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精彩典範 激發靈感無限 Inspiring by Example





醫療及社會科學院 Faculty of Health and Social Sciences 2011/12理大傑出 服務學習項目頒獎禮 PolyU Outstanding Service-Learning Project Awards 2011/12

大一向積極鼓勵學生參與「社區服務實踐計劃」, 希望他們透過不同的社會服務工作,擴閣人生經驗 和視野,從而增加自我認識和社會責任感,以及深化其實 務工作技巧。為表揚不同學系的老師和學生積極參與社區 服務,理大每年舉辦「服務學習項目頒獎禮」,透過獎項 及嘉許,推動師生繼續關懷社區,並讓公眾人士認識理大 學生對社會作出的貢獻。

醫療及社會科學院於2011/12年度的頒獎禮中,榮獲多個獎 項。眼科視光學院憑「2012新彊驗眼之旅」及「理大眼科 視光學院與中山眼科中心合作眼睛篩查服務」獲優異獎 外,學院名為「一視同仁」的計劃連獲兩獎,包括在課程 項目(Course-required Projects)中勇奪銀獎,以及新增的 「恒生銀行最佳可持續服務學習項目」大獎。康復療治科 學系在自發項目(Self-initiated Projects)中亦以「手牽手: 為國內有康復需要的人民服務」取得銅獎;而應用社會科 學系則以「快樂天地-共融小組」在自發項目中獲優異 獎。

S ervice learning combines formal academic study and assessments with community service to enhance students' learning and sense of social responsibility. Students and staff advisors from FHSS's constituent departments and schools did very well in the PolyU Outstanding Service-Learning Project Awards 2011/12.

The "Opening Your Eyes, Beautify Your Mind" project by the School of Optometry (SO) landed silver in the course-required project category and was a joint first-prize winner of the Hang Seng Bank Best Sustainable Service Project Awards in the course-required project category. SO also won certificates of excellence in the self-initiated and course-required categories, respectively, for its "2012 Vision Screening for Students, Turpan, Xinjiang" and "Joint Screening of School of Optometry and Zhongshan Ophthalmic Center" projects. The Department of Rehabilitation Sciences (RS) grabbed bronze in the self-initiated project category for its "Hand in Hand: Serving People with Rehabilitation Needs in China" project. And the Department of Applied Social Sciences was awarded a certificate of excellence in the course-required category for its "Fun Fun Fun There" project.

### 眼科視光學院— 「一視同仁」 "Opening Your Eyes, Beautify Your Mind"

- 理大傑出服務學習項目(課程項目)銀獎
- 恒生銀行最佳可持續服務學習項目 (課程項目)大獎
- Silver Award, PolyU Outstanding Service-Learning Project Awards (course-required projects)





 Joint First-Prize Winner, Hang Seng Bank Best Sustainable Service Project Awards (course-required projects)

香港暫時未有為幼童檢查眼睛的完善政策,而因為幼童年紀太小的關係,往往未能夠判斷自己的視力是否 出現問題。其實許多眼睛毛病如果能夠及早發現,情况都能夠得以改善,但若將問題置諸不理,嚴重的話 有機會會永久喪失視力。有見及此,理大眼科視光學院助理教授杜志偉博士及紀家樹博士,帶領15位眼科 視光學同學,發起名為「一視同仁」的計劃,為157位深水埗街坊福利會小學,來自低收入家庭的學童提 供免費驗眼服務。當中發現44位學童視力有問題,並轉介到理大眼科視光學診所作進一步的眼睛檢查,而 當中有17位學童更獲學院免費驗配眼鏡。

杜博士説:「大部分的眼睛問題在年幼時並不明顯,要經詳細檢查才能發現。小童最遲應在入讀幼兒班或 小一前,作第一次全面眼睛健康檢查,之後最少每兩年要全面檢查眼睛一次,以確保眼睛健康,不妨礙他 們學習。」

紀博士補充說:「社區服務對學生來說,是一個最好的學習方式,因為他們能夠將課堂及書本上學到的知 識和理論,切實地應用到受助人士的身上。同學們的思維也會因應社會的需要而作出調整,學習包容社會 多元化,以及啟發其批判思考、增強社會責任感以及其領導能力。此外,這計劃也促進他們的成長,和提 升人際關係和溝通技巧,為未來作出更好準備。」

Unlike in some Western countries, Hong Kong does not systematically screen its schoolchildren for eye and vision problems. Moreover, it has been found that young children in Hong Kong might be unable to judge whether they can see clearly or not without an eye examination. It has also been reported that many low-income households with children who already wear spectacles cannot afford to update their prescriptions.

Many eye and vision problems in children can be treated if caught early enough and that if left untreated, a few disorders can cause permanent visual loss. To help address these issues, SO Assistant Professors Dr Do Chi-wai and Dr Kee Chea-su initiated the "Opening Your Eyes, Beautify Your Mind" project to provide vision screening for primary schoolchildren from low-income families and, for eligible children found with uncorrected refractive errors like shortsightedness, provide them with free prescription spectacles to correct their vision. Children found with other eye or visual problems were referred to PolyU's Optometry Clinic for further investigation. Shamshuipo Kaifong Welfare Association Primary School partnered up for the project, and 15 PolyU optometry students planned, organised and performed history taking and vision assessment tests on 157 of the schoolchildren and educated them about basic eye care in February 2012. At the end, 17 children were provided with free spectacles while a further 44 were referred to the Optometry Clinic.

"Many eye diseases in early childhood aren't apparent without appropriate testing," said Dr Do. "Children should be examined by an eye care professional just before they enter kindergarten or Primary 1 and every two years thereafter. Regular comprehensive eye exams are important to ensure their eyes and vision are good so their learning and playing aren't hindered," he advised.

"Engaging with the community is the best way for students to learn because they can better connect their experiences with ideas and methods they've learned in the classroom," said Dr Kee. "It also challenges them to learn the notions of community, democracy, diversity, social responsibility, leadership, and critical thinking. It offers them an opportunity for personal growth and to develop trust and their interpersonal and communication skills beyond campus life," he added.

### 手牽手: 為國內有康復 需要的人民服務 "Hand in Hand: Serving People with Rehabilitation Needs in China"

#### • 理大傑出服務學習項目(自發項目)銅獎

 Bronze Award, PolyU Outstanding Service-Learning Project Awards (self-initiated projects)

健康並不是必然的,在中國這個擁有世界上最多人口的國家,當中有不少是孤兒及殘障人士,需要社會特

別照顧。其中較普遍的患有腦癱、唐氏綜合症或白化病,而這些孤兒需要長期留在兒童福利院或復康中心 接受康復訓練及特殊教育等治療,但是這些院舍往往缺乏資源及合資格的治療師,更可惜的是連最基本的 社會支持及關注也很少。

有見及此,康復治療科學系副教授司徒佩玉博士近年積極帶領其學生到中國內地服務,希望藉此幫助提高 內地康復服務的質素之餘,亦可幫助國家培育人才。在2012年,79位物理治療及職業治療的學生分別到訪 了廣州、上海、西寧、贛州、青島、烏魯木齊、南京、杭州及成都,為當地的孤兒院或兒童福利院提供服 務,提升社會關注及改善他們的生活質素。

司徒博士說:「當殘障兒童被診斷出患有腦癱時,應及早診治,因為他們像剛出生的健康嬰兒一樣,需要 外界不斷刺激他們的大腦神經,才能夠有效幫助他們改善姿勢和肢體功能,促進他們的正常運動和身心發 展。而我一直致力教育內地大眾多一些這方面的知識,希望不要再戴有色眼鏡對待他們。」

司徒博士亦感到現今的學系學生很幸福,因為大學不但採用最現代化的康復設備來教學,課程亦與時並進,涵蓋中西方最新的康復理論及研究。此外,參與計劃的學生在內地服務時,也可以學習及觀察到內地 的治療師如何在有限資源的環境裏給予病人最有效的治療,更可了解多些中國傳統療法,希望日後可以學 以致用。同時,同學們也可跟治療師分享在課程中學習到最新的西方療法及知識。」司徒博士補充說: 「雖然為了這項計劃著實付出不少努力及私人時間,但得到大眾對我們的認同,我認為是值得的。」

As the most populous country in the world, China probably has the largest number of people with disabilities too. Many of them are orphans with congenital conditions, such as cerebral palsy, Down's syndrome, and albinism. Many orphans stay at children's homes or rehabilitation centres, which provide rehabilitation and special education to them but often lack adequate funding, skilled manpower, and even understanding from their communities.

For two years, RS Associate Professor Dr Grace Szeto worked diligently to devise the "Hand in Hand: Serving People with Rehabilitation Needs in China" project to help improve the quality and quantity of rehabilitation services on the mainland.

From February 2012, 79 RS physiotherapy and occupational therapy students organised the project and in August worked in children's homes or hospitals in Guangzhou, Shanghai, Xining, Ganzhou, Qingdao, Ürümqi, Nanjing, Hangzhou or Chengdu with such children. "Children with cerebral palsy need encouragement and stimulation right from birth, like normal children. Early intervention can minimise their contractions and bad posture. Childhood is the key time to implement treatments, which is why I'm trying to educate health professionals and the public in China about it," explained Dr Szeto.

"Having always learned the latest Western rehabilitation theories and practices and used the most modern rehabilitation facilities at PolyU, it was also a valuable opportunity for our students to observe how therapists on the mainland do rehabilitation using limited resources. They learned about traditional Chinese therapeutics, which they can integrate and apply in the future. The students also shared their Western rehabilitation knowledge with the therapists," said Dr Szeto. "And all the students and I are really delighted that our hard work has been recognized with the award," she added.

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# 病榻中的大領悟 「2012最卓越學生獎」-



#### Inspirational Nursing Student Is PolyU's Most Outstanding Student

If ife is a journey, not a destination," wrote Ralph Waldo Emerson, an American essayist. Perhaps no-one at PolyU exemplifies this more than Miss Nichole Leung Lai-ting, a final-year undergraduate at PolyU's School of Nursing (SN). She won PolyU's Most Outstanding Student Award for 2012, which recognises the best all-round final-year student in terms of outstanding academic performance, strong leadership ability, good personal qualities, and active involvement in extra-curricular activities and

community service.

梁麗婷在初中時曾經是一位羽毛球及長跑好手,但在一次比賽中 受傷,腳部半月板軟骨撕裂,麗婷於接受手術後卻因併發症以致 半身不遂,其後更證實患上交感神經障礙症,遇過呼吸及吞嚥困 難、頭痛甚至失禁的情況,需要留院三年接受治療。麗婷説: 「當時的健康狀況十分惡劣,我都曾經想過放棄學業及成為護士 的理想,很幸運地我得到身邊的家人及朋友一直支持、愛護及鼓 勵,才可堅持到最後,我實在要為今天的成功而感恩。」

堅韌不拔的決心,推動麗婷完成中五會考及中七高考,並成功獲 理大取錄入讀護理學高級文憑課程,一年後更以全級三甲的成績 升讀理大護理學學士學位課程,至今一直名列前茅,並曾獲頒五 個不同的獎學金。除了學業成績優異外,活躍的她更是「文武雙 全」,多年前已考獲英國皇家音樂學院八級鋼琴,更以交換生身 份遠赴英國及新彊。麗婷在2012年舉行的香港國際木球公開賽女 子雙人組中奪得第三名,同時亦是現役理大木球隊隊員,熱心公 益的她也曾參與柬埔寨社會服務團。

麗婷續說:「患病留院其間令我明白到一個稱職的護士對病人有 很大的影響,我曾經遇過不太尊重自己的護士,但亦有很多醫護 人員對我愛護有加,因此我立志要成為一個以真誠去愛護及尊重 病人、以同理心去聆聽病人心底話的護士。」人生中必定會遇到 不如意的事情,當我們感到氣餒時,不妨以梁麗婷同學作借鏡, 以樂觀的態度去令生活更精彩。 Her achievement is even more astonishing given her circumstances. Miss Leung was a promising badminton player and long-distance runner at junior high school when she tore a cartilage in her leg and underwent surgery to repair it. However, serious complications developed and her lower body became paralysed for a time. She was then diagnosed with a life-threatening and chronic sympathetic nervous system disorder, which led to extensive hospitalisation for more than three years for treatment to alleviate her symptoms of a difficulty in breathing and swallowing, loss of muscle strength, slurred speech, and headaches. "I wanted to give up studying for my school exams and becoming a nurse because it was just too difficult to carry on. But, luckily, a lot of people supported me in different ways. I feel blessed to have so many people around me who love me and who kept me going. I then thought this is not the end of the road and that I should fight, no matter what, and I will succeed," Miss Leung recalled. Her gritty determination saw her successfully pass her HKCEEs and HKALs, gain admission to SN's Higher Diploma in Nursing programme in 2009 and articulation to the bachelor's degree programme in 2010, rise to become one of the top three students in her class, and land a number of scholarships. She is also a member of PolyU's woodball team and was part of the women's doubles team that won the 2012 Hong Kong Woodball Open Competition. She also took part in a service-learning programme in Cambodia and student exchange programmes in the UK and Xinjiang autonomous region, China. Outside PolyU, she has achieved Grade 8 in her ABRSM exams.

On being a nursing student, Miss Leung said: "My time being hospitalised proved to be invaluable. It gave me a better understanding of how to be a good nurse. I encountered nurses who cared about both my physical condition and daily needs, and nurses who overlooked my situation. I learned that to be a good nurse, you have to be an optimistic person, respect the patient, and be a good listener." But to for all of us, Miss Leung is also an inspiration.

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### 醫療資訊科技研討會 Advances in Health IT Workshop

★ 技發明日新月異,令人類的壽命得以延長。於歐洲,丹 麥、英國及蘇格蘭三地,堪稱為遠程醫療健康服務發展的 翹楚。於2012年9月28日,醫療及社會科學院聯同駐上海的丹麥 科技創業中心,於理大校園舉行醫療資訊科技研討會,邀請多位 來自本港及丹麥的專家,分享兩地的醫療資訊科技發展。

第一位發言的是來自丹麥哥本哈根市Bispebjerg醫院的Anne Frølich醫生,她以丹麥首都圈作為例子,介紹丹麥政府為處理日 益增加的長期病患者而建立的綜合醫療服務,以及國內遠程藥物 的發展策略。

丹麥科技大學的 Lars Dittmann 教授則詳述丹麥科技創業中心所 研發的Patient@home系統,配備多項「即插即用」的醫療產品及 服務,以減低病人入院對醫療資源構成的壓力,令更多病人可於 診所或家中接受治療及康復訓練。Ditttmann教授表示,由於病人 減少對醫院資源的倚賴,他們更需要積極地自我管理健康,而有 關部門於製訂醫療資源藍圖時,亦要顧及不同人士於尋找、理解 及執行診症意見的能力。丹麥哥本哈根大學的Lars Kayser博士則 舉出多個丹麥例子闡述國內病人主導的醫療趨勢,特別是分享於 推行電子健康及醫療訊息化中所遇到的困難。

於將軍澳醫院及東區尤德夫人拿打素醫院專責處理醫療科技的 唐嘉信博士,與參與人士分享醫療影像電子化,以及三維影像於 公立醫院的應用。

理大土地測量及地理資訊學系的關美寶教授,於研討會上剖析地 理的規劃如何影響研究結果,以及分享科研人員怎樣運用地理資 訊系統及訊息技術去追蹤研究對象的活動及移動路徑。醫療科技 及資訊學系的陳穎志博士介紹其研究團隊於分析病人電子病歷資 料的研究,提出醫療人員可由病歷中推斷出病人可能會出現的身 體毛病,及早診治。護理學院的蔡及時博士則分享護理學院於實 體虛擬及觸覺科技的研究,並介紹理大舉辦全港首個醫療科技及 資訊學碩士課程的發展歷程,以及「理大一梁顯利流動結合保健 中心」走訪各區提供服務的經驗。來自生物醫學工程跨領域學部 的鄭永平教授,介紹其團隊以不同的感應器、智能電話及屏幕電 腦,為長者研發的遠程醫療健康服務器材;而湯啟宇教授則即場 示範其團隊設計,曾多次獲獎的幫助長者及中風病人進行康復療 程的免費感官遊戲軟件。電子計算學系系主任曹建農教授介紹其 於電腦輔助醫療診斷及治療,以及遠程醫藥和互聯網為基礎的健 康應用合成的電子化健康醫療研究,並舉出多個有關醫療及生物 識別系統的例子作為討論。

Lumans are living longer than ever before thanks to innovations in science and technology. And Denmark, England and Scotland are at the forefront of telehealth in Europe, according to a European Commission study. On 28 September 2012, FHSS and Shanghai's Innovation Centre Denmark co-organised the Advances in Health IT Workshop on PolyU's campus to share information about the latest health IT developments in Denmark and Hong Kong and PolyU's award-winning work.

Dr Anne Frølich of the Department of Integrated Health Care at Bispebjerg Hospital outlined Denmark's strategy of developing telemedicine to deliver integrated health care in the face of rising rates of chronic illnesses, with examples from the Capital Region.

Prof Lars Dittmann from the Department of Photonics Engineering at Technical University of Denmark spoke about ICT aspects of Denmark's Patient@home initiative, which aims to develop 'plug-and-play' products and services to relieve the pressure on hospital admissions by facilitating more treatment and rehabilitation at home and more outpatient treatments. With less access to hospital resources, however, patients would have to become more involved with their own health, and health resources should take into account individuals' different abilities to seek, understand and comply with advice and instructions. Dr Lars Kayser from the Department of Public Health, University of Copenhagen, gave examples in Denmark of this user-centred trend and its challenges, especially in eHealth.

Dr Carrison Tong of Tseung Kwan O Hospital and Pamela Youde Nethersole Eastern Hospital spoke about digital medical imaging and 3-D visualisation usage in a filmless public hospital.

From PolyU, Prof Kwan Mei-po of the Department of Land Surveying and Geo-Informatics described how a geographical area is delineated may affect research findings and how this could be addressed by GIS and geospatial technologies to track subjects' activities and routes. Dr Lawrence Chan from the Department of Health Technology and Informatics described his team's research on mining information from patients' electronic health records so that potential complications and early interventions can be identified effectively. Dr Thomas Choi of the School of Nursing (SN) talked about SN's research in virtual reality and haptic technology, education via Hong Kong's first master's programme in health informatics, and service via the vehicular PolyU-Henry G. Leong Mobile Integrative Health Centre. From the Interdisciplinary Division of Biomedical Engineering, Ir Prof Zheng Yongping described his team's telecare devices for the elderly utilising different sensors, smartphones and tablets, while Ir Dr Raymond KY Tong highlighted his team's free KineLabs software platform featuring games with rehabilitation training tasks for the elderly or stroke patients. Prof Cao Jiannong from the Department of Computing gave an overview of computerised health care comprising computer-aided medical diagnosis and therapy, telemedicine, and Web-based health applications, and gave examples of medical biometric systems created by his department.



### 理大腦神經 科學研究小組成立 Launch of PolyU's Neuroscience Research Group

學家指出,人腦是宇宙中最複雜的一個物體。醫療及社會科學 院於去年成立一個嶄新的跨專業腦神經科學研究小組,為校內 來自不同專科的研究人員提供一個平台,鼓勵專家們溝通分享各自不 同有關大腦的研究,集各家之所長解決研究的基礎問題,同時亦定期 舉行不同的講座,供有興趣的人士及學生參與。

The human brain has been described as the most complex object in the known universe by scientists. Last year, FHSS launched the interdisciplinary Neuroscience Research Group to encourage researchers across PolyU and elsewhere to network, share findings from their studies in brain-related topics and form collaborations to tackle fundamental problems. To help this process along, a series of talks has been held regularly on campus.



統籌研究小組的康復治療科學系賀菊芳教授,於2012年12月3日為研究小組的一系列講座 揭開序幕,分享其於研究大腦中有關記憶與書寫化學物的成果。

今年的1月17日,四位海外學者應邀到臨理大舉行研討會,包括來自加拿大卡加利大學的 Hu Bin 教授分享其團隊的一項名為 AmbuloSono的發明,利用音樂幫助患有柏金遜症的病人 練習走路。英國牛津大學的 Andrew King 教授分享其於研究聽覺系統適應性,以及聽覺信 息編碼的結果。美國加州大學戴維斯分校的 Mitchell Sutter 教授講解專注力如何改善皮層神 經元辨別聲音的能力。而美國喬治城大學醫學中心的 Josef Rauschecker 教授,則分享其於 聽覺腦皮層的雙軌道分析的研究。

於4月8日,香港大學解剖學系蘇國輝教授應小組的邀請,講述其團隊如何利用燈光變化 以改善情緒,特別是將燈光直接投射到視網膜背側縫核的神經節細胞,繼而對情緒產生 影響作用。

兩位理大學者於3月5日舉行講座,生物醫學工程跨領域學部的湯啟宇教授分享其團隊如 何透過KineLabs虛擬遊戲平台,讓長者及中風病人進行運動及康復治療。康復治療科學系 張穎思博士則分享其團隊如何透過功能性核磁共振造影(fMRI),分析研究對象在愛荷華賭 局作業測試(Lowa Gambling Task)時大腦於進行感性決策時的運作機制。

5月3日以色列理工學院的 Moussa Youdim 教授發表其團隊近期於藥理學的研究工作上,發現鐵螯合劑於醫治腦退化症的可能性。

The group's coordinator, Prof He Jufang of PolyU's Department of Rehabilitation Sciences, kicked off with a talk on 3 December 2012 titled "Discovery of the Memory-Writing Chemical in the Brain."

On 17 January this year, a symposium was held featuring four overseas speakers. First, Prof Hu Bin, Suter Professor at the Department of Clinical Neurosciences, University of Calgary, Canada, described his team's AmbuloSono invention, a sensorimotor contingency-based programme that uses music to help people with Parkinson's disease walk. Prof Hu was followed by Prof Andrew King of the Department of Physiology, Anatomy and Genetics, University of Oxford, UK, who spoke about adaptive neural coding in the auditory system. Prof Mitchell Sutter of the Department of Neurobiology, Physiology, and Behavior at the University of California, Davis, in the US gave a talk on how active engagement improves auditory cortical neurons' ability to discriminate sounds. Last but not least, Prof Josef Rauschecker of the Department of Neuroscience at Georgetown University Medical Center in the US detailed the dual processing streams in the auditory cortex.

In a talk on 8 April, Prof So Kwok-fai, Jessie Ho Professor in Neuroscience and Chair Professor at the Department of Anatomy, University of Hong Kong, described his team's work in understanding how light lightens the mood, specifically on how direct retino-raphe projection alters serotonergic tone and affective behaviour.

Two PolyU scholars gave a seminar on 5 March. First, Ir Prof Raymond KY Tong of the Interdisciplinary Division of Biomedical Engineering outlined and demonstrated his team's KineLabs virtual-games platform designed as a fun way for the elderly to exercise and stroke patients to do rehabilitation. Dr Vinci Cheung, Assistant Professor at the Department of Rehabilitation Sciences, then described her team's fMRI study on the brain mechanism underlying affective decision-making using the Iowa gambling task.

On 3 May, Prof Moussa Youdim, Professor Emeritus at the Department of Molecular Pharmacology, Technion–Israel Institute of Technology, Israel, outlined his team's recent pharmacological work involving iron chelators on a possible treatment for Alzheimer's disease.

#### 新發現24個影響近視的遺傳基因 24 More Genes for Shortsightedness Discovered!

學發展的巨輪不斷向前轉動。一年之前,科研人員只能夠歸納到幾個影響近視的遺傳基因,然而於 本年2月,理大眼科視光學院副教授古根海(Jeremy Guggenheim)博士,聯同醫療科技及資訊學系副系 主任研究葉社平教授發表聯合研究文章,表示新發現到不少於24個影響近視發展的遺傳基因。古博士及葉 教授均為理大近視研究中心成員,亦同時是集全球64間不同大學及研究中心人員所成立的CREAM研究組織 的其中一員。

hat a difference a year can make! A year ago, after years of searching, only a few genes had been known to be associated with shortsightedness or myopia. This February, however, Dr Jeremy Guggenheim, Associate Professor at PolyU's School of Optometry, and Prof Yip Shea-ping, Associate Head (Research) of PolyU's Department of Health Technology and Informatics, both members of PolyU's Centre for Myopia Research, were among the CREAM group of researchers from 64 universities and research institutes around the world that published a research paper announcing the discovery of no fewer than 24 other genes associated with refractive errors such as myopia.

眼睛屈光不正的問題與其他健康疾病一樣,均受 先天遺傳及後天環境所影響。屈光不正是眼睛最常見 的問題,而深度近視更有很大機會致盲。患近視人士的眼球通 常比正常人的眼球長,因此令其看到的影像只能投射到視網膜前 端而非於視網膜上。八成的亞洲人士及三成的西方人士均有近視 的情況。亞洲學童往往比較少時間作戶外活動,而大多數家長十 分緊張孩童的學術成就,研究人員有理由相信後天環境的影響, 是過去半世紀亞洲區內近視率增加的主要原因。古博士表示: 「研究影響近視的遺傳基因亦十分重要,有助發明抑制近視出現 的藥物。」

CREAM (Consortium for Refractive Error and Myopia) 是一個專門研究屈 光不正及近視的聯合研究組織,早前進行了一個目前為止全球最 大,針對不同國家屈光不正情況的遺傳基因組整合分析,研究範 圍涵蓋來自亞洲、澳洲、美國及歐洲的32份研究報告,當中被分 析的研究對象超過45,000人。此項研究有別於其他傳統的研究,並 沒有刻意地徵集深近視的研究對象,反而以整合分析的手法,於 不特別挑選研究對象的情況下,深層分析所有曾接受有關醫學健 康研究對象的資料,以令研究結果更具代表性。

葉教授指出:「我們於有關歐洲人士的研究中,新發現了16個影響屈光不正問題的遺傳基因位點,而其中八個位點亦於中國、印度或馬來西亞血統人士身上找到。」研究組織發現了可能會影響 眼睛或近視發展的遺傳基因,其中有些基因影響眼球鞏膜或眼球 眼白生長的情況,而另一些基因則決定視網膜於接收影像時發出 的化學訊號力度,這些均會影響近視的形成及發展。

CREAM研究組織更計算到,某些人士如果擁有26基因變異,得到 近視的機會增加10倍。 Like many health problems, refractive errors result from the interplay between genetic and environmental risk factors. Refractive errors are the most common type of eye disorder, and high myopia can lead to blindness. People with myopia tend to have longer than normal eyeballs, which result in their focusing of images in front of their retinas instead of on them. It is estimated that up to 80% of Asians and 30% of Caucasians are myopic. Environmental risk factors may have played a large part in increasing the prevalence in Asia over the past half-century, such as children spending less time doing outdoor activities due to dense urbanisation and parental pressure to do well academically. "However, it's also important to identify genetic factors because they could open the door to developing drugs that can hinder myopia," explained Dr Guggenheim.

To this end, the Consortium for Refractive Error and Myopia (CREAM) undertook the biggest international genome-wide meta-analyses on refractive error, involving 32 studies from Asia, Australia, the US and Europe of more than 45,000 people. Instead of recruiting subjects or families with high degrees of myopia, as studies on myopia tend to do, which could return results of rarely occurring genetic variations only present in high myopes, the meta-analyses examined data of unselected subjects from health studies, which would be more representative of people around the world.

"We found 16 new loci of genes for refractive error in people of European descent, of which 8 loci are shared with people of Chinese, Indian or Malay descent. We also confirmed a further 8 associated loci," said Prof Yip. The consortium identified new candidate genes involved in possible mechanisms linked to eye growth and myopia. Some of the genes may be involved in the growth or lack of growth of the sclera, or the white outer layer of the eyeball, while a few other genes may be involved in determining the strength of chemical signals generated by the retina when viewing images, which may influence the onset and progression of myopia.

CREAM also calculated that people with all 26 gene variants have a tenfold increased risk of developing myopia.

「感知提示手錶儀器」 助病人活動偏癱手 New Watch Assists Patients to Exercise Partially Paralysed Arms

伊需要用兩條腿走路或跑步,但當處理日常工作時,我們往往會不自覺地倚賴其 中一隻慣性手,而另一隻手則經常閒置,因此有所謂「右撇子」和「左撇子」之 分別。雖然這是一個很常見的個人小習慣,但對於香港現時超過十萬名半身局部偏癱的中 風、腦損傷或大腦麻痺病人來說,則會帶來很大的長久影響,妨礙他們的康復進度。這些 病人學習走路時必需要同時使用偏癱及沒有受影響的腿部,但當處理日常生活的瑣事時, 往往會捨難取易,單純倚靠沒有受影響的手以完成任務。對於病人而言,這個安排當然可 以讓他們比較得心應手地達到目的,但偏癱手就會因為缺乏活動而令其活動能力日益下 降。為令這些病人刻服習慣性棄用偏癱手的情況,康復治療科學系副教授方乃權博士發明 了一隻全球首創的「感知提示手錶儀器」,透過提醒治療法幫助偏癱病患的康復人士。

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e use both our legs to walk or run, but we often only use our dominant hand to do many tasks, leaving the other hand to do very little. This observation may seem insignificant, but it makes a huge difference to more than 100,000 people in Hong Kong who are partially paralysed on one side of their body because of stroke or brain injury or those with cerebral palsy. Such patients have to exercise both affected and unaffected legs to learn to walk again, but they tend to be less diligent in exercising their affected arm and hand because it's easier just to use the unaffected hand to do most tasks, which weakens and stiffens the affected arm and hand further. To help patients overcome their learned non-use of their affected arm and hand, a team led by Dr Kenneth Fong, Associate Professor at PolyU's Department of Rehabilitation Sciences, invented the Remind to Move sensory cueing wristwatch.

於西方的職業治療方法中,治療師會紥起病人沒有受影響的正常手,刻意 地令病人只可以用其偏癱手處理事情。但是病人可能會對於在公眾場合被 紥手感到尷尬,而且有很多事情均需兩手兼用才可做到,如果兒童病人被 紥起其中一隻手很可能會影響其安全,因此紥手這個傳統局限誘發動作治 療往往未能適用。方博士研發的「感知提示手錶儀器」則可讓病人日常生 活中不受束縛地接受治療,亦讓他們可在需要時雙手並用,令病人於治療 過程有自主權及更具彈性。

「感知提示手錶儀器」就如一隻普通的手錶,病人需要將儀器佩戴於偏癱 手的手腕上,手錶會於預設時間產生聲音或震動,提示使用者定時活動偏 癱的上肢,儀器會記錄使用者活動偏癱手時的三維活動幅度及時間。職業 治療師可從儀器下載活動的資料記錄,透過特別軟件對偏癱手活動的次 數、範圍及幅度進行分析,繼而與病人商討康復情況、調較響震時間及指 示病人應作的運動。

病人的康復進展視乎其活動偏癱肢的恆心及堅持。方博士表示:「『感知 提示手錶儀器』經濟易用,亦不受環境局限,原理是利用正面鼓勵令病人 定時活動其偏癱手,於第一階段的臨床測試中已證明儀器的效用。」直至 現時為止,共有六間醫院及非政府機構正使用這個儀器協助病人進行康復 療程,方博士及其團隊希望可從多方面,包括開展有關腦神經的研究,及 進行更多臨床測試,並透過改善技術及科研發明商品化等幾方面,繼續優 化「感知提示手錶儀器」,協助更多病人康復。 In the West, an accepted occupational therapy treatment is to put a mitten on the patient's unaffected hand, which forces the patient to use only his or her affected hand to carry out tasks. However, patients often feel self-conscious wearing just one mitten in public; not all tasks can be done using one hand; and not having the flexibility of using both hands introduces safety concerns, especially for children. In contrast, the Remind to Move watch is less conspicuous and allows patients to use both hands whenever necessary.

Worn like a normal wristwatch on the affected arm, the watch produces beeps or vibrations at preset times to remind the patient to do his or her prescribed exercises using the affected arm. As the affected limb is exercised, a sensor in the watch measures the movements in three dimensions and real time. The data is downloaded later from the watch by the therapist, allowing software analysis of the frequency, range and other parameters of the movements. The therapist then discusses the information with the patient and can change the times of the reminders as well as instruct the patient on what exercises to do next.

Thus the patient's progress relies on his or her self-motivation in carrying out the exercises. "The watch uses positive rather than negative reinforcement," said Dr Fong. "Our watch has proven to be effective in our initial clinical trials. It's simple to use, can be used anywhere, and it's cost-effective." So far, six public hospitals and an NGO in Hong Kong have adopted the watch for use by their patients. The team is also looking for opportunities in neuroscience studies, more clinical trials, technological improvements, and commercial production and marketing for the watch.

科研成果

RESEARCH

科研成果 RESEARCH

nd spatial perception

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> 新創易筋十段錦 助長者強化身體機能 Frail Elderly Can Improve Health Through New Qigong

動有益身心,功效無容置疑,任何年齡人士皆應定期作適量的運動,保持身心健康。然而香港邁向高齡化社會,市區中越來越多長者體質偏弱,他們往往因為行動不便,未能鍛鍊普通運動如傳統太極或氣功。為幫助這一群因體能或認知力受限制而未能進行運動的長者,康復治療科學系曾永康教授聯同仁濟醫院社會服務部合作,新創一套易學易做、結合站式及坐式的「仁濟易筋+段錦」。

曾永康教授

曾教授及仁濟醫院社會服務部於3月19日舉行聯合新聞發佈會,發 表一份「有關研發及測試一套專為體弱長者重新編制及較易掌握 的健身氣功成效」的研究報告,並由仁濟醫院社會服務部的長者 即場示範。

「仁濟易筋十段錦」由一個包括職業治療師、社工、物理治療師、心理學家及中醫師在內的專家小組研發,結合兩套非常受歡迎的健身氣功——八段錦及易筋經中的套路,並重新編制。

為評估「仁濟易筋十段錦」的效用,研究團隊曾進行隨機對照實 驗。研究人員將參與的116名長者分成兩組,當中61位長者學習 「仁濟易筋十段錦」連續十二星期,每週練習兩次,每次六十分 鐘;而參加對照組的長者則只參與閱報組。十二星期後,研究結 果發現,學習「仁濟易筋十段錦」的長者無論在認知功能、身體 機能、日常活動或整體健康方面的自我評估,都有顯著改善;而 靜止心率也顯著減少。

現時仁濟醫院於其轄下的護理安老院及長者日間護理中心,均有 推行「仁濟易筋十段錦」訓練班。由於新創的十段錦對長者體能 要求不高,體弱長者可以容易及安全地在家練習。 B eing too old to exercise is a myth. Exercise can improve anybody's health, regardless of their age. However, many elderly in Hong Kong are frail and cannot walk or do conventional forms of exercise, traditional tai chi or qigong. And with Hong Kong's population ageing, there will likely be more frail elderly in the future. To help the aged who may not be physically or cognitively able to do normal forms of exercise or qigong, Prof Hector Tsang, Associate Head at PolyU's Department of Rehabilitation Sciences, and Yan Chai Hospital Social Services Department (YCHSSD) developed a new protocol of easy-to-learn qigong moves called "Yan Chai Yi Jin Ten Section Brocades," which can be done sitting down or standing up.

Prof Tsang and YCHSSD representatives gave a press briefing on 19 March at PolyU about the study they had completed to develop the protocol, and which was followed by a demonstration of the protocol by elderly volunteers from YCHSSD. The protocol was created using functional anatomical analysis and advice from an expert panel comprising a qigong researcher, an occupational therapist, a physiotherapist, a social worker, a psychologist, and a traditional Chinese medicine practitioner. The protocol consists of moves adapted from two popular normal qigong protocols "Baduanjin" and "Yijin Jing."

A randomised controlled trial was carried out to evaluate the health benefits of the new protocol. A total of 116 elderly subjects were divided into two groups. One group of 61 subjects practised the protocol in 1-hour sessions twice a week for 12 weeks. Meanwhile, a control group of 55 subjects spent the sessions reading newspapers, which involved moving their hands and arms whenever they wanted to turn a page. After the 12 weeks, it was found that the group practising the protocol showed significant improvements in cognitive functioning, activities of daily living, perceived physical health, reduction in resting heart rate, and overall health status when compared with the control group.

Having proved its efficacy, the protocol has been adopted by YCHSSD for teaching to its elderly clients who live in its residential care homes as well as those who attend its day care centres. The less demanding modified gigong moves make the protocol easy to learn and safe for the elderly to practise at home.

大一生專題研習課程 FRESHMAN SEMINAR

### 大一生專題研習課程 New Mandatory Freshman Seminar for First-Year Students

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配合本港的新3-3-4學制,理大於重整舊有的課程內 容,於新四年制綜合本科課程中,加入「大一生專題 研習課程 (Freshman Seminar)」,為所有經修畢新高中課程後 入讀理大的新生所必修之科目。大學按學生所修讀的課程將 他們編入不同的廣泛學科,於為期一個學期的課程中,學生 們除會出席不同的講座外,亦需參與課堂及導修課,並完成 不同的功課,以達到不同的學習目標,幫助他們面對未來四 年的學習,更希望所學的知識受用終身。 O ne of the new features of PolyU's revamped curriculum resulting from Hong Kong's adoption of a 3+3+4 academic structure is a compulsory Freshman Seminar for all first-year undergraduates entering with HKDSE qualifications. The students are divided into groups according to which "broad discipline" they belong to. And perhaps in a well-meaning effort not to frighten fresh-faced youngsters, the word "seminar" may not be quite accurate either, for the Freshman Seminar is spread over a whole semester and consists of a plurality of educational activities — including lectures, tutorials and assignments — to help them achieve different learning objectives that will stand them in good stead during and after their studies at PolyU.

入讀醫療科技及資訊學系、康復治療科學系、護理學院及眼 科視光學院課程的同學,會被編入醫療科學廣泛學科,而修 讀應用社會科學課程的同學,則會被編至社會科學廣泛學 科。

於今年首年舉辦的大一生專題研習課程中,學院邀請了六位 分別來自海外、本港及理大校內的學者,與620多位醫療科 學廣泛學科的新生,就不同的議題作出分享。而118位社會 科學廣泛學科的同學,則參與由應用社會科學系教員負責的 互動課堂,探討不同的個人及社會問題。

醫療及社會科學院希望透過不同的教學活動,幫助新生由進 入大學的一刻開始,確立誠信對於他們作為未來醫療社科專 才的重要性。學院亦期望透過涵蓋不同課題的講座及導修課 堂,幫助他們了解當代香港,以至世界全球於醫療及社會上 備受爭議的課題,刺激他們獨立思考。學院亦希望透過課 程,促進同學們的跨專業交流,幫助學生建立專業形象,並 提升他們的個人學習能力及態度。 Freshmen on programmes by PolyU's Department of Health Technology and Informatics, Department of Rehabilitation Sciences, School of Nursing, and School of Optometry are grouped under the Broad Discipline in Health Sciences, while their peers on programmes by PolyU's Department of Applied Social Sciences (APSS) are under the Broad Discipline in Social Sciences.

Six health experts from overseas, Hong Kong and PolyU conducted interactive lectures for the 620 or so health freshmen. The lectures were titled: "Are you prepared to live to 120 years?"; "Promoting and protecting health in Hong Kong — community needs, professional response and personal action"; "Are you ready to be a health professional in the 21st century?"; "Who are you and what do you do? Ensuring your role is valued — the science behind teamwork in health care"; "Hong Kong Cancer Registry"; and "Market trends and technology commercialisation in medical devices." The 118 social science students attended interactive lectures by four APSS academics on "Social science as a double-edged sword"; "Life, choices and sociology"; "Social work and social workers"; and "Housing policy and the quality of life."

Both Freshman Seminars ensured that the FHSS first-years learned from the very beginning of their studies at PolyU why it is paramount to practise academic and professional integrity and how to do it. And depending on whether they are health or social science students, they also acquired an overview of health or social science as both academic and professional pursuits and of contemporary issues in health or social science in global and local contexts, and learned about the interdisciplinary nature of health care or how social science underpins and interfaces with human services professions. They also learned why it is important to develop a holistic and entrepreneurial outlook, how to cooperate and tackle problems creatively with others or by themselves through constructive discussions, and how to upgrade their study skills and mindset.

醫療及社會科學院暑期研究生計劃 FHSS Summer Research Studentships for Full-Time Undergraduates

信各位選讀醫療及社會科學院課程的學生,於畢業後都有 志從事醫療或社會科學的行業,以學到的專業知識服務社 會。為讓有興趣從事研究方面的同學得到一個瞭解研究工作的機 會,學院推出暑期研究生計劃,讓就讀於全日制課程(非最後一年) 的同學參加。參與計劃的同學於暑假期間的五至八星期間,由學 院教員擔任其導師,晉身成為研究團隊的其中一員,將書本理論 深化,應用到研究工作上。去年的暑假期間,共有20名同學把握 這個難能可貴的機會,參與這個研究生計劃擴闖眼界,而學院於 今年暑假亦同樣提供20個名額供各位同學參與。

究竟暑期研究計劃涵蓋甚麼內容?首先,有志申請的同學需要由 學系/學院提供的研究清單中,挑選一個其感興趣的項目,然後約 見負責該項研究的老師以更深入了解內容,以及評核個人是否適 合參與。學院人員繼而會對各個申請進行甄選,入圍的學生將進 行面試,面試成功的同學便可參與研究小組,親身體驗真正的大 學科研之外,同時亦可獲得研究生津貼。

參與計劃的學生於七月及八月期間全職地參與研究的不同過程, 包括資料搜集、問卷設計、徵集研究對象、進行訪問及實驗、收 集及分析資料數據、整合及發表分析結果,以及其他有關是項研 究的不同活動。學生於計劃期後需呈交一份經驗反思報告,詳述 受訓期間的經驗,以及在與計劃中有何得著。每份報告均由學院 的學術小組審讀,為參與計劃的老師及學生提供增善教學相長的 建議。

醫療及社會科學院通常於二月上旬公佈暑期研究生計劃,三月中 截止報名,未曾參與過計劃的學生將獲優先考慮,各位同學記緊 於未來日子把握機會! Most students who enrol on FHSS's undergraduate programmes do so because they aim to become a practitioner in their chosen health or social science field. To offer those thinking of perhaps pursuing research studies in the future a chance to learn how cutting-edge research is actually conducted, FHSS began a Summer Research Studentship scheme for its full-time non-final-year students in which they can apply to work as part of a research team for 5 to 8 weeks during which they will train under the guidance of the corresponding academic who will act as their mentor. Twenty students landed the first offering of studentships last summer, and 20 places are up for grabs this summer.

So what's involved in one of those studentships? First, prospective applicants choose a research project that interests them from a list compiled from FHSS's constituent departments and schools and they arrange to meet with the academic to find out more about the project and their suitability for the training. After their applications are vetted, shortlisted students are interviewed. If they are successful in clearing this hurdle, the selected students can look forward to gaining hands-on experience in working within a research team and they also qualify for a monthly stipend during their training period.

The students work full-time in July or August in different aspects of the research process as specified for their particular project. These can range from helping to review or analyse published studies and other relevant literature, design questionnaires, recruit subjects, interview/test/experiment, collect or enter data, analyse or interpret data, present findings, to being involved in other activities and protocols associated with the research process. The students also have to individually produce a reflective report at the end of their training period on what their project's research is about, their experiences on the project, and what they have gained from working on the project. The students' reports will be read by the academic panel that had vetted their applications so it can recommend any improvements to the training for the benefit of the mentors and future student participants.

An announcement about the FHSS Summer Research Studentship scheme is normally made to full-time undergraduates in early February, while the deadline for applications is usually mid-March. Students who have not joined the scheme before are given priority.

Look out for it in the future!

### 理大慶祝75歲生辰! **PolyU Celebrates** 75th Anniversary



→→ 慶祝建校75周年紀念,理大於2011-12年度舉辦了一連串的慶祝 **示** 活動。其中由理大及理大校友會聯會合辦的「理大校友日」, 正好為周年紀念錦上添花。「2012理大校友日」在2012年11月11日舉 行,分別畢業於早年香港官立高級工業學院、香港工業專門學院及香 港理工大學的數千名校友,紛紛帶同家人及朋友,到臨「理大校友 日」,為母校的輝煌成就喝采。

醫療及社會科學院在活動上展出了歷年來創新科技及傳承知識方面的 成就,同時亦安排了診所及「理大一梁顯利流動結合保健中心」導賞 參觀,並為校友們進行簡單健康檢測,讓校友們更了解本學院的社區 參與。此外,活齡學院在活動當日,派出多名充滿活力的長者義工主 持攤位遊戲,又即場示範坐式太極及針灸,展現積極參與的精神。

此外,近一千位理大的成員及友好在2012年11月13日雲集香港會議展 覽中心,參與理大建校七十五周年晚宴。晚宴由香港特別行政區行政 長官暨理大校友梁振英先生擔任榮譽嘉賓。



he past 2011-12 academic year marked the 75th anniversary of PolyU. To celebrate, various events were held throughout the year, of which PolyU's biennial Alumni Homecoming Fiesta on 11 November 2012 took on special meaning for thousands of past graduates of PolyU and its predecessors the Hong Kong Polytechnic, Hong Kong Technical College, and Government Trade School. Jointly organised by PolyU and the Federation of PolyU Alumni Associations and staffed by volunteers from the PolyU community, the campus-wide event welcomed alumni and their families and friends to enjoy a fun day out with old classmates and learn about recent developments at their alma mater.

FHSS's constituent departments and schools showcased their research and knowledge-transfer achievements and offered guided tours of their clinics. The School of Nursing invited visitors to look around its award-winning PolyU-Henry G. Leong Mobile Integrative Health Centre and undergo a basic health check. In addition, older adults on the Institute of Active Ageing's Project for the Third Age showed their active-ageing spirit by manning game booths and giving demonstrations of the newly developed "Yan Chai Yi Jin Ten Section Brocades" as well as acupressure.

The finale of the year-long celebrations was the PolyU 75th Anniversary Gala Dinner at the Hong Kong Convention and Exhibition Centre on 13 November, in which the Honourable Mr CY Leung, Hong Kong's Chief Executive and an alumnus of the Hong Kong Polytechnic, was the guest of honour.



## 恭賀醫療及社會科學院畢業生! Congratulations to FHSS's New Graduates!

18屆畢業禮在2012年11月6日至7日於理大賽馬會綜藝館舉行,超過1,750名醫療及社會科學院畢業生在獲院長頒授學位後,正式 展開人生的新一頁。其中122位畢業生更名列院長優異生名單內,兩名來自康復治療科學系的博士生更榮獲學院傑出論文獎,表 揚其出眾的成績。畢業禮圓滿結束前,一眾畢業生在院長帶領下讀出專業誓章,決心成為優秀的醫療社科專才,以所學專業為市民大 眾服務。今年的院長優異生名單已上載於http://fhss.polyu.edu.hk/docs/en/news/DeansList1112.pdf。

s part of PolyU's 18th Congregation, more than 1,750 FHSS graduands were conferred with their academic awards by FHSS's A Dean at PolyU's Jockey Club Auditorium on 6 and 7 November 2012. An impressive 122 of them also made it onto the Dean's Honours List for their excellent academic and non-academic performance, while 2 doctoral graduands from the Department of Rehabilitation Sciences won the Faculty Distinguished Thesis Award. The new graduates also collectively took a pledge of professionalism, which aims to remind them that becoming a good health or human services professional does not end with their degree or diploma but continues in how they deal with patients, clients, colleagues and others during their career. To see the Dean's Honour List, please visit : http://fhss.polyu.edu.hk/docs/en/news/DeansList1112.pdf

#### 全力協助香港馬拉松 Helping Out at Hong Kong Marathon 2013

港馬拉松已成為一項本地重要體育活動,今年的賽事於2月24日舉行,破紀 錄地錄得超過72,000名跑手報名,參與全馬、半馬、10公里及新設的3公里輪 椅賽事。由於參與人數比去年增加了3,000多名,理大醫療及社會科學院以及康復治療 科學系,今年出動了更多人手去協助一眾跑手。

his year, the Hong Kong Marathon doubled as the Asian Marathon Championships, featured a new half-marathon in addition to a 3K race for wheelchair athletes, and saw a new record of more than 72,000 runners registered for the multitude of full marathon, half-marathon and 10K races on 24 February. With an increase of nearly 3,000 more participants than for last year, FHSS and its Department of Rehabilitation Sciences (RS) were busier than ever to make it a successful day of pounding the streets for all its participants.

相信各位有做運動的 朋友都會同意,賽事表 現是經年累月訓練的反 映。為幫助跑手更有效率地

備戰香港馬拉松,醫療及社會科學院負責運作的香港賽馬會運 動醫學及健康科學中心,以及學院轄下的康復治療科學系,聯 同香港業餘田徑總會於2012年底至2013年頭舉辦馬拉松訓練課 程及講座,由康復治療科學系副教授暨香港業餘田徑總會高級 副主席楊世模博士領導一眾執業物理治療師,及本校物理治療 學生主理,協助不同資歷的跑手為賽事作出準備。

參加馬拉松訓練課程的人士首先出席入門講座,進行各項體能 測試,以及學習不同的跑步理論概念、訓練要點及傷患預防, 亦有到運動場跑道上進行實習。楊博士及物理治療師會按各跑 手的需要設計不同的訓練指示,跑手需按照指導進行訓練,並 定期向物理治療師彙報訓練進度。最後,參加者於3月9日進行 訓練後的評估,確定訓練的成效。至於其他參與短期課程的人 士則出席講座及實戰工作坊,學習跑姿及如何避免受傷。

此外,楊博士亦為醫療及社會科學院師生及校友組成的FHSS長 跑隊,於12月18日舉行工作坊,各出席隊友獲益良多。

楊博士及另一位康復治療科學系副教授楊慧博士於2月16及17 日假銅鑼灣維多利亞公園舉行的馬拉松嘉年華,連同18名理大 畢業的執業物理治療師及24位物理治療系學生,設立大型攤位 為入場人士提供不同的體能測試及物理治療諮詢。參與活動的 學生得到一個難能可貴的機會,協助經驗豐富的物理治療師, 他們雖然不是以跑手身份去參加香港馬拉松,但以志願工作人 員身份,亦能獲得寶貴的大賽經驗呢! As any athlete knows, a race is only the culmination of many months or even years of training. To help runners train effectively, the Hong Kong Amateur Athletic Association (HKAAA), FHSS through its co-hosted Hong Kong Jockey Club Sports Medicine and Health Sciences Centre, and RS jointly organised a running clinic and introductory courses from late 2012 to early 2013 for participants of different race distances and levels of experience. As in previous years, the running clinic and courses were instructed by RS physiotherapists, led by RS Associate Professor and HKAAA Senior Vice Chairman Dr Simon Yeung.

Participants in the running clinic attended an introductory seminar, underwent a pre-training physical fitness assessment, learned about different concepts involved in running, training and injury prevention, took part in practical sessions on the track, and were each prescribed an individually tailored training schedule for which they had to log in and submit details of the training they did for regular monitoring and feedback from RS physiotherapists. Participants also underwent a post-race assessment on 9 March, which was used to finalise the results of their personalised training profile. Those on the shorter introductory courses attended a seminar and a practical training session on the track in which they also learned about the different concepts related to running, training and how to avoid injuries.

FHSS members of the PolyU Running Team 2013 were also able to benefit from Dr Yeung's vast experience and knowledge as a physiotherapist and accomplished runner during FHSS's workshop exclusively for them on 18 December 2012.

Dr Yeung and Dr Ella Yeung, Associate Professor at RS, also staffed the Centre's customary large booth at the Marathon Expo on 16-17 February, ably aided by a small army of volunteers comprising 18 physiotherapists — all RS physiotherapy alumni — and 24 RS physiotherapy students. This offered the students a valuable chance to learn in the field from seasoned physios on how to administer different fitness tests, consultation sessions and useful advice to runners and other Expo visitors of varying ages, abilities and interest in physical exercise. The large scale of the Expo also acted to prime the physios and students for a very busy race day a week later, for which Dr Ella Yeung was in charge of coordinating the physiotherapy service for runners in the finishing area of Victoria Park.

專訪醫療科技及 資訊學系副教授蕭明輝博士 Interview with Dr Parco Siu, Department of Health Technology and Informatics

蕭博士説:「我很榮幸及謙遜地接受這個重要的獎項。我真的很 感激我所屬學院、學系及各同事的支持。他們創建了一個充滿支 持及互信的環境,好讓我進行跨學科研究。」

蕭博士表示,別人看他的專業和研究興趣,可能覺得很多樣化, 表面看似互不相關,他解釋著說:「我對肌肉相關的種種研究都 感到無限興趣,而我的研究集中於癌症、糖尿病、老化和運動醫 學,這一切正正都與肌肉組織有密切關係。」

「癌症病人在接受化療時,往往出現脱髮和皮膚問題等副作用。 其實心臟亦是一個肌肉組織,化療對心臟亦會有一定程度的傷 害。我們最想瞭解當癌症病人接受化療後,究竟心臟會作出甚麼 反應,以及我們應怎樣保護心臟,好讓病人可以在高劑量但持續 安全的情況下,接受最適切的化療。許多化療藥物,在高劑量的 情況下,會提高癌症病人心臟病發作的風險,以及削弱病人的心 臟功能。即使癌症病人完成療程後,病人的心臟仍會受著化療藥 物帶來的長遠影響。」

蕭博士説:「掌管活動的骨骼肌也是我的研究範疇。患有癌症的 人,他們的骨骼肌也同樣受到一定的影響。」癌症病人一般會受 著惡病質或「消耗症候群」的影響,使其肌肉量、體重、食慾和 體能下降,大大影響病人的生活質素。「我的同事跟一眾科研人 員致力研究治療癌症的方法,而我的研究就是為著保持癌症病人 的生活質素。」

蕭博士剛剛接到通知,獲American Physiological Society頒發另外兩 項國際殊榮。雖獲獎無數,但他並不滿足於現狀。「我的目標是 要做出高質素的健康科學研究,為社會帶來正面影響,以及讓人 類對科學有更深遠的認識,為社會作出貢獻。」他說。 r Parco Siu, Associate Professor at PolyU's Department of Health Technology and Informatics (HTI), seems to have a knack for winning awards ever since he was an undergraduate. In December 2012, he was presented with another, FHSS's Faculty Award for Outstanding Performance/Achievement in Research and Scholarly Activities for 2011-12.

"I'm truly humbled and honoured to receive this award! I really must thank FHSS, HTI and my colleagues for it. They've created a very supportive and collegial environment to do interdisciplinary research," said Dr Siu.

His own research interests seem very diverse and not obviously related — cancer, diabetes mellitus, ageing, and sports medicine. "I'm very interested in all areas related to muscle. That's what they have in common," explained Dr Siu.

"For example, besides hair loss and skin problems, heart problems are a possible side effect of chemotherapy for cancer. The heart is a muscle. We want to understand how the heart reacts and how to protect it during treatment so that chemo can continue at a safe but high dose," said Dr Siu. Many chemo drugs can damage the heart and increase the risk of a heart attack if the dose is too high for the health condition of the patient's heart to tolerate. Some chemo drugs also have long-term effects on the heart that only manifest after the treatment has finished.

"I also study skeletal muscle. It's not only involved in movement. The study of skeletal muscle is very important. For example, in cancer patients, their skeletal muscle system is impaired," Dr Siu continued. Cancer is often accompanied by cachexia or a wasting syndrome comprising loss of muscle mass, weight, appetite, and energy, which largely affects the patient's quality of life and can be life-threatening. "While my colleagues and other researchers are working hard to look for a cure for cancer, my research helps to maintain the quality of life for patients," he said.

Dr Siu was also recently told that he had won another two awards from the American Physiological Society. But he isn't resting on his laurels. "My goal is to do ever better, high-quality research in health science in terms of that which can have a significant impact on society as well as that which can deepen and widen the understanding of the science. Both contribute to society and mankind," he said.

G HIANN

CHILI SHORNERS

#### 理大社區結合保健中心榮獲社會資本動力獎 Social Capital Builders Award for PolyU's Integrative Community Health Centre



火火 工及福利局的社區投資共享基金推出「社會資本動力 獎」嘉許計劃,目的是嘉許對香港社會資本發展有貢獻 的企業,讓社會各界共同見証及分享香港建立社會資本的成 果。在2012年11月23日的頒獎禮上,理大社區結合保健中心榮 獲社區投資共享基金頒發社會資本動力獎,以表揚中心對建立 香港社會資本的貢獻。中心自2004年起已在荔景展開服務,積 極與區內組織緊密合作,建立完善的社區網絡。

中心以整全健康為理念,為區內市民提供基層健康服務。理大 護理學院為社區人士進行健康檢測、痛症及體重管理指導,以 及健康講座。眼科視光學學生在導師的指導下,透過「香港視 覺」計劃,為市民提供全面眼科視光檢查,並舉辦護眼講座, 宣揚眼睛護理的重要性。自2006年起,理大眼科視光學院與葵 青安全社區及健康城市協會及瑪嘉烈醫院合作,社區結合保健 中心率先在區內提供糖尿病視網膜病變篩選檢查服務。 olyU's Integrative Community Health Centre received a Social Capital Builders Award during the

inaugural awards presentation ceremony on 23 November 2012 at the Hong Kong Convention and Exhibition Centre. The honour, from the Community Investment and Inclusion Fund of Hong Kong's Labour and Welfare Bureau, was bestowed on the Centre to commend its contribution to the building of social capital in Hong Kong. Since its soft opening in 2004 in Lai King in Kwai Tsing District, the Centre has been building social capital in the local community by working with other organisations and sectors of the community to form a supportive network that brings the community closer together.

The Centre promotes a holistic approach to primary health care to locals by reaching out to them in their community. Nurses from PolyU's School of Nursing provide health checks, guidance in pain management and weight management, and health talks, while staff and student optometrists from PolyU's School of Optometry conduct comprehensive eye examinations through its charitable Vision Hong Kong project and give eye care talks. In 2006 in collaboration with Kwai Tsing Safe Community and Healthy City Association and Princess Margaret Hospital, the Centre introduced to Hong Kong the provision of diabetic retinopathy screening to diabetic patients by optometrists.

### 第八屆泛太平洋康復會議 8th Pan-Pacific Conference on Rehabilitation



5 00多名來自亞太區的學者、研究人員,醫療專業人員和 學生在會議中聚首一堂,出席於2012年11月17至18日在 菲律賓馬尼拉聖托馬斯大學舉行的第八屆泛太平洋康復會議, 發表科研的成果及深入討論不同康復範疇的議題。會議更是聖 托馬斯大學及香港理工大學分別慶祝建校400年及75年的重要 活動。

是次會議由聖托馬斯大學康復治療科學學院及理大康復治療科 學系合辦,主題是「以多種專業的方法來預防、處理及復康各 種功能障礙」,會議強調不同康復專業之間的合作,對在社區 推廣健康生活訊息的重要性。

此外,由台灣、星加坡及美國專家出任評審的學生組別論文展 示及演述項目,共設7個獎項,結果理大康復治療科學系的學 生勇奪其中4個獎項。 More than 500 rehabilitation academics, researchers, students, practitioners and health care administrators from around the Asia-Pacific region attended the 8th Pan-Pacific Conference on Rehabilitation on 17-18 November 2012 at the University of Santo Tomas (UST) in Manila, the Philippines, the first time that the biennial event has been held outside Hong Kong. The conference was a major event on the calendar for organisers UST and PolyU as UST celebrated its 400th anniversary while PolyU reached its 75th.

Jointly organised by UST's College of Rehabilitation Sciences and PolyU's Department of Rehabilitation Sciences (RS), the conference themed "Multi-Disciplinary Approach to Prevention, Management and Rehabilitation of Disability" promoted the importance of holistic, multidisciplinary collaboration between different types of professionals involved in rehabilitation to address disability at different levels of prevention and in different practice environments.

In the students' poster and oral presentations judged by experts from Taiwan, Singapore and the US, RS PhD students won 4 of the 7 prizes.

# Canada's Minister of State (Seniors) Visits PolyU 加拿大聯邦耆老事務國務部長到訪理大

力口拿大聯邦耆老事務國務部長黃陳小萍國會議員,以及其隨訪團於4月14日到訪理 大,並由唐偉章校長、眼科視光學院榮休教授胡志城教授及活齡學院總監錢黃碧 君女士接待。理大人員向黃國會議員介紹活齡學院的研究學術項目,以及為第三齡人士 舉辦的活動,並由活齡學院成員分享參與長者終身學習、義工及就業計劃的經驗。

A delegation from Canada led by the Honourable Alice Wong, Minister of State (Seniors), visited PolyU on 14 April. They were warmly welcomed by PolyU President Prof Timothy Tong and members of FHSS's Institute of Active Ageing (IAA), including Mrs Teresa Tsien, IAA Director, and Prof George Woo, Emeritus Professor and Visiting Chair Professor of Optometry and FHSS's former Dean. During the visit, IAA members informed the delegation about their research, academic and service activities. Two older adults on IAA's Project for the Third Age also shared their experiences in lifelong education, volunteer work and job placement through the project.



#### 醫療及社會科學院研究生課程 Taught Postgraduate Programmes in Health

· 療及社會科學院舉辦多個研究生課程,讓有志深化及擴闊醫療專業知識的人士入讀。

HSS offers taught postgraduate programmes for graduates in health or other relevant disciplines who wish to deepen their knowledge and understanding of different aspects of health care.

#### 醫療科學博士課程

為香港首個醫療科學的博士專修課程,當其他的哲學博士學位 課程多數以研究為主,醫療科學博士課程除研究外,更集中探 討醫療科學及健康照顧的實踐,適合有經驗的醫療專業人士就 讀,以培育其於擔當決策及領導者必須具備的分析力。學生可 選擇以普通全科博士學位畢業,或專攻某一項醫療專科範圍。

#### 健康信息科技理學碩士課程

為本港第一個是項範疇的碩士學位課程,適合所有醫療專才, 以及其他學系如資訊科技學或工程學的畢業生入讀,旨在探討 資訊科技於醫療環境中的應用。課程包括介紹醫療專業人員於 工作上對資訊科技應用的需要,適合打算加入、重新定位或轉 換至醫療健康有關專業範疇的學生就讀。

#### 感染控制理學碩士學位課程

課程前身名為醫療護理學理學碩士學位(感染控制)課程,為全 港首個針對感染控制的深造課程,內容包括介紹當前最新及最 先進的感染控制知識,旨在培育醫護人員或有關界別人士,作 為機構或組織的感染控制專責人員,並於公共衞生的範疇擔當 領導或教育的角色。2013年9月起,課程由護理學院舉辦。

#### Doctor of Health Science

This professional doctoral degree is the first-ever such programme in Hong Kong. While PhD programmes focus primarily on research, the DHSc programme concentrates on the practice of health sciences and care provision as well as research and is intended for experienced health care professionals who are looking to develop their analytical skills for leadership positions within a health care environment. Students can choose to graduate with a generic award or specialise in a particular health stream.

#### Master of Science in Health Informatics

This programme is the first of its kind in Hong Kong and aims to equip health care professionals and graduates from health-related disciplines, information technology, engineering or related backgrounds for the advanced use of information technology skills in health care settings. The course addresses the needs of health care providers and allows for the introduction, re-orientation and/or conversion to a field that is of direct relevance to the student's place of employment.

#### Master of Science in Infection Control

Formerly "Master of Science in Health Care (Infection Control)," this programme is the first ever in Hong Kong and aims to provide experienced health care staff and professionals in relevant industries with a qualification to become infection control practitioners and to take up leadership and/or educational roles in public health. It covers the latest and emerging knowledge on infection control. From September 2013, the programme will be under FHSS's School of Nursing.

查詢更多醫療及社會科學院以及轄下學系/學院的課程資料,可瀏覽http://fhss.polyu.edu.hk/en/postgraduate。 For more details about the programmes and those offered by FHSS's constituent departments and schools, please visit http://fhss.polyu.edu.hk/en/postgraduate/.