒店及旅遊業管理學院田桂成教授

Lo Ka Chung Charitable Foundation Endowed Professorship in Pharmaceutical Sciences 盧家馳慈善基金藥物科學教授席

Endowed by Lo Ka Chung Charitable Foundation Limited

Appointee: Prof. Thomas Y.C. Leung,

Department of Applied Biology and

Chemical Technology

捐贈者 : 盧家驄慈善基金有限公司 履任教授: 應用生物及化學科技學系梁潤松教授

Alex Wong Siu Wah Gigi Wong Fook Chi Endowed Professorship in Product Design Engineering

黄少華黄宓芝產品設計工程教授席

Endowed by King's Flair Development Limited

Appointee: Prof. Alan K.T. Lau,

Department of Mechanical Engineering

捐贈者 : 科勁發展有限公司 履任教授: 機械工程學系劉建德教授

Vincent and Lily Woo Endowed Professorship in Textiles Technology 吳文政及王月娥紡織科技教授席

Endowed by Vincent and Lily Woo Trust

Appointee: Prof. Tao Xiaoming,

Institute of Textiles and Clothing

捐贈者 : 吳文政及王月娥信託基金 履任教授: 紡織及製衣學系陶肖明教授

May 15

Dr Edwin Leong Siu-hung, Chairman of the Tai Hung Fai Charitable Foundation, once again made a generous donation in support of the Phase 3 Service Programme of the PolyU-Henry G. Leong Mobile Integrative Health Centre (MIHC). With the Foundation's support, MIHC would not only be able to continue serving the elderly in need with upgraded facilities but also to conduct research related to elderly health and provide placements to students.

理大再獲大鴻輝慈善基金主席梁紹鴻 博士慷慨捐助,支持「理大一梁顯利流動 結合保健中心」開展第三期服務計劃。除 提升設施以服務更多有需要長者外,亦有 助開展有關長者健康的研究,以及為學生 提供實習機會。



18 五月

An amphitheatre was named after The Hon. Lam Tai-fai, a member of the Legislative Council of the HKSAR and the National Committee of the Chinese People's Political Consultative Conference, in recognition of his significant contributions to education and community services, as well as his ardent support of his alma mater — PolyU.

大學舉行「林大輝廣場」命名典禮,以 表彰香港特別行政區立法會議員及中國 人民政治協商會議全國委員會委員林大輝 先生對教育和社會服務的重要貢獻,以及 對母校理大的熱心支持。

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With the support of Mr Wan Feng, President of the PolyU Shenzhen Research Institute (SZRI) Alumni Association (Pearl River Delta) and President of the Centre Testing International Corporation, PolyU SZRI set up an activity room for the alumni from Pearl River Delta to host networking activities and enhance their sense of belonging at PolyU.

理大深圳研究院珠三角校友聯誼會會長、 華測檢測技術股份有限公司董事長萬峰 先生慷慨支持,在深圳研究院設立 「珠三角校友活動室」,鼓勵校友舉辦 交流活動,以增進校友對理大的歸屬感。















ACADEMIC DEVELOPMENT 學術發展



Continuous progress with our four-year curriculum

During the 2014/15 academic year, the four-year undergraduate curriculum had been in place for three years, with over 8,000 local and non-local students enrolled in PolyU's 52 UGC-funded full-time four-year/five-year undergraduate degree programmes. Additionally, in 2014/15 more than 1,300 senior year intake admittees joined as full-time undergraduate degree students and more than 900 admittees as articulation degree programme students.

The 2014/15 academic year was challenging as there was a huge increase in student numbers, which created much pressure on how to plan for the General University Requirements (GUR) and Discipline-Specific Requirements (DSR) subjects. With the co-operation of different academic departments and administrative units, the implementation of the four-year undergraduate programmes continued to proceed smoothly, and students expressed their satisfaction with the arrangements. In order to improve the undergraduate programmes, we have made minor adjustments in response to what we have learned during the actual implementation and from feedback by students and staff.

During the year, we conducted an interim review on the structure and implementation of the four-year curriculum to gauge initial staff feedback on its effectiveness. Evaluation of the undergraduate curriculum is ongoing, and a five-year evaluation study of the GUR has been in place since the 2012/13 academic year.

大學四年制進展良好

在 2014/15 學年,四年制本科學位課程已實行三年,有八千多名本地及海外學生修讀理大提供的五十二個大學教育資助委員會資助的全日制四年或五年制本科學位課程。此外,在 2014/15 學年,有一千三百多名學生修讀本科學位高年級課程,以及有九百多名學生修讀學士學位銜接課程。

2014/15 學年是充滿挑戰的一年。由於學生人數大幅增加,在規劃大學核心課程及本科專修科目方面均倍添壓力。然而,在各學術部門和行政部門的通力合作下,四年制本科課程得以順利推行,而學生亦對各方面的安排感到滿意。為了進一步完善本科課程的施行,我們根據在實際執行上所獲得的經驗,以及學生和老師所反映的意見,對課程作出微調。

年內,大學對四年制本科學位課程的結構和 運作進行了中期檢討,以收集教職員對課程 成效的初步意見。本科課程的評估將會持續 進行,大學並已於 2012/13 學年開始,就 核心課程進行五年的評估研究。



Academic advising

The Office of General University Requirements (OGUR) provides academic advising services to students on their studies and career planning. During the year, OGUR Academic Counsellors conducted a total of 3,524 individual or group sessions for undergraduate students, of whom 92.1% were freshmen. The Office also conducted 66 briefing sessions and 13 talks/workshops to help students understand the GUR system, improve their study skills in GUR subjects and adjust to university life.

To promote good practices in academic advising, OGUR leads the development of a Community of Practice on Academic Advising. Through this interest group, the University has organized sharing sessions for academic staff, funded academic advising projects initiated by academic departments, provided an e-learning course, and conducted a large-scale survey to gauge the needs and expectations of students on academic advising. In April 2015, we hosted the first Academic Advising Symposium in Hong Kong, which brought together academic advisors from PolyU and other universities to share best practices and experience.

學業指導

大學核心課程事務處為學生提供學業指導,在 學習和就業規劃方面給予協助。年內,課程輔 導主任跟本科生進行了三千五百二十四次個 人或小組形式的會面,當中百分之九十二點一 為新生。此外,該事務處為學生舉辦了六十六 場簡介會和十三場講座或工作坊,協助學生了 解大學核心課程、改善修讀大學核心課程科目 的技巧,以及適應大學生活。

為提倡優質學業指導,大學核心課程事務處就 學業指導範疇開展「實踐社群」。透過這個 平台,大學為教學人員組織分享會、撥款資助 由學系開展的學業指導項目、為學業指導員 提供網上培訓課程,以及進行大規模調查, 以了解學生在有關方面的需要和期望。 2015年4月,該事務處主辦香港首個 學業指導研討會,理大與各大院校的學業 指導員聚首一堂,分享最佳模式和經驗。



General University Requirements

Under the four-year undergraduate degree curriculum, students are required to take 30 credits in GUR subjects. The primary objective of the GUR is to broaden students' horizons and promote their holistic development during their undergraduate years. It is expected that the GUR subjects will help students sharpen critical thinking, learn effective communication and gain innovative problem-solving skills. as well as acquire lifelong learning, professional competence and ethical leadership qualities.

大學核心課程

在四年制本科課程中,學生必須修畢佔三十個 學分的大學核心課程。該課程旨在善用本科 課程的幾年時間,擴闊學生視野及促進他們 的全人發展。這些科目將有助培育學生 成為敏於思辨、善於溝通、富於創見、 精於解難、樂於學習、立於仁德的專業人士及 領導人才。

Credit requirements under GUR (six components) 大學核心課程的學分要求 (六個部分)

3 Credits 學分	Freshman Seminar 大一生專題研習課程					
9 Credits 學分	Language and Communication Requirements 語文及溝通課程					
3 Credits 學分	Leadership and Intra-Personal Development 領袖及個人發展課程					
12 Credits 學分	Cluster Area Requirements 通識科目課程 Human Nature, Relations and Development 人性、關係及發展 Community, Organization and Globalization and Globalization 性會、組織及全球化 History, Culture and World Views 歴史、文化及世界觀 Apple 大技術及環境					
3 Credits 學分	Service-Learning 服務學習課程					
Non-credit bearing 不計學分	Healthy Lifestyle 健康生活模式課程					

EXCELLENCE IN TEACHING 卓越教學

Launch of Massive Open Online Courses (MOOCs)

Close to two years of intensive preparation and coordination have led to the inaugural launch of three MOOCs by HKPolyUx on the MIT edX platform. Two of the three MOOCs (on Knowledge Management and Anatomy) began in August 2015 and a third (on business English) in October 2015. One month into the registration period of the first two MOOCs, some 25,000 learners from more than 180 countries had signed up. The introduction of MOOCs at PolyU has encouraged more staff to embark on blended learning in the delivery of their on-campus subjects. Two additional MOOCs are in the pipeline, with more to be funded in the future.

開展大型開放式 網絡課程 (MOOCs)

經過近兩年的積極籌備及協作,理大HKPolyUx將在麻省理工學院的edX平台上推出三個大型開放式網絡課程(MOOCs)。其中「知識管理」和「解剖學」兩個課程於2015年8月開課,而「商務英語」課程則在10月推出。在首兩個課程接受報名的一個月內,已有來自一百八十多個國家約二萬五千名人士報讀。理大開展MOOCs之後,鼓勵了更多教員在校內教學時融入混合式學習的方法。此外,兩個MOOCs正在計劃當中,大學亦將資助開發更多此類型課程。



Professional courses in blended and online teaching

During the year, PolyU developed two professional development courses to train teachers for the implementation of blended and online teaching. In the first course, the Becoming an Online Teacher (BOT), academics expanded their teaching and learning repertoire and increased their capacity to deliver technology-enhanced education, underpinned by the BOT's action learning approach.

The BOT is also the seed project for the UGC-funded Blended and Online Learning and Teaching (BOLT) Project, which takes the former's successful approach and extends it in collaboration with other Hong Kong universities. With PolyU taking a leading role in the BOLT project, the core blended course has been refined during its implementation.

Effective use of peer instruction approach (Clickers Project)

PolyU has accumulated considerable experience in using peer instruction (PI) along with the students' response system to actively engage students in large classes. Data collected from focus groups show that most students believe this approach has enhanced learning efficiency and helped them identify areas for improvement, while helping to promote an engaging interactive learning environment.

Supported by competitive funding from UGC, PolyU is collaborating with the Chinese University of Hong Kong to further develop and promote the use of the PI technique at both universities. The project involves working with the pioneers of peer instruction, Prof. Eric Mazur and the Mazur Group at Harvard University, to explore its application and the students' response system in a flipped classroom context with an emphasis on discussion and critical thinking. During the year, up to 12 teaching staff completed training in using PI. Three pilot projects showed initial evidence of learning gains among students with this type of collaborative learning.

混合式及網上教學法 專業課程

年內,理大開發了兩個混合式及網上教學項目的專業發展課程。第一個項目是「成為網上教師」,這課程教授行動學習法,幫助教員拓闊教與學的範疇,並提升他們在科技輔助教學方面的能力。

該課程更為由教資會資助的第二個項目 奠定了基礎。第二個項目名為「混合式 及網上教學」,是繼承了第一個項目中的 有效教學法,並延伸至與其他香港院校的 合作計劃。理大在「混合式及網上教學」 項目中擔當主導角色,更在項目實行過程 中持續完善核心混合式課程。

善用同儕教學法 (課堂即時答問項目)

理大在融合同儕教學法及學生即時答問系統 上累積了豐富經驗,令學生在大班教學環境 中能積極學習。從學生小組訪問所收集的 數據顯示,大部分學生認為這種方式有助 提升學習效率,且能讓他們認識到需要 改善的地方,並推動積極和互動的學習環境。

在教資會所提供的競爭性資金的資助下,理大與香港中文大學攜手合作,在兩所大學中進一步發展及推廣同儕教學法的先驅一哈佛大學 Eric Mazur 教授及其團隊合作,探討在藝藝室中運用同儕教學法與學生即時論 系統,重點在於促進學生的討論完成 應用同儕教學法的培訓,而三個試點項目初步顯示應用同儕教學法這種協作學習方式,可讓學生有所獲益。

Funding for eLearning and blended learning

With the aim of enriching learning experiences and enhancing learning outcomes, in June 2015, PolyU established an eLearning and Blended Learning Development Fund under the Advisory Committee on eLearning. Since then, the University has approved and funded 18 projects, including MOOCs and subjects integrated with other well-established eLearning initiatives on campus such as the Learning Management System (Blackboard), Clickers, eAssessment, and Personal Learning Environments.

Overseas Scholarship Scheme (Teaching Development)

The Overseas Scholarship Scheme (Teaching Development) was set up with UGC funding for professional development. The Scheme provided funds that enabled teachers to go on overseas study visits and explore innovative examples of teaching practice and policy, with the possibility of implementing them within their local contexts. To date, the Scheme has funded 21 teachers on visits to over 20 overseas universities and provided collaboration opportunities with more than 30 renowned scholars across 16 countries. An Overseas Scholarship Scheme (Implementation Fund) has also been set up to support implementation of overseas teaching practices.

資助網上學習及 混合式學習

為了進一步豐富學習經驗及提升學習成效,理大於 2015 年 6 月在網上學習諮詢委員會轄下成立了網上學習及混合式學習發展基金。基金成立後,大學批核及資助了十八個項目,包括大型開放式網絡課程及其他正在校內採用的網上學習系統,例如:學習管理系統、課堂即時答問系統、網絡測評系統及個人學習環境系統。

海外學者計劃 (教學發展)

理大獲得教資會資助,為教師的專業發展 成立海外學者計劃(教學發展)。此計劃資助 教師赴海外學習訪問,發掘在教學實踐及 政策上的創新案例,以及研究這些案例套用 在本地環境中的可行性。這計劃至今共資助 了二十一位教師前往十六個國家,與超過 二十所大學的三十多位知名學者合作。大學 亦成立了海外學者計劃(實踐基金),以支援 在校內推行參照海外的教學方法。



DEVELOPING BRIGHT YOUNG MINDS 培育傑出人才

Service-Learning: A life-changing experience

With the aim of developing students into responsible global citizens, PolyU introduced the mandatory Service-Learning (SL) Requirement in the 2012/13 academic year as part of the new undergraduate degree curriculum. SL integrates community service with academic study by providing students with opportunities to serve the underprivileged through the application of their professional knowledge and skills in Hong Kong, the Chinese mainland and overseas. In 2014/15, the number of SL subjects offered increased significantly to 58, with over 3,000 students enrolled.

To evaluate learning outcomes, the Office of Service Learning surveyed 1,438 students on all 38 SL subjects offered in 2013/14. The findings showed significant improvements in all four generic competencies measured, namely, interpersonal effectiveness, teamwork, problem-solving and social responsibility.

Over 160 students taking SL subjects went to Cambodia, Myanmar, Rwanda and Vietnam to serve and learn in the summer of 2015, and some 600 students served in the Chinese mainland. These offshore SL activities covered a wide range of services, including technology education and development, sustainable rural development, hospitality management, child and adolescent development, cultural heritage preservation, and community healthcare.

服務學習: 改變生命的經歷

為培育學生成為負責任的世界公民,理大自 2012/13 學年起將服務學習納入新本科課程,成為必修科目。服務學習將社區服務融入學習中,讓學生運用其專業知識及技能,在香港、中國內地及海外服務弱勢社群。2014/15 學年開辦的服務學習科目大幅增至五十八科,共有三千多名學生修讀。

為評估學習成果,服務學習事務處在 2013/14學年向一千四百三十八名學生 進行問卷調查,他們分別參與了該年開辦 的三十八個服務學習科目。結果顯示學生 的四項通才效能均有顯著進步,包括人際 效能、團隊合作、解難能力和社會責任感。

2015 年暑期,一百六十多名學生遠赴柬埔寨、緬甸、盧旺達及越南進行服務學習,另近六百名學生前往中國內地參與服務。這些境外服務學習項目涵蓋廣泛範疇,包括科技教育及發展、農村可持續發展、酒店管理、兒童及青少年發展、文化遺產保育,以及社區醫療。















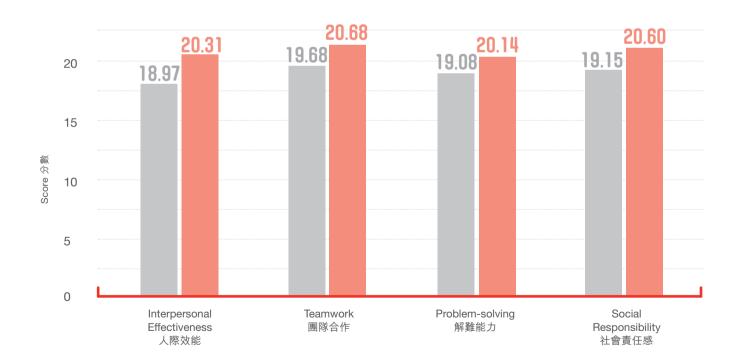




Comparison of students' learning mean scores on four generic competencies before and upon completion of the SL subjects

學生在四項通才效能的前後期評估之平均分比較





Conference on Service- Learning practices

PolyU hosted the Inaugural International Conference on Service-Learning on 20–21 November 2014. During the event, PolyU shared its pioneering SL model and gave nearly 200 global participants a platform for learning about SL practices, opportunities and challenges as well as the chance to build networks and partnerships.

The University also introduced developments in SL during the "PolyU Serves" Showcase held on 21–23 November 2014. To demonstrate how students and staff made effective use of their professional expertise in SL, the event featured over 20 meaningful projects under four main themes, namely, Education and Technology, Environment Improvement and Sustainable Development, Health and Wellness, and Social Integration.

In March and May 2015, PolyU invited two distinguished scholars in SL, Prof. Andrew Furco and Dr Barbara Jacoby, to conduct open lectures, workshops and consultation sessions on campus. More than 200 participants from Hong Kong, Macau, Myanmar and Vietnam attended the events.

WIE: Learning while practising

The mandatory Work-Integrated Education (WIE) component is a unique feature of the University's undergraduate curriculum. Implemented in 2005, WIE requires students to engage in real-world projects or work as interns in an organizational context. In 2014/15, the Office of Careers and Placement Services secured local and offshore internships for more than 700 PolyU students at leading organizations in nine cities on the Chinese mainland and in 25 overseas countries.

服務學習國際會議

理大於 2014 年 11 月 20 至 21 日舉辦首屆 服務學習國際會議,與院校分享服務學習的 創新模式,同時提供一個平台,讓近二百名 來自世界各地的與會者了解服務學習的實踐 方法、契機和挑戰,並建立網絡及夥伴關係。

此外,大學在 2014 年 11 月 21 至 23 日舉行「理有心」服務項目巡禮,展出二十多個圍繞四大主題的服務學習項目,包括「教育及科技」、「環境改善及可持續發展」、「醫療及健康」及「社會融和」,旨在向社區介紹服務學習方面的發展,並展示師生善用專業服務社群的成果。

2015年3月及5月,理大邀請到兩位在服務 學習領域有卓越成就的學者— Andrew Furco 教授及 Barbara Jacoby 博士於校園主持公開 講座、工作坊及諮詢會。超過二百名來自香港、 澳門、緬甸及越南的人士參與其中。

校企協作教育: 學習與實践並重

必修的校企協作教育是理大本科課程中一大特點,自2005年起,此計劃要求學生必須參與實際工作項目或於機構中實習。2014/15年度,就業服務處為學生在本地與海外多家大機構爭取到實習機會,有逾七百名學生於中國內地九個城市及海外二十五個國家進行實習。















Promoting arts and culture

In 2014/15, the Culture Promotion and Events Office arranged 35 programmes comprising 93 activities. Over 44,000 participants took part in the programmes, representing a 50% increase over the previous year.

To give students, staff and alumni the opportunity to develop their talents under the guidance of professional artists, the Artist-in-Residence Programme this year featured the world-renowned violinist Yao Jue. During her residency, Ms Yao organized a series of programmes for the PolyU community, including an opening concert with the Hong Kong String Orchestra, a mentoring programme and a finale concert together with the PolyU Orchestra.

From September to October 2014, PolyU hosted the Lingnan Painting Exhibition by the maestro of contemporary Lingnan Painting, Ng Yuet-lau, at the Pao Yue Kong Library. The exhibition, which exemplified Ms Ng's aesthetic principles of "mingle the East and the West, the old and the new", attracted over 15,000 patrons. Ms Ng also gave a talk and demonstration on the Lingnan school of painting as well as a Chinese painting workshop during the year.

推廣藝術文化

文化及設施推廣處於 2014/15 年度舉辦了三十五個節目,合共九十三項活動,有四萬四千多人次參與,較前一年增長百分之五十。

駐校藝術家計劃為學生、教職員和校友提供 在藝術家指導下發揮潛能的機會,本年度的 駐校藝術家為世界著名小提琴家姚珏。姚女 士為理大設計了一系列活動,包括香港弦樂 團參與的開幕音樂會、師友計劃,以及理大 管弦樂團參與演出的壓軸音樂會。

2014年9至10月,理大在包玉剛圖書館舉辦「嶺南意象 — 伍月柳水墨畫展」,展出 嶺南派大師伍月柳的作品,充分體現「折衷 中西,融匯古今」的藝術特徵,吸引到超過 一萬五千人次參觀。年內,伍女士更主持了 嶺南畫講座示範和國畫班。





In July, the Harvard Din & Tonics, Harvard University's signature all-male jazz a cappella singing group, gave a stirring performance on campus to a full house audience.

During the year, PolyU collaborated with art groups and Consulate General Offices to bring art and cultural events to the campus. Events included the Indian Classical Dance – Bharatanatyam and the Inaugural Indian Film Festival with the Consulate General of India; Giuseppe Bruno and Paolo Valcepina — Piano Four Hands Concert with the Consulate General of Italy; Singing Contest — Kayosai 2014 with the Consulate General of Japan; the opening programme of 2014 Festive Korea with the Consulate General of Korea; a jazz performance by The Sheryl Bailey 3 with the US Consulate General for Hong Kong and Macau; and three Le French May 2015 programmes with the Consulate General of France, including the Lise de la Salle Piano Recital, Jo Bithume Company — Brass Band Music and a film show.

To cultivate a reading culture, the campus-wide Read@PolyU Programme organized by the Library selected "The Boy in the Striped Pyjamas" as the common book for 2014/15. Over 2,000 copies were distributed by the Library to first-year undergraduate students and the book was embedded as one of the thematic areas in "Tomorrow's Leaders" — a General University Requirement course. In collaboration with the English Language Centre, the Library organized a series of discussion sessions, film shows, book talks, writing clinics and exhibitions to engage students and the University community.

哈佛大學全男班無伴奏合唱團 The Harvard Din & Tonics 於 7 月在校園舉行了一場美妙的爵士音樂會,音樂會座無虛設。

年內,大學繼續與各藝術團體和各國總領事館合作,為校園帶來藝術及文化節目。節目包括與印度領事館合作的印度古典舞蹈表演及首屆印度電影節;與意大利領事館合作的鋼琴四手聯彈音樂會;與日本領事館合作的韓國十月文化節2014 開幕公演;與美國領事館合辦的爵士樂三重奏;以及與法國領事館合作把三場「法國五月」的節目安排在校園舉行,包括麗莎·德勒沙爾鋼琴獨奏會及一場電影欣賞會。

為培育閱讀文化,圖書館舉辦了 Read@ PolyU 全校閱讀計劃,向逾二千名一年級新生派發《穿條紋睡衣的男孩》一書,作為2014/15 年度大一學生的共同讀物,該書亦被列入大學核心課程「明日領袖」的其中一個專題單元。圖書館又與英語教學中心合辦一系列小組討論會、電影放映會、書籍講座、寫作診所及展覽活動,讓學生及理大社群齊參與。







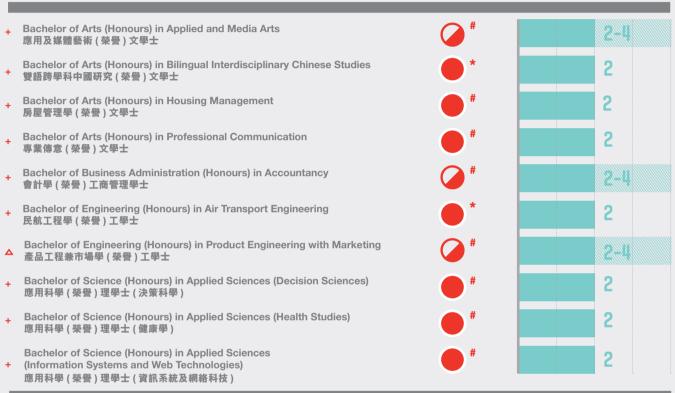


New Programmes introduced in 2014/15 2014/15 年度新增課程





Undergraduate Degree Programmes 學士學位課程



KEY 圖例



資助課程

大學教育資助委員會



Mixed Mode 混合制

Self-financed programme



Full-time 全日制

↑ Top-up bachelor's degree programme 銜接課程

This programme was introduced by merging the existing 2-year full-time and 3.5-year part-time self-financed programmes. 此課程將現有分別為兩年全日制及三年半兼讀制的自負盈虧課程合併而成。

Double Majors Study Option under the 4-year undergraduate degree structure 四年制本科學位架構下的雙主修科學習模式

Faculty/ Department Double Majors Study Option

Implementation Year 實行年度

FACULTY OF HUMANITIES 人文學院

雙主修科學習模式

CBS & ENGL

學院/學系

Bachelor of Arts (Honours) in Chinese and Bilingual Studies and Bachelor of Arts (Honours) in English Studies for the Professions

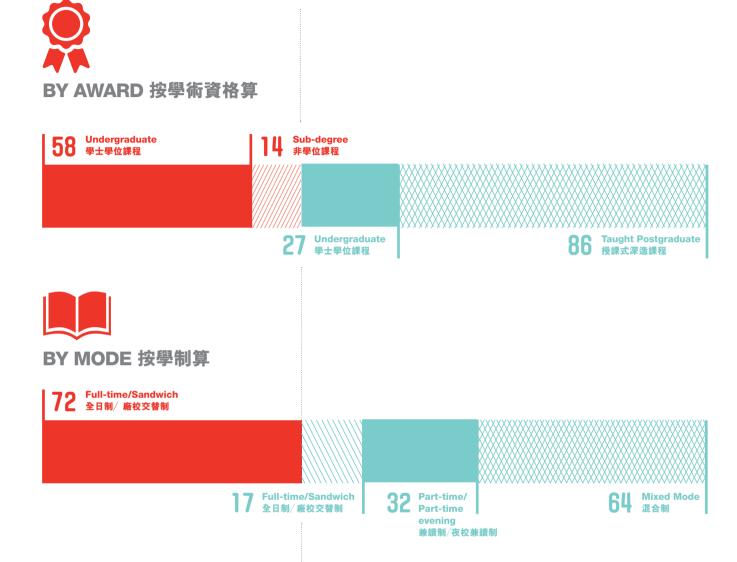
中文及雙語(榮譽)文學士及 專業英文(榮譽)文學士 2012/13

Regular Minor and Custom Design Minor Programmes under the 4-year undergraduate degree structure 四年制本科學位架構下的普通副修及特設副修課程

Faculty/	Minor	Implementation	Faculty/	Minor		Implementation
Department 學院/學系	Programme 副修課程	Year 實行年度	Department 學院/學系	Programme 副修課程		Ye 實行年
Faculty	v of Applied Science and Textiles 應用科	·學及紡織學院	EIE	Minor in Electronic 副修電子及資訊工程	: and Information Engineering 呈學	2013/1
ABCT	Minor in Food and Nutritional Science 副修食品及營養科學	2013/14		Minor in Internet and Multimedia Technologies 副修互聯網及多媒體科技 Minor in Enterprise Engineering with Management 副修企業工程兼管理		2013/1
AMA	Minor in Applied Mathematics* 副修應用數學	2015/14	ISE			
AP	Minor in Optoelectronics			Minor in Industrial	Minor in Industrial and Systems Engineering 副修工業及系統工程學	
ITC	副修光電子學 Minor in Fashion and Textiles	2014/15		Minor in Logistics	Engineering with Management	2013/1
	副修服裝及紡織	2013/14			ingineering with Marketing	2013/1
	y of Business 工商管理學院		ME	副修產品工程兼市 Minor in Mechanic		2013/1
AF	Minor in Accountancy 副修會計學	2014/15		副修機械工程學		2013/1
	Minor in Business Economics* 副修商業經濟學	2015/16			of Health and Social Sciences 醫療及社	
	Minor in Finance 副修金融學	2014/15	APSS	Minor in Applied Psychology* 副修應用心理學		2013/1
	Minor in Financial Services and Institutions 副修金融服務業	2014/15		Minor in Changing 副修變化中的中國	Chinese Societies* ^ ±會	2013/1
_MS	Minor in Global Supply Chain Management	2013/14		Minor in Social Po 副修社會政策及行	licy and Administration	2013/1
	副修全球供應鏈管理 Minor in International Shipping and Transport	Logistics	Facu	Ity of Humanities		2010/1
MM	副修國際航運及物流管理 Minor in Management	2013/14	racu		anguage and Culture	
	副修管理學 Minor in Marketing	2013/14		(for international s		2014/-
	副修市場學	2013/14	CBS	Minor in Japanese 副修日語	,	2013/-
Facult	y of Construction and Environment	建設及環境學院		Minor in Korean*		
BRE	Minor in Real Estate Investment 副修房地產投資	2013/14			n and Bilingual Communication	
BSE	Minor in Building Services Engineering 副修屋宇設備工程	2013/14	CC	副修翻譯及雙語傳訊 Minor in Chinese Culture*		2013/
CEE	Minor in Environmental Engineering 副修環境工程	2014/15	ENGL	副修中國文化 Minor in English		2014/1
	Minor in Structural Engineering		2.102	副修英文	Ctudios*	2013/1
_SGI	副修結構工程 Minor in Geomatics	2014/15		Minor in European Studies* 副修歐洲研究		2014/
	副修測繪及地理資訊學	2013/14	Scho	ol of Design 設計	學院	
	y of Engineering 工程學院			Minor in Design 副修設計學		2014/1
BME	Minor in Biomedical Engineering 副修生物醫學工程	2013/14	Coho	副修設訂學 School of Hotel and Tourism Management		2014/
COMP	Minor in Computing 副修電子計算	2013/14		or or noter and i 及旅遊業管理學院	ourism Management	
	Minor in Enterprise Computing 副修企業計算	2013/14		Minor in Hotel Mar	nagement	2010/
	Minor in Software Technology 副修軟件科技				Management (2013/1
ĒΕ	Minor in Electrical Engineering			副修旅遊業管理		2013/
	副修電機工程學 Minor in Transportation Systems Engineering	2014/15		↑ The presumance is a	* Custom design Minor Programs	
	副修運輸系統工程學	2014/15		The programme is pr	oposed to be discontinued with effe 這項課程建議由 2	
DEPAR1	「MENTS 學系	BSE Department of	Building Services Engine		Department of English 英文系	
ABCT [Department of Applied Biology and Chemical Technology	屋宇設備工程身 CBS Department of	Chinese and Bilingual S		Department of Industrial and Systems Engineering 工業及系統工程學系	
AF S	應用生物及化學科技學系 School of Accounting and Finance 會計及金融學院 Department of Applied Mathematics 應用數學系	CC Department of	中文及雙語學系 Department of Chinese Culture 中國文化學系 Department of Civil and Environmental Engineering 土木及環境工程學系		ITC Institute of Textiles and Clothing 紡織及製衣學系 LMS Department of Logistics and Maritime Studies 物流及航運學系 LSGI Department of Land Surveying and Geo-Informatic:	
AP [Department of Applied Physics 應用物理學系	土木及環境工程				
BME I	Department of Applied Social Sciences 應用社會科學系 Interdisciplinary Division of Biomedical Engineering 生物醫學工程跨領域學部	EE Department of	Department of Computing 電子計算學系 Department of Electrical Engineering 電機工程學系 Department of Electronic and Information Engineering MM Department of Management Department of Management		土地測量及地理資訊學系 Department of Mechanical Engineerir Department of Management and Mar	ng 機械工程學系 keting
	土物國学工程時很與學部 Department of Building and Real Estate 建築及房地產學系	電子及資訊工程	學系	on Engineering WilVI	管理及市場學系	Kottilg



Number of Programmes in 2014/15 2014/15 年度課程數目



Total no. of programmes 總課程數目

72 UGC-funded 教資會資助

113 Self-financed 自負盈虧

PROMOTION OF LIFELONG LEARNING

推動終身學習

The College of Professional and Continuing Education (CPCE) is one of the largest self-financing providers of full-time tertiary education in Hong Kong. It oversees the operation of two self-financing education units: Hong Kong Community College (HKCC) and the School of Professional Education and Executive Development (SPEED). These two units mainly offer a variety of sub-degree and top-up undergraduate programmes, providing quality tertiary education opportunities to around 10,000 full-time students in the 2014/15 academic year. A wide range of continuing education programmes is also offered to cater to the different needs of lifelong learners.

專業及持續教育學院為香港自資專上教育界別其中一所最具規模的機構。學院轄下兩個以自負盈虧模式運作的單管位方。 香港專上學院及專業進修學院,主要開辦各項副學位及學士學位銜接課程,在2014/15學年為近一萬名全日制學生提供優質專上教育機會。學院亦提供涵習人士的不同需要。

Hong Kong Community College (HKCC)

In the 2014/15 academic year, HKCC offered a total of 35 PolyU-HKCC award associate degree and higher diploma programmes to around 6,800 full-time students. With 82% of its graduates pursuing degree studies, HKCC has always maintained one of the highest articulation rates among sub-degree institutions in Hong Kong.

School of Professional Education and Executive Development (SPEED)

Around 3,000 students were enrolled in 37 full-time/part-time PolyU-SPEED award top-up degree programmes during the year. SPEED also offered, in collaboration with PolyU academic units, 3 self-financing top-up degree honours programmes leading to PolyU awards. Fifteen additional programmes are planned for subsequent years. In addition, 109 short courses were provided to some 2,800 students for the pursuit of continuous professional development and lifelong learning.

香港專上學院

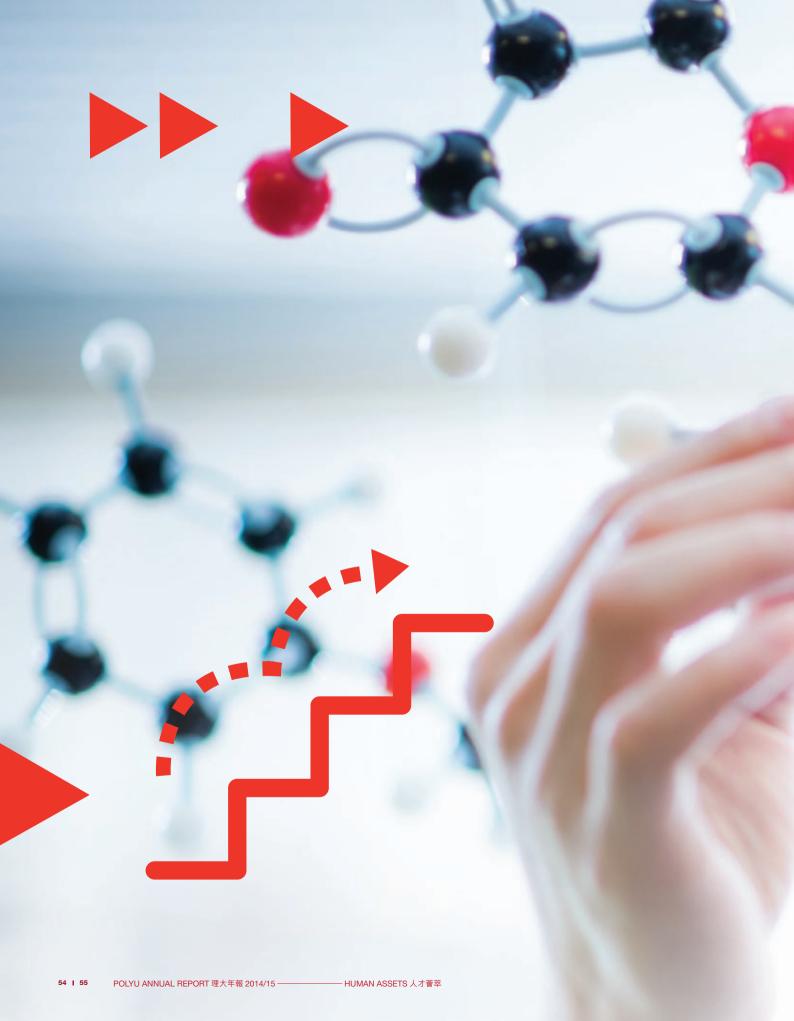
2014/15 學年,香港專上學院為約六千八百名全日制學生開辦三十五項頒授理大香港專上學院學銜的副學士及高級文憑課程。 學院畢業生升讀學士學位的比率為百分之八十二,一直保持為全港提供副學位課程的院校中升學率最高的院校之一。

專業進修學院

在2014/15 年度,約三千名全日制/兼讀制學生入讀共三十七項頒授理大專業進修學院學銜的學士學位銜接課程。學院更與理大教學部門合辦三項頒授理大學銜的自資榮譽學士銜接學位課程,並計劃於未來數年開辦超過十五項課程。此外,專業進修學院更開辦一百零九項短期課程,供約二千八百名致力持續專業發展及終身學習的人士修讀。









PolyU values its dedicated members, whose efforts have contributed to the University's achievements and sustainable development, benefiting the society.

理大對校內成員珍而重之,他們的努力讓大學成就卓越,並持續發展,為社會帶來裨益。



HONORARY DOCTORATES

榮譽博士學位



PolyU conferred honorary doctorates on five prominent members of the community at the 20th Congregation on 25 October 2014. 理大於 2014 年 10 月 25 日舉行的第二十屆畢業 典禮上,向五位傑出人士頒授榮譽博士學位。



Dr Christopher Cheng Wai-chee,

Chairman of Wing Tai Properties Limited, was conferred with the Honorary Degree of Doctor of Business Administration.

永泰地產有限公司主席 鄭維志博士獲頒授榮譽 工商管理博士學位。



Prof. Leon O. Chua,

Professor of Electrical
Engineering and Computer
Sciences of the University
of California at Berkeley,
USA, was conferred with
the Honorary Degree of
Doctor of Science.

美國加州大學柏克萊分校電機工程學及計算機科學教授蔡少棠教授獲 頒授榮譽理學博士學位。



Dr Irwin Mark Jacobs, Founding Chairman

and CEO Emeritus of Qualcomm Incorporated, USA, was conferred with the Honorary Degree of Doctor of Engineering. 美國高通公司創辦主席 兼榮休行政總裁 Irvin

兼榮休行政總裁 Irwin Mark Jacobs 博士獲 頒授榮譽工程學博士 學位。



Prof. Yan Jun-qi,

Vice-Chairman of the Standing Committee of the National People's Congress and Director of China Institute of Education Policy, was conferred with the Honorary Degree of Doctor of Social Sciences.

全國人民代表大會常委會 副委員長暨中國教育政策 研究院院長**嚴雋琪教授**獲 頒授榮譽社會科學博士 學位。



Prof. Andrew Yao Chi-chih.

renowned computer scientist and educator, was conferred with the Honorary Degree of Doctor of Science.

計算機科學家兼教育家 姚期智教授獲頒授榮譽 理學博士學位。

UNIVERSITY FELLOWSHIPS 大學院士

On 8 January 2015. PolyU conferred the honorary title of University Fellowship on eight outstanding individuals in tribute to their significant contributions to the University and the community. 2015年1月8日,理大向八位傑出人士頒授 大學院士榮銜,表揚他們對理大和社會的卓越 貢獻。



Mr Alexander Woo Chung-ho, Chairman of Central Textiles Group 中央紡織集團董事長 吳中豪先生

Ms Josephine Siao Fong-fong, MBE, renowned actress and President of End Child Sexual Abuse Foundation

著名演員及護苗基金會長 蕭芳芳女士, MBE

Dr Dennis Ng Wang-pun, BBS, MH, Managing Director of Polaris Jewellery Manufacturer Limited 寶星首飾廠有限公司 董事總經理吳宏斌博士, BBS, MH

6

Dr Chung King-fai, SBS, veteran actor, director, television producer, programme host and theatre educator

資深演員、導演、電視製作人、 電視節目主持及戲劇教育家 鍾景輝博士, SBS

Prof. Wang Jianhua, Professor of Electrical Engineering and former Party Secretary of Xi'an Jiaotong University

西安交通大學電氣工程學院 教授及前校黨委書記 王建華教授

7

Dr Royce Yuen Man-chun, JP, Founder of New Brand New and Executive Director of Chinagrowth Group 時尚品牌策劃有限公司 創辦人及盛國集團執行董事 袁文俊博士, JP

Dr Humphrey Leung Kwong-wai. JP. Founder and Group Chief Executive Officer of Solomon Systech Limited

晶門科技有限公司創辦人兼 集團行政總裁梁廣偉博士, JP

Dr Samuel Lam Pak-nin, specialist in diagnostic radiology and Director of Lam Woo Foundation 放射診斷科專家及林護紀念 基金董事林柏年醫生

(In absentia 未能出席典禮)



A CELEBRATION OF ACADEMIC EXCELLENCE

卓越學術典範



Prof. Edwin Cheng.

Dean of the Faculty of Business, received the Education Leadership Award from the World Education Congress in recognition of his contributions to the University and his field through his leadership, innovation and interactions with academia and industry.

工商管理學院院長 鄭大昭教授榮獲世界教育 大會頒發教育領袖獎,以 表彰他在大學及專業範疇 作出了領導、創新、學術 及業界交流方面的貢獻。 Prof. Eric Tsui of the Department of Industrial and Systems Engineering received the Knowledge Management Leadership Award from the World Education Congress for his leadership, innovation and interactions with academia and industry with the aim of developing future leaders.

工業及系統工程學系 徐汝康教授榮獲世界教育大會頒發知識管理領袖 獎,以表揚他透過領導、創新、學術及業界交流,培育未來領袖。





Prof. Alan Lau, Associate Dean (Industrial Relations) of the Faculty of Engineering, won the Award for Outstanding Contribution to Education at the Global LearnTech Congress for his achievements in outcomebased education through the integration of research and industrial activities.

工程學院副院長(業界關係) 劉建德教授贏得全球學習 科技會議頒發的教育卓越 貢獻獎,表揚他透過融合 研究與業界活動,在成果 為本教學法方面所取得的 成就。

Dr Henry Chan,

Associate Professor of the Department of Computing, was honoured with the Computer Science and Engineering Undergraduate Teaching Award by the IEEE Computer Society for his outstanding contributions in computing education through teaching, mentoring students, and service to the education community.

電子計算學系副教授 陳峻斌博士喜獲IEEE電腦 學會頒發計算機科學與 工程學本科教學獎,表彰 他在計算學範疇中的傑出 教學貢獻,包括培育和指導 學生,以及服務教育社群。



PRESIDENT'S AWARDS FOR EXCELLENT PERFORMANCE/ACHIEVEMENT 校長特設卓越表現/成就獎

On 25 March 2015, Dr Gail Forey and Prof. Teng Jin-guang received the President's Award for Excellent Performance/ Achievement in Teaching (Individual) and Research and Scholarly Activities (Individual), respectively. Thirty-three staff members from the Department of Industrial and Systems Engineering, Industrial Centre and Mainland and International Student Services Office were also awarded for their outstanding achievements and contributions. 2015年3月25日·Gail Forey 博士及滕錦光教授分別獲頒發校長特設卓越表現/成就獎的教學和研究及學術活動的個人獎項。此外,大學頒授獎項予三十三名來自工業及系統工程學系、工業中心和內地及國際學生服務處的教職員,表揚他們的傑出成就和貢獻。

Teaching 教學獎



Dr Gail Forey, Associate Professor, Department of English Gail Forey 博士 英文系副教授

Dr Forey contributes significantly to teaching and programme management as well as research. As a programme leader, she has energetically ensured that her programme is research based and community oriented. She is a knowledgeable and inspirational lecturer with a great capacity for making students enthusiastic about learning. Her class is interesting and engaging. Under Dr Forey's facilitation and leadership, students have sufficient room for unleashing their talents. She is highly engaged in curriculum/subject design and teaching-related projects. Not only a committed teacher, Dr Forey is also a creative and productive researcher.

Forey 博士在教學、課程管理及研究方面作出了重大貢獻。 作為課程總監,她致力使課程既以研究為基礎,亦回應社區 的需要。她知識廣博,極富啟發性,往往能激勵學生熱衷於 學習。Forey 博士的課堂趣味性及互動性兼備,在她循循善 誘及領導下,學生都有充足的空間發揮潛能。Forey 博士亦 積極參與課程/學科的設計及教學相關的項目。她不僅全情 投入教學工作,而且是一位極具創意和多產的研究人員。



Research and Scholarly Activities 研究及學術活動



Ir Prof. Teng Jin-guang, Chair Professor of Department of Civil and Environmental Engineering and Director of Research Institute for Sustainable Urban Development

滕錦光教授、工程師 土木及環境工程學系講座教授及 可持續城市發展研究院院長 Prof. Teng is widely recognized as the leading scholar in fibre-reinforced polymer (FRP) composites for construction and the leading founder of the theory of FRP-strengthened concrete structures. He has published his own book and edited 2 books and 173 papers in Science Citation Index (SCI) journals, attracting over 4,800 citations leading to an H-index of 36. He was elected Fellow of the Hong Kong Academy of Engineering Sciences and Corresponding Fellow of the Royal Society of Edinburgh in 2014 and 2015 respectively. His study, Behaviour and Design of Concrete Structures Strengthened with Advanced FRP Composites, earned him the State Natural Science Award of China (Second Class) in 2013.

滕錦光教授為纖維增強複合材料(FRP)結構工程應用的著名學者,亦是 FRP 加固混凝土結構理論的始創者。他發表了一部專著、兩本編輯書籍及一百七十三份 SCI 期刊論文,引用次數超過四千八百次,H-指數為三十六。滕教授分別於 2014 及 2015 年當選香港工程科學院院士和愛丁堡皇家學會通訊院士。2013 年,他憑著關於「高性能纖維增強複合材料加固混凝土結構的力學性能及設計理論」的研究,獲頒國家自然科學獎二等獎。

Staff numbers (as of 30 June 2015) * 教職員人數 (截至 2015 年 6 月 30 日) Average turnover rate of academic and teaching/ clinical staff 學術及教學 / 臨床人員 平均轉職率

11%



1,175 Academic and teaching/ clinical staff 學術及教學 / 臨床人員

251 se

Management/ senior professional staff 管理 / 高級專業人員 1,780

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Executive/professional and general grade staff 行政 / 專業及一般職級員工

3,206 Total 總數

- * Refers to full-time staff funded by the UGC, with 111 new academic and teaching/clinical staff joining PolyU and 129 leaving during the year. The above does not include 865 staff members funded by other sources.
- *指教資會撥款資助聘用的全職員工,其中有一百一十一位學術及 教學/臨床人員於年內入職,另一百二十九位離職。 以上數字不包括以其他經費聘用的八百六十五名員工。

THRIVING STUDENTS

卓越學生

On 12 February 2015, the University presented the Outstanding Student Awards to the following full-time students from different faculties and schools who have excelled in both academic and non-academic pursuits. Another 18 outstanding students from academic departments were also awarded.

2015年2月12日,理大頒發卓越學生獎予以下來自不同學院、品學兼優的全日制學生,表揚他們於學業上及課堂外均有全面的發展及優異成績。此外,十八位來自不同學系的優秀學生亦獲得獎項。

The Most Outstanding PolyU Student 最卓越學生



It is my greatest honour to be selected as The Most Outstanding PolyU Student of the year. I could not have done it without the infinite support from the University, faculty, family and friends.

獲頒「最卓越學生獎」對我來說是很大的 榮譽。如沒有大學、學院、家人及朋友 一直支持,我想我不可能有今日的成績。

Alice Lau Suet-ying, a final-year student in the BBA (Hons) Major in Global Supply Chain Management programme of the Faculty of Business, was named this year's Most Outstanding PolyU Student. Alice not only ranked at the top of her class with a number of scholarships and awards, she was also a highly dedicated volunteer who has actively participated in service projects. In addition to serving the local community, she volunteered in a Shaoguan teaching programme in the mainland during the summer of 2014. She also demonstrated her leadership potential when participating in the leadership development programme offered by the HKUYA Student Exchange Network, Youth Society of Hong Kong Logistics Association and Women's Foundation.

工商管理學院轄下物流及航運學系三年級學生劉雪瑩獲頒最卓越學生獎。她的學業成績一直為全班之冠,曾獲多項獎學金,更是一位熱心的義工,積極參與義務工作。除了服務香港社區,她曾於2014年暑期內地韶關參與義教。她更於香港青聯學生交流網絡、香港物流協會青年社,以及婦女基金會所舉辦的領袖培訓計劃中展現其出色的領導才能。



Outstanding students by faculty/school 學院卓越學生獎得主



Xia Yi-fan 夏逸凡 Faculty of Applied Science and Textiles 應用科學及紡織學院



Gao Ya 高雅 Faculty of Construction and Environment 建設及環境學院



Nie Ni 聂旎 Faculty of Engineering 工程學院



Ngo Hiu-ching 敖曉晴 Faculty of Health and Social Sciences 醫療及社會科學院



Wang Ying-can 王盈粲 Faculty of Humanities 人文學院



Law Yuen-kwan 羅婉君 School of Design 設計學院



Hou Shan-shan 侯姗姗 School of Hotel and Tourism Management 酒店及旅遊業管理學院

Scholarship Schemes for Outstanding Students in 2014/15 2014/15 年度優異學生獎學金計劃

Number of full-time undergraduate freshmen awarded entry scholarships during the year: 年內,獲頒入學獎學金的全日制本科新生人數:

Entry academic scholarships

Entry non-academic scholarships 入學非學術獎學金

264 Hong Kong 香港

Chinese mainland 中國內地

Overseas countries/ territories 海外國家/地區

ATHLETIC ACHIEVEMENTS 運動佳績





A total of 19 PolyU students were selected to represent Hong Kong, China, in the 17th Asian Games 2014 at Incheon, Korea. Lin Po-heung captured two bronze medals in Women's Foil (Fencing) individual and team events, Yan Hon-pan won a bronze medal in Men's Sabre (Fencing), Lai Chun-ho took home a bronze medal in the Men's 4x100m Relay (Athletics), and Chan Kin-lok received a bronze medal in the Women's 4 x 100m Medley Relay (Swimming).

Eight PolyU Men's Basketball Team members participated in the 5th Asian University Men's Basketball Championship in Taiwan in November 2014 and won Hong Kong's first bronze medal.

十九名理大學生運動員代表香港出席於2014年在南韓仁川舉辦的第十七屆亞運會。當中連寶香在花劍個人及團體項目中奪得兩面銅牌,甄侃斌在佩劍團體項目中贏得一面銅牌,黎振浩在田徑項目男子4x100米接力中奪得一面銅牌,而陳健樂亦在游泳項目女子4x100米混合泳接力中得一面銅牌。

八名男子籃球隊隊員參加 2014 年 11 月舉行的第五屆亞洲大學生男子籃球錦標賽,並為香港奪得歷史性的季軍。







Ten members of the Tennis Team (Men and Women) participated in the All China University Tennis Championship in July 2014. Both the men's (Division A) and women's teams (Division B) won the championship in the Team Event. In addition, Wu Ho-ching earned a silver medal in the Individual Event (Division B).

十名男女子網球隊隊員參加於 2014 年 7 月 舉行的全國大學生網球錦標賽,男女子隊 分別奪得甲組及乙組團體冠軍,胡可澇更贏 得女子乙組單打亞軍。

At the 2014 All China University Badminton Championship, nine members of the PolyU Badminton Team (Men and Women) participated and Tang Ho-kan won the 2nd Runner-up in the Men's Singles Event (Division A).

在第十八屆全國大學生羽毛球錦標賽中, 九名理大男女子羽毛球隊隊員參與其中,而 鄧浩勤更奪得男子甲組單打季軍。

The ten members of the Fencing Team (Men and Women) who participated in the All China University Fencing Championship also achieved good results. The men's Foil team captured the bronze medal in the Team Event (Division A) while Tang Hoi-yan was named the Champion in the Individual Men's Foil (Division A).

十名男女子劍擊隊隊員參加了全國大學生 劍擊錦標賽,更奪得佳績。男子花劍隊贏得 甲組團體季軍, 而鄧凱仁更奪得男子花劍 甲組個人賽冠軍。

This year, out of the 32 events organized by the University Sports Federation of Hong Kong, China, PolyU captured 29 awards (10 gold, seven silver, seven bronze and five iron). In the Women's and Men's category, PolyU athletes were awarded the overall Championship and 1st Runner-up respectively.

年內,在香港大專體育協會舉辦的三十二項 賽事中,理大獲得十冠、七亞、七季及五殿, 共二十九個獎項,並勇奪女子團體總冠軍及 男子團體總亞軍。

A total of 10 student athletes received Most Valuable Player Awards, They are Leung Shiu-wah (Basketball), Lam Sze-pui (Handball), lp Chun-long (Soccer), Ho Ka-po (Squash), Chan Kin-lok (Swimming), Kwok Ka-fai (Swimming), Lee Tsz-ching (Taekwondo), Chan Mei-shan (Table-tennis), Lam Wing-lun (Tennis) and Wu Ho-ching (Tennis).

十名學生運動員被選為大專最有價值運動員, 包括梁兆華(籃球)、林思佩(手球)、葉頌朗 (足球)、何嘉寶(壁球)、陳健樂(游泳)、 郭家輝(游泳)、李芷晴(跆拳道)、陳美珊 (乒乓球)、林永倫(網球)及胡可澄(網球)。











Student numbers in 2014/15 2014/15 年度學生人數

	Full-tin	Full-time 全日制		Part-time 兼讀制	
	UGC-funded 教資會資助	Self-financed 自負盈虧	UGC-funded 教資會資助	Self-financed 自負盈虧	
Sub-degree 非學位	2,598		102		
Bachelor's degree 學士學位	13,954	1,291^	-	3,532 *	
Taught Postgraduate 授課式深造	15	2,903	-	5,848	
Research Postgraduate 研究式深造	653	612	-	356	
Sub-total 小計	17,220	4,806	102	9,736	
UGC-funded 教資會資助 17,322	+	Self-financed 自負盈虧 14,542	=	Total 總數 31,864	
^ excluding 165 students studying Franchised Pr 不包括一百六十五名供讀專營課程的學生	rogrammes	* excluding 84 student 不包括八十四名供讀專	ts studying Franchised Prog 厚營課程的學生	rammes	

Student intake via Non-academic Achievements Scheme in 2014/15

2014/15 年度透過「非學術表現計劃」收生人數

78 Outstanding Sportsmen Recommendation Scheme 傑出運動員推薦計劃

46 JUPAS Sub-system for School Principal's Nominations 校長推薦計劃

Total 總數 124



ALUMNI EVENTS

校友活動

Federation of PolyU Alumni 理大校友會聯會 Associations celebrates its 20th anniversary

慶祝成立二十周年

The year marked the 20th anniversary of the establishment of the Federation of PolyU Alumni Associations with a series of celebratory events to introduce alumni to the University's latest research achievements and innovations as well as strengthen its relationships with them.

今年見證了理大校友會聯會成立二十周年, 聯會更舉辦一連串慶祝活動,向校友介紹大學 的最新科研成就及創新發明,並增進彼此間的 **騰擊。**

Outstanding PolyU Alumni Award

On 19 May 2015, PolyU bestowed the Outstanding PolyU Alumni Award on eight eminent alumni in recognition of their distinguished professional accomplishments as well as their significant contributions to the community and their alma mater. This year marked the 10th presentation of the award.

傑出理大校友

2015年5月19日,理大頒發「傑出理大校友」 榮譽予八位成就卓越的校友,以表揚他們的專 業成就及對社會和母校的重要貢獻。今年正是 大學第十屆頒授此獎項。

Mr Eric Chan Ping-pang 陳秉鵬先生

Founder and President. ECCO Design, USA 美國 ECCO Design 創辦人及總裁

1976 graduate of Higher Diploma in Design at Hong Kong Polytechnic 香港理工學院 1976 年設計學高級 文憑畢業生

Ir Chan Siu-hung, JP 陳紹雄工程師, JP

Managing Director - China, CLP Holdings Ltd. 中電控股有限公司 中國區總裁

1977 graduate of Diploma in Electrical Engineering and 1979 graduate of Higher Diploma in Electrical Engineering at Hong Kong Polytechnic 香港理工學院 1977 年電機工程學 文憑及1979年電機工程學高級 文憑畢業生

Ir Prof. Choy Kin-kuen 蔡健權教授、工程師

Director - Structural, Meinhardt (C&S) Ltd.

邁進土木結構工程顧問有限公司 結構分部董事

1974 graduate of Higher Diploma in Structural Engineering and 1975 Associateship in Structural Engineering at Hong Kong Polytechnic 香港理工學院 1974 年結構工程學 高級文憑畢業生及 1975 年結構

工程學院十



4

Ir Dr David Ho Chi-shing, JP 何志盛博士、工程師, JP

Group General Manager, Hong Kong Ferry (Holdings) Co. Ltd. 香港小輪(集團)有限公司 集團總經理

1979 graduate of Higher Diploma in Business Studies (Transport) and 1982 graduate of Endorsement Certificate in Transport Planning & Traffic Engineering at Hong Kong Polytechnic; 2002 graduate of Doctor of Business Administration at PolyU

香港理工學院 1979 年商業高級 文憑課程 (運輸管理學)及 1982 年 交通規劃及工程專修證書課程 畢業生、理大 2002 年工商管理博士

5

Dr Edith Kwan Ngan-hing, MH 關雁卿博士, MH

Fellow and Honorary Advisor, Hong Kong Computer Society 香港電腦學會院士及名譽顧問

2003 graduate of Doctor of Business Administration at PolyU 理大 2003 年工商管理博士

7

Dr Johnny Ng Kit-chong 吳傑莊博士

Founder and Chairman, Goldford Group 高鋒集團創始人及主席

1996 graduate of Bachelor of Engineering in Manufacturing Engineering and 2002 graduate of Doctor of Philosophy at PolyU 理大 1996 年製造工程學學士及 2002 年哲學博士

6

Dr Polly Lau Mo-yee, JP 劉慕儀博士, JP

Cluster Manager (Physiotherapy), Kowloon Central Cluster and Department Manager of Physiotherapy Department, Queen Elizabeth Hospital

九龍中醫院聯網經理(物理治療)及伊利沙伯醫院物理治療部主管

2008 graduate of Doctor of Health Science at PolyU

理大 2008 年醫療科學博士

8

Mr Wan Feng 萬峰先生

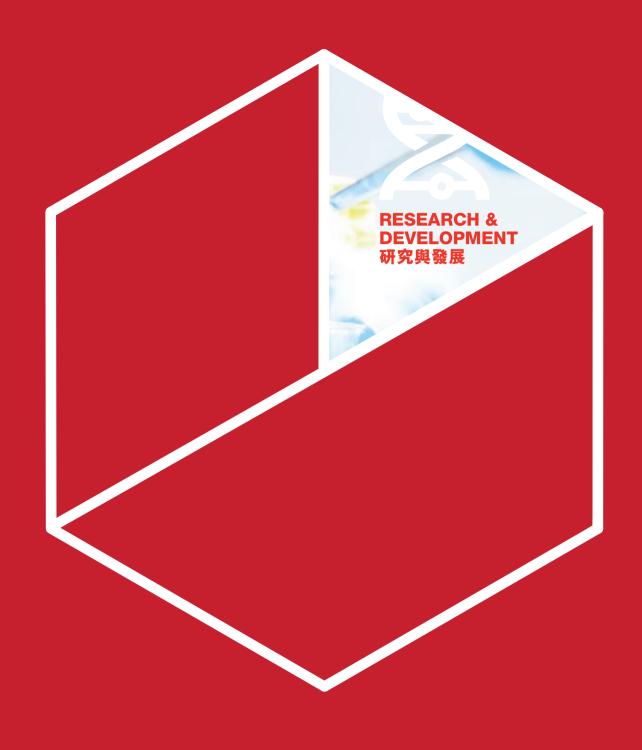
President, Centre Testing International Corporation

華測檢測技術股份有限公司董事長

2006 graduate of Master of Business Administration at PolyU 理大 2006 年工商管理碩士











RESEARCH & DEVELOPMENT 研究與發展

Where research stimulates ground-breaking discoveries 讓科研創新開天闢地

PolyU is passionate about interdisciplinary research. Working at the intersection of various disciplines sparks new insights and discoveries that are contributing to a better world.

理大熱衷跨學科研究,匯聚不同學術範疇,激發創新思維,讓突破性發明造福世界。



FUNDING FOR RESEARCH 科研經費



In addition to receiving funds allocated by the University, academics at PolyU applied for funding from external sources, either through competitive or non-competitive means, for their research projects in 2014/15. Total funding during the year amounted to HK\$1,832.2 million in support of over 2,800 projects undertaken by more than 1,000 academic staff and around 1,140 research personnel.

除了大學提供的科研經費,學術人員同時積極 透過競爭或非競爭渠道,申請校外不同種類 的科研基金,以資助他們的科研項目。 2014/15年度,理大科研計劃的總資金為 十八億三千二百二十萬,資助超過二千八百 項科研計劃,而參與其中的學術人員有一千 多名,科研人員約一千一百四十名。

Newly-funded projects in 2014/15 2014/15 年度新科研計劃

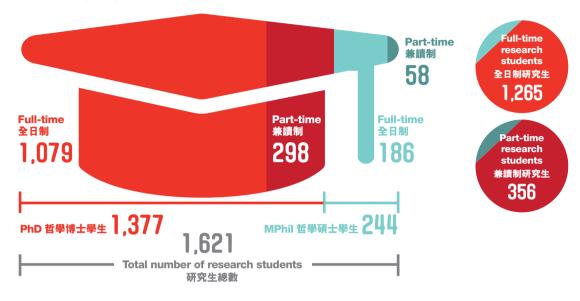
Funding Source 資金來源	No. of Projects 計劃數目	Total Amount (HK\$m) 資助總額 (百萬港元計)
Research Grants Council 研究資助局	180	\$142.31
Innovation and Technology Fund 創新及科技基金	6 2	\$140.76
Other competitive grants 其他透過競爭渠道獲取的科研經費	53	\$37.83
China Fund [#] 中國境內科研基金 [#]	3 9	\$23.66
Non-competitive grants* 非競爭性資助*	495	\$214.27
Total 總數	829	\$558.83

[#] The amount is calculated at an exchange rate of RMB1: HKD1.2497 根據 1 人民幣: 1.2497 港元的匯率計算 * Including industrial/commercial support and donations 包括工商機構贊助及捐贈

Number of research students 研究生人數

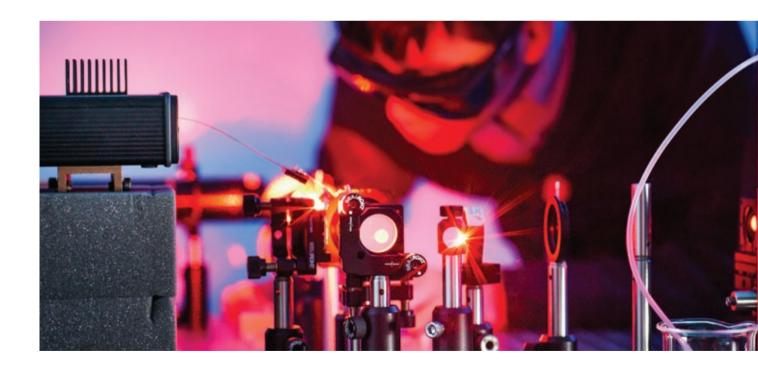
In 2014/15, a total of 1,621 research degree students were engaged in the following postgraduate courses of study:

2014/15 年度,共有一千六百二十一名學生 修讀以下研究課程:



A total of 271 research students graduated in 2014/15, including 207 PhD and 64 MPhil graduates.

2014/15 年度共有二百七十一名研究生畢業, 當中二百零七名是哲學博士學生,六十四人是 哲學碩士學生。





PROJECTS FUNDED BY THE RESEARCH GRANTS COUNCIL COLLABORATIVE RESEARCH FUND 研究資助局協作研究金資助項目

Facility to validate barriers for debris flow impact

Geo-hazards have always been a great danger in Hong Kong and many other countries due to global warming, uncertain extreme weather and geological conditions, and continuing land development. Flexible barriers are being widely used to reduce the impact and risk of debris flows, yet current design methods have not been validated. PolyU is designing a large-scale, multi-function physical model facility to validate these methods. Construction of the facility began on the PolyU campus in November 2015.

High-speed aerodynamics research facility

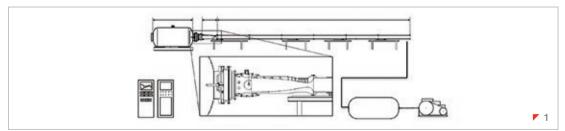
PolyU is constructing a multipurpose transonic-to-hypersonic Ludwieg tube facility to meet the most demanding high-speed ground testing parameters, with performance sufficient for 50ms test times at up to Mach 4 flow. Equipped with data-acquisition systems and flow visualization devices, the facility will enable further research and teaching in high-speed aerodynamics in Hong Kong. It will also enhance local aero-thermodynamic research in support of aerospace research on the Chinese mainland.

泥石流災害防護網 驗證設施

全球暖化、極端天氣和地質狀況的不確定性,以及持續開發土地令香港和多個國家出現地質災害。現時普遍採用柔性防護網以減低泥石流的影響和風險。然而,泥石流阻攔柔性防護網的設計方法仍有待驗證。理大正計劃建造一項大型及多功能物理模型設施,以驗證現有的防護網的設計方法。該項設施於2015年11月在理大校園開始興建。

高速空氣動力學 研究儀器

理大正建造一個多功能跨音速至高超音速路 德維希管風洞,它可滿足地面高速流動實驗 的嚴格要求,更可在高達 4 馬赫氣流下提供 50ms 以上的測試時間。此設施將配備資料 獲取系統及視流系統,可促進香港高速空氣 動力學範疇的科研和教育,亦有助本港進行 氣熱動力學研究,從而支援中國內地的航空 航太研究。



Schematic of the Ludwieg tube facility 路德維希管設施示意圖

High-output protein crystallography system

The University is in the process of setting up an accurate highspeed, high-output protein crystallography facility, which will greatly enhance the capacity of cutting-edge biomedical research and provide critical support to new drug research.

高輸出蛋白晶體 衍射系統

大學現正設立一個快速、精確及高輸出的 蛋白晶體衍射系統,可以大大提升在尖端生 物醫學領域的研究能力,為新藥研發工作 提供重要支援。

Ion mobility mass spectrometer for new drug research

PolyU has acquired an ion mobility mass spectrometer for the separation of ions based on their size and shape. With its high speed and high sensitivity capabilities, the mass spectrometer allows for effective acquisition of structural information of molecules. In addition, the ion mobility technology significantly enhances the ability to analyse complex samples and identify compounds by reducing background interference, allowing separation of isomers and providing additional compound identity information.

離子遷移質譜儀有助 新藥開發研究

理大購置了一部離子遷移質譜儀,它可根據離子大小和形狀的差異實現離子分離。這部儀器具備高速和靈敏的特點,可有效地獲取樣本分子的結構信息。此外,離子遷移技術可減低背景干擾、方便異構體分離和提供化合物特性的其他信息,大大增強了質譜分析複雜樣本及辨認化合物的能力。





(Left) Protein crystallography facility (左圖)蛋白晶體衍射系統

(Right) Ion mobility mass spectrometer (右圖)離子遷移質譜儀

Exploring sustainable chemical syntheses

A multidisciplinary team of synthetic chemists and material and theoretical scientists from PolyU, The Hong Kong University of Science and Technology and The Chinese University of Hong Kong is tackling challenges related to green chemistry. Through their work in catalyst design and development, it is envisaged that effective synthesis can be achieved from biomass, thus facilitating Hong Kong's journey towards a low carbon economy.

可持續化學合成研究

理大、香港科技大學及香港中文大學的合成化學家、材料及理論科學家組成的了一支跨學科團隊,一起應對綠色化學領域上的挑戰。團隊期望透過催化劑的設計和開發工作,可以促進有效合成生物質,以推動香港邁向低碳經濟。



Design methodologies for improving wind and thermal comfort in the urban environment

城市小區風環境和 熱舒適的設計方案

PolyU is carrying out research with the goal of improving the environmental quality, liveability and public health in large cities through a modelling-based design methodology. The research looks at both temperature and wind at the pedestrian level in the community, which is subject to the Urban Heat Island effect as determined by macro-scale city morphology and the landscape. PolyU is conducting this research in collaboration with City University of Hong Kong, The Hong Kong University of Science and Technology, The University of Hong Kong, Hong Kong Observatory and University of Western Sydney.

理大正利用一套基於模擬的設計方法進行研究,旨在提升大城市的環境質素、可居住性及公共健康。這項研究探討城市小區內與行人高度相若之處的溫度及風速,而該處的溫度及風速則受大城市場處的溫度及風速則受大城。局和地形造就的熱島效應所影響。這研究項目是由理大與香港城市大學、香港科技大學、香港大學、香港天文台及西悉尼大學共同維行。

5 -

Heterogeneous chemistry of atmospheric reactive nitrogen oxides

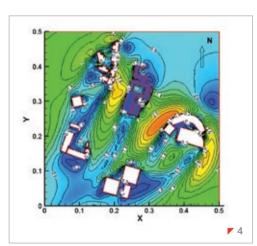
Employing cutting-edge, integrative computer simulations, this study explores the chemical reactions between gases and particles in the atmosphere and their contributions to air pollution. The project is being conducted by a multidisciplinary team from PolyU, The Hong Kong University of Science and Technology, The Chinese University of Hong Kong, a French research institute and the HKSAR Environmental Protection Department. The research findings are expected to support the mitigation of photochemical smog and haze pollution in Hong Kong, the Pearl River Delta, and other Chinese cities.

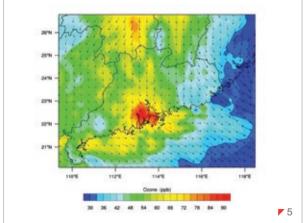
大氣氮氧化物的 非均相化學研究

這項目應用尖端綜合計算機模擬科技,旨在研究大氣層氣態及顆粒態污染物之間的化學反應,以及它們對空氣污染的影響。跨學科研究團隊成員來自理大、香港科技大學、香港中文大學、一所法國研究機構及香港特區環境保護署。預期研究成果將有助減輕香港、珠三角和中國其他城市的光化學煙霧及灰霾等污染問題。

(Left) Velocity contours at a height of 2 m above the ground in North East wind direction obtained from numerical modelling (左圓) 距地面兩米高處在東北風向環境下的速度

(Right) Ozone distributions over Guangdong simulated by regional air quality model (右圖)區域空氣質素模型模擬廣東地區臭氧 濃度的分佈





AT THE FOREFRONT OF SAFEGUARDING HEALTH 保障健康 走在前沿

6

Computer intelligence to detect acute strokes

Dr Tang Fuk-hay of the Department of Health Technology and Informatics has developed an acute stroke detection system using built-in artificial intelligence. Analyzing over 100 brain scans, the system is able to determine whether a patient has suffered an ischemic stroke or haemorrhagic stroke. Its diagnostic accuracy is 90%, as high as the accuracy of diagnoses by specialists but at a much reduced time of 3 minutes versus 10-15 minutes. This system can detect subtle and minute changes in the brain and learn by experience, dramatically cutting the chances of a missed diagnosis, minimizing damage to patients within 3 hours of stroke onset, and allowing more lives to be saved.

電腦智能偵測 急性中風

醫療科技及資訊學系鄧福禧博士研發了一套配備內置人工智能、用作偵測急性中風的系統,它能透過讀取一百多張腦部電腦斷層掃描影像,診斷病人是否罹患缺血性中風或充血性中風。系統的診斷準確度達到百分之九十,與專科醫生的診斷準確度相若,但可由專科醫生診斷所需的十至十五分鐘時間減至三分鐘。系統可以偵測微細的腦部變化,更從經驗中學習,大大減低漏診機會,並在病者病發三小時內盡量令中風對其傷害減至最低,以期拯救更多生命。





Nano-approach for remedying tendon degeneration

Research by Prof. Gabriel Ng of the Department of Rehabilitation Sciences involves two projects — one based on animals (basic science approach) and another on humans (clinical study approach). The study with animals tested the strength of degenerative tendons after treatment by custom-made external herbal patches (some processed with nano-technology), while the study with humans examined the effect of nanomized herbal applications for treating tendon degeneration in the foot. Preliminary findings show that patients experienced a significant decrease in pain and increase in range of movement with their treated tendons after two weeks of treatment.

納米技術 治療退化筋腱

康復治療科學系吳賢發教授正進行的研究包括兩個項目:一個是動物實驗(基礎科學方向),而另一個則為人體實驗(臨床研究方向)。動物實驗測試經過特製外用中草藥貼療後(部分經過納米化處理),動物的退化筋腱之強度。人體實驗則檢定納米化中草藥在足部筋腱退化情況中的治療效果。初步數據顯示病者經過兩星期治療後,痛楚明顯減低及筋腱活動範圍明顯擴大。

A simple and rapid method for drug abuse detection

Confirmatory techniques used in drug abuse analysis require laborious and time-consuming sample preparation procedures. Dr Yao Zhongping of the Department of Applied Biology and Chemical Technology has developed a simple method that uses an ordinary wooden tip (such as a toothpick) to collect samples and reliably detect and quantify abused drugs in urine and oral fluids within minutes. Upon applying a high voltage to the wooden tip, spray ionization is induced to detect ion signals of analytes.

簡單快速的 濫藥檢測方法

現行的濫用藥物分析方法涉及繁複的樣本處理工序,耗時費力。應用生物及化學科技學系姚鍾平博士於是利用木籤(如家用牙籤)收集樣本,數分鐘內便可從尿液或唾液樣本中準確地得知有否濫用藥物及其份量。新方法利用木籤黏附樣本,並在高電壓情況下產生噴霧電離,從而測出分析物的離子信號。

Hong Kong's first breast milk nutrient database

Led by Dr Wong Man-sau of the Department of Applied Biology and Chemical Technology, a research team analysed the diet nutritional characteristics and level of polyunsaturated fatty acids in the breast milk of 74 Hong Kong lactating women. The objective was to examine how daily diet affects the nutritional composition of breast milk and establish Hong Kong's first breast milk nutrient database. The results showed that the DHA level in over 80% of the subjects' breast milk met the adequate intake level recommended by the Chinese Dietary Reference Intakes, and hence, sufficient DHA was supplied to infants for normal brain and vision development.

香港首個母乳營養 資料庫

應用生物及化學科技學系黃文秀博士帶領研究團隊為七十四名哺乳期婦女進行調查,分析她們的飲食習慣,並研究其母乳的營養成分及多元不飽和脂肪酸含量。這項目旨為研究日常飲食如何影響母乳的營養成分,以及建立香港首個母乳營養資料庫。結果顯示逾八成研究對象的母乳的多元不飽和脂肪酸(DHA)含量達中國居民膳食營養標準,足以供嬰兒正常的腦部及視力發展。





Applying Chinese herbal plaster onto the injured tendon 在受損筋腱敷上中草 藥貼



Wooden toothpick to collect samples for drug abuse analysis 木牙籤收集樣本進行 濫藥分析



PolyU establishes Hong Kong's first breast milk nutrient database 理大建立香港首個母乳 營養資料庫



Rapid authentication of edible oils and gutter oils

Dr Yao Zhongping of the Food Safety and Technology Research Centre under the Department of Applied Biology and Chemical Technology has developed a new method for the rapid authentication of edible oils and screening of gutter oils. Using matrix-assisted laser desorption/ionization mass spectrometry (MALDI-MS), high quality and highly reproducible MALDI-MS spectra results can be obtained and a preliminary spectral database of commonly used labelled edible oils has been set up. As different types of edible oils have different MALDI-MS spectral patterns, the authenticity of an edible oil sample can be determined within five minutes by comparing its MALDI-MS spectrum with those of its labelled oil in the established database. Since this method is capable of authenticating edible oils, it can also determine whether samples are gutter oils.

快速鑒別食用油和 地溝油

應用生物及化學科技學系轄下食物安全及科技研究中心姚鍾平博士研發出快速鑒別食用油和篩查地溝油的新方法。運用基質輔助激光解吸電離質譜技術,得出高質量和重現性高的譜圖,並由此建立了一個常用食用油的初步譜圖數據庫。由於不同種類的食用油顯示不同的譜圖,通過與數據庫中相應的食用油標準譜圖比較,五分鐘內便可鑒別一個食用油樣本的真偽。這新方法可鑒別食用油,亦可用於篩查樣本是否地溝油。

11

Probing into metalinguistic awareness and developmental dyslexia

Dr Leung Man-tak of the Department of Chinese and Bilingual Studies is investigating theory driven intervention for Hong Kong primary students suffering from developmental dyslexia. A virtual centre equipped with databases and standardized tests was set up for this purpose. The study has been extended to the Chinese mainland and an attempt to design an educational programme for Non-Chinese-Students learning Chinese.

探索後設語言覺識及 發展性讀寫障礙

中文及雙語學系梁文德博士正研究為香港 患有讀寫障礙的小學生而設的理論主導 治療。他建立了一個設有數據庫及標準測試 的虛擬中心。這項研究更擴展至中國內地, 並試行為非華語學生設計學習華語的課程。

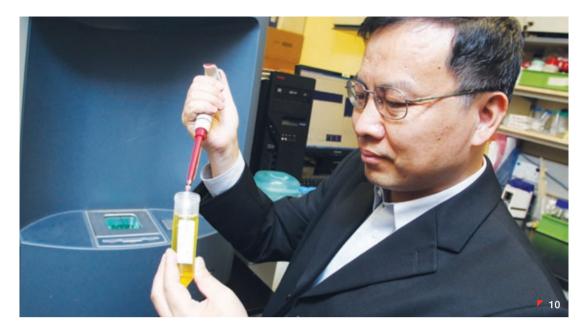
12 —

Big data analysis for revealing gene interactions in cancer

Prof. Benjamin Yung of the Department of Health Technology and Informatics is exploring pair-to-pair correlations between genes to decipher the mechanism underlying cancer. His research team has developed a big data analytics method that can analyse the co-expression of 0.2 billion gene pairs in just two days. This novel structural co-expression network analysis platform has revealed the cancer pathogenesis and its potential Nucleophosmin (NPM1)-oriented treatment strategy in Chronic Myelogenous Leukemia (CML). The platform can also be readily applied to other diseases for diagnostic, prognostic and therapeutic investigation.

大數據分析揭示 癌症基因關係

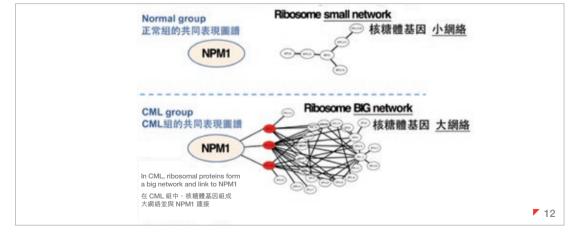
醫療科技及資訊學系翁一鳴教授探究每對基因之間的關係,從而破解癌症背後的機制。研究團隊發展了一套大數據分析方法,只需兩天便可分析兩億個基因對的共同表現。這創新的結構性基因共同表現分析平台揭示了癌症發病機理,與及研發以核磷蛋白導向的策略治療慢性骨髓細胞白血病。這平台亦可應用在其他疾病的診斷、預後和治療研究。



Application of matrix-assisted laser desorption/ionization mass spectrometry in rapid authentication of edible oils 運用基質輔助激光解吸電離質譜技術,可快速鑒別食用油



Different games are designed based on children's learning stages 因應兒童學習階段而設計不同的遊戲



In Chronic Myelogenous Leukemia, ribosomal proteins form a big network and link to Nucleophosmin 在慢性骨髓細胞白血病組中,核糖體基因組成大網絡,並與核磷蛋白連接



COLLABORATION LEADS TO RESEARCH INSIGHTS 攜手協作 进發科研創見

Visual perspectives of products and services affect consumer behaviour

In a joint study with professors from The Hong Kong University of Science and Technology, Tel Aviv University and The Chinese University of Hong Kong, Dr Jiang Yuwei of PolyU's Department of Management and Marketing found that multiple visual perspective descriptions of products and services may have a detrimental effect on consumer evaluations. The research has shown that when individuals were disposed to construct an image-based narrative representation of the use of a product or service, differences in the visual perspectives of the images made it difficult to construct mental images that, consequently, had a negative impact on evaluations of the product or service. In contrast, when individuals are simply motivated to acquire information about the product or service, pictures from different perspectives serve as references, thus enhancing their evaluations.

New advances in urban sustainability

In 2014/15, PolyU's Research Institute for Sustainable Urban Development (RISUD) added four new research groups, taking the total number of research groups to 33. They are organized into five divisions: the Division of Urban Systems, Division of Urban Infrastructure. Division of Urban Environment, Division of

產品及服務的 視覺角度影響消費者 的行為

理大管理及市場學系姜宇威博士與香港科技 大學、臺拉維夫大學及香港中文大學的教授 聯合研究發現,多重視覺角度的描述可能對 消費者評價產品或服務有負面的影響。研究 結果顯示,當消費者接受影像去叙述產品的 用途或服務時,視覺角度的變動使目標影像 難以清晰呈現於消費者的腦海,因而對消費 者評價產品或服務有負面的影響。相反地, 當消費者需自行查詢產品或服務的資料時, 不同角度的影像只作參考,他們對產品或服 務的評價亦見提高。

可持續城市發展 **屢見新**猷

2014/15 年度,可持續城市發展研究院新增了四個研究小組、研究小組總數增至三十三個,分別隸屬:城市系統分部、城市基建分部、城市環境分部、綠色建築分部及智慧城市分部。年內,研究院



Green Buildings, and Division of Smart Cities. During the year, RISUD initiated the following collaborative/inter-disciplinary research projects with government departments and industry to support the development of smart new towns in Hong Kong:

- New Ways of Development for New Towns in Hong Kong: Social-Economic-Environmental Integrative Planning Systems for Community (led by Prof. Edwin Chan)
- Integrated Smart Energy Systems for Smart Towns (led by Prof. Wang Sheng-wei)
- Wastewater-derived Energy for Smart Towns (led by Prof. Li Xiang-dong)
- Integration of Communication, Positioning, and Surveillance Infrastructures for Smart New Towns (led by Prof. Chen Wu)

On 26 August 2014, RISUD organized a University-Government-Industry trilateral forum to explore new town development in Hong Kong. The forum brought together senior government officials, industry practitioners and scholars who discussed topics such as planning for social-economic-environmental integration, smart infrastructure for sensing cities, pedestrian-oriented mobility, self-contained environmental systems, energy efficiency and renewable energy.

In 2014/15, two projects under RISUD were funded by the Innovation and Technology Fund:

- Development of a Hong Kong Indoor Positioning Infrastructure based on GPS Technologies (led by Prof. Ding Xiao-li and Prof. Chen Wu)
- Location-based Technologies for Asset Tracking and Risk Management (led by Prof. Li Heng)

Two other projects were funded by the Research Grants Council Collaborative Research Fund:

- Development of Design Methodologies for the Improvement of Wind and Thermal Comfort in the Urban Environment (coordinated by Prof. Mak Cheuk-ming)
- Heterogeneous Chemistry of Atmospheric Reactive Nitrogen Oxides: From Capability Development to Cutting-edge (coordinated by Prof. Wang Tao)

與政府及業界攜手合作,倡導以下協作/ 跨學科科研項目,推動香港的「智能城市」的 發展:

- 陳漢雲教授領導的香港新市鎮開發的新模式:以建立社區為本的綜合系統規劃
- ▼ 王盛衛教授領導的智慧城鎮之智能化 集成能源系統
- ▼ 李向東教授領導的智慧城鎮的廢水 能源轉化技術
- ▼ 陳武教授領導的智能城市通訊、 定位及監控基礎設施的集成研究

2014年8月26日,可持續城市發展研究院舉辦了一個官產學三方論壇,匯集政府高層官員、業界及學者,探討在香港發展新市鎮的新模式。討論的議題包括:考慮社會、經濟及環境因素的綜合規劃、用作感應城市的智能基建、行人優先的交通流動性、獨立自足的環境系統,以及能源效益與可再生能源。

2014/15 年度,兩個研究院的科研項目獲 創新及科技基金資助:

- ▼ 丁曉利教授和陳武教授領導的基於 GPS 技術的香港室內定位平台
- ▼ 李恆教授領導的基於定位技術之 資產追蹤及風險管理

另外兩個項目獲研資局的「協作研究金資助計劃」撥款:

- ▼ 麥卓明教授負責的城市小區風環境 和熱舒適的設計方法研究
- ▼ 王韜教授負責的大氣氮氧化物的 非均相化學研究:前沿科學綜合項目





More than 280 experts, researchers and industry practitioners from 19 countries and regions gathered on 7-9 January 2015 for the Second International Conference on Sustainable Urbanization. jointly organized by RISUD and PolyU's Faculty of Construction and Environment. In addition to plenary lectures by distinguished

speakers, the conference held six symposia under distinct themes:

- ▼ Emerging Materials and Technologies for Sustainable Infrastructure
- Sustainable Urban Renewal in High-Density Cities
- Sustainable Water in Cities
- Urban Data and Urban Computing
- Energy Saving and Renewable Energy Technologies for Buildinas
- Second Cross-Strait Forum on Sustainable Urban Development

逾二百八十位來自十九個國家及地區的專家、 科研人員及業界人士,於2015年1月7至 9日出席由可持續城市發展研究院與理大建設 及環境學院合辦的第二屆可持續城市化國際 學術會議。除了由傑出講者主講多個講座 之外, 還設有以下六個專題研討會:

- ▼ 可持續新型基建材料及技術
- 高密度城市的可持續市區重建
- ▶ 城市可持續水供應
- ▼ 城市數據與城市運算
- ▶ 建築物節能及再生能源技術
- ▼ 第二屆海峽兩岸可持續城市發展論壇

Pushing the frontiers of aviation services research

During the year, the Aviation Services Research Centre (ASRC) installed new facilities and large equipment, including the 5-axis Horizontal Machining Centre, Tool Presetter, Measuring and Shrinking Machine and a Robotic Drilling System. The Phase Two workshop with an approximate area of 100m² is currently under renovation with a planned opening in February 2016 to accommodate shot blasting and spraying robots as well as advanced new equipment. The Centre now has a research team of over 20 members from Hong Kong and overseas with diverse research backgrounds and experience.

In addition, ASRC successfully obtained Innovation and Technology Fund (ITF) grants amounting to a total of HK\$51M for five new projects. The two projects approved by ITF first round grant were completed in June 2015.

New projects:

- Automation of Coating, Marking, and Recording Processes for Aircraft Components Maintenance
- ▼ Intelligent Maintenance, Repair and Overhaul (MRO) **Business Management Systems**
- Feasibility Study in Optimizing Modular Wing Docking Platform for Local MRO
- Surface Defect Detection and Correction of Metallic Components
- Rapid Manufacture of Metallic and Composite Aircraft Components

Completed projects:

- Laser Projected Drilling Templates and Robotics Drilling (More on p.100)
- Mechanical Refurbishment of Aviation Parts

推動航空服務研究

年內, 航空服務研究中心新增了設施及大型 設備,包括:五軸臥式加工中心、刀具預調機, 測量和收縮機的機械人鑽井系統。佔地一百 平方米的第二期工場正進行翻新工程, 並 計劃於2016年2月投入服務,而噴丸處 理和噴塗機械人及其他先進設備將置於第二 期工場內。現時,中心的研究團隊有來自本 地及海外、具備不同研究背景及豐富經驗的 二十多位研究人員。

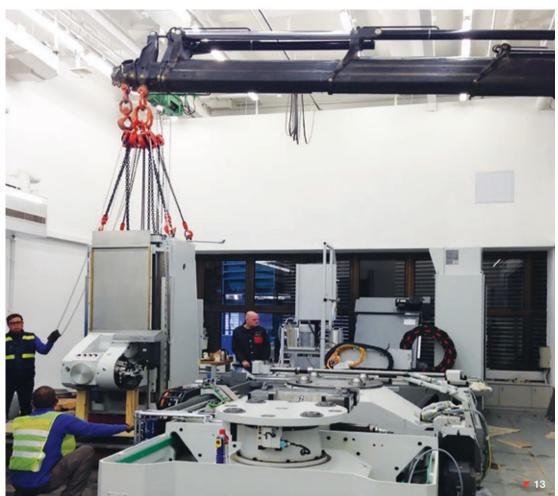
此外,航空服務研究中心成功獲得創新及科技 基金共五千一百萬港元資助,作為五個新項目 的研究經費。而此基金第一輪資助的兩個項目 已於 2015 年 6 月完成。

新項目:

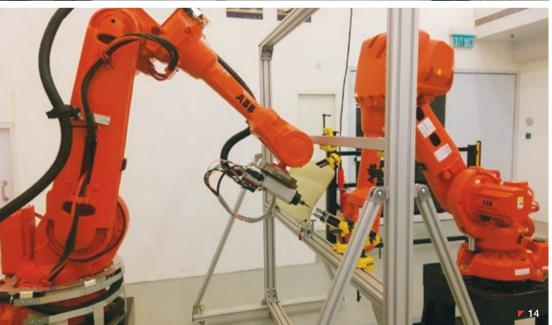
- ▼ 飛機部件維修的噴塗、標記及記錄工序 自動化
- ▼ 智能飛機維修工程業務管理系統
- ▶ 優化模塊化機翼對接平台供本地飛機 維修工程的可行性研究
- ▼ 表面缺陷檢測和金屬部件的矯正
- ▼ 金屬和複合材料飛機零部件的快速製造

已完成項目:

- ▶ 激光投射鑽模板和機械鑽 (詳見第100頁)
- ▼ 航空零部件的機械翻新



Installing starrag 5-axis machine 安裝 Starrag 五軸機情況



Twin Robotic Drilling Cell 雙機械人鑽孔裝置



MAJOR AWARDS FOR RESEARCH AND DEVELOPMENT PROJECTS 獲獎科研項目













43rd International Exhibition of Inventions (Geneva, Switzerland, 15-19 April 2015) 第四十三屆國際發明展 (瑞士日內瓦[,]2015 年 4 月 15-19 日)

Award 獎項		Project 項目	Principal Investigator/ Faculty/ Department 首席研究員/學院/學系	
7 15	Grand Prize and Gold Medal with the Congratulations of Jury 特別大獎及評判特別嘉許金獎	i.Dummy: Robotic Mannequin for Fashion Design and Fitting i.Dummy:智慧可調節型人體模型	Dr Allan Chan Chee-kooi, Institute of Textiles and Clothing 紡織及製衣學系陳志駒博士	
F 16	Grand Prize and Gold Medal 特別大獎及金獎	Catalyst for Green Biodiesel Production from Unrefined Feedstock 綠色生物柴油催化劑	Dr Yung Ka-fu, Department of Applied Biology and Chemical Technology 應用生物及化學科技學系容家富博士	
▶ 17	Special Merit Award and Gold Medal with the Congratulations of Jury 特別優異獎及評判特別嘉許金獎	Internet of Things (IoT)-based Advanced Automobile Parking Navigation System 基於物聯網的先進車輔停泊導航平台	Dr Andrew W.H. lp, Department of Industrial and Systems Engineering 工業及系統工程學系葉偉雄博士	
▼ 18	Special Merit Award and Gold Medal 特別優異獎及金獎	Posture Correction Girdle for Adolescents with Early Scoliosis 供患早期脊柱側彎的青少年使用的姿勢矯正束身衣	Dr Joanne Yip Yiu-wan, Institute of Textiles and Clothing 紡織及製衣學系葉曉雲博士	
▼ 19	Special Merit Award and Gold Medal 特別優異獎及金獎	Rehabilitation Sleeve - A Functional Electrical Simulation (FES)-robotic Hybrid System 復康袖-智感肌電混合上肢復康訓練系統	Dr Hu Xiaoling, Interdisciplinary Division of Biomedical Engineering 生物醫學工程跨領域學部胡曉翎博士	
₹20	Special Merit Award and Silver Medal 特別優異獎及銀獎	O-blanket: Phototherapy Device for Neonatal Jaundice O-毯:新生兒黃疸光療設備	Prof. Tao Xiaoming, Institute of Textiles and Clothing 紡織及製衣學系陶肖明教授	
₹21	Silver Medal 銀獎	Adaptive Hydrotherapy Wetsuit 水療浮水衣	Dr Kristina Shin, Institute of Textiles and Clothing 紡織及製衣學系 Kristina Shin 博士	
₹22	Silver Medal 銀獎	Durable, Washable and High Performance Conductive Textiles 耐洗的高性能導電織物	Dr Zheng Zijian, Institute of Textiles and Clothing 紡織及製衣學系鄭子劍博士	
₹23	Silver Medal 銀獎	Intelligent Condition-based Key Machinery Asset Maintenance Management Platform 智能設備維護管理平台	Prof. Eric Ngai Wai-ting, Department of Management and Marketing 管理及市場學系倪偉定教授	



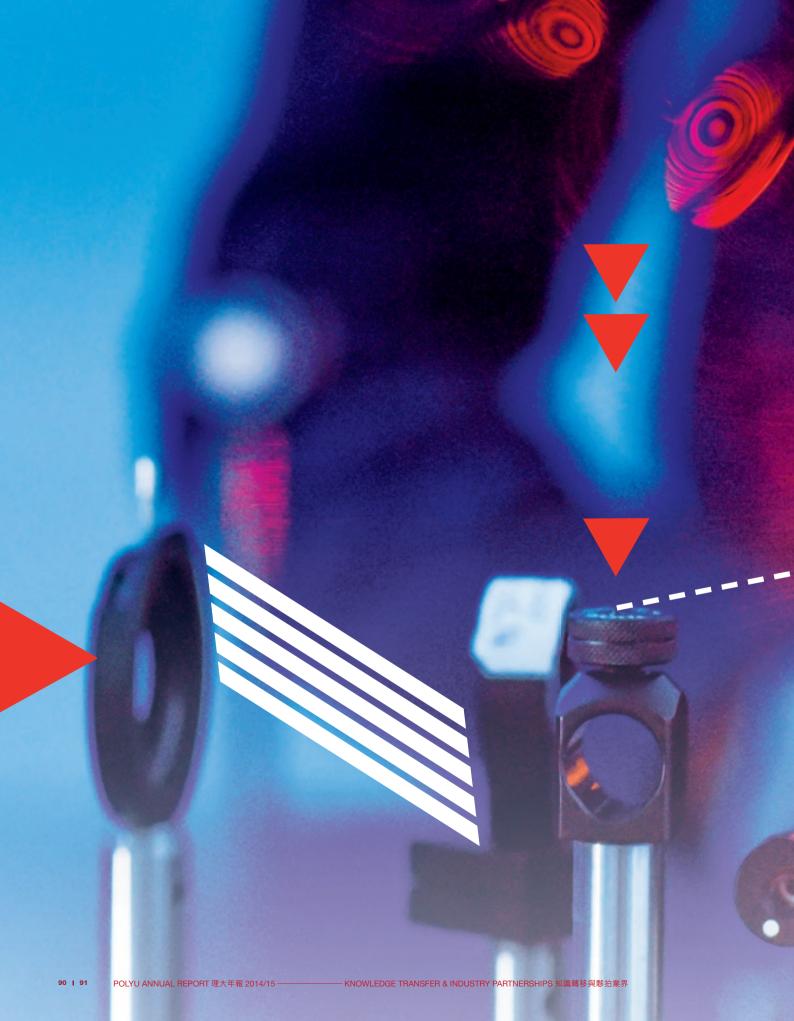














KNOWLEDGE TRANSFER & INDUSTRY PARTNERSHIPS 知識轉移與夥拍業界

Where collaboration bears fruit 讓夥伴合作開花結果

PolyU brings innovation to life in the community, business and industry. The world-changing ideas of our researchers have been put into practice, providing the driving force for societal wellbeing and economic growth.

理大為創新發明賦予生命,惠及社區和工商業界。科研人員改變世界的嶄新意念得以 實踐,推動社會進步和經濟增長。



KNOWLEDGE TRANSFER THAT BENEFITS INDUSTRY AND THE COMMUNITY 知識轉移 惠澤工商社群



PolyU Technology and Consultancy Company Limited (PTeC), the ISO9001-accredited commercial arm of the University, focuses on providing services with high impact and added value to the community and industry. During the year, PTeC was engaged in 533 new consultancy projects with 338 clients. More than 60% of the projects were from the corporate/industrial sector, 26% from government organizations and the remaining 13% from the NGO/education sector.

理大科技及顧問有限公司是一家擁有 ISO9001 認證、協助大學為工商界提供支援的機構,致力為社會及業界提供具影響力及高增值的服務。年內,它為三百三十八家機構提供五百三十三項顧問服務。當中超過百分之六十的項目來自企業及工商界,百分之二十六來自政府機構,其餘的百分之十三來自非政府組織及教育界。







2014/15 Project highlights 年度重點項目

			Consultancy project 顧問項目	Impact/Contributions 影響 / 貢獻	
	Department of Applied Social Sciences 應用社會科學系	Central Policy Unit, The Government of the HKSAR 香港特別行政區政府 中央政策組	To identify different parenting practices and examine child development outcomes 研究不同的親職實踐方式對兒童成長和發展的影響	To provide a comprehensive account of current parenting practices in Hong Kong and identify factors affecting parenting decisions, child development and family functioning through a territory-wide survey 透過一項全港性的調查,對現時香港父母的不同親職實踐方式進行全面研究,並深入探討影響親職決定、兒童成長和家庭功能的各種因素	
1	Department of Civil and Environmental Engineering 土木及環境 工程學系	Highways Department, The Government of the HKSAR 香港特別行政區政府 路政署	To conduct research and a study on the feasibility and cost effectiveness of high performance asphalt 對高性能瀝青路面的可行性研究及成本效益 進行分析	To evaluate the engineering and acoustic performance of high performance asphalt and its suitability for use on Hong Kong's roads 評估高性能瀝青混合料的技術及噪音表現,建議是否適合在香港道路上使用	
	Department of Civil and Environmental Engineering 土木及環境 工程學系	Environmental Protection Department, The Government of the HKSAR 香港特別行政區政府 環境保護署	To investigate the impact of radical chemistry on the air quality of Hong Kong (More on p.101) 研究自由基化學物質對香港空氣質素的影響 (詳見第101頁)	To make recommendations on a monitoring and control strategy to keep air pollutant levels in check 就監察及控制空氣污染水平提供建議方案	
	Department of Electrical Engineering 電機工程學系	MTR Corporation Limited 香港鐵路有限公司	To establish assessment criteria to monitor the healthiness of insulators used in the railway network 訂立評核準則,監察鐵路網絡所用絕緣體的健康情況	To enhance the service reliability of the rail network 提升鐵路網絡服務的可靠性	
	Institute of Textiles and Clothing 紡織及製衣學系	Marine Department, The Government of the HKSAR 香港特別行政區政府 海事處	To develop a type of lifejacket suitable for use by both adults and children on local vessels 為本地船隻研發一款成人及兒童均適合穿著的 救生衣	To improve the existing operation of local vessels in which lifejackets for adults and children are provided separately 改善現時本地船隻需分別配備成人及兒童救生衣的運作情況	
	Institute of Textiles and Clothing 紡織及製衣學系	Clothing Industry Training Authority 製衣業訓練局	To research and develop an activity-based water footprint modelling system for the textile manufacturing process 為紡織生產過程中研發基礎水足跡模型	To provide insights on improving water management performance and establish best practices to reduce the water footprint of the textile dyeing and finishing industry 為紡織印染工業提供改善用水管理的技術方案,並建立減少水足跡的最佳應用技術	
	Department of Rehabilitation Sciences 康復治療科學系	The Mental Health Association of Hong Kong 香港心理衛生會	To design an effective way of assessing emotional health in Chinese populations and develop an online emotions management programme for service users of the Integrated Community Centres of Mental Wellness 為華人社群設計情緒健康評估的方法,並為綜合社區中心的服務使用者發展一套網上情緒管理課程	To provide better mental health services for service users at risk of developing common mental disorders and effectively monitor the emotional health of Hong Kong population 為有機會患上輕度精神障礙的患者提供更佳的心理健康服務,並可有效地監察香港人的精神健康	
	School of Design 設計學院	Environmental Protection Department, The Government of the HKSAR 香港特別行政區政府 環境保護署	To design an exhibition area in Tuen Mun's sludge treatment facility, the first waste-to-energy infrastructure in Hong Kong 為屯門的污泥處理設施(香港首個廢物轉化為能源的基建設施)設計一個展覽用地	To promote environmental awareness by engaging visitors through interactive design experience 為訪客提供互動設計體驗,以提高環保意識	
3	School of Optometry 眼科視光學院	Swiss Lens Laboratory (HK) Ltd 瑞士鏡片(香港) 有限公司	To conduct a study to determine the effects of blue-light filtering lenses on the visual functions of young and presbyopic computer users 進行研究,以確定過濾藍光的鏡片對年輕及遠視的電腦使用者是否有視覺功能上的影響	To further develop optical products and safeguard people from the flood of High-Energy Visible (HEV) light they may encounter in their daily lives 進一步研發光學產品,為市民提供保護,不致受日常生活中經常接觸的高能量可見光而傷害	



CREATING IMPACT THROUGH PATENTING AND LICENSING

專利與技術授權 影響深遠

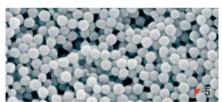
PolyU values knowledge creation and scientific breakthroughs by researchers and students. As of June 2015, the University had obtained 681 cumulative patents and filed 1,346, making it a leader among local tertiary institutions in this area. In 2014/15, a total of 96 patent and trademark applications were filed and 78 granted.

Knowledge transfer through licensing enables partner companies to leverage PolyU technologies to enhance their competitiveness or create new products. During the year, the Institute for Entrepreneurship executed over 30 licensing agreements/ memoranda of understanding/non-disclosure agreements for PolyU's proprietary knowledge in areas including textile technology, engineering, health science and design.

理大重視研究人員及學生在創造知識和創新科研方面的貢獻。截止2015年6月,大學獲批專利累計六百八十一項,而申請中的專利則有一千三百四十六項,足證理大在這範疇領先本地其他高等院校。在2014/15年,理大提交了九十六個專利和商標申請,並有七十八項獲批。

透過技術授權進行知識轉移,夥伴機構可以利用理大的科研技術來提升競爭力和開發新產品。年內,理大企業發展院與業界簽訂逾三十項技術授權協議/備忘錄/保密協議,以轉移理大的專有知識,涉及範疇包括紡織技術、工程、健康科學及設計等。









Licensed Technologies and Designs 授權技術及設計

_	PolyU faculty and department 理大院系	Inventor 發明者	Technology 科技	Licensee 獲授權機構	Benefits/ Applications 優點 / 應用
▶ 4	Department of Applied Biology and Chemical Technology 應用生物及 化學科技學系	Prof. William Chan and Prof. Larry Chow 陳德恒教授及 周銘祥教授	Flavonoid Dimers for Reversing Drug Resistance (More on p. 98) 腫瘤抗藥性抑制劑黃酮類 二聚物(詳見第 98 頁)	Kinex Pharmaceuticals (HK) Ltd.	Reverse common multi-drug resistance (MDR) in cancer cells, which hinders chemotherapy, and enhance the bioavailability of anticancer drugs 癌細胞的多藥抗藥性會降低化療的療效,此二聚物逆轉癌細胞抗藥性,加強抗癌藥物的功效
	Department of Applied Biology and Chemical Technology 應用生物及 化學科技學系	Prof. William Chan 陳德恒教授	lonic Liquid Supported Peptide Synthesis 離子支撐縮氨酸液 相合成	AUM LifeTech Inc.	A cost-effective peptide synthesis technology that can potentially be used in large-scale synthesis of short DNA and RNA for use in nucleic acid therapeutics 具成本效益的縮氨酸合成技術,可大規模合成 DNA(脱氧核糖核酸) 及 RNA(核糖核酸) 作核酸治療
F 5	Department of Applied Biology and Chemical Technology 應用生物及 化學科技學系	Prof. Li Pei 李蓓教授	Amphiphilic Core-Shell Nano-Particles (More on p. 100) 兩親性核殼納米粒子 (詳見第 100 頁)	MJ Medical Gel Systems Limited 美生醫學凝膠系統 有限公司	The core-shell nano-particles encapsulated with anti-pruritic agents function as a drug carrier of medical gel that facilitates long-lasting relief from itching during healing of post-burn scars 核殼納米粒子可作抗癢藥物的載體,在治療燒傷後的疤痕期間可有效延長抗癢的功效
•	Department of Applied Biology and Chemical Technology 應用生物及 化學科技學系	Prof. Wong Kwok-yin 黃國賢教授	Luminescent Chemosensory Material for Detecting Organic- Halogen Compounds 用作檢測有機鹵素化合 物的發光化學感應材料	Versitech Ltd. 港大科橋有限公司	This material gives out a "switch-on" luminescence signal upon its exposure to organic-halogen compounds that pose a health risk. It is a highly sensitive chemosensory material for developing chemosensory devices 這種材料遇到對健康有害的有機鹵素化合物時會發出螢光,是一種高敏度的化學感應材料,可用作製造化學感應器
F 6	Department of Building and Real Estate 建築及房地產學系	Prof. Albert Chan 陳炳泉教授	Anti-Heat Stress Clothing for Construction Workers 建造業工人 抗熱工作服	Construction Industry Council 建造業議會	Effectively alleviate heat stress of construction workers during outdoor work 有效紓緩建築工人在戶外工作時的炎熱情況
7	Department of Mechanical Engineering 機械工程學系	Prof. Wallace Leung 梁煥方教授	Multilayer Nano-Fiber Filter 多層納米纖維過濾器	Avalon Nanofiber Ltd. 雅護納米纖維 有限公司	Achieve high particulates capture efficiency while maintaining good air permeability for applications such as facemasks that require high filtration efficiency, as well as cabin and space filtration 能有效地阻隔微型污染物·同時保持良好透氣,可應用作面罩及在客艙與室內場所,以過濾空氣



Licensed Technologies and Designs 授權技術及設計

	PolyU faculty and department 理大院系	Inventor 發明者	Technology 科技	Licensee 獲授權機構	Benefits/ Applications 優點 / 應用
8	Department of Rehabilitation Sciences 康復治療科學系	Prof. Cecilia Li-Tsang 李曾慧平教授	Smart Pressure Monitored Suit (SPMS) 智能壓力衣	Champion Rehabilitation Ltd. 創理復康 有限公司	Enable faster production of pressure garments; speed up and enhance scar treatment 可加快生產壓力衣物,促進及改善疤痕治療
	Institute of Textiles and Clothing 紡織及製衣學系	Prof. Winnie Yu and Dr Joanne Yip 余詠文教授及 葉曉雲博士	Teaching Materials of Intimate Apparel Technologies 內衣技術教材	Clothing Industry Training Authority 製衣業訓練局	The teaching materials cover the know-how and provide information on intimate apparel design, development and technologies that enhance the competitiveness of the local clothing industry 教材除了技術部分,亦有提供內衣設計、發展及科技方面的資料,有助提升本地服裝業的競爭力
	Institute of Textiles and Clothing 紡織及製衣學系	Prof. Tao Xiao-ming 陶肖明教授	Pressure Sensing Fabric (More on p. 99) 織物壓力感測器 (詳見第 99 頁)	Footfalls and Heartbeats Ltd.	This pressure sensing fabric with interlocking loops of conductive yarns can be used to develop pressure sensing textile products for sports and healthcare applications, such as sportswear with sensing switches 這種可導電的相扣環形紗線壓力感測織物,可用以開發運動及保健的壓力感測衣物,例如有感測開闢的運動服裝
₹ 9	Institute of Textiles and Clothing 紡織及製衣學系	Dr Ameersing Luximon Ameersing Luximon 博士	Knowledge-Based Foot Scanning System 三維足部掃描系統	Cloudolp Business Analytics Co., Ltd. 深圳市雲智數據服務 有限公司	Generate 3D foot-shaped digital representations from the 2D images captured by the system with a foot shape prediction model. The system can provide a virtual shoe fitting solution for the footwear industry to facilitate online shopping 以腳形預測模型,將系統取得的二維圖像轉為三維腳形數碼顯示,以提供虛擬的合適鞋履方案,協助鞋業發展網上銷售





Licensed Technologies and Designs 授權技術及設計

	PolyU faculty and department 理大院系	Inventor 發明者	Technology 科技	Licensee 獲授權機構	Benefits/ Applications 優點 / 應用
10	School of Design 設計學院	Prof. Michael Siu 邵健偉教授	Recycling Bin- Green Hunger Green Hunger 循環再用 垃圾箱	Poon Kei Engineering Ltd. 磐基工程有限公司	With its attractive appearance and user-friendly features, the Green Hunger recycling bin will encourage the promotion of waste recycling and raise awareness of environmental sustainability 循環再用垃圾箱「Green Hunger」外型美觀、使用方便,可鼓勵推廣廢物循環再用及提高可持續發展的環保意識
	School of Design 設計學院	Mr Stefan Sonntag and students of School of Design Stefan Sonntag 先生及 設計學院學生	Design MINI Pulze 設計 MINI Pulze	MINI Hong Kong MINI 香港	Unconventional and effective promotional concepts for MINI cars 為 MINI 汽車設計出新穎而有效的推廣意念
	School of Design 設計學院	Mr Stefan Sonntag and students of School of Design Stefan Sonntag 先生及 設計學院學生	Design paper cutting, Santa and reindeer decorations 設計剪紙、聖誕老人和 馴鹿裝飾	MINI Hong Kong MINI 香港	Creative designs for MINI car decorations 為 MINI 汽車開發具創意的裝飾設計
	School of Design 設計學院	Mr Fred Han and students of School of Design Fred Han 先生及 設計學院學生	Design of a Smartwatch 設計智能手錶	TARC Holdings Limited	Creative product ideas, user interface and appearance of a smartwatch 具創意的產品概念,為智能手錶設計用者界面和外型
	School of Design 設計學院	Mr Rémi Leclerc and students of School of Design Rémi Leclerc 先生及 設計學院學生	Toy airplane designs 玩具飛機設計	Educational toy company 教育玩具公司	Arouse children's interest in science and airplane design 引起兒童對科學及飛機設計的興趣







INDUSTRY PARTNERSHIPS WITH FRUITFUL ACHIEVEMENTS 攜手業界 共享成果



During the year, PolyU partnered with companies in various sectors to create many innovations that benefit society, from life-saving breakthroughs to green initiatives.

年內,理大與各行各業的機構建立夥伴關係, 一起進行科研創新,從拯救生命的發明, 到保護環境的新猷,均以裨益社會為依歸。

Flavonoid Dimers to reverse cancer drug resistance

The University successfully synthesized flavonoid dimers to address common multi-drug resistance (MDR) in cancer cells by inhibiting undesirable drug efflux. As polyphenolic compounds are commonly found in food, flavonoids are good candidates for reversing MDR because of their low toxicity. This innovation was licensed to Kinex Pharmaceuticals (HK) Limited, which in turn will support further research of flavonoid dimers for oncology indication and treatment.

黃酮 類 二 聚 物 逆 轉 癌細胞抗藥性

大學成功研發黃酮類二聚物,可防止癌細胞把藥物排出和逆轉多藥抗藥性。由於食物中普遍含有多酚類化合物,毒性低的黃酮類化合物是逆轉多藥抗藥性的理想物質。理大已將這創新發明的專利權授予 Kinex Pharmaceuticals (HK) Limited,該公司將支持進一步研究黃酮類二聚物在診斷及治療腫瘤上的應用。



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Rapid authentication of edible oils and gutter oils

PolyU's Food Safety and Technology Research Centre developed a novel method using matrix-assisted laser desorption/ionization mass spectronmetry to screen non-referenced sub-standard oils within five minutes. This innovation protects consumers from health hazards associated with illegal oil recycling. (More on p. 80)

Pressure sensing fabric

Researchers of the University invented a fabric pressure sensor with interlocking loops of yarns that can demonstrate a change of resistance from conductive fibres when pressed. The fabric sensor can be used to develop pressure sensing textile products for sports and healthcare applications, such as sportswear with sensing switches. The same research team also developed a fabric sensor using elastic fabric coated with conductive composite materials to function as a strain gauge. This type of sensor can be used to make novel healthcare and medical products, such as wearable respiratory monitors and pressure-sensing shoes for diabetics. These technologies have been licensed to Footfalls & Heartbeats Ltd. in New Zealand and locally to AdvanPro Limited.

Building Information Modelling

A research team on Building Information Modelling (BIM) provided consultancy services to the Hong Kong Housing Authority which has adopted the University's proprietary BIM system in several public housing development projects. With its clear graphical details, automatic generation of drawings and reports and design analysis, the modelling system enables builders to make better-informed decisions, improve the efficiency and accuracy of building design and construction, optimizing the time and resources used.

快速鑒別食用油和 地溝油

理大的食物安全及科技研究中心發明了一個 嶄新方法,利用矩陣輔助的激光吸附/質譜 離子化技術,可在五分鐘內驗出不合參考 標準的油。這項發明可保障消費者,避免 受非法再用油對健康造成影響。(詳見第 80頁)

壓力感測織物

大學研究人員發明了相扣環形紗線的壓力感測織物,這種導電的織物在受壓時會出現電阻轉變,適用於運動及保健的壓力感測衣物,例如有感測開關裝置的運動服裝。同一研究團隊亦研製出另一類壓力感測織物,這種塗上傳導合成物的彈性織物可用以量度壓力,適用於創新保健產品,例如可穿戴的呼吸監察器及適用於糖尿病患者穿著的壓力感測鞋。這些技術的特許使用權已授予新西蘭的Footfalls & Heartbeats Ltd. 及本地的安潤普有限公司。

建築資訊模型

香港房屋委員會轄下數個公共房屋項目採用 了大學的專利建築資訊模型系統,有關的 研究團隊並為委員會提供專業意見。該系 統能夠繪製清晰的圖形細節,並能自動製作 繪圖、報告及設計分析,可讓建築商了解 資訊後作出更佳決定,提高建築設計及建造 的效率與準確度,從而善用時間及資源。



Thermal functional textile with conductive materials

A thermal functional fabric was developed by PolyU with conductive fibres directly knitted into the fabric using integrated knitting techniques to produce effective localized zone heating. With its unique stitch structure and density, electrical resistance at specific areas can be controlled to generate required temperature profiles. The precise localized heating ability enables the development of energy-efficient and lightweight heated garments for indoor, outdoor and even healthcare applications.

具傳熱功能的 保暖衣物

理大研發出具保暖功能的織物,透過結合編織方法,可直接將傳熱的織物縫進衣物,達致局部發熱的功效。這種織物具備獨特的針織結構和密度,可控制特定部分的電阻,以調節所需溫度。這項局部發熱功能可用以開發節能而輕巧的保暖衣物,除適合室內外穿著,亦可擴展至保健用涂。

Medical gel using core-shell nano-particles

Nano-particles with amphiphilic core-shell morphology developed at PolyU can be engineered for various functional applications such as coatings, adhesives, microcapsules, sorbent and solid supports. The core-shell nano-particles encapsulating active pharmaceutical agents and cross-linked with polymer gel can also function as a drug carrier for topical medication, improving the physical properties of the resultant medical gel for better treatment administration. With anti-itching agents encapsulated, the medical gel can facilitate longer relief from itching during the healing of post-burn scars. This technology is licensed to MJ Medical Gel Systems Limited.

用於醫療凝膠的核殼 納米粒子

理大發明的兩親性核殼形態納米粒子,可以有多方面的應用功能,包括用於塗層料、黏合劑、微型膠囊、吸收物合體支撐物。含有活性藥用物及聚聚體的核殼納米粒子,更可用作裝納藥物,改善藥用膠體的物理特質,提升治療效能。例如將抗癢劑放進膠囊,用以治療燒傷後的疤痕,可延長抗癢功效。這項技術的特許使用權已授予美生醫學凝膠系統有限公司。

Automation for aircraft maintenance

Jointly established by PolyU, Boeing, the Hong Kong Aircraft Engineering Company Limited and Hong Kong Aero Engine Services Limited, the Aviation Services Research Centre completed the Laser Projected Drilling Templates and Robotic Drilling project during the year. The project involved the design of an automated process that uses a portable laser drilling template to streamline the workflow for replacing the outer skin parts of aircrafts. By automating a fully manual operation, this industrial breakthrough has led to a substantial improvement in the accuracy and quality of the repair work, with a three-to-four fold improvement in process time and labour hours.

飛機維修自動化

年內,理大與波音公司、香港飛機工程有限公司及香港航空發動機維修服務有限公司合作成立的航空服務研究中心完成了「雷射投影鑽孔模板與自動化機械鑽孔」項目。這項目利用手提雷射鑽孔模板的自動化程序,精簡更換飛機外層組件的工作流程。這是業界的一項突破,讓全人手操作變為自動化,大幅提升維修工作的準確度和質量,而飛機結構維修工作的工序時間及工時亦可縮減三分之二或四分之三。











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Generating electricity from a building's water supply system

PolyU worked with Sino Green in Hong Kong Limited to explore the feasibility of generating electricity from fresh water supply pipelines in high-rise residential buildings. The study involved installation of a proprietary inline micro hydropower system jointly developed by the University and Water Supplies Department for in-depth performance tests on power generation in water supply pipelines. The system is expected to harvest just enough hydro-energy for energy-efficient light bulbs, providing cost savings to residential properties.

Strategies to lower air pollution level

PolyU researchers undertook an investigation initiated by the Environmental Protection Department on radical chemistry and its impact on the air quality of Hong Kong. Their subsequent recommendations on the monitoring and control strategies for elevated ozone, secondary pollution, pollution precursors and radicals will contribute to the city's continuous efforts to keep air pollutant levels in check.

In another project commissioned by PTC International Limited and carried out at Tai Mo Shan, researchers studied photochemical processes and ozone pollution in Hong Kong. The outcome will lead to measurements of regional photochemical processes and a better understanding of ozone formation in the region.

利用大廈水管供水 系統發電

理大與信和綠色有限公司合作,探討以高層住宅大廈供水喉管發電的可行性。 研究計劃裝設了理大與水務署共同研發的 管內微型水力發電系統,以深入測試供水 喉管發電的表現。該系統產生的水力能源, 預期剛可足夠供節能燈泡使用,並為住宅 大廈節省開支。

降低空氣污染水平 策略

理大研究人員獲環境保護署委託,就放射 化學展開研究,了解其對香港空氣質素的 影響。團隊其後就監測和管制上升的臭氧 水平、二次污染、污染源及污染基作出建議, 有助控制空氣污染的程度。

另一項研究香港的光化合過程和臭氧污染的 計劃是由培德國際有限公司委託,並在大帽山 進行。該項研究結果將可用作量度分區光化合 過程,並有助進一步了解區內臭氧的形成。



CULTIVATING "DO WELL DO GOOD" ENTREPRENEURSHIP 培育「創富創善」的 企業家精神

Micro Funding Platform

PolyU has been contributing to the development of the entrepreneurial eco-system in Hong Kong through various innovation and entrepreneurship programmes for students and graduates. Since 2011, the University has established the Micro Funding Platform with collaborating partners to provide a series of seed funding programmes and create a pipeline of early stage start-ups.

PolyU Micro Fund Scheme

In 2014/15, the Micro Fund scheme awarded 15 new start-up companies, leading to an accumulated total of 79 start-ups since its inception in 2011. The over 70% surviving awardees have performed well, raising over HK\$40 million in investment and financial support, a leverage of 800% compared with HK\$5.6 million disbursed through the scheme. So far, Micro Fund recipients have won over 35 awards.

▼ STEFG-PolyU China Entrepreneurship Fund

Jointly set up by PolyU and the Shanghai Technology Entrepreneurship Foundation for Graduates (STEFG), the fund supported 11 new ventures of PolyU students and graduates during the year to set up businesses in China. Over 90% of the awardees are still surviving and have raised over HK\$50 million in additional funding support, with Tencent and the founder of Xiaomi among the investors.

微型創業基金平台

理大致力為學生及畢業生提供各式各樣的 創新活動及創業計劃,對香港的創業生態環境 持續作出貢獻。自 2011 年起,大學與合作 夥伴共同建立「微型創業基金平台」,提供 多項種子基金計劃,資助初創企業的發展。

▶ 理大微型基金計劃

2014/15 年度,微型基金計劃資助了 十五家新的初創企業。自2011 年成立 以來,基金共資助了七十九家初創企業, 當中超過百分之七十的公司運作良好, 並籌得逾四千萬港元的投資金額及資助。 相對於計劃下發放的五百六十萬港元創業 基金,槓桿效率達八倍之多。至今,基金 支持的企業更贏得超過三十五個獎項。

上海市大學生科技創業基金會 –理大專項基金

此基金由理大與上海市大學生科技創業 基金會共同成立,年內資助了理大學生及 畢業生於中國成立的十一家初創企業。 獲資助的企業活存率超逾百分之九十, 吸引逾五千萬港元的投資,投資者包括 騰訊及小米創辦人等。

Tech Incubation Fund and Tech Launchpad Fund

Supported by the Innovation and Technology Commission of the HKSAR Government under the Technology Start-up Support Scheme for Universities, two new funding schemes were launched by PolyU in November 2014: the HKSTP-PolyU Tech Incubation Fund (TIF) and the PolyU Tech Launchpad Fund (TLF).

In partnership with the Hong Kong Science and Technology Parks (HKSTP), the TIF supports early-stage technology start-ups by offering both seed funds (from PolyU) and incubation support (from HKSTP). As of June 2015, eight technology ventures have been awarded under the TIF scheme. The TLF also offers scaled-up funding to accelerate the growth of qualified ventures by matching dollar-to-dollar investments made by angel investors up to HK\$2 million.

Good Seed

With the support of the Social Innovation and Entrepreneurship Development Fund of the HKSAR Government, PolyU was commissioned as one of the Fund's Intermediaries to launch the Good Seed social innovation programme in early 2015. Open to students and graduates of local higher education institutions, this programme focuses on leveraging design thinking and technology to come up with innovative ideas that address poverty issues in Hong Kong. This three-year programme aims to develop 1,000 young people into social innovators and support 40 projects.

▶ 科技培育基金及科技領航基金

在香港特別行政區政府創新科技署轄下的「大學科技初創企業資助計劃」的支持下,理大於2014年11月推出兩項全新的基金計劃:「科技園一理大科技培育基金」及「理大科技領航基金」。

在「科技園一理大科技培育基金」下,理大與香港科技園合作,分別為以科技為主的初創企業提供種子基金和創業培訓。截至2015年6月,此基金共資助了八家初創企業。「理大科技領航基金」則由理大夥拍天使投資者,提供一對一的資助配對,向成功申請的企業提供最高達二百萬港元的資助,以加速企業發展。

▶ 「好薈社」計劃

理大受香港特別行政區政府之社會創新 及創業發展基金委託,成為其協創機構 之一,並於 2015 年初推出「好薈社」 社會創新計劃。這計劃歡迎本地大專院 校學生及畢業生參加,希望結合設計思 維及科技應用,為本港貧窮問題提供創 意解決方案。這為期三年的計劃目標是 培育一千名年青人成為社會創新者,並 為四十個項目提供資助。







High-level education for professionals and executives

During the year, the Institute for Entrepreneurship delivered 562 training courses that benefited 22,122 participants from both the public and private sectors. The programmes are part of the Institute's ongoing training for professionals and executives and customized courses for industry associations and enterprises.

Similarly, the Institute of Advanced Executive Education delivered open programmes and bespoke programmes addressing a myriad of topics, including branding and marketing, crisis communication and high-impact presentations, business innovation, accounting and finance, as well as thought leadership.

高層次專業及行政 培訓課程

企業發展院的工作,除了為專業人士及行政 人員提供進修課程,亦有為工商機構提供度身 訂造的培訓服務。年內,企業發展院共舉辦 五百六十二項課程,為二萬二千一百二十二 名來自公營和私營機構的人士提供培訓。

此外,高級管理深造學院開辦了不同類別的 公開及特制課程,涵蓋品牌策略、市場營銷、 危機處理溝通、具感染力的演説技巧、商業 創意、會計金融,以及思維領導才能等範疇。



In 2014/15, two new interdisciplinary executive master degree programmes were launched: the Executive Master in Real Estate Finance and the Executive Master in Meaningful Innovation. For the third Executive Master in Healthcare, Technology and Management, three Professors of Practice of the University joined the programme development team to provide their expert advice.

In addition, an e-Learning series was launched with 120 handpicked courses. Based on these e-Learning courses, blended learning topics will be developed to support continuing professional development for executives. Two executive diplomas – one in accountancy and one in shopping mall management – were also offered as public courses, with the latter supported by

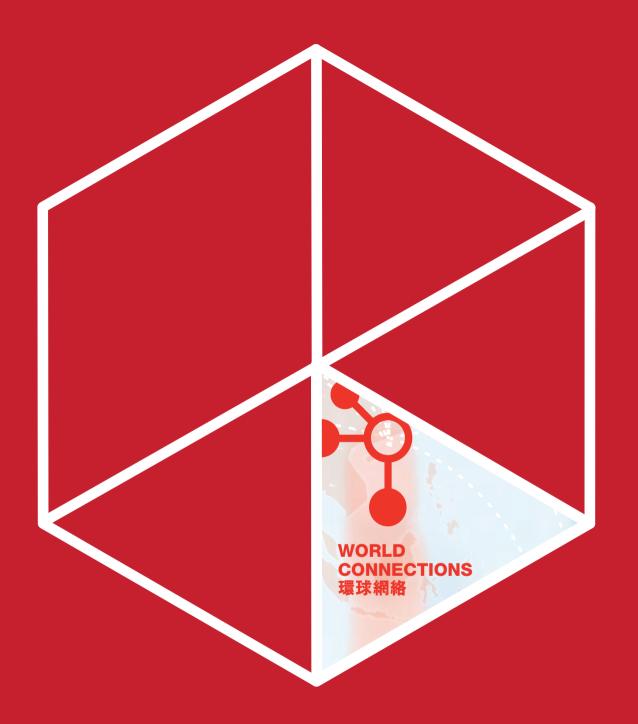
年內,高級管理深造學院開辦「高級管理 人員房地產金融碩士」及「高級管理人員創新 創意碩士」兩個跨學科深造學位課程。第三個 「高級管理人員醫療保健、科技及管理碩士」 深造課程更邀得大學的三位專業應用教授 加入課程發展小組,並提供專家意見。

此外,學院推出網上學習系列,共有 一百二十多項課程可供選擇。建基於這系列, 學院將發展不同的混合學習課題,以支援 行政人員的持續專業發展。學院亦舉辦了會計 及商場管理兩個行政文憑課程,供公眾人士 報讀,後者獲得領展公司鼎力支持。













Where internationalization enhances global visibility

讓國際化使大學名聞遐邇

In today's increasingly interconnected global community, PolyU reaches out across borders to advance its development in education and research. Our diversity extends from the nation to the world.

現今全球社會的聯繫日趨緊密,理大爭取與國際接軌,以推進其教研工作。大學的多元化 發展從國家延伸以至世界各地。

> WORLD CONNECTIONS 環球網絡



ENGAGING THE WORLD 與世界各地聯繫



International Advisory Board

The fifth International Advisory Board meeting was held on 5–7 November 2014 on the theme of social responsibility for the University. International advisors discussed education and shared research from a social responsibility perspective and Service-Learning experiences with senior management, faculty representatives, students and other stakeholders.

國際顧問委員會

第五次國際顧問委員會會議於 2014 年 11 月 5 至 7 日舉行,主題為大學社會責任。來自世界各地的顧問與理大管理層、各院系代表、學生和其他持份者,從社會責任角度探討教育和科研,並分享服務學習的經驗。





The Innovation and Entrepreneurship Global Student Challenge

The biennial Innovation and Entrepreneurship Global Student Challenge in June 2015 attracted 57 teams of over 220 contestants from universities and high schools all over the world. This PolyU signature event provided a platform for participants to network with like-minded peers, as well as to learn from eminent academics and prominent business and social entrepreneurs.

Expanding our international network

During the year, PolyU continued to expand its academic links with leading overseas universities and institutions, including those in Brunei, Colombia, Croatia, Kazakhstan, Latvia and Vietnam, in order to create more academic exchanges, research internships and Service-Learning opportunities for students. As at June 2015, the University had established 284 exchange agreements with 244 partners in 37 countries and regions.

國際學生創新挑戰賽

兩年一度的「國際學生創新挑戰賽」於 2015年6月舉行,二百二十名來自世界 各地的大學和中學的學生分別組成五十七支 隊伍參加。這項理大盛事為參賽者締造與 志同道合的朋輩聯繫交流的機會,亦讓他們 向知名學者、商界翹楚及傑出社會企業家 學習。

拓展國際網絡

年內,理大繼續擴展與海外知名院校的 學術聯繫,包括在汶萊、哥倫比亞、 克羅地亞、哈薩克斯坦、拉脱維亞和越南 等地的院校,為學生帶來更多學術交流、 科研實習及服務學習的機會。截至 2015年6月,大學已與三十七個國家 和地區的二百四十四個合作夥伴簽訂共 二百八十四項學生交換協議。



Summit on University Social Responsibility

On 19-23 November 2014, PolyU hosted the 2nd Summit on University Social Responsibility and Inaugural International Conference on Service-Learning. The Summit attracted over 300 participants from across the world to exchange views on topics that included "Nurturing Students to be Socially Responsible Citizens", "Developing University Social Responsibility: Strategies and Models" and "Higher Education as a Catalyst for Social Change".

"World Cities World Class **University Network**" **Symposium**

In August 2014, a PolyU delegation participated in the inaugural World Cities World Class University Network (WC2) Symposium hosted by City University London. The fiveday programme brought together over 130 academics and postgraduate students to discuss challenges and solutions in establishing effective cooperation between cities and between universities. PolyU academics and PhD students made presentations during the event.

Exploring academic partnerships

Prof. Hal Abelson, Director of the MIT Centre for Mobile Learning at Massachusetts Institute of Technology (MIT) together with his MIT App Inventor Team visited PolyU in July 2014 to explore potential collaboration opportunities in computer science education.

In September 2014, Prof. Moshe Sheintuch from the Faculty of Chemical Engineering, Technion - Israel Institute of Technology visited PolyU to build stronger research links with the University's Faculty of Applied Science and Textiles and Faculty of Construction and Environment. He also gave a talk to faculty members and post-doctorate students.

Singapore's Ministry of Education led a delegation comprising the Consul General of Singapore in Hong Kong,

大學社會責任 高峰論壇

理大於 2014 年 11 月 19 至 23 日舉辦「第二屆 大學社會責任高峰論壇暨首屆服務學習 國際會議」,有三百多名來自世界各地的 人十參加,並就「培育學生成為具社會責任的 公民」、「推行大學社會責任的策略及模式」 和「大學作為推動社會發展的先鋒」等題目 看極交流。

「世界城市、世界級 大學網絡 | 研討會

2014年8月,理大代表團參加由倫敦城市 大學舉辦的首屆「世界城市、世界級大學 網絡上專題研討會。渝一百三十名學者及研究 生在這個五天的研討會上探討世界主要城市 及大學間協作上所面對的挑戰和解決方案, 以達致有成效的合作關係。理大學者及 博士生更在會上就議題發表演説。

開拓學術協作

2014年7月,美國麻省理工學院行動教學 中心總監 Hal Abelson 教授及其程式設計 團隊到訪理大,共同探討電子計算科技教 育的合作契機。

2014年9月,以色列理工學院化學工程院 Moshe Sheintuch 教授到訪理大,與應用 科學及紡織學院和建設及環境學院建立更 緊密科研合作關係,更為教學人員及博士 後研究生發表演説。

在新加坡教育部部長帶領下,新加坡駐港 總領事、教育部官員及中學校長等高層代 senior officials from the Ministry of Education and school principals on a visit to PolyU in January 2015. During their visit, the delegation learned about the education system and development of vocationally-oriented degree programmes in Hong Kong.

In January 2015, a PolyU delegation visited Almaty and Astana, Kazakhstan, to explore opportunities for academic exchange and research collaboration. During the visit, the delegation met with the senior management of several leading universities and the Vice Minister for Education of Science.

表團於 2015 年 1 月訪問理大,藉此了解香港的教育制度及以職業為本的學位課程的發展。

2015年1月,理大代表團造訪哈薩克斯 坦阿拉木圖和阿斯塔,探討學術交流及科 研合作的機會,更與當地幾所卓越大學的 高層及教育科學部副部長會面。









BROADENING OUR OUTREACH TO THE MAINLAND 拓展內地聯繫

As part of the Exploring China programme, PolyU offered a wide range of credit-bearing and Service-Learning subjects and programmes, giving students the opportunity to venture into the Chinese mainland. In the summer and winter breaks of 2014/15, more than 1,400 students participated in learning programmes.

在「向華夏出發」活動系列中,理大提供不同種類的學分課程,以及服務學習科目,讓學生加強認識中國內地。在2014/15的寒暑假期間,一千四百多名學生參加了這些學習計劃。

Leveraging development of the New Silk Road

Under the Chinese mainland's strategy of development along the One Belt, One Road, PolyU and Xi'an Jiaotong University with the support of the Shaanxi government formed the Universities Alliance of the New Silk Road (UANSR). This initiative, which was launched in May 2015, attracted close to 100 universities in countries along the New Silk Road to begin negotiating bilateral or multi-lateral cooperation agreements under the UANSR umbrella.

新絲綢之路的機遇

乘著中國內地推行「一帶一路」的發展策略,在陝西省政府的支持下,理大聯同西安交通大學在 2015 年 5 月成立「新絲綢之路大學聯盟」,有近百所位於絲綢之路沿線的大學加入,在該聯盟的框架下,探討雙邊或多邊合作協議。





6

With the formation of the alliance, PolyU is extending the reach of its Silk Road Youth Leadership programme to Eurasian countries. Since the summer of 2015, this one-year intensive training programme has enrolled local and non-local students for educational trips to Xi'an, Turkey, Israel and Kyrgyzstan in Central Asia, organized talks by distinguished speakers, and arranged research projects for participants. Through these activities, students will learn about cultural, ethnic, racial and economic issues of different countries along the New Silk Road.

Also expanding to Eurasian countries, the Silk Road International Summer School provides opportunities for students to study Chinese history and culture through lectures and field trips. The first Silk Road International Summer School was organized in 2014 in collaboration with Xi'an Jiaotong University, with a mixture of participants from PolyU, Xi'an Jiaotong University and overseas universities in the UK, US, Australia. Korea and Taiwan.

隨著聯盟的成立,理大把「絲綢之路青年領袖計劃」推展到歐亞國家。自2015年夏天起,為期一年的密集式培訓計劃安排本地及非本地學生前往西安、土耳其、以色列和中亞吉爾吉斯坦等中亞地區學習,邀請傑出講者主持講座,以及為參加者舉辦研究項目。透過這些活動,學生將對新絲綢之路沿線國家的文化、民族、種族和經濟有進一步的認識。

此外,「絲綢文創暑期班」亦擴展至歐亞國家。這課程透過講座和實地考察,為學生提供學習中國歷史和文化的機會。首屆「絲綢文創暑期班」在2014年開課,由理大與西安交通大學合辦,參加者來自理大、西安交通大學、以及英國、美國、澳洲、韓國和台灣的大學。

More study programmes in the Chinese mainland

In collaboration with elite Chinese mainland universities, PolyU offered 30 classes across 13 different academic programmes in the mainland in 2014/15, with classes mostly conducted at PolyU's outposts in Xi'an, Hangzhou and Sichuan. Subject areas included business, hotel and tourism, real estate, information systems, physiotherapy and occupational therapy. To-date, PolyU has 23 state-approved programmes in the mainland and graduated almost 7,800 students since 2000.

PolyU is also working closely with leading mainland institutions to offer Joint PhD programmes. Partnering institutions include Harbin Institute of Technology, Sichuan University, Sun Yat-sen University, Tongji University, Xi'an Jiaotong University and Zhejiang University.

更多中國內地課程

在 2014/15 年度,理大夥拍內地優秀大學開辦十三項課程,共三十班,大部分在西安、杭州和四川等發展基地上課。學科領域包括商業、酒店及旅遊、房地產、資訊系統、物理治療及職業治療。現時,大學獲得國家批准的內地課程達二十三項;自 2000 年至今,已培育了近七千八百名畢業生。

此外,理大與內地頂尖大學緊密合作,提供 聯合培養博士課程。合作院校包括哈爾濱 工業大學、四川大學、中山大學、同濟大學、 西安交通大學及浙江大學。



Boosting research and knowledge transfer

In 2014/15, the PolyU Base on Commercialization, Training and Research in Shenzhen succeeded in bidding for mainland research projects funded by the Ministry of Science and Technology, National Natural Science Foundation of China, and the Guangdong and Shenzhen governments. By the end of June 2015, the accumulated mainland grants in Shenzhen exceeded RMB100 million.

At the new Knowledge Transfer Centre, Shenzhen Base, PolyU also succeeded in drawing resources from mainland industries and facilitated 100 consultancy projects with accumulated funding of over RMB30 million.

During the year, Shenzhen Base also established the Shenzhen Key Laboratory of Food Biology Safety Control and equipped it with state-of-the-art facilities for developing national and international collaborations in food safety.

促進科研與知識轉移

在 2014/15 年度,理大深圳產學研基地成功申請內地多項由國家科學技術部、國家自然科學基金,以及廣東省和深圳市提供經費的研究項目。截至 2015 年 6 月底,基地累計取得內地的科研經費超過一億元人民幣。

深圳基地新成立了一個知識轉移中心,更獲 得內地業界投放超過三千萬元人民幣,進行 一百個顧問服務項目。

年內,深圳基地成立了「深圳食品生物污染 與控制重點實驗室」配備先進設施, 用以促進與國家及國際在食品安全領域上的 科研合作。

Support for post-quake reconstruction in Sichuan

During the year, the Institute for Disaster Management and Reconstruction (IDMR) established by PolyU and Sichuan University continued to provide support for the post-quake reconstruction effort in Sichuan and Yunnan. A student disaster nursing team was also formed by the Institute to offer timely assistance to victims of the Ludian earthquake in Yunnan in 2014.

A cumulative total of 42 students were enrolled in the Joint PhD programme with IDMR and 133 students registered in the four Master's programmes in Prosthetics and Orthotics, Disaster Nursing, Physical Therapy and Occupational Therapy.

支持四川災後重建

年內,理大與四川大學合辦的「災後重建與管理學院」繼續支援四川和雲南地震後的重建工作。2014年雲南魯甸地震期間,學院更成立一支學生護理團隊,向災民提供及時援助。

學院的聯合培養博士課程累計錄取了共四十二名學生,另義肢及矯形、災害護理、物理治療及職業治療四個碩士課程共錄取了一百三十三 名學生。



Insights from distinguished scholars

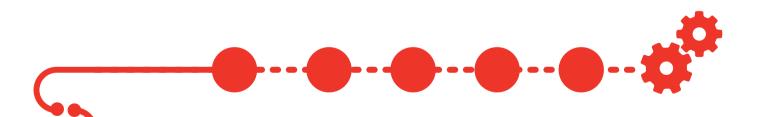
On 25 November 2014, PolyU honoured six renowned scholars from the Chinese mainland under the Distinguished Chinese Visiting Scholars Scheme. All of the scholars are either members of the Chinese Academy of Sciences or the Chinese Academy of Engineering. They were (photo 9, from right) Prof. Yang Xiurong of the Changchun Institute of Applied Chemistry, Chinese Academy of Sciences; Prof. Huang Wei, President of Nanjing University of Technology; Prof. Xu Guanhua, former minister of Science and Technology; Prof. Wang Huijun of the Institute of Atmospheric Physics, Chinese Academy of Sciences; Prof. Ding Han, Dean of the School of Mechanical Science and Engineering, Huazhong University of Science and Technology; and Prof. Mei Hong, Vice President and Professor of Shanghai Jiaotong University. The scholars held public lectures and seminars on the PolyU campus, which were attended by over 400 participants.

傑出學人 分享學術精粹

2014年11月25日,理大在「傑出中國訪問學人計劃」中表彰六位內地知名學者。他們都是中國科學院院士或中國科學院長士,包括:(圖九右起)中國科學院長春應用化學研究所研究員楊秀榮院士、南京工業大學校長冠研究所對於大氣物理研究所研究員維院士、中國科學院大氣物理研究所研究員進華院士、中國科學院大氣物理研究所研究與王會軍院士、華中科技大學機械科學與工程學院院長丁漢院士,以及上海交國工程學院院長丁漢院士,以及上海交國大學副校長梅宏院士。他們在理大校園主持公開講座和研討會,共有超過四百人參加。











Where a green campus supports the University's mission

讓綠色校園協助大學履行使命

With state-of-the-art facilities on a green campus, PolyU is building a sustainable and healthy environment to meet the requirements of our cutting-edge teaching and research activities.

理大的綠色校園具備先進設施,提供可持續發展及健康的環境,配合前沿教學和科研 活動的需要。





EXPANDING OUR CAMPUS 擴建校園



Block X redevelopment

The foundation works for the Redevelopment of Block X project, a low rise building with sustainable features, commenced in February 2015. Scheduled for completion in mid-2017, the building will provide workshops and offices for the Aviation Services Research Centre, a 25m long all-weather indoor swimming pool, a 5-a-side indoor football pitch, indoor gymnasium and student communal facilities. It will also provide landscaped recreational space and serve as a circulation hub connecting the future pedestrian footbridge linking Block Z and the main campus.

X座重建項目

X座重建項目的基礎工程於2015年2月展開,整個項目預期於2017年中竣工。此低層大樓的設施將包括航空服務研究中心的工場和辦公室、全天候二十五米室內游泳池、室內足球場、室內健身室及學生公共設施。這重建計劃還提供休憩園地,並在通往Z座的行人天橋落成後,作為與主校園連接的流通樞紐。

Footbridge linking main campus and Phase 8

A footbridge linking the proposed Redevelopment of Block X project and the podium level of Block Z is being planned and scheduled for completion in early 2017. The completed footbridge will not only improve pedestrian connectivity between the main campus and Block Z but also serve as a test bed for academic research and form part of the cycle route in the long term campus master plan.

連接主校園及第八期 之行人天橋

用作連接重建的 X 座及 Z 座平台的行人天橋 的工程規劃經已展開,預期可於 2017 年初 完成。工程完成後,不但可改善主校園與 Z 座行人交通往來的情況,更可為學術研究 提供一個試驗台,以及作為校園長遠整體 規劃中興建單車徑的一部分。









Library Extension and Revitalization Project

PolyU has been striving to secure funding from the Government for the proposed Library Extension and Revitalization project, which will provide additional space for the Library as well as improve some of the existing facilities. Subject to funding approval, the additional floor of the Learning Commons and the revitalization of existing space will be completed in early 2018 and end of 2019 respectively.

圖書館擴建及 活化計劃

理大就圖書館擴展及活化計劃向政府爭取 撥款,目的是為圖書館提供更多空間及改善 現有設施。如撥款獲得通過,新增樓層的 圖書館研習坊及活化工程將分別於2018 年初及2019年底完成。

Potential campus expansion 何文田校園擴建計劃 at Ho Man Tin

With the support of the Town Planning Board in May 2015 for the University's application for rezoning the site at Ho Man Tin Slope, the project on campus expansion at this site has moved an important step forward. The project planned to accommodate more than 1,200 hostel places and over 10,000 m² net floor area of academic and teaching space. Subject to the approval by various government authorities, the project is targeted for completion in two stages in 2021 and 2022.

隨著城市規劃委員會於2015年5月同意將 何文田斜坡的土地改變用途,理大何文田 校園擴建工程亦邁進了重要的一步。這 計劃預期為大學增加超過一千二百個學生 宿位及超過一萬平方米的教研空間。這項目 如獲有關政府部門通過,預計可分階段於 2021 及 2022 年落成。



PROMOTING ACCESSIBILITY AND SUSTAINABILITY

推動無障礙及可持續發展

Award-winning department websites

Several PolyU websites won the Gold Award in the Web Accessibility Recognition Scheme 2015, jointly organized by the Office of the Government Chief Information Officer and the Equal Opportunities Commission. Among the winners were the PolyU homepage, websites of the Information Technology Services Office, Office of Careers and Placement Services, Health, Safety and Environment Office and the Campus Sustainability Committee. The Health, Safety and Environment Office website also received the Triple Gold Award for winning the Gold Award over three consecutive years.

Recognition of campus sustainability

In May 2015, PolyU received the Bronze Award for the Public Organizations and Utilities Sector of the 2014 Hong Kong Awards for Environmental Excellence. The University went through three stages of assessment in the award selection process, which included criteria such as green leadership, environmental performance and green partner synergy.

Green campus buildings

PolyU endeavours to bring green elements and designs into all existing and new developments. Green buildings certified by the Building Environmental Assessment Method (BEAM) as of April 2015 included the following:

- ▶ Hung Hom Bay Campus
- ▼ Student Halls of Residence (Homantin)
- West Kowloon Campus

Platinum Award Platinum Award Provisional Gold Award

多個部門網站獲獎

多個部門網站,包括理大主網頁、資訊科技處網頁、就業服務處網頁、健康安全及環境事務處網頁,以及校園可持續發展委員會網頁,均於政府資訊科技總監辦公室及平等機會委員會合辦的「2015無障礙網頁嘉許計劃」中獲得金獎。健康安全及環境事務處網頁更同時獲得三年卓越表現大獎,以表揚其連續一年獲得金獎之佳績。

校園可持續發展 獲嘉許

2015年5月,理大榮獲2014年度香港環境 卓越大獎公營機構及公用事業界別銅獎, 評審過程包括三個階段,分別評估環保 領導、環保表現及夥伴協作範疇的表現。

校園綠色建築

理大致力在現有建築和新發展項目中加入 綠色元素和設計。截至 2015 年 4 月,獲得 香港建築環境評估法認證的理大綠色建築 包括:

- ▶ 紅磡灣校園
- ▼ 何文田學生宿舍
- ▶ 西九龍校園

白金級獎項 白金級獎項 暫定金級獎項

Green Building Awards

PolyU was honoured with two awards in the Green Building Award 2014, jointly organized by the Hong Kong Green Building Council and the Professional Green Building Council. Researchers from the Research Institute for Sustainable Urban Development were involved in these two award-winning projects.

Proposed Green Deck over Cross Harbour Tunnel Plaza – an innovative solution to problems in the vicinity of the Cross Harbour Tunnel, including poor air quality, an overloaded footbridge, unsatisfactory connectivity within the district and lack of open space (Merit Award in the Research and Planning Category)

環保建築大獎

在香港綠色建築議會與環保建築專業議會合辦的「2014年度環保建築大獎」中,理大兩個項目奪得下列獎項,而可持續城市發展研究院的科研人員均參與其中。

▶ 建議於紅隧收費廣場上興建一個綠化平台 - 此創新方案可解決現時紅磡海底隧道 周邊空氣質素欠佳、行人天橋超逾負荷、 區內交通往來不便和公共空間不足等 問題(研究及規劃組別優異獎)



- Environmentally-friendly and cost effective highly dispersed screen-printable nanocomposite paste for self-cleaning curtain walls (Merit Award in the Building Products and Technologies Category)
- 一種用於製作自潔玻璃幕牆的高分散可 絲網印刷型納米塗料,既環保且具高成本 效益(建築產品及科技組別優異獎)







Record-setting cycling rally generates clean energy

Carried out by PolyU students from 11 to 12 September 2014, more than 1,500 members from the University community successively pedalled static bikes over a 24-hour period to generate electricity and promote renewable energy, sustainable development and a healthy lifestyle. This Enlighten project, which was funded by the University Grants Committee, ultimately generated a total of 31,399.31 watt-hours of energy and set a new Guinness World Record for "the most electrical energy generated by pedalling on bicycles in 24 hours."

接力踏單車產電 刷新世界紀錄

9月11至12日,理大學生發起超過一千五百名大學成員於二十四小時內日以繼夜踏單車發電,以宣揚可再生能源、可持續發展及健康生活。這個名為「燃啟理大」的項目,獲得大學教育資助委員會資助,最終產生了共31,399.31 瓦特小時的電力,並打破健力士世界紀錄,獲確認為「二十四小時內踏單車發電最多」的紀錄。



Hydroponic planting on campus

A group of PolyU students initiated the Hydroponic Salad Vegetable Planting Scheme on campus. This new system, which does not require conventional soils, avoids pollution and produces higher crop yields in a shorter period of time, won the Innovation Stream Grand Award of the PolyU Micro Fund 2014. It was also one of the winning projects for UGC Funding for Student-Initiated Projects.

校園水耕種

一群理大學生在校園發起「水耕沙津菜種植計劃」,他們設計了嶄新的水耕系統,既無需使用泥土,亦可避免造成污染,更能在短時間內獲得較多收成。該計劃贏得 2014 年度理大微型基金創新組別大獎,亦為大學教育資助委員會的學生資助項目之一。





UNIVERSITY GOVERNANCE 大學管治

Council and Court

The Council is the governing body of the University. Established under the PolyU Ordinance, the Council comprises the following members: the President and Deputy President of the University as ex-officio members; 17 lay members from the business, financial and industrial sectors, as well as the professions; three elected staff members; a member from the alumni; and two elected full-time students.

Dr Patrick Poon Sun-cheong completed his term as the University Treasurer on 31 March 2015 and Dr Lawrence Li Kwok-chang was appointed by the HKSAR Chief Executive to take up the role on 1 April 2015. During 2014/15, the Council welcomed Mr Stephen Liu Ling-hong, Mr Peter Sit Kien-ping, Mr Jaime Sze Wine-him and Professor Iris Benzie as new members. Members retiring from the Council upon the completion of their respective terms included Mr Billy Lam Chung-lun, Mr Laurence Li Lu-jen, Professor Michael C.K. Tse and Mr Lai Wai-kin. (See p.136 for the Council membership as at 30 June 2015.)

There are 12 Committees under the Council, namely the Audit Committee, Campus Development Committee, Council Membership Nominations Committee, Disciplinary Committee, Executive Committee, Finance Committee, Honorary Degrees and Awards Committee, Investment Committee, Knowledge Transfer Committee, Senior Executives Evaluation and Compensation Committee, Staffing Committee and the Hong Kong Polytechnic University Foundation.

The University Court is the supreme advisory body to the Council on matters of direction, with the objective of promoting the well-being of the University.

During the year, new University Treasurer Dr Lawrence Li Kwok-chang succeeded Dr Patrick Poon Sun-cheong as an ex-officio member of the University Court. Mr Dennis Ng Tsang, upon assuming the role as 2015/16 President of the PolyU Students' Union, took over the ex-officio membership of Mr Lai Wai-kin in the University Court. (See p. 137 for the Court membership as at 30 June 2015.)

校董會及 大學顧問委員會

校董會是大學的管治組織,按香港理工大學條例成立,其組成包括:校長和常務副校長為當然成員;十七名來自商業、金融、工業及專業界別的校外成員;三名由選舉產生的教職員;一名校友和兩名全日制學生。

潘燊昌博士出任大學司庫的任期於2015年3月31日屆滿,李國祥醫生獲香港特別行政區行政長官委任為司庫,並於2015年4月1日接任。2014/15年度,新任校董會成員包括廖凌康先生、薛建平先生、施榮忻先生及Iris Benzie 教授。任滿成員包括林中麟先生、李律仁先生、謝智剛教授及賴偉健先生。(截至2015年6月30日的校董會成員名單見第136頁。)

校董會轄下設有十二個委員會,包括:審核委員會、校園發展委員會、校董會成員提名委員會、紀律委員會、常務委員會、財務委員會、榮譽學位及榮銜委員會、投資委員會、知識轉移委員會、管理層評核及薪酬委員會、聘任事務委員會,以及香港理工大學基金。

大學顧問委員會是校董會的最高諮詢機構, 負責就大學方向性的事項提供意見,以推動 大學的發展。

新任大學司庫李國祥醫生接替潘燊昌博士 出任大學顧問委員會當然成員,而2015/16 年度學生會會長吳崢先生亦接替賴偉健先生 成為顧問委員會當然成員。(截至2015年 6月30日的大學顧問委員會成員名單見第 137頁。)

Senate

The Senate is the highest authority on all academic-related matters within the University. It is chaired by the President, and its membership includes representatives from all faculties and academic departments as well as the student body. Under the Senate, there are a number of faculty/school boards and standing committees with responsibility for various policy/functional areas, including the Academic Appeals Committee, Academic Planning Committee, Academic Regulations Committee, Faculty/School/College Boards, Learning and Teaching Committee, Quality Assurance Committee (Academic Departments) and Research Committee.

教務委員會

教務委員會是大學內處理學術事務的最高 決策單位,由校長擔任主席,成員包括各 學院、學系和學生組織代表。轄下設有多個 學院院務委員會及常務委員會,負責不同 範疇的政策與職能,包括教務申訴委員會、 教務策劃委員會、教務規章委員會、學院 院務委員會、教學委員會、質素委員會(教學 部門)及研究委員會。

Internal controls and audit

The University has in place policies and guidelines that enable management to operate and monitor effectively through checks and balances. It has also appointed an Audit Committee to ensure the effectiveness of internal control systems, internal audit processes and financial reporting. The Internal Audit Unit provides independent appraisals within the University to ensure and improve the quality of PolyU operations. To maintain its independence, the Unit reports directly to the Audit Committee.

The Internal Audit Unit is responsible for conducting regular audits to assess the adequacy and extent of compliance with the controls, and provides risk-based and objective assurance and advice to management in order to add value to the University's operations.

The Unit performs audits in accordance with the plan approved by the Audit Committee and makes recommendations for improving the effectiveness and efficiency of the areas being reviewed.

內部監管及稽核

理大除了制定政策和指引,協助管理層透過 各項制衡措施,有效地管理及監察大學運作 外,亦委任了一個審核委員會,確保大學的 內部監管制度、內部稽核程序及財務報告 制度行之有效。內部稽核組是校內一個獨立 的稽核機制,確保及提高大學的營運質素。 為保持內部稽核組運作的獨立性,該組直接 向審核委員會負責。

內部稽核組會定期進行稽核,以審查各項 監管程序是否充份及符合規格的程度,並且 為管理層提供以風險為基礎和客觀的保證及 建議。

該組根據審核委員會審批的計劃進行審核 工作,並就審核的範疇提出改善工作效能 和效益的建議,使大學的營運更加理想。

Human resources management

During the year, the modified Staff Appraisal System for Staff other than Heads of Department (HoDs) and Above Levels implemented in March 2012 continued to be one of the major bases for evaluating staff performance. In a similar vein, the Staff Appraisal System for Staff at Heads of Department and Above Levels was implemented in 2014 for the first round of the 2013/14 review cycle. Subsequently, the appraisal results at all levels provided key inputs for the consideration of the Merit-based Salary Adjustment under the Salary Review and Reward System, and the adjustment was paid out in May 2015. All of these helped to further the University's performance-oriented culture by rewarding staff members in accordance with their performance levels and motivating them to deliver their best.

人力資源管理

在 2012 年 3 月修訂並實施的「教職員(系主任、部門主管及以上職級除外)員工評核制度」,於年內繼續成為員工表現管理的主要平台之一。而在 2014 年,「系主任、部門主管及以上職級員工評核制度員工所發制度」工式實施,供大學管理層評核相關員工於 2013/14 周期內之工作表現。員工評核對與與關制度」下的績效薪酬調整掛鉤,而調整後薪金及追溯期的差額於 2015 年 5 月發放。這些評核安計技好內以表現為本的管理文化,以及鼓勵員工力臻至善。

Staff promotion was another key area to administer during the year. For academics, the 2011 Framework for Appointment, Promotion and Retention of Academic Staff continued to function effectively with appropriate refinements to the operational workflow. For non-academics, a Framework for Career Development and Promotion for Non-academic Staff was being developed upon due consultation and review. As expected, the Framework was implemented in September 2015 to provide non-academic staff members with career development opportunities in a more structured manner.

Several other policies and procedures were also reviewed to make enhancement in various aspects. A major example was the revised Grievances and Human Resources Related Appeals Procedures, which took effect in February 2015 to provide an open and transparent mechanism for safeguarding the rights and interests of members of the University through fair and effective handling of grievances and appeals. In particular, more detailed guidelines were introduced to facilitate the application of informal resolutions of grievances (including mediation) in a more structured and effective manner. Another example was the revised Policies on Staff Development and Duty and Liaison Functions, which also took effect in February 2015 and included a clearer classification of activities, extended coverage of staff development support for certain staff groups, and shortened post-study service requirements, among others. Also enhanced during the year were the benefits provisions for research/project personnel with not less than 24 months' continuous service at the University.

In addition to the aforementioned change in policies, in-house training programmes provided staff members with development opportunities. In 2014/15, over 2,000 staff took part in the University's wide range of in-house training programmes. New programmes during the year, which included Situational Leadership: Building Leaders, Succession Planning and Identification of Potential and Talents and Interviewing for Talent and Competencies, were introduced to help meet the University's needs.

To promote work-life balance, in September 2014 Heads of Department and above participated in a workshop – Working together for a better PolyU – to deliberate on work-life balance issues at the University. Subsequently, many department heads also produced work-life balance plans of their own, and management approved an increase of the university-wide departmental budget for team-building social functions.

Internal communication

PolyU enhances communication across the different sections of the University, by encouraging management to gather opinions and listen to feedback from staff and students. Among the channels are regular meetings between management and representatives of the Polytechnic University Staff Association and the Students' Union. Open forums are also held to facilitate discussion on University issues. In addition, President's Communication Forums are regularly organized to enhance communication with staff members.

員工晉升是年內另一項需要重點處理的範疇。在學術人員方面,「2011 學術人員的聘任、晉升和保留架構」的運作流程進行了輕微調整後,行之有效。非教學人員方面,經過諮詢及檢討,「非教學人員的事業發展及晉升框架」於2015年9月落實執行,為非教學人員更有系統地提供事業發展機會。

除上述的政策修訂外,大學亦透過校內培訓課程為員工提供發展機會。在2014/15年度,超過二千人次受惠於校內培訓課程。 為配合大學需要,亦引進多個新課程,包括「情境領導:培育先驅者」、「才能辨識與繼任規劃」及「從面試搜賢納能」等。

大學亦致力推廣工作與生活平衡。2014年9月,大學管理層、各系主任、部門主管聚首於「同建理大佳境」工作坊,討論校內工作與生活平衡的事宜。其後多位系主任、部門主管就其學系、部門內的工作與生活平衡安排提出具體方案,而管理層亦提高了供各部門、學系的團隊活動之經費。

內部溝通

理大積極促進校內各階層的溝通,讓管理層 收集及聽取員工及學生的意見。其中的渠道 包括管理層與教職員協會和學生會的 代表定期會面,並舉行公開論壇,就 大學事宜進行討論。此外,大學更定期舉行 校長與員工交流會,以加強與員工的溝通。

The Hong Kong Polytechnic University University Governance Statement* 香港理工大學 管治原則和架構 *

Principles

The Hong Kong Polytechnic University (PolyU) is committed to the principles of good governance so as to ensure that the University is "fit for its purpose" – as an institution of teaching and research, which also provides consultancy and other professional services to the community. These principles emphasize academic freedom and autonomy, performance in terms of added value to student education and academic advancement, public accountability and social responsibility, transparency, ethics and professionalism. These principles are to be upheld through the following provisos:

1. Academic freedom and autonomy

PolyU will uphold and defend academic freedom and institutional autonomy so as to ensure that its education and academic pursuits are not subject to undue intervention.

2. Performance, ethics and professionalism

The University will strive for exemplary performance with the highest possible standards of professionalism and ethics and seek to provide high quality services at a reasonable and affordable cost.

3. Transparency and public accountability

The Council and the Management of the University will conduct their activities in a transparent manner, subject to legal restrictions and the need to protect the overall interests of the University.

4. Social responsibility

The University will strive to fulfil its social responsibilities. As such, the University will, as far as is reasonable and possible, facilitate the participation of its staff and students in community development activities and public services.

原則

香港理工大學(理大)恪守良好管治原則, 務求令理大達致其作為一所教研學府,並為 社會提供顧問及專業服務的既定目標。理大 重視學術自由和自主、致力在教學及學術 發展方面作出貢獻、肩負對公眾和社會的 責任、並確保有高透明度、合乎道德標準和 專業水平的運作。本校將通過以下條目維護 此等原則:

一. 學術自由和自主

理大堅守和捍衛學術自由和制度上 的自主,以確保教育和學術追求 不會受到不適當的干預。

二. 表現、道德和專業

理大以最高的專業和道德標準為 依歸,追求卓越的表現,並以合理 和可負擔的成本提供高質素的服務。

三. 透明度和公眾問責

大學校董會和管理層執行職務時, 當在法律約制和維護理大整體利益 的前提下,保持適當的透明度。

四. 社會責任

理大致力履行其社會責任,據此, 理大會盡量在合理和可能的情況 下,為教職員和學生參與社會 建設活動及公眾服務提供方便。

Structures and processes

PolyU is committed to the mission of achieving academic excellence in a professional context. The emphasis is to provide holistic education and training so as to equip students with all-round personal development as well as professional knowledge and skills through application-oriented programmes, and to undertake research, emphasizing those of an applied nature which are relevant to industrial, commercial and community needs. Towards this end, the University recognizes the importance of establishing and implementing an effective framework of governance and management in directing and monitoring its operation and financial performance. The University has put in place the following governance structures and processes:

1. Council

The Council of PolyU is composed of members appointed in accordance with The Hong Kong Polytechnic University Ordinance. The majority of Council members, including the Council Chairman, are external to the University. As the supreme governing body of the University, Council will do its best to govern the University by ensuring effective management of the University by the University Management team led by its President who is the Chief Executive Officer of the University. All Council members are expected to provide support and advice to the University so as to ensure its well-being and sustainable development. Council members will diligently and faithfully discharge their duties in the best interests of the public, the University's students, employees and other sectors of the University community.

2. Council committees

The Council will appoint standing Committees to support the governance of the major activities of the University. These Committees will include, but not be limited to, an Executive Committee, a Campus Development Committee, a Finance Committee and an Audit Committee. These committees will discharge their responsibilities according to the terms of reference prescribed by Council. The Council may also appoint ad hoc Committees or equivalent to take on matters of particular importance.

架構及治事程序

理大致力追求以專業為基礎的卓越學術成就。我們著重提供全人教育,培育學生的全面發展,並透過以應用為本的課程,向學生傳授專業知識與技能。同時,理大亦致力進行應用研究,以配合工商界及社會的需要。為達致以上目標,大學必須建立有效的管治及管理架構,藉以指導及監察大學的運作與財政管理。理大的管治架構及治事程序如下:

一。 校董會

二. 校董會轄下委員會



3. Senate

The Council will appoint a Senate, as provided in the University's Ordinance, to act as the supreme body in the academic governance of the institution. Senate is chaired by the President, with membership drawn from different guarters of the University community.

4. Managemen

The University adopts an executive-led management system in which executives will assume full responsibility and accountability for their respective portfolios and will be given corresponding authority for the purpose of discharging their responsibilities. University executives are expected to exercise their authorities in an equitable, fair and compassionate manner, and to make decisions after adequate consultation in a collegial spirit through various formal and informal processes which cover diverse perspectives to facilitate executives in reaching balanced and informed decisions.

5. Internal control and external reporting

The University Management will ensure high-level performance and cost-effectiveness in all aspects of the University's academic and service operations through appropriate delegation of responsibility and authority as well as the deployment of check-and-balance mechanisms. It will also maintain an effective internal control system to appropriately monitor the exercise of executive authorities, safeguard the university's assets and ensure their appropriate use or disposition, maintain proper accounts and records, and comply with relevant legal and regulatory requirements as well as to ensure appropriate risk management.

The University will publish an annual report and audited financial statements after the end of each financial year. To provide an objective and independent review of the financial reporting of the University and to ensure transparency and accountability in the use of financial resources, an external auditor is appointed by the University to conduct an annual audit of its financial statements.

The Audit Committee will provide an independent review of the effectiveness of the financial reporting process, internal audit process, internal control system and risk management of the University. The Audit Committee will receive reports from both the internal and external auditors and will ensure their adequate and fair disclosure in the University's annual accounts, and the appropriate development, maintenance and implementation of control measures to address risks.

三. 教務委員會

校董會依照大學條例設立教務 委員會,作為管治大學學術事務 的最高組織。教務委員會由校長 擔任主席,成員則來自大學不同 的單位。

四. 管理層

五. 內部監管及對校外的披露

大學將於每個財政年度後出版 年報及經審核的財務報表。為 確保大學以高透明度及問責態度 運用資源,大學每年均委任校外 核數師,負責審核大學的財務 報表,並就大學的財務報告方式 提供客觀和獨立的意見。

6. Human resources management

The University is a caring employer for all its employees, offering equal opportunity to qualified and suitable persons. It will provide a favourable and facilitating environment and opportunities for employees' career advancement.

The University will endeavour to provide competitive compensation and benefits to its employees so as to attract and retain quality employees to provide high quality education services.

The Council will determine the employment policy and terms of employment of the University's employees while the President, under delegated authority of the Council, will determine the terms of employment of individual employees in accordance with established regulations and procedures.

Management will establish and implement an effective system and mechanism to handle staff grievances and appeals in a fair and reasonable manner.

六. 人力資源管理

作為關懷員工的僱主,大學為符合 資格及合適的人士提供平等機會, 並為員工提供有利環境及機會, 協助他們個人事業的提升。

大學致力提供具競爭力的薪酬及 福利,藉以吸引及保留優秀員工, 為社會提供優質的教育和服務。

校董會負責釐訂大學員工的聘用及 服務條款政策。校長獲校董會 授權,根據規例及程序決定個別 員工的聘用條款。

大學管理層須訂立及執行有效機制,公平及合理地處理員工的申訴。



^{*} The Chinese translation is based on the English version endorsed by the Council.

^{*}此譯文以校董會通過的英文原文為本。

Membership of Council (as of 30 June 2015) 校董會成員(2015 年 6 月 30 日名單)

Chairman 主席

Ms Marjorie Yang Mun-tak 楊敏德女士, GBS, JP*

Deputy Chairman 副主席

Mr Chan Tze-ching 陳子政先生, BBS, JP*

Treasurer of the University 大學司庫

Dr Lawrence Li Kwok-chang 李國祥醫生, JP**

Members 成員

(a) The President and the Deputy President 校長及常務副校長

Prof. Timothy W. Tong, President 校長唐偉章教授, *JP* Prof. Philip C.H. Chan, Deputy President and Provost 常務及學務副校長陳正豪教授, *BBS*

- (b) Three elected staff members appointed by Counci 三名經推選並由校董會委任的員工成員
 - (i) elected by and from full-time staff 由全職員工從全職員工中選出 Dr Rodney Chu Wai-chi 朱偉志博士 Dr Justin Law King-wai 羅敬偉博士
 - (ii) elected by and from the Senate 由教務委員會從教務委員會中選出 Prof. Iris Benzie
- (c) Seventeen members who are not employees or students of the University or public officers, of whom 十七名非大學的僱員或學生或公職人員的成員,其中
 - (i) nine shall be appointed by the Chief Executive 九名由行政長官委任 The Hon. Chan Kam-lam 陳鑑林議員, SBS, JP Mr Jimmy Kwok Chun-wah 郭振華先生, BBS, MH, JP Mr Lau Ping-cheung 劉炳章先生, SBS Mr Stephen Liu Ling-hong 廖凌康先生

Mr Peter Sit Kien-ping 薛建平先生 Mr Jaime Sze Wine-him 施榮忻先生, JP

Mr Augustus Tang Kin-wing 鄧健榮先生

- (ii) eight shall be appointed by the Council 八名由校董會委任
 - Prof. John Chai Yat-chiu 查逸超教授 Ms Irene Chow Man-ling 周雯玲女士 Mrs Yvonne Law Shing Mo-han 羅盛慕嫻女士, JP Prof. Raymond Leung Siu-hong 梁少康教授 Mr Alex Lui Chun-wan 雷震寰先生 Ms Amy Lung Pui-ying 龍佩英女士 (1 vacancy 一空缺)
- (d) One member from the alumni who is not an employee of the University and who shall be appointed by the Council
 - 一名由校董會委任和非大學僱員的校友成員 Ir Prof. Johnny Fan Siu-kay 樊紹基教授、工程師
- (e) Two members from the full-time students appointed by the Council
 - 兩名由校董會委任的全日制學生成員
 - (i) elected by and from undergraduate and sub-degree students 由全日制本科生及學位以下程度課程學生從全日制本科生及學位以下程度課程學生中選出 (to be elected 有待選出)
 - (ii) elected by and from postgraduate students 由全日制研究生從全日制研究生中選出 (to be elected 有待選出)

Secretary 秘書

Miss Connie Chan Yuk-wa 陳育華小姐

- * Members appointed under category (c)(i) 根據類別 (c)(i) 獲委任的成員
- ** Member appointed under category (c) (ii) 根據類別 (c) (ii) 獲委任的成員

Membership of University Court (as of 30 June 2015) 大學顧問委員會成員(2015年6月30日名單)

Chairman 主席

Prof. Roy Chung Chi-ping 鍾志平教授, BBS, JP

Honorary Chairmen 榮譽主席

Dr Tung Chee-chen 董建成博士, SBS, JP

Dr Sir Gordon Wu Ying-sheung 胡應湘爵士, GBS, KCMG, FICE

Ex-officio Members 當然委員

Chairman of Council 校董會主席

Ms Marjorie Yang Mun-tak 楊敏德女士, GBS, JP

Deputy Chairman of Council 校董會副主席

Mr Chan Tze-ching 陳子政先生, BBS, JP

Dr Lawrence Li Kwok-chang 李國祥醫生, JP

President of the University 香港理工大學校長

Prof. Timothy W. Tong 唐偉章教授, JP

Prof. Angelina Yuen 阮曾媛琪教授, BBS, JP

Vice President (Institutional Advancement & Partnership)

副校長(學院發展及合作)

香港理工大學校友會聯會會長

Ir Prof. Johnny Fan Siu-kay 樊紹基教授、工程師

Mr Dennis Ng Tsang 吳崢先生

Dr Victor Lo Chung-wing 羅仲榮博士, GBS, JP

Honorary Members 榮譽委員

Dr the Hon. Chan Sui-kau 陳瑞球博士, GBM, GBS, JP

Prof. Patrick Fung Yuk-bun 馮鈺斌教授, JP

Dr the Hon. Stanley Ho 何鴻燊博士, GBM, GBS, OBE

Ms Katherine Hung Siu-lin 洪小蓮女士

The Hon. Jeffrey Lam Kin-fung 林健鋒議員, GBS, JP

Prof. Kenneth Lam Yiu-kin 林耀堅教授

Mr Lawrence Lam Yin-ming 林彥明先生, PMSM

Dr Allen Lee Peng-fei 李鵬飛博士, JP

Dr the Hon. Lui Che-woo 呂志和博士, GBM, MBE, JP

Ir Prof. Ng Sai-ho 吳世豪教授、工程師

Dr Danny Ngai Kam-fai 倪錦輝博士, JP

Ms Winnie Ng Wing-mui 伍穎梅女士

The Hon. James Pei-chun Tien 田北俊議員, GBS, JP

Dr Henry Tseng Chee 曾琦博士

Dr Allan Wong Chi-yun 黃子欣博士, GBS, JP

Members 委員

Mr Dennis Chan Shui-lun 陳瑞麟先生

Dr Raymond Chan 陳煒文博士, JP

Dr Francis Choi Chee-ming 蔡志明博士, GBS, JP

Dr Jonathan Choi Koon-shum 蔡冠深博士, GBS, JP

Mr Oscar Chow Vee-tsung 周維正先生

Ms Pansy Ho 何超瓊女士, JP

Dr the Hon. Lam Tai-fai 林大輝議員, SBS, JP

Mr Lee Ka-shing 李家誠先生

Prof. Liu Sing-cheong 廖勝昌教授, JP

Mr Joseph Lo Kin-ching 勞建青先生

Mr Ng Wai-hung 伍偉雄先生, JP

Mrs Katherine Ngan Ng Yu-ying 顏吳餘英女士, MH, JP Prof. Kenneth Pang Tsan-wing 彭贊榮教授, SBS Mr Irons Sze Wing-wai 施榮懷先生, BBS, JP Mr Cliff Sun Kai-lit 孫啟烈先生, BBS, JP Ir Dr Peter Wong Kwok-keung 王國強博士、工程師, GBS, JP Dr Loretta Yam Yin-chun 任燕珍醫生, BBS Mr Eric C. Yim 嚴志明先生, JP

Dr Yu Kwok-chun 余國春博士, GBS, SBS, JP Dr the Hon. Jose Yu Sunsay 楊孫西博士, GBM, GBS, JP

Mrs Betty Yuen So Siu-mai 阮蘇少湄女士

Secretary 秘書

Miss Connie Chan Yuk-wa 陳育華小姐



FINANCE 財務概況

A year of solid progress

The University continued to manage its finance effectively and efficiently during the year 2014/15, with satisfactory results achieved for the period. The University and the Consolidated Entity recorded an operating surplus of \$464.3 million (2013/14:\$831.3 million) and \$441.4 million (2013/14:\$1,007.2 million) respectively in 2014/15. Net assets of both the University and the Consolidated Entity grew 9% and 7% to \$5,293.1 million (2013/14:\$4,848.0 million) and \$6,180.5 million (2013/14:\$5,757.2 million) respectively.

穩健發展的一年

在 2014/15 年度,大學繼續維持穩妥且高效的財務管理, 財政情況令人滿意。大學與綜合體分別錄得盈餘 4.643 億 港元 (2013/14 : 8.313 億 港元) 及 4.414 億 港元 (2013/14 : 10.072 億港元)。大學與綜合體的淨資產 增長率分別為 9% 及 7%,達 52.931 億港元 (2013/14 : 48.480 億港元) 及 61.805 億港元 (2013/14 : 57.572 億 港元)。

Operating results and financial position

Income for the University in 2014/15 was \$5,461.7 million (2013/14: \$5,440.8 million), representing a net increase of \$20.9 million. This gain was attributable to the increase in Government Subventions of \$75.4 million, comprising the receipt of additional supplementary grant following the civil service pay adjustment with effect from April 2014, an increase in Donations and Benefactions of \$58.3 million, and a slight increase in Tuition and Other Fees of \$20.8 million. These were largely offset by a reduction in net investment gain of \$133.0 million, owing to the volatile securities market environment towards the end of the year.

On the expenditure side, the University recorded an increase of \$385.3 million, or 8%, in total expenditure to \$4,994.8 million (2013/14: \$4,609.5 million). Staff costs and benefits, accounting for 62% of the total expenditure, increased by \$244.7 million. This was in line with the University's Strategic Plan for 2012/13 - 2017/18 on recruiting, developing, retaining and rewarding quality staff. In addition to the general adjustment with reference to civil service pay adjustment, the University carried out a merit-based salary adjustment under the Salary Review and Reward System for the second year. Furthermore, the number of full-time temporary research personnel increased by about 150 (or 14%).

The establishment of University Research Facilities ("URF") in the year brought the University one step closer towards achieving its Strategic Plan on Research, which is designed to foster a culture

營運結果及 財務狀況

大學在 2014/15 年度的總收入為 54.617 億港元 (2013/14:54.408 億港元),較去年淨增長 2,090 萬港元。收入增長原因是政府撥款增加了 7,540 萬港元,包括因應 2014 年 4 月起調整公務員薪酬而額外增撥的補助金。另外,外界捐助增加了 5,830 萬港元,而學費和其他費用亦有 2,080 萬港元的輕微調升。然而,年底證券市場環境波動,淨投資收益因而減少了 1.330 億港元,抵消了大部分的收入增長。

大學總開支較去年增長3.853億港元或8%,達49.948億港元(2013/14:46.095億港元)。教職員薪酬及福利開支佔總開支62%,增長了2.447億港元。這增幅符合大學2012/13至2017/18策略發展計劃中有關招聘、培養、挽留及獎勵優秀員工的目標。除了根據公務員薪酬調整之外,大學亦在第二年的薪酬檢討及獎勵制度下推行了績效薪酬調整。此外,全職臨時科研人員的數目亦增加了約一百五十名(或14%)。

大學策略發展計劃有關科研範疇方面,目標 是營造適當的科研文化與環境,讓研究工 作蓬勃發展,並成就卓越。年內成立的中心



and an environment in which research can thrive and excel. In addition to the resources required for supporting research development, there was an increase in expenses for enhancing the University's IT facilities, equipment as well as teaching and learning environment.

The total operating income of subsidiaries was \$1,382.3 million (2013/14: \$1.439.4 million), and total operating expenditure was \$1,406.7 million (2013/14: \$1,266.1 million), resulting in an operating deficit of \$24.4 million for the year (2013/14: surplus of \$173.3 million). In comparison with last year, this 4% decrease in total operating income was mainly due to a decrease in net investment gain of Hong Kong Community College ("HKCC") and College of Professional and Continuing Education Limited ("CPCE"), which was in line with the investment results of the University. The other subsidiaries of the University, including Hotel ICON, maintained income comparable with the previous year. Total operating expenditure, excluding donation of \$100 million from subsidiaries to the University, actually increased by 3% corresponding to the current salary and price levels. HKCC and CPCE continued to invest in staff development, campus facilities, information technology, student development activities and scholarship/financial assistance to students in need. Although 2014/15 was a challenging year for the Hong Kong hotel industry. Hotel ICON achieved stable returns as a result of adjustments in its sales and marketing strategies and implementation of various cost control measures.

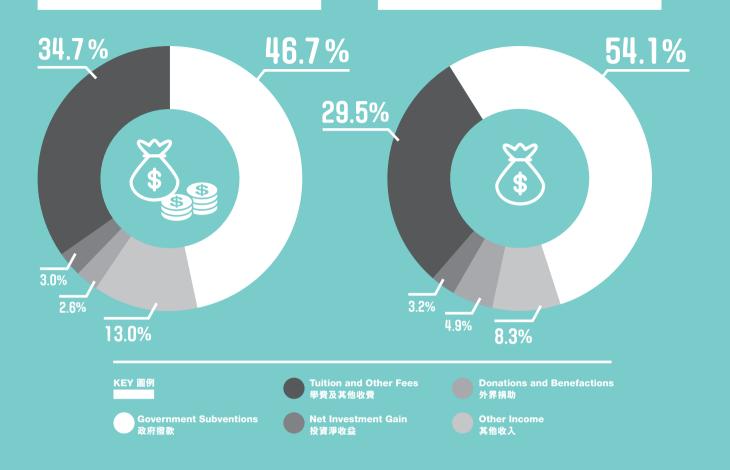
實驗室,見證大學向這目標邁進了一步。除了 為科研發展提供充足資源之外,大學亦提升 了資訊科技的配套和設備,以及改善教學 環境,營運開支因而上升。

年內附屬公司的總營運收入為 13.823 億 港元 (2013/14:14.394 億港元),總營運 開支為 14.067 億港元 (2013/14:12.661 億港元),因而錄得營運虧損2,440萬港元 (2013/14:盈餘 1.733 億港元)。相比去年 同期,總營運收入於2014/15年度下降了 4%,主要是由於香港專上學院和專業及 持續教育學院有限公司的投資淨收益減少, 這與大學的投資成績相若。其他附屬公司, 包括「維港薈」,均保持與去年相若的收入 水平。撇除附屬公司給予大學的1億港元 捐款,本年總開支實較去年同期增加3%, 與現時薪酬及價格水平對應。香港專上 學院和專業及持續教育學院繼續在職員培訓 發展、校園設施、資訊科技配套、學生發展 活動,以及獎學金或為有需要學生而設的 學生財政援助上投放大量資源。雖然 2014/15年度香港酒店業充滿挑戰,「維港薈」 仍能诱過調整銷售及市場策略和推行多項 成本控制措施而獲得穩健的收益。

Analyses of the University and Consolidated Income and Expenditure are provided in Figures 1-4. 本校及綜合體之收入及開支情況的分析載於圖一至四。

FIGURE 1 圖一 2014/15 Consolidated income analysis 2014/15 年度綜合收入分析

FIGURE 2 圖二 2014/15 University income analysis 2014/15 年度大學收入分析



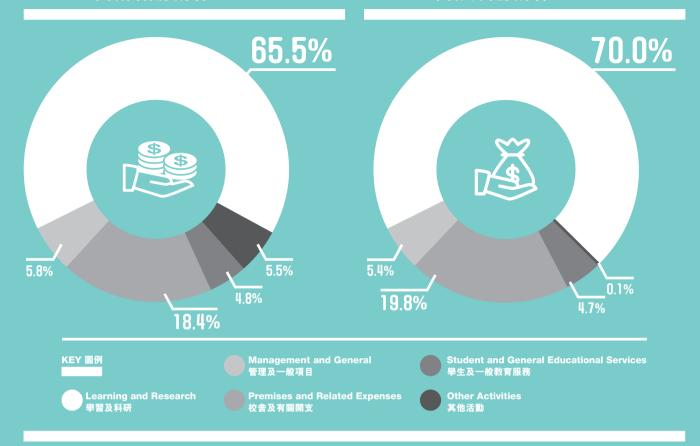
Income Analysis 收入分析

	Consolida	ted 綜合			University	y 大學		
	2015		2014		201	5	2014	1
INCOME 收入	HK\$'m	%	HK\$'m	%	HK\$'m	%	HK\$'m	%
Government Subventions 政府撥款	2,964	46.7	2,887	44.6	2,953	54.1	2,878	52.9
Tuition and Other Fees 學費及其他收費	2,207	34.7	2,185	33.8	1,614	29.5	1,593	29.3
Net Investment Gain 投資淨收益	189	3.0	379	5.9	174	3.2	307	5.6
Donations and Benefactions 外界捐助	168	2.6	202	3.1	267	4.9	208	3.8
Other Income 其他收入	825	13.0	819	12.6	454	8.3	455	8.4
TOTAL 總數	6,353	100	6,472	100	5,462	100	5,441	100



FIGURE 3 圖三 2014/15 Consolidated expenditure analysis 2014/15 年度綜合開支分析

FIGURE 4 圖四 2014/15 University expenditure analysis 2014/15 年度大學開支分析



Expenditure analysis

開文分析	Consolida	ted 綜合			University	大學		
	2015		2014		2015		2014	1
EXPENDITURE 開支	HK\$'m	%	HK\$'m	%	HK\$'m	%	HK\$'m	%
Learning and Research 學習及科研								
Instruction and Research 教學及科研	3,187		2,896		2,923		2,658	
Library 圖書館	171		158		151		137	
Central Computing Facilities 中央電腦設施	201		173		160		135	
Other Academic Services 其他教學服務	306		282		254		229	
	3,865	65.5	3,509	64.3	3,488	70.0	3,159	68.7
Management and General 管理及一般項目	340	5.8	338	6.2	267	5.4	258	5.6
Premises and Related Expenses 校舍及有關開支	1,088	18.4	1,015	18.6	986	19.8	918	20.0
Student and General Educational Services 學生及一般教育服	务 282	4.8	272	5.0	237	4.7	224	4.9
Other Activities 其他活動	326	5.5	321	5.9	6	0.1	39	0.8
TOTAL EXPENDITURE EXCLUDING FINANCE COSTS AND INCOME TAX 財務費用及所得稅以外開支	5,901	100	5,455	100	4,984	100	4,598	100

Research

In 2014/15, the total number of ongoing research projects was 2,893 (2013/14: 2,789), of which 790 (2013/14: 743) were new projects. The total number of candidates registered in research degrees was 1,621 (2013/14: 1,594).

In addition to recurrent grants by the University Grants Committee ("UGC") for supporting general research activities, the University also secured funding through other sources for specific research projects. Total grants of \$128.5 million (2013/14: \$108.5 million) were received from UGC and its Research Grants Council. Another \$362.1 million (2013/14: \$236.6 million) of research funds came from government related organizations and external private organizations. Total expenditure on research activities, projects and studentship, irrespective of funding sources, was \$615.5 million for the year (2013/14: \$487.5 million).

Following the establishment of the URF in Materials Characterization and Device Fabrication and the URF in Life Sciences, the University decided to establish a third URF in Chemical and Environmental Analysis in the year with an initial set-up cost of over \$50 million, according to the University's strategic development plan. These URFs demonstrate the University's determination to form a solid platform for world-class research by strengthening its competitiveness in these niche areas and promoting interdisciplinary collaboration.

科研

於 2014/15 年度進行中的科研項目共計 2,893 項 (2013/14: 2,789 項),其中 790 項 (2013/14: 743 項)為新項目。而註冊研究生的總人數為 1,621 名 (2013/14: 1,594 名)。

除大學教育資助委員會(「教資會」)用於資助一般科研活動的經常性撥款外,大學也循不同途徑募集資金,用於支持特定的科研項目。大學從教資會及其研究資助局獲得的撥款為1.285億港元(2013/14:1.085億港元)。另外,從政府有關機構和對外私人機構所得的研究基金共計3.621億港元(2013/14:2.366億港元)。將所有資金來源統一計算,本年度用於研究活動、研究項目與研究生助學金支出共計6.155億港元(2013/14:4.875億港元)。

繼成立材料與器件中心實驗室和生命科學中心實驗室後,大學根據策略發展計劃於本年度決定成立第三個關於化學和環境分析的中心實驗室。該項設施的初始設置成本超過5,000萬港元。這些設施的成立,可以加強專長領域的競爭力及推動跨學科合作,正好展示大學決心建設一個穩固平台,進行世界級的科研項目。

Investments

The University continued to adopt the investment strategies developed by the Investment Committee, based on the Statement of Investment Policies and Guidelines approved by Council.

Funds of the University and major subsidiaries were pooled for efficient fund management. Approximately 40% of the investible funds were invested by external investment managers. As at 30 June 2015, 74.5% of the University's investments were in fixed income securities (2013/14: 78.8%) and 25.5% were in equities (2013/14: 21.1%). The University and the Consolidated Entity recorded a net investment gain of \$174.1 million (2013/14: \$307.1 million) and \$189.0 million (2013/14: \$379.3 million) respectively for the year. The decrease was mainly attributable to the volatility in financial markets.

投資

大學繼續按校董會已審批的投資政策及指引, 採取由投資委員會制訂的投資策略。

為進行更有效的資本管理,大學及其主要附屬公司的資本是集合投資的。獨立基金經理的投資資本佔可投資資金約40%。截至2015年6月30日止,大學投資的分配如下:74.5%投放於固定收入證券(2013/14:78.8%)、25.5%投放於股票(2013/14:21.1%)。大學及綜合體本年度錄得的投資淨收益分別為1.741億港元(2013/14:3.071億港元)及1.890億港元(2013/14:3.793億港元),收益減少主要源於金融市場的波動。



Capital programmes

For the year 2014/15, the University's capital programmes amounted to a total of \$217.7 million (2013/14: \$370.1 million), comprising capital development programmes of \$79.8 million (2013/14: \$224.2 million) and various alterations, additions and improvement projects of \$137.9 million (2013/14: \$145.9 million).

Two new development projects with financing from the University's non-UGC funds were approved during the year, namely the Redevelopment of Block X and the Footbridge Linking Phase 8 Development. The Redevelopment of Block X has an estimated construction cost of \$400 million. It will provide 4,700m² of net floor area for sports facilities and amenities as well as research and workshop space for the Aviation Services Research Centre. The project is targeted for completion in June 2017 and foundation works commenced in November 2014.

For the Footbridge Linking Phase 8 Development project, the University is spending about \$130 million to construct an 88-metre long pedestrian footbridge between the Main Campus and the Phase 8 Development. The design and build contract for the works was awarded in June 2015 and the project is scheduled for completion in February 2017.

In line with the University's growth and development plans, two new projects were under planning during the year. One is the Library Extension and Revitalization project, which includes the construction of an additional 6th floor at the top of the existing library building and the revitalization of the existing library floors. The other project is the potential campus extension at Ho Man Tin which is still in the early stage of development. A Technical Feasibility Statement was submitted for this project to the UGC in July 2015.

基建項目

2014/15 年度基建項目總開支為 2.177 億港元 (2013/14:3.701 億港元),包括用於基建發展項目的 7,980 萬港元 (2013/14:2.242 億港元),以及校舍改善工程的 1.379 億港元 (2013/14:1.459 億港元)。

由大學自資的教學樓 X 座重建計劃及連接第八期校舍的行人天橋計劃已於年內獲批准。教學樓 X 座重建計劃預計建築成本為 4 億港元,將提供淨樓面面積約四千七百平方米作體育及康樂設施,以及設置航空服務研究中心的研究工作室。項目的基礎工程已於2014年11月開始,並預計於2017年6月竣工。

連接第八期校舍與主校園的行人天橋長八十八米,工程費用為 1.3 億港元。該項目的設計及建造合約已於 2015 年 6 月簽訂,並計劃於 2017 年 2 月竣工。

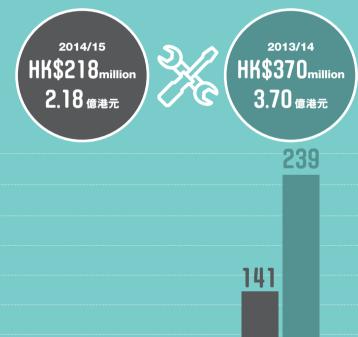
為配合大學的發展計劃,兩個新項目正在規劃階段。其一是圖書館擴建及活化計劃,包括在現有圖書館大樓頂層新建第六層,以及活化現有圖書館樓層。另一項目是何文田斜坡校園擴展計劃,此項目仍處於發展初期,其技術可行性報告已於2015年7月提交教資會。

An analysis of the University's capital development programmes is provided in Figure 5. 大學基建項目情況的分析載於圖五。

Capital development programmes analysis 基建項目分析

	2015		2014	
	HK\$'m	%	HK\$'m	%
Phase 8 Development 第八期校舍發展計劃	37	16.9	125	33.8
Redevelopment of Block X 教學樓 X 座重建計劃	35	16.1	6	1.6
Footbridge Linking Phase 8 Development 連接第八期校舍之行人天橋	5	2.3	_	0.0
Other Capital Projects & AA&I Works 其他基建項目及改建、加建、維修及改善工程	141	64.7	239	64.6
	218	100	370	100





200
150
125
100
37
35
6
50
Phase 8 Development 第八期校舍發展計劃 Redevelopment of Block X 教學樓 X 座重違計劃 Phase 8 Development 連接第八期校含 入A&I Works 其他基建項目及改建、加建、維修及改善工程

Donations

The University received donations totaling \$228.4 million during the year (2013/14: \$280.1 million), including \$100 million from subsidiaries. Other sources of donation funding were alumni, friends and organizations for supporting the development, research activities, scholarships and various departmental functions of the University. Donations and Benefactions of \$266.5 million (2013/14: \$208.3 million) were recorded as income in the Income and Expenditure Statement for the year. The University has participated in the Government's Sixth Matching Grant Scheme which ended in July 2014 and received matching grants of \$21.5 million (2013/14: \$39.8 million).

The Hong Kong Polytechnic University Foundation was established on 1 July 2014. Its free balance, after setting aside those donations with designated purposes into specific fund accounts, was \$619.4 million as at 30 June 2015. This funding can be used by the University to support its future development.

The University is highly appreciative of all our donors for their continuous financial support. Their generosity affirms the public's recognition of the University's academic and research achievements, activities and administration capabilities.

An analysis of the University's donations is provided in Figure 6. 大學捐助情況的分析載於圖六。

捐贈

本年度大學合共籌募得 2.284 億港元捐款 (2013/14:2.801 億港元),包括來自附屬公司的 1 億港元捐款。其他捐款來自校友、社會各界友好及團體,分別以支持大學發展、科研活動、獎學金及各個院系的活動。入賬方面,2.665 億港元 (2013/14:2.083 億港元)的外界捐助於本年度收支賬項中記錄為收入。大學參與了第六輪配對補助金計劃,該計劃於 2014 年 7 月結束,本校獲發的配對補助金為 2,150 萬港元 (2013/14:3,980 萬港元)。

香港理工大學基金已於 2014 年 7 月 1 日成立。撇除已轉至各特定基金賬戶作特定用途的捐款,該基金於 2015 年 6 月 30 日的結餘為 6.194 億港元,可用於支持大學未來發展。

大學衷心感謝所有捐贈者一直以來的支持。 捐贈者的慷慨捐助證明了大學的學術和科研 成就、活動及行政管理能力廣受社會的認同。

Donation analysis 外界捐助分析

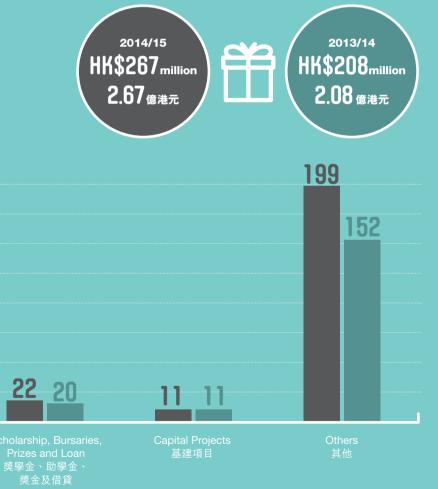
	2015		2014	
	HK\$'m	%	HK\$'m	%
Donations for Research Activities 科研活動捐助	35	13.1	25	12.0
Scholarship, Bursaries, Prizes and Loan 獎學金、助學金、獎金及借貸	22	8.2	20	9.6
Capital Projects 基建項目	11	4.1	11	5.3
Capital Projects 基建項目 Others 其他	199	74.6	152	73.1
	267	100	208	100

FIGURE 6 圖六 Donation analysis 外界捐助分析

35

25

Research Activities 科研活動捐助



Financial outlook

2015/16 is the roll-over year in the current 2012-15 triennium. The University undertook the Academic Development Planning ("ADP") exercise for the 2016-19 triennium, which received positive comments from the UGC.

The key strategies of the ADP will drive the development of the University in the coming years. The focus of the ADP is on the recruitment of quality staff, increasing investment in research infrastructure, refining the undergraduate curriculum, scaling up knowledge transfer, enhancing internationalization, engaging the nation, and restructuring our portfolio with regard to the provision of academic programmes. The University will continue to divert sufficient resources to new initiatives in line with the ADP directives so that it can fulfil its aspiration to excel in professional education, research and partnership.

The University has achieved encouraging financial results over the past years and will remain pragmatic and prudent in its financial planning in the years to come. We would like to convey our sincere thanks to all staff, students, alumni and donors, whose unfailing support will enable us to take the University to new heights of excellence.

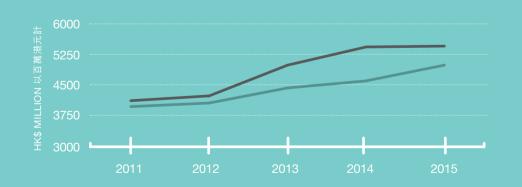
財政展望

2015/16 是目前 2012-2015 教資會三年撥款預算週期的延展年。大學擬定的 2016-19 三年期學術發展建議書亦得到教資會正面的回應。

學術發展建議中勾劃的主要策略將推動大學未來數年的發展,建議重點為招聘優秀員工、增加科研基礎設施的投資、優化本科課程、擴大知識轉移活動的規模、加強國際化、拓展內地聯繫,以及調整大學所提供的學術課程種類。大學將繼續根據學術發展建議書為新項目提供充足的資源,以實現在專業教育、科研與夥伴合作上創造佳績的抱負。

大學在過去幾年的財政狀況令人鼓舞,未來 將繼續以務實和審慎的態度進行財政規劃。 我們衷心感謝所有教職員、學生、校友及捐 贈者的鼎力支持,讓大學的發展可以更上 層樓。

FIGURE 7 圖七
University income and expenditure analysis for 2011-2015
2011-2015 年度大學收支賬項分析



KEY 圖例









Total Expenditure 總開支

University income and expenditure analysis for 2011-2015 2011-2015 年度大學收支賬項分析

TOTAL EXPENDITURE 總開支

	201		201	2	201	3	201	4	20	15
INCOME 收入	HK\$'m	%	HK\$'m	%	HK\$'m	%	HK\$'m	%	HK\$'m	9
Government Subventions 政府撥款	2,256	54.7	2,339	55.1	2,787	55.8	2,878	52.9	2,953	54.
Tuition and Other Fees 學費及其他收費	1,264	30.6	1,362	32.0	1,480	29.6	1,593	29.3	1,614	29.
Net Investment Gain 投資淨收益	138	3.3	32	0.8	132	2.6	307	5.6	174	3.2
Donations and Benefactions 外界捐助	131	3.2	136	3.2	220	4.4	208	3.8	267	4.9
Other Income 其他收入	339	8.2	377	8.9	378	7.6	455	8.4	454	8.3
TOTAL INCOME 總收入	4,128	100	4,246	100	4,997	100	5,441	100	5,462	100
Learning and Research 學習及科研 Instruction and Research 教學及科研 Library 圖書館 Central Computing Facilities 中央電腦設施	2,476 133 112 196	62.2 3.3 2.8 4.9	2,465 135 118 201	60.6 3.3 2.9 4.9	2,565 135 137	57.8 3.1 3.1 5.0	2,658 137 135 229	57.7 3.0 2.9 5.0	2,923 151 160 254	3.
Learning and Research 學習及科研 Instruction and Research 教學及科研 Library 圖書館 Central Computing Facilities 中央電腦設施 Other Academic Services 其他教學服務	133	3.3	135	3.3	135	3.1	137	3.0	151	3.
Learning and Research 學習及科研 Instruction and Research 教學及科研 Library 圖書館 Central Computing Facilities 中央電腦設施 Other Academic Services 其他教學服務 Institutional Support 教學支援	133 112	3.3 2.8	135 118	3.3 2.9	135 137	3.1 3.1	137 135	3.0 2.9	151 160	3.0 3.2 5.
EXPENDITURE 開支 Learning and Research 學習及科研 Instruction and Research 教學及科研 Library 圖書館 Central Computing Facilities 中央電腦設施 Other Academic Services 其他教學服務 Institutional Support 教學支援 Management and General 管理及一般項目 Premises and Related Expenses 校舍及有關開支	133 112 196	3.3 2.8 4.9	135 118 201	3.3 2.9 4.9	135 137 222	3.1 3.1 5.0	137 135 229	3.0 2.9 5.0	151 160 254	3.0 3.2 5.
Learning and Research 學習及科研 Instruction and Research 教學及科研 Library 圖書館 Central Computing Facilities 中央電腦設施 Other Academic Services 其他教學服務 Institutional Support 教學支援 Management and General 管理及一般項目	133 112 196	3.3 2.8 4.9	135 118 201	3.3 2.9 4.9	135 137 222 247	3.1 3.1 5.0	137 135 229 258	3.0 2.9 5.0	151 160 254 267	58.5 3.0 3.2 5.1 5.4 19.8 4.7
Learning and Research 學習及科研 Instruction and Research 教學及科研 Library 圖書館 Central Computing Facilities 中央電腦設施 Other Academic Services 其他教學服務 Institutional Support 教學支援 Management and General 管理及一般項目 Premises and Related Expenses 校舍及有關開支	133 112 196 213 637	3.3 2.8 4.9 5.4 16.0	135 118 201 221 720	3.3 2.9 4.9 5.4 17.7	135 137 222 247 906	3.1 3.1 5.0 5.6 20.4	137 135 229 258 918	3.0 2.9 5.0 5.6 19.9	151 160 254 267 986	3. 3. 5. 5.

3,982 100

4,070 100

4,438 100

4,610 100

4,995 100

Income and expenditure statement (For the year ended 30 June 2015) 收支賬項(截至 2015年6月30日止年度)

	Consolida	University 大學		
In thousands of Hong Kong dollars 以千港元計	2015	2014	2015	2014
INCOME 收入				
Government Subventions 政府撥款	2,964,323	2,887,162	2,953,127	2,877,695
Tuition and Other Fees 學費及其他收費	2,207,283	2,184,489	1,613,971	1,593,147
Net Investment Gain 投資淨收益	189,000	379,283	174,130	307,131
Donations and Benefactions 外界捐助	167,367	201,494	266,534	208,268
Other Income 其他收入	825,024	819,119	453,900	454,575
	6,352,997	6,471,547	5,461,662	5,440,816
EXPENDITURE 開支				
Learning and Research 學習及科研				
Instruction and Research 教學及科研	3,187,135	2,895,684	2,922,741	2,657,918
Library 圖書館	171,004	157,473	151,110	136,826
Central Computing Facilities 中央電腦設施	201,431	173,467	159,516	135,060
Other Academic Services 其他教學服務	305,801	282,017	254,416	229,040
Institutional Support 教學支援				
Management and General 管理及一般項目	340,154	338,078	267,420	258,213
Premises and Related Expenses 校舍及有關開支	1,088,335	1,015,094	985,894	917,939
Student and General Educational Services 學生及一般教育服務	281,631	272,322	236,885	223,983
Other Activities 其他活動	325,365	320,410	6,407	39,434
	5,900,856	5,454,545	4,984,389	4,598,413
Finance Costs 財務費用	10,412	11,120	10,412	11,120
	5,911,268	5,465,665	4,994,801	4,609,533
SURPLUS FROM OPERATIONS 營運盈餘	441,729	1,005,882	466,861	831,283
Share of Loss of an Associate 應佔聯營公司虧損	(68)	(172)	_	
Share of Profits of Joint Ventures 應佔合營公司溢利	2,314	1,486	_	_
SURPLUS BEFORE TAXATION 除稅前盈餘	443,975	1,007,196	466,861	831,283
Income Tax 所得税	(2,595)	(14)	(2,595)	(14)
SURPLUS FOR THE YEAR 本年度盈餘	441,380	1,007,182	464,266	831,269

The above Income and Expenditure Statement is extracted from the audited financial statements for the year ended 30 June 2015. 以上收支賬項摘錄自 2015 年 6 月 30 日止年度經核數師審核之財務報表。

Statement of financial position (as at 30 June 2015) 財務狀況表 (2015 年 6 月 30 日)

	Consolid	ated 綜合	University 大學		
In thousands of Hong Kong dollars 以千港元計	2015	2014	2015	2014	
NON-CURRENT ASSETS 非流動資產					
Fixed Assets 固定資產	5,372,706	5,485,466	5,168,071	5,260,163	
Investments in Subsidiaries 附屬公司之投資	_	_	145,832	145,025	
Interests in Associates 聯營公司權益	2,308	2,376	_	_	
Interests in Joint Ventures 合營公司權益	41,956	39,342	_	_	
Non-current Financial Assets 非流動金融資產	751,111	632,234	751,111	632,234	
	6,168,081	6,159,418	6,065,014	6,037,422	
CURRENT ASSETS 流動資產					
Current Financial Assets 流動金融資產	3,137,748	2,613,571	3,137,748	2,613,571	
Loan to a Subsidiary 附屬公司貸款	_	_	<u> </u>	66,040	
Staff Loans 教職員貸款	29,290	34,990	29,290	34,990	
Inventories 存貨	4,043	4,316	<u> </u>	_	
Accounts and Other Receivable 應收賬項	401,163	404,160	383,126	373,591	
Cash and Deposits with Banks 現金及銀行存款	3,660,385	3,595,636	3,515,184	3,460,660	
	7,232,629	6,652,673	7,065,348	6,548,852	
CURRENT LIABILITIES 流動負債					
Bank Loan for On-lending to Staff 轉貸予教職員之銀行貸款	29,290	34,990	29,290	34,990	
Loans and Borrowings 貸款	81,941	72,491	81,941	72,49 ⁻	
Accounts and Other Payable 應付賬款	782,180	653,471	1,548,562	1,471,47	
Provision for Employee Benefits 員工福利撥備	334,693	338,233	261,388	272,865	
Deferred Income 遞延收入	484,610	422,182	471,893	413,440	
Receipts in Advance 預收款項	245,714	236,278	184,531	177,862	
Tax Payable 應付税項	1,134	2,916	1,134	2,916	
	1,959,562	1,760,561	2,578,739	2,446,035	
NET CURRENT ASSETS 淨流動資產	5,273,067	4,892,112	4,486,609	4,102,817	
TOTAL ASSETS LESS CURRENT LIABILITIES 總資產扣減流動負債	11,441,148	11,051,530	10,551,623	10,140,239	
NON-CURRENT LIABILITIES 非流動負債					
Loans and Borrowings 貸款	1,035,384	1,117,325	1,035,384	1,117,325	
Provision for Employee Benefits 員工福利撥備	390,715	388,086	388,610	386,075	
Deferred Income 遞延收入	132,336	91,941	132,336	91,941	
	1,558,435	1,597,352	1,556,330	1,595,34	
DEFERRED CAPITAL FUNDS 遞延資本基金	3,702,223	3,696,934	3,702,223	3,696,934	
NET ASSETS 淨資產	6,180,490	5,757,244	5,293,070	4,847,964	
REPRESENTING 相當於				0.000	
General Funds 一般基金	4,877,751	4,572,857	3,990,331	3,663,577	
Restricted Funds 特定基金	1,302,739	1,184,387	1,302,739	1,184,387	
TOTAL 總額	6,180,490	5,757,244	5,293,070	4,847,964	

Ms Marjorie Yang Mun-tak 楊敏德女士 , *GBS*, *JP* Chairman of Council 校董會主席

Dr Lawrence Li Kwok-chang 李國祥醫生, *JP* Treasurer 司庫

Professor Timothy Tong Wai-cheung 唐偉章教授, JP President 校長

Miss April Wong Soo-kam 黃素琴小姐 Director of Finance 財務總監

The above Statement of Financial Position is extracted from the audited financial statements for the year ended 30 June 2015. 以上財務狀況表摘錄自 2015 年 6 月 30 日止年度經核數師審核之財務報表。

APPENDICES 附錄

I. SENIOR STAFF APPOINTMENTS AND MOVEMENTS 高級職員人事變動

APPOINTMENTS 委任

Prof. John W.Z. Shi,

as Head, Department of Land Surveying and Geo-Informatics on 1 July 2014

史文中教授:

2014年7月1日出任土地 測量及地理資訊學系系主任

Ir Prof. Y.L. Xu,

as Dean, Faculty of Construction and Environment on 1 July 2014 徐幼麟教授、工程師:

2014年7月1日出任建設及 環境學院院長

Prof. Andy C.L. Yeung,

as Head, Department of Logistics and Maritime Studies on 1 July 2014

楊昌良教授:

2014年7月1日出任物流及 航運學系系主任

Prof. Helen Chan,

as Director, University Research Facility in Materials Characterization Ir Daniel Lai, and Device Fabrication on 1 December 2014

陳王麗華教授:

2014年12月1日出任材料與 器件中心實驗室主任

Prof. Tam Hwa-yaw,

as Head, Department of Electrical Engineering on 1 December 2014 譚華耀教授:

2014年12月1日出任電機

Prof. K.Y. Wong,

as Director, University Research Facility in Life Sciences on 1 January 2015

黃國賢教授:

2015年1月1日出任生命 科學中心實驗室主任

Prof. J.C. Lin,

as Chair Professor of Finance on 2 January 2015

林基財教授:

2015年1月2日出任講座教授

Prof. Albert P.C. Chan.

as Head, Department of Building and Real Estate on 1 March 2015

陳炳泉教授:

2015年3月1日出任建築及 房地產學系系主任

Ir Prof. Ko Jan-ming.

as Interim Vice President (Campus Development and Facilities) on 1 March 2015

高贊明教授、工程師:

2015年3月1日出任暫任 副校長(校園發展及設施管理)

as Interim Vice President (Administration) on 19 March 2015

賴錫璋工程師:

2015年3月19日出任暫任 副校長(行政)

Prof. S.L. Ho,

as Associate Vice President (Academic Support) and Academic Secretary on 30 March 2015

何兆鎏教授:

2015年3月30日出任協理 副校長(學術支援)及教務長

PROMOTION 擢升

Miss April Wong,

as Director of Finance on 1 July 2014

黃素琴小姐:

2014年7月1日出任財務總監

Dr Alison E. Lloyd,

as Director of Institutional Research and Planning on 1 April 2015

Dr Alison E. Lloyd:

2015年4月1日出任大學策劃 總監

DEPARTURES 離職

Mr Louis Heung,

Director of Finance retired on 7 July 2014

財務總監香世傑先生:

2014年7月7日榮休

Mr Frankie So.

Head, Management Information and Support Office retired on 3 September 2014

管理信息及支援處處長

蘇鴻輝先生:

2014年9月3日榮休

Mrs Dorinda Fung,

Director of Student Affairs, left the University on 6 February

學生事務總監陳敏慈女士:

2015年2月6日離職

Mr Nicholas W. Yang,

Executive Vice President left the University on 28 February

行政副校長楊偉雄先生:

2015年2月28日離職

Mrs Nancy Tong Liu Yuk-ling,

Academic Secretary retired on 29 March 2015

教務長劉毓芩女士:

2015年3月29日榮休

Prof. Walter W. Yuen,

Strategic Task Specialist left the University on 30 June 2015

策略事務專員阮偉華教授:

2015年6月30日離職

II. SCHOLARSHIPS, PRIZES AND **FINANCIAL ASSISTANCE FOR STUDENTS** 獎助學金及貸款

		-	2013/14	2014/15
	Scholarships and Prizes 獎學金	Awards 名額	3,506	3,704
		Total amount 總額	\$77,617,198	\$79,416,951
3	Government's Tertiary Student Finance Scheme -	Applications 申請個案	5,573	5,373
	Publicly-funded Programmes 政府資助專上課程學生資助計劃	Successful applications 成功申請個案	5,057	4,800
		Total amount of grants paid 發放助學金總額	\$188,944,475	\$183,367,590
		Total amount of loans paid 發放貸款總額	\$48,985,120	\$44,936,805
	Government ^I s Non-means- tested Loan Scheme (Full-time	Applications 申請個案	1,654	2,115
	Government-funded Students) 政府免入息審查貸款計劃	Successful applications receiving loans 獲取貸款個案	1,501	1,703
	(全日制政府資助同學)	Total amount of loans paid 發放貸款總額	\$57,714,105	\$66,273,563
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	PolyU Student Financial Assistance Scheme	Applications 申請個案	930	897
	理大學生資助計劃	Successful applications 成功申請個案	581	632
		Total amount of bursaries paid 發放助學金總額	\$4,774,705	\$5,264,010
		Total amount of loans paid		

III. LIBRARY STATISTICS

圖書館統計數字

Library Collections 收藏項目

			2013/14	2014/15
	Books 書籍			
		Print books (titles) 紙本書籍 (種類)	863,184	881,651
		e-Books 電子書籍	532,477	2,297,396
	Serials 期刊			
		Current print serials (titles) 印刷期刊 (種類)	2,169	2,023
		e-Journals 電子期刊	50,332	54,821
	E-Databases 電子數據庫		413	445
[a]	Audio-Visual Materials 視聽資料			
		Audio materials 錄音資料	94,115	94,392
		Video materials 錄像資料	84,246	89,354
		Graphic materials 圖形資料	318,218	318,270
		Cartographic materials 地圖及圖表資料	1,515	1,515
		Others 其他	1,129	1,167
(a)	Microforms 縮微複製資料		400,438	400,438
	Total Library Holdings (Items) 全館	收藏資料總數(項目)	2,778,868	4,527,947

Facilities & Equipment 設施與設備

RANGS-KR III	2013/14	2014/15
Study spaces 座位	3,893	3,893
Research Carrels 研讀室	138	138
Group Rooms 小組研討室	15	18
Public Computers 公用電腦	414	439

MOVING FORWARD 進步向前

Following a series of consultation and engagement exercises with internal and external stakeholders, in 2014/15, PolyU adopted *Opening Minds • Shaping the Future* as our new brand promise for education and research. Through our innovative higher learning model and relentless pursuit of knowledge creation, the University is committed to creating positive change in the world.

During the year, PolyU made great strides towards realizing the plans set out in our Strategic Plan 2012/13-2017/18. In education, we continued to develop our Service-Learning (SL) initiatives so that students can develop their potential and leadership skills. The wide variety of SL subjects were well received by students. Different blended and online teaching programmes were also in place to enhance the effectiveness of learning and teaching.

PolyU's excellence in research and innovation flourished during the year. Through our interdisciplinary expertise, we ventured beyond boundaries, from finding cures to improving the environment and boosting industry efficiency.

As the government places more emphasis on the development of innovation and technology, PolyU is keen to be and will be a key player in the process, supporting the government's drive to further enhancing the competitiveness of Hong Kong while benefiting mankind.

The University is committed to transforming today's potential into tomorrow's accomplishments. We hold a strong belief that success comes from embracing new mindsets as we make headway into the future with our new brand promise.

2014/15 年度,理大舉行了多次諮詢及討論會議,收集校內及校外持分者的意見後,決定採用「**啟迪思維・成就未來**」作為其全新的教研承諾。大學透過嶄新的教育模式和努力不懈創造知識,致力為世界帶來正向改變。

年內,理大繼續履行 2012/13 至 2017/18 策略發展計劃所制定 的項目,並取得很大進展。 在教育方面,我們持續發展 服務學習科目,讓學生發揮 潛能,並培育他們的領導才能, 多元化的服務學習科目亦深到 學生歡迎。此外,各項混合式和 網上教學計劃亦得以落實推行, 提升了學與教的成效。 理大的創新科研亦於年內蓬勃發展,成就卓越。我們積極推動跨學科合作,拓展研究領域,既研發治病藥物,亦改善環境和提升業界效率。

隨著政府越趨重視發展創新科技,理大亦積極參與其中,並將在過程中擔當重要角色,支持政府帶動香港進一步提升其競爭力,且為造福世界而作出貢獻。

大學矢志開發今日潛能,以期 共享明天碩果。我們深信,只要 懷抱創新思維,便可達致成功。 讓我們時刻秉持新的教研承諾, 昂首闊步,邁向未來。

THE HONG KONG POLYTECHNIC UNIVERSITY ANNUAL REPORT 2014/15 香港理工大學年報

We would like to express our gratitude to all staff members, students, alumni and friends of PolyU who have contributed to the preparation of this report. 特此鳴謝所有協助籌備本年報的教職員,學生、校友及理大友好。

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ABOUT POLYU 關於理大

The Hong Kong Polytechnic University (PolyU) is the largest government-funded tertiary institution in Hong Kong with a total student population of more than 31,000. Through our faculties and schools — the Faculty of Applied Science and Textiles, Faculty of Business, Faculty of Construction and Environment, Faculty of Engineering, Faculty of Health and Social Sciences, Faculty of Humanities, School of Design, and School of Hotel and Tourism Management — the University connects education and research to the real world as manifested in our motto: "To learn and to apply, for the benefit of mankind". Through an innovative education model combining professional knowledge with service-learning and real-world experience, PolyU has nurtured many bright minds to serve and contribute to the community. We also challenge boundaries and uncover knowledge, bringing many practical yet world-changing ideas to life for the benefit of mankind. These efforts reflect our commitment as described in the University's new brand promise — Opening Minds · Shaping the Future.

香港理工大學(理大)是香港最大的政府資助高等院校,學生人數超過三萬一千名。透過不同學院一應用科學及紡織學院、工商管理學院、建設及環境學院、工程學院、醫療及社會科學院、建設工作。與方案的學院,設計學院和酒店及旅遊業管理學院,理大致力將教育及科研與現實社會聯繫起來,發揚校訓「開物成務」勵學利民」的精神。理大的嶄新教育模式,將專業知識、服務學習和現實社會體驗結合起來。我們致力培育貢獻社會的傑出人意學結合起來。我們致力培育貢獻社會的傑出人意學等於承擔重任,失志「**啟迪思維,成就未來**」。

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