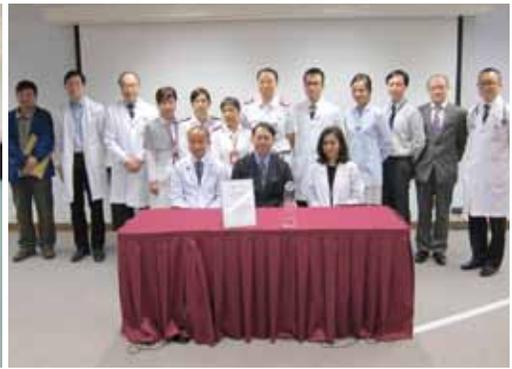


ISSUE 15 APRIL 2014

HEALTH NEWS  
**健訊**  
fhss.polyu.edu.hk



醫療及社會科學院  
**研究項目創意  
實用兼備**

**Dedication Meets Innovation**

香港理工大學(理大)醫療及社會科學院積極鼓勵研究人員進行高質素的研究，藉此改善及優化人類生活。今期的《健訊》中將介紹幾個最近完成的研究。

The Faculty of Health and Social Sciences (FHSS) of The Hong Kong Polytechnic University (PolyU) encourages its scholars, researchers and practitioners to continually pursue excellence in the education, research, and services the faculty conducts for students and our local and global communities at large. Find out what they've been up to recently in this issue of "Health News"!



**目錄 Contents**

- 02 科學研究  
RESEARCH
- 05 本地獎項  
HONG KONG AWARDS
- 06 研究生課程  
POSTGRADUATE DEGREES
- 07 運動健康  
SPORTS HEALTH
- 08 研究小組  
RESEARCH GROUPS
- 09 理大獎項  
POLYU AWARDS
- 10 學院快訊  
FACULTY NEWS
- 12 學系消息  
DEPARTMENTAL UPDATES



## 彩色隱形眼鏡存有潛在風險 Coloured Contact Lenses May Be Fun But Aren't Risk-Free



佩戴俗稱「大眼仔」的彩色隱形眼鏡已經成為潮流玩意，現在要將眼珠變成其他顏色，甚至其他圖案簡直易如反掌。但如果各位使用的彩色隱形眼鏡是購自格仔舖或隨便在網上商店的話，就要格外小心留神，因為佩戴這些非經正式途徑驗配的彩色隱形眼鏡，很有可能影響眼睛健康。眼科視光學院曹黃惠華教授率領其研究團隊，進行全球首個針對彩色隱形眼鏡微生物黏附量研究，並於2013年10月29日舉行新聞發佈會分享研究成果。曹教授及研究人員發現，於接受測試的15個品牌的鏡片中，有13個樣本均未能通過標準擦拭測試(經擦拭後色素脫落)，顯示製造商並非使用夾層設計或嵌入式設計將色素附於鏡片上。至於微生物黏附方面，研究人員發現13款未能通過擦拭測試的鏡片，比其餘兩款通過測試的鏡片，微生物的黏附量最少多出六倍。

市場上購買到的彩色隱形眼鏡，色素裝嵌設計大致上可分為兩類，其中一類的色素塗於鏡片表面，另一類的色素則採用夾層設計附於鏡片中間，而後者的設計則能夠避免眼簾及眼球直接接觸到顏色物質。曹教授及團隊於進行研究時，發現13個品牌的色素經標準擦拭測試後脫落，顯示鏡片並非如其中某些製造商所述色素是採用夾層設計。

於第二部份測試中，研究人員集中比較三款彩色隱形眼鏡及無色隱形眼鏡(即相同物料及含水量)的微生物黏附程度。結果發現，不能通過擦拭測試(即非夾層或嵌入式設計)鏡片的微生物黏附量，明顯高於不含色素的鏡片。而兩款能夠通過擦拭測試(即夾層或嵌入式設計)的鏡片與不含色素鏡片的微生物黏附程度則沒有明顯分別。由此證明彩色隱形眼鏡若沒有使用夾層或嵌入式設計，將色素塗於表面的鏡片會黏附更多的微生物。

曹教授表示，是項研究的重點並非質疑13款彩色隱形眼鏡的安全性，而是希望指出接受測試的15個品牌中，許多於貨品資料上並沒有列明鏡片色素是塗於表面或是採用夾層設計，亦沒有清楚附上使用及護理程序。

曹教授表示：「佩戴彩色隱形眼鏡是一個潮流，但要安全使用，首要條件是必須由專業眼科視光師驗配。這樣才可保證鏡片的質素及可靠性，而眼科視光師更會替使用者進行眼睛檢查及鏡片試戴，並會提供正確的使用和護理指示，以及進行定期覆檢，減少因佩戴隱形眼鏡而出現的併發症。」



Want to make your brown eyes blue? Or bigger, or any other colour or pattern to impress or shock your friends? Buyer beware! Your blue contact lenses bought casually over the counter or Internet could leave you with red infected eyes. In a press briefing at PolyU on 29 October 2013, Prof Pauline Cho from PolyU's School of Optometry described her team's findings of what they believe is the world's first study of cosmetic coloured contact lenses and microbial adherence levels. They found that 13 of the 15 brands of coloured contact lenses bought from various sources failed a standard rub-off test as pigment came off the lenses and that a sixfold or higher level of test bacteria (*Pseudomonas aeruginosa*) was able to stick to (new untested) lenses of those 13 brands than on (new untested) lenses of the 2 brands that passed the rub-off test.

Coloured contact lenses may have their pigment printed on their surfaces or embedded or sandwiched inside the lenses. The latter two types prevent pigment from touching the eyelid and eyeball. The pigment of the 13 brands rubbed off, indicating it was on their surfaces. This was contrary to manufacturers' claims for some of the 13 brands that stated they were of an embedded or sandwich type.

The team also tested 3 of the 15 brands that had clear counterparts comprising the same material (hydrogel or silicone hydrogel) and water content for adherence levels of 3 types of test bacteria (*Pseudomonas aeruginosa*, *Staphylococcus aureus*, and *Serratia marcescens*). They postulated that (new untested) lenses of the 2 brands that passed the rub-off test were of an embedded or sandwich design and should show no substantial difference with their clear counterparts, while (new untested) lenses of the brand that failed should show much higher levels of microbial adherence than its clear equivalent. And that is exactly what they discovered.

Prof Cho said this didn't necessarily mean the 13 brands were unsafe. However, many of the 15 brands also did not come with product information on whether the lenses were of the surface, embedded or sandwich type, and many did not come with any usage or care instructions.

She urged potential buyers to go to a registered eye health practitioner who is licensed to prescribe contact lenses, such as an optometrist, to ensure the quality and reliability of lenses and for a professional eye examination, fitting, and usage and care advice. "Users should also get regular check-ups to minimise complications that can be associated with contact lens wear," said Prof Cho.



## 「提示小便」能有效改善 長者小便失禁情況

### Prompted Voiding Effective for Reducing Urinary Incontinence in Elderly



「小便失禁」問題困擾了不少長者，影響他們心理及生理健康。香港大學於2003年發表的調查顯示，於全港65歲以上的長者中，約有10-15%有不同程度的小便失禁問題。居住於安老院舍長者的小便失禁發生率在短短的幾年間，更由2003年的45%急升至2009年的54%。理大護理學院青年健康護理中心總監兼賽馬會流金頌學人賴錦玉教授及其團隊，早前進行全港首個有關「提示小便」行為治療的實驗性研究，發現這個治療模式能有效為安老院舍的院友改善小便失禁情況，並於2013年12月17日舉行新聞發佈會，與傳媒及業界人士分享研究成果。

本地安老院舍現時普遍使用紙尿片處理長者失禁問題，然而這安排令長者尊嚴及自信心受損，而紙尿片更可能會刺激長者皮膚帶來不適，並增加患上尿道炎風險。現時普遍有三種治療失禁問題的行為治療，分別為：「提示小便」、「定時小便」及「膀胱訓練」。所謂「提示小便」，就是透過定時提示長者如廁，減少他們失禁的頻率；「定時小便」則是於特定時間提醒長者排尿，而「膀胱訓練」就是以凱格爾運動鍛鍊患者的盆底肌肉，提高其控制膀胱的能力。根據研究顯示，以上三種方法中以「提示小便」最能有效改善失禁情況。

賴教授及其團隊於2011年1月至2013年7月期間進行研究，研究對象為52位居住於五間不同安老院舍，及有失禁問題的67歲以上長者。院友都必須是自願參與，並符合研究條件才被納入作為研究對象。參與研究的院友被隨機分到實驗組及對照組，實驗組的院友獲安排接受「提示小便」行為治療，院舍護理人員於日間每隔兩小時便詢問長者是否需要小便，並重複詢問最多三次。而對照組則如常使用成人尿片作日常護理。研究結果顯示，接受「提示小便」行為治療的實驗組長者，小便失禁率由73%下降至58%，反之對照組的長者小便失禁率則由66%上升至77%，反映出「提示小便」行為治療能有效改善長者失禁的情況。賴教授表示：「是項研究證明『提示小便』行為治療的成效，不但能夠幫助失禁的長者避免尷尬，重拾自信，更改變了院友和院舍職員對小便失禁問題的看法。」

Everyone goes to the toilet but it's taboo to talk about it. Yet a 2003 survey by the University of Hong Kong found that 10-15% of people aged 65 years or older suffered from urinary incontinence, or involuntary leakage of urine. In nursing homes, the percentage is higher and rising, perhaps because of Hong Kong's ageing population, from 45% in 2003 to 54.1% in 2009. On 17 December 2013 at PolyU, Prof Claudia Lai of PolyU's School of Nursing, who is a Jockey Club Cadenza Fellow, presented the results of Hong Kong's first-ever study of the effectiveness of prompted voiding as a behavioural strategy for elderly residents of nursing homes to reduce their urinary incontinence. The findings suggest that prompted voiding is effective and potentially sustainable in local nursing homes.

Adult diapers are commonly used for urinary incontinence in grown-ups. But wearing them brings embarrassment and the risk of developing skin irritation and urinary tract infections. There are 3 main behavioural strategies that could be used to reduce urinary incontinence: prompted voiding, in which a caregiver prompts the person at set times to go to the toilet; timed voiding, in which the person has to remember to go to the toilet at set times; and bladder control training, in which the person uses Kegel exercises to strengthen his or her pelvic floor muscles to train his or her bladder to hold in urine for longer.

Studies in other countries found that prompted voiding is the most effective behavioural strategy for the elderly. For their study from January 2011 to July 2013, Prof Lai and her team randomly assigned half of the 52 residents aged 67 years or older at 5 local nursing homes who volunteered and met the study's criteria to either the experimental group that would use prompted voiding or the control group that would continue to use adult diapers only. Those in the experimental group were asked up to 3 times every 2 hours during the daytime by the homes' carers if they needed to go to the toilet to pee and would be praised by the carers, who had been given training for the study, if they agreed to go. Over a 6-month period, the rate of urinary incontinence among the experimental group fell from 72.6% to 58.7%, while the rate for the control group actually increased from 66% to 77.6%. Apart from improving the dignity and quality of life for the experimental subjects, Prof Lai also said the carers' attitude towards urinary incontinence in general in the elderly also changed after the training.

# 理大—中大合作研發遠程中風治療系統 喜獲國際殊榮

## PolyU-CUHK Telestroke System Wins International Award



眾所周知，香港的公共醫療系統多年來面對專業人員短缺問題，病人往往需要輪候很長時間以接受治療，有機會影響他們的康復機會及進度。中風就是其中一個與時間競賽的病症，存活率及康復機會取決於病人是否於最短的時間內得到最適切的治療。理大醫療科技及資訊學系早前與香港中文大學(中大)醫學院內科及藥物治療學系合作，研發一套流動影像傳訊系統，協助腦神經科醫生在非辦公時間遙距為中風病人作評估及診斷，榮獲亞太區HIMSS-Elsevier 數碼醫療傑出資訊及傳訊技術獎，研究人員於去年11月26日舉行聯合新聞發佈會介紹有關系統。

腦中風是中國第一大殺手，每年造成超過150萬人死亡。本港每年亦有超過二萬名中風病人需要住院接受治療，當中有3,000多人死亡，而數以萬計病人因而傷殘。中風大致可分為兩大種類，第一種是缺血性腦中風(腦栓塞)，動脈出現血塊阻塞血液供血到腦部造成腦功能障礙。另外一種是腦出血，腦部內血管爆裂引致出血。中風病人必須及時由有經驗的腦神經科專科醫生進行評估及診治，方能增加生存及痊癒的機會。溶栓治療(俗稱通血管)能有效治療缺血性腦中風，如病人在病發後的黃金三小時內接受治療，其康復機會可增加三成。但溶栓治療屬高風險治療，必須由腦神經科專科醫生診斷病情及評估風險後才可進行。然而由於香港腦神經科醫生人手短缺，本港大部分醫院未能提供24小時中風溶栓治療服務。

有見及此，理大醫療科技及資訊學系與中大內科及藥物治療學系合作，利用由理大研發的流動影像傳訊系統，推行遠程中風治療。透過專用軟件及輕便的平板電腦或手提電腦，腦神經科醫生能在非辦公時間遙距為中風病人作診斷及提供專業意見，評估病人是否適合接受溶栓治療。

沙田威爾斯親王醫院於2012年5月起利用此技術為病人提供24小時急性中風溶栓治療服務，令院內接受溶栓治療的人數比以往增加達三倍。負責研究該套治療系統的醫療科技及資訊學系副教授暨副主任鄧福禧博士表示：「利用流動影像傳訊系統進行的遠程診斷，其成效及安全性與駐院腦神經科醫生的現場診斷相若。」

It's no secret that Hong Kong's public health care system is short of many types of health and medical professionals. This not only negatively affects patients by their having to wait longer for appointments, but it could also adversely affect the outcome of their treatments. One such example where speed is of the essence is the diagnosis and treatment of stroke. Researchers from PolyU's Department of Health Technology and Informatics (HTI) and the Chinese University of Hong Kong's (CUHK) Department of Medicine and Therapeutics jointly held a press briefing at CUHK on 26 November 2013 to introduce their telestroke system, which won an HIMSS-Elsevier Digital Healthcare Award 2013 last October in a competition open to all health care organisations based in the Asia-Pacific region.

In China, stroke is the top cause of death. Every year in Hong Kong, more than 20,000 stroke sufferers are admitted to hospital, of whom more than 3,000 die while the majority of the remainder develop varying degrees of physical disability. There are 2 broad categories of stroke: those caused by a blood clot in the brain, and those caused by a burst blood vessel in the brain. Stroke patients must be evaluated and diagnosed by an experienced neurologist to receive the appropriate treatment as soon as possible. For those whose stroke is caused by a blood clot, thrombolytic therapy, which uses drugs to dissolve the clot to restore blood flow, is the most effective treatment and increases the chance of recovery — if thrombolysis is started within 3 hours of the onset of stroke, that is. However, there is a shortage of neurologists in Hong Kong, resulting in delayed diagnosis and treatment, especially outside normal work hours.

To address this, HTI and CUHK's Department of Medicine and Therapeutics jointly developed a telestroke system that utilises HTI's Security-Enhanced Mobile Image Distribution System (SEMIDS). The system enables off-site neurologists to use laptops or tablets with special software to evaluate stroke patients for their suitability for thrombolysis.

In May 2012, the Prince of Wales Hospital became the first in Hong Kong to use the telestroke system to offer a 24-hour thrombolysis service by allowing off-site neurologists to assess its stroke patients if no on-site neurologist is available. Since then, about 3 times more patients have been treated with thrombolysis than before the system was adopted. Also, "the result indicated that the telestroke system offers similar treatment efficacy and safety compared to on-site neurologists," said Dr Tang Fuk-hay, Associate Professor and Associate Head of HTI.





本地獎項

HONG KONG AWARDS



## 物理治療學學生獲選為 2013年度香港十大傑出青年 Physiotherapy Student Is One of Hong Kong's Ten Outstanding Young Persons 2013



13歲那年是馮英騏的人生轉捩點，估不到只因在街頭摔了一跤，跌斷手臂，竟然會360度改變了他的一生。英騏到醫院接受手術卻不幸受感染，患上急性脊髓炎，影響到下半身的活動能力，自此需以輪椅代步。但英騏深信「勝人者力，自勝者強」，他不但創造了生命的奇蹟，更徹徹底底地活出他的信念。英騏說：「世界絕對有奇蹟，但要創造奇蹟，我們亦要付出相對的努力、毅力及堅持。」

馮英騏明白接受了要以輪椅代步的事實，他不但沒有抱怨氣餒，反而將輪椅當作好朋友，而這位「親密戰友」更激發起他的鬥志，當年只得15歲的英騏挑戰自我，嘗試參與輪椅劍擊運動，自此便與劍擊項目結下不解之緣。由於表現出色，英騏被發掘加入香港輪椅劍擊代表隊，在1998年世界錦標賽奪冠，一鳴驚人；更在2000年悉尼及2004年雅典殘奧的輪椅劍擊項目，再勇奪5金1銀1銅的成績。經過多年的康復治療訓練，以及憑著不屈不撓的精神，英騏現在已能夠正常走路。現已退役的英騏，一直積極推廣傷殘運動，熱心公益之餘更出任不同運動科學學會成員。他於修畢體育學士學位課程後，最近更完成理大康復治療科學系的物理治療學碩士課程，成為註冊物理治療師，踏入另一個人生里程，繼續活出他的座右銘。

由運動員生涯開始，英騏一直積極參與有關青少年的工作，包括到不同中學及大學演講，分享其個人經歷，希望藉此感染其他處於逆境的年青人，可以跟他一樣樂觀堅強地面對人生低潮，活出不一樣的人生。英騏這份大無畏精神及對社會多年來的貢獻，得到社會大眾的認同，曾獲得多項殊榮，於2001年獲香港特別行政區頒授榮譽勳章外，於2013年更獲選為香港十大傑出青年。

天生好動的英騏熱愛運動，為鼓勵傷健人士積極參與運動，他不斷挑戰自己，更在2013及2014年的香港馬拉松中夥拍其「親密戰友」，參加10公里輪椅賽，奪得第一名。英騏表示：「非常感謝每一位在我生命中曾經鼓勵過我的朋友，雖然我現在已經退役，但我依然酷愛運動，因此希望透過參與不同運動項目，證明傷健人士的能力，並鼓勵他們多參與體育項目。」

Many people may think Mr Fung Ying-ki's sporting, academic and civic achievements border on the miraculous, given his disability. At the age of 13, Mr Fung broke his arm, which became infected and resulted in damage to his spinal cord and the loss of the use of his legs. But staying true to his motto of "Mastering others is strength, mastering yourself is true power" that was originally penned by ancient Chinese philosopher Lao Tzu, Mr Fung disagrees. "A miracle won't happen if you don't have the passion or dedication for what you're doing. It also depends on how much effort you put into it," said Mr Fung.

Though becoming disabled is very upsetting for anybody, Mr Fung ultimately didn't let it dampen his zest for life. He became inspired by wheelchair fencing and started training when he was 15. Mr Fung went on to become a world champion in 1998 and a multiple champion at the 2000 Sydney and 2004 Athens Paralympic Games with a haul of 5 golds, 1 silver and 1 bronze. In 2002, after years of determination, he regained some ability to stand and walk. Mr Fung has earned degrees in sports and was a committee member of international and Hong Kong sports and sports science bodies. He recently completed the Master in Physiotherapy programme at PolyU's Department of Rehabilitation Sciences to become a professional physiotherapist.

For nearly 2 decades, Mr Fung has given talks to school and university students on his experiences to encourage them to be strong and not to give up when they are struggling with issues. It is no surprise, then, that he has won several civic awards, including the Medal of Honour from the government in 2001, and was named as one of Hong Kong's Ten Outstanding Young Persons for 2013 in recognition of his professional endeavours and contribution to the community.

"I'm so thankful for having so many people support me during the difficult time of my life," said Mr Fung. "And I want to give back to society. I've tried different sports since I retired from fencing because I want to demonstrate to others that the disabled can do different sports. I also want to encourage more disabled people to play sports," he added. For example, Mr Fung has taken up wheelchair racing and continued his winning ways in the 2013 and 2014 Hong Kong Marathon. He is also active in helping people with chronic diseases to succeed in sports.

# 首屆職業治療學/物理治療學碩士課程學生畢業 Ceremony Celebrates First Graduates and Second Cohort of Entry-Level Master's in Occupational Therapy, Physiotherapy

 康復治療科學系於1月18日在理大校園蔣震劇院，為首屆職業治療學/物理治療學碩士課程舉行特別儀式，恭賀學生圓滿完成課程，並宣佈於今年繼續招收第二屆學生。社會福利署副署長(服務)林嘉泰先生更撥冗出席儀式擔任主禮嘉賓，見證首屆由該署及康復治療科學系合作提供的準入碩士課程學生完成學習，投身物理治療及職業治療的專業。

物理治療學碩士課程主任彭耀宗教授表示：「過去幾年本港嚴重缺乏物理治療師及職業治療師，與其不斷消極地投訴人手不足，我們作為學術人員不如積極地與有關政府部門及相關團體磋商，共同訂立解決人材短缺問題的良策。理大於前年推出這兩個碩士課程，培育一班新晉物理治療師及職業治療師投入市場，除可惠及病人外，相信亦能夠減輕現職專業治療師的工作負擔。」

彭教授補充說：「今天的儀式並非純粹一個紀念及分享畢業喜悅的時刻，學系更希望透過這個機會，讓各位完成課程的同學，感受到公眾人士對於他們付出時間及決心完成課程的肯定。同學於完成課程後便成為本港醫療系統的重要一員，必需秉承信念，為市民提供專業及高質素的物理治療及職業治療服務。」

職業治療學碩士課程主任文偉光教授表示：「首屆的兩年全日制碩士課程得到學生及業界人士的良好評價，由於課程內容較為密集，適合一班成熟，以及有志投身物理治療或職業治療專業的本科畢業生。」文教授說：「是次課程為香港職業治療專業的一個重要里程碑，能切合現時日益增多的長者、長期病人及傷健人士的需要，為非政府機構適時地培育適切的職業治療師，服務市民大眾。」

文教授隨後補充說：「康復治療科學系今次主動出策舒緩醫療專業人員短缺的情況，我要特別感謝所有教職員，以及醫院管理局及參與機構為課程同學提供的臨床指導，相信畢業生會十分珍惜於課程中得到的知識及經驗。」

剛完成課程加入成為物理治療師的馮敬龍表示：「很榮幸成為課程的首屆畢業生，課程深化了我對物理治療的知識，並讓我明白到現今業界最新的治療方法及技巧。」

由於社會福利署全額資助學生完成是次課程，畢業生需於畢業後在名冊內的非政府機構服務兩年，而第二屆學生的課程已於一月展開。



 On 18 January at the on-campus Chiang Chen Studio Theatre, PolyU's Department of Rehabilitation Sciences (RS) held a special ceremony to celebrate both the graduation of its first-ever cohort of students from its entry-level Master in Occupational Therapy (MOT) and Master in Physiotherapy (MPT) programmes and the intake of its second cohort to the programmes. In recognition of these 2 taught postgraduate programmes that RS began in 2012 in collaboration with Hong Kong's Social Welfare Department (SWD), Mr Lam Ka-tai, SWD Deputy Director (Services), was invited to the ceremony as its officiating guest.

Afterwards, Prof Marco Pang, MPT Programme Leader, reflected that "the severe shortage of physiotherapists and occupational therapists has been mentioned over the past few years. Rather than just complain about it, us academics and other parties worked together to come up with a solution to reduce the shortage. The programmes will also ease the stress on current practitioners and benefit patients."

He added, "The ceremony isn't only an exceptional moment and memory for our graduates and staff. More importantly, it serves as a public acknowledgement of the graduates' hard work and determination to complete the programmes and that they're closer to realising their dreams of becoming professional physiotherapists or occupational therapists."

Prof David Man, MOT Programme Leader, said the 2-year, full-time master's programmes "have met with great success. Their intensive curricula have been carefully designed for more mature and committed students who have a health-related first degree or background." On the MOT, he said, "It's a new milestone in Hong Kong's history of occupational therapy education because it's timely and caters to a specific need for competent occupational therapists in NGOs who will serve Hong Kong's increasing numbers of the elderly and people with chronic illnesses or challenging disabilities."

"I'm very proud of RS's role and am grateful to all the teaching staff and the clinical educators from the Hospital Authority and participating NGOs. They've made both programmes possible and successful. Besides, the graduates are very appreciative of what they've gained from the programmes," he added.

Mr Eric Fung, a newly minted MPT graduate, concurred. "I'm glad to be one of the graduates this year. The programme consolidated my knowledge as well as taught me contemporary practices in physiotherapy," he said.

Since SWD subsidised the graduates' tuition fees, they will now work for an approved NGO for 2 years. The second cohort started their studies this January.



# 理大協助馬拉松選手 跑出信念、跑得健康 PolyU Helps HK Marathon Participants to Be Fit to Run



 2013年10月及11月的某幾個朝早，香港其中一個網站突然出現「網路大塞車」，所指的是2014年香港馬拉松的跑手登記專頁。許多熱愛跑步的朋友，清晨開始便於電腦前或以手機戰戰兢兢，準備就緒，為的就是希望成功爭取到2月16日舉行的馬拉松賽事其中一個席位。今年共有73,000位選手成功得到參與賽事的資格，然而亦有不少人士因未能報名而失望而回。作為這項大型賽事的主辦單位，香港田徑總會每年均增加參賽名額，今年較去年更增加了1,000個名額，但仍未能滿足到本港所有跑步愛好者的需求。市民的熱烈參與，亦意味著醫療及社會科學院，以及康復治療科學系需要投放更多人手及資源，協助跑手預備，以及於賽事當日提供專業的物理治療服務。

一如往年，康復治療科學系副教授暨香港田徑總會高級副主席楊世模博士，於醫療及社會科學院、康復治療科學系，以及香港賽馬會運動醫學及健康科學中心的支持下，由去年10月起舉辦一連串的馬拉松診所及先導課程，協助參與不同賽事及不同跑步年資的選手備戰。

於2014年2月8日至9日，康復治療科學系的楊慧教授及楊世模博士帶領一隊由專業物理治療師及物理治療學生組成的團隊，於維多利亞公園舉行的馬拉松嘉年華中，為選手進行不同類型的體能測試，及按選手身體狀況提供專業意見。賽事舉行當日，楊教授更帶領團隊於終點線為跑手提供即時的物理治療服務。參與的物理治療學生除可得到於大型體育運動中擔上重任的機會外，更能夠將所學到的知識附諸實踐，幫助參賽人士。

理大今年組成歷年來最強大的馬拉松隊，共有3,900人出賽，更連續五年蟬聯主辦單位頒發的「最鼎力支持大獎」冠軍，其中300多位更是來自醫療及社會科學院的馬拉松選手。

 On a few mornings last October and November, buses, trains and offices suddenly became unlikely venues for a massive 'cyber-attack' on a single website — that of the Hong Kong Marathon 2014, that is, as thousands of people tried to enrol at the same time for a coveted place in one of its races on 16 February 2014. Some 73,000 of them managed to register successfully while many more thousands were left disappointed as the quotas quickly filled up. Although the race organiser, the Hong Kong Amateur Athletic Association (HKAAA), has increased the number of spots available each year — a thousand more for 2014 than in 2013 — demand still far outstrips supply for Hong Kong's biggest mass-participatory sports event. The public's insatiable appetite for taking part also meant that FHSS and its Department of Rehabilitation Sciences (RS) continued to put in plenty of effort to help entrants prepare safely for their races beforehand and to provide physiotherapy for them after their exertion on the big day.

As in previous years, Dr Simon Yeung, RS Associate Professor and HKAAA Senior Vice-Chairman, led multiple running clinics and introductory courses from last October for participants of the different race distances and levels of experience, with support from FHSS, RS, and The Hong Kong Jockey Club Sports Medicine and Health Sciences Centre, which is co-hosted by FHSS.

And on 8-9 February 2014 at the Marathon Expo in Victoria Park, during which runners picked up their runner's pack, Dr Yeung and RS Prof Ella Yeung led PolyU and non-PolyU physiotherapists and RS physiotherapy students at a booth themed "Fit to Run" to offer different fitness assessments and advice to them and other visitors. A week later, on race day, Prof Yeung was once again in charge of the official physiotherapy service for the Hong Kong Marathon, with the physiotherapists and students strategically stationed in the finishing area in Victoria Park. Apart from experiencing the buzz of being a hands-on health practitioner at a large-scale international sports occasion, the students gained a priceless opportunity to put into practice what they had learned on their degree programme on a steady stream of serious, weekend and novice runners of all ages and genders.

The 3,900-strong PolyU Running Team 2014, including some 300 from FHSS, also set a new record for the number of runners in a single team and helped the university to win the Hong Kong Marathon's "Most Supportive Group Award" for the fifth consecutive year.



# 腦神經科學研究小組研討會

## Seminars by Neuroscience Research Group



多位國際知名學者繼續應腦神經科學研究小組之邀請，舉行研討會與理大師生及研究人員分享其最新研究成果。

去年7月15日，美國名尼蘇達大學心理學系教授Gordon E. Legge教授剖析室內環境的對比度、顏色、燈光、陰影、斜台及梯級的設計，如何影響到視障人士的知感接收，以及空間移動。Legge教授本身亦為視障人士，他與其團隊早前研發一套以紅外線感應器及發音器材組成的室內電子訊息系統，透過語音合成器協助視障人士前往到指定地點。

於11月19日，來自美國貝勒醫學院的吳森鑫博士教授與出席研討會的人士，分享其團隊於不同眼內壓的老鼠視網膜樣本中，發現偵測弱光(Rod)及辨別顏色(Cone)感光細胞擁有不同訊號傳導途徑。眼內壓是形成青光眼的重要成因，團隊發現眼內壓會複雜地影響到視網膜神經原連接的相互影響。如果可以將這個影響量化，則能有效地完善現有的青光眼檢查，幫助病人更早偵測到出現青光眼的機會。吳教授同場更分享中央視野及周邊視野於不同視覺幻象，包括殘影(afterimages)、馬赫帶(Mach bands)及赫爾曼格(Hermann grid)所扮演的角色。

俗語有云「耳聽三分假，眼看未為真」，英國牛津大學的Jan Schnupp教授於9月5日的研討會上分享其團隊針對白鼬進行的實驗。研究人員當給予兩種聲音給白鼬聆聽，若白鼬能夠正確分辨到後一種聲音比前一種聲音高音或低音的話就會給予水份。實驗結果發現，白鼬腦內相關的聽覺皮層活動會隨測試次數而增加，顯示大腦的活動並非單單與音頻有關。

於靈長類動物中，節奏性活動如步行是由脊髓所控制，而非由腦部運動皮層所影響。然而，於觀察脊髓受傷病人的康復過程中，病人每次嘗試踏步時均會增加皮層神經元活動的同步。於9月6日，美國亞利桑那州立大學生物衛生系統工程學院的何繼平教授表示，從他以獼猴為對象的研究中，再次確立這個神經系統的轉變。研究更探討使用患者腳部周圍神經移植的方法，以及加入酸性成纖維細胞生長因子(aFGF)以修復脊髓受傷的成效。



Prominent international scholars continued to give seminars at PolyU at the invitation of the university's interdisciplinary Neuroscience Research Group.

On 15 July 2013, Prof Gordon E. Legge, Distinguished McKnight University Professor at the University of Minnesota's Department of Psychology, showed how contrast, colour, lighting, shadows, ramps and steps in indoor environments could negatively affect how visually impaired people perceive and move through them. Prof Legge, who is visually impaired, also explained his team's indoor Digital Sign System that uses RFID sensors and readers to guide visually impaired people to their desired destination using synthesised-voice directions.

On 19 November, Prof Samuel M. Wu, Camille and Raymond Hankamer Chair in Ophthalmology at the US's Baylor College of Medicine, outlined his team's work in rod and cone signalling pathways in different mouse retina models with increased eye pressure (or intraocular pressure, IOP). IOP is a risk factor in humans for developing glaucoma. Their findings imply that a rise in IOP may lead to a more complex interplay of retinal synapses being disrupted than currently believed and that if these could be quantified, it could lead to improvements in tests for the early detection of glaucoma. Prof Wu then spoke about the role of centre-surround antagonistic receptive fields in different types of optical illusions, such as afterimages, Mach bands, and the Hermann grid.

Just as what we 'see' isn't always the same as the actual visual stimulus, what we 'hear' isn't always the same as the actual frequencies. On 5 September, Prof Jan Schnupp, Co-Director of the Oxford Auditory Neuroscience Group at the University of Oxford, described his team's study of ferrets that discriminated between a target artificial sound whose pitch was higher or lower than the preceding reference artificial sound to get water. The ferrets' neural activity in their auditory cortex related to their responses increased throughout the trial, which would not happen if the neural activity was only related to the sounds' frequencies.

In primates, rhythmic locomotion like walking is usually controlled by the spinal cord, with insignificant control from the motor cortex in the brain. However, increasing synchronisation of cortical neuron activity arises in attempts to take steps during recovery after a spinal cord injury. On 6 September, Prof He Jiping from Arizona State University's School of Biological and Health Systems Engineering described his team's study of rhesus monkeys that confirmed this neural activity change. The study also explored the effectiveness of using a peripheral nerve graft from the subject's leg and adding acidic fibroblast growth factor (aFGF) to repair its spinal cord injury.

## 訪問應用社會科學系 杜文龍博士及David Herold博士

### Interviews with Dr Allen Dorcas and Dr David Herold, Department of Applied Social Sciences



理大應用社會科學系助理教授杜文龍博士及David Herold博士，榮獲2012/13醫療及社會科學院「學院特設傑出表現/成就獎」，以表揚其分別於教學，以及研究及學術活動的卓越表現。醫療及社會科學院亦頒發首屆學院教學獎，2012/13年度的得獎者為應用社會科學系導師馮一沖博士、護理學院助理教授陳頌儀博士及蔣忠廉博士，以及醫療科技及資訊學系助理教授羅嘉慧博士。

究竟怎樣才是一位好老師？杜文龍博士表示：「老師必須真心關懷學生，鼓勵他們主動發掘知識。」杜博士是一位研究輔導心理學及醫療心理學的專家，他認為：「老師要於『專家』及『倡導者』的兩個角色中取得平衡，如果可以在課堂中帶來歡笑，創造一個輕鬆的學習環境的話，更能做到教學相長。」杜博士表示，老師不應該常常高高在上，適當時要保持謙遜。「一位無所不知，無所不能的『萬能老師』往往會打擊學生，因為學生覺得無論自己怎努力也追不上老師，最後無法建立自己獨立的意見及觀點。」

David Herold博士是一位研究中國內地互聯網使用的人類學家，他說：「雖然世界上很多人口在使用互聯網，但直至現時學術界仍未能就這題材歸納到一套完善的理論。中國內地有各式各樣的互聯網社群，但大部份相關的文獻及媒體報導都是意見分歧。」Herold博士的父親是德國人，母親是芬蘭人，太太是中國人，更有一對混血孿生兒。由於生活在一個多元文化的家庭，Herold博士研究時不會單純地只由一個文化的觀點出發，所以更能作出具批判性的分析。被問及如何可以成為一位出色的研究人員，Herold博士表示：「每個人於日常生活中都在作出不同的研究，例如為搬遷而研究不同的住所等，但學術研究則要包括對理論的反思。」Herold博士認為，一個高質素的研究學者必須能夠將複雜難澀的研究資料，轉化成普通人也能看得懂及有興趣閱讀的報告。

Dr Allen Dorcas and Dr David Herold, Assistant Professors at PolyU's Department of Applied Social Sciences (APSS), won PolyU's Faculty/School Awards for Outstanding Performance in Teaching (FHSS) and in Research and Scholarly Activities (FHSS), respectively, for 2012/13. FHSS also bestowed its inaugural Faculty Teaching Prizes upon APSS Lecturer Dr Luke Fung, School of Nursing Assistant Professors Dr Zenobia Chan and Dr Vico Chiang, and Department of Health Technology and Informatics Assistant Professor Dr Helen Law for 2012/13.

So what makes a good teacher? "The ability to care and the desire to understand students and to stimulate and facilitate their own explorations are the extra ingredients that make a teacher shine more brightly in the eyes of students," said Dr Dorcas, a psychologist who specialises in counselling and psychology in health care. "Another strength is the ability to strike a good balance between the role of the specialist and the facilitator in the classroom. The ability to laugh and have fun in the classroom also contributes to a very positive learning atmosphere," he added. "And a good dose of humility can go a long way. 'Know-it-all' teachers quickly give the impression to students that they will never be as good as him or her and so fail to encourage them to develop their own ideas and viewpoints," Dr Dorcas observed.

Meanwhile, Dr Herold is an anthropologist whose research interests include Internet use in mainland China. "The Internet is still very poorly understood or even theorised. China has one of the most diverse online cultures on the planet, but much of the literature and media debates are still stuck in creating dichotomies," he said. Dr Herold noted that his multicultural family background has helped him "to step outside specific national perspectives on research topics and therefore be critical of different approaches." When asked what makes a good researcher, he replied, "As a qualitative researcher, there's little difference between living day-to-day life and doing academic research, except for the theoretical reflection necessary for the latter. People planning to move engage in qualitative research to find out whether or not they should choose one particular flat over another." Dr Herold also added that a qualitative researcher should translate the findings of his or her research into writing that laypeople can understand.





## 第19屆理大畢業典禮 PolyU's 19th Congregation Sees Class of 2013 Graduate



On 5-6 November 2013, the on-campus Jockey Club Auditorium was filled for the six FHSS sessions of PolyU's 19th Congregation and saw a total of 1,912 students graduate in front of packed audiences of family and friends in recognition of the graduands' successful completion of their programmes of study from FHSS or its constituent departments and schools in the past academic year, from sub-degree up to master's level. Based on their excellent academic and non-academic performance, 149 of the graduands were also selected for the Dean's Honours List 2012/13 and were presented individually with a certificate on stage. The Dean's Honours List can be viewed at <http://fhss.polyu.edu.hk/docs/en/promo/DeansList1213.pdf>.



於第19屆的理大畢業典禮中，共有1,912名學生完成醫療及社會科學院以及轄下學系/學院的課程，儀式於2013年11月5日及6日分六場進行。其中149位畢業生更名列院長優異生名單內。院長優異生名單已上載於 <http://fhss.polyu.edu.hk/docs/en/promo/DeansList1213.pdf>

畢業禮對於醫療及社會科學院的畢業生而言別具意義，除了是各位同學接過畢業證書完成學業外，更是畢業同學與社會大眾訂立約定的一個時機。於畢業典禮中，各位醫療及社會科學院的學生於院長葉健雄教授監誓下，宣讀專業誓章，承諾於執業時尊重所有人之尊嚴，工作時秉持最高的專業態度，以及領導及改善社會的醫療及福利服務。

醫療及社會科學院祝各位畢業生前程錦繡。

The conferment sessions for the FHSS graduands are not only a formal-cum-celebratory occasion signalling the end of their studies. In each session, after all the graduands were presented, they were asked to stand and cite FHSS's Pledge of Professionalism together to publicly pronounce that as health and human services professionals they will treat all people with respect and compassion, maintain the highest level of professional conduct and ideals, and strive to improve the health and welfare of all in their community.

FHSS wishes all of our new graduates every success in the future!

## 聯合國要員訪問理大 Head of UN Office for Disaster Risk Reduction Visits PolyU



亞太地區常見的自然或人為災害包括颱風、洪水泛濫、地震、海嘯、核電廠災難、火災等，均造成嚴重的傷亡、環境及經濟損失。3月13日，醫療及社會科學院接待聯合國秘書長特別代表暨聯合國減災戰略署署長Margareta Wahlström女士訪問。Wahlström女士此行，是為了介紹聯合國減災戰略署的工作，以及與理大商討未來的合作機會。

理大校長唐偉章教授、常務及學務副校長陳正豪教授、副校長(學院發展及合作)阮曾嫻琪教授，以及醫療及社會科學院、建設及環境學院、工程學院的學術人員跟Wahlström女士會面。理大更特別邀請來自本地商界及慈善事業的代表出席午餐會議，藉此交流意見及呼籲各界支持聯合國減災戰略署的工作。Wahlström女士於訪問結束前，並與香港特區政府保安局及醫院管理局高層人士見面。



The Asia-Pacific region is very prone to natural and man-made disasters. In recent memory, it has been hit by major typhoons, flooding, earthquakes, tsunamis, a nuclear power plant disaster, and wild fires, resulting in huge human, environmental and economic costs. FHSS coordinated various meetings on 13 March between Ms Margareta Wahlström, who is Head of the United Nations Office for Disaster Risk Reduction (UNISDR) and the Special Representative of the Secretary-General for Disaster Risk Reduction, and representatives from Hong Kong's Security Bureau and Hospital Authority, local businesses and NGOs, as well as PolyU.

In a show of support for UNISDR's work, Prof Timothy W. Tong, PolyU President, Prof Philip Chan, PolyU Deputy President and Provost, Prof Angelina Yuen, PolyU Vice President (Institutional Advancement and Partnership), and academics from FHSS and PolyU's Faculty of Construction and Environment and Faculty of Engineering welcomed Ms Wahlström to the university.

During the meetings, Ms Wahlström introduced the aim and work of UNISDR to the representatives and exchanged views with them on ways their organisations could collaborate with UNISDR to reduce the risk of disaster from different perspectives.



## 瑞典馬爾默大學及澳洲科廷大學 代表團訪問理大醫療及社會科學院 Malmö University and Curtin University Delegates Visit FHSS

 醫療及社會科學院一直積極與海外大學於科研上建立策略性合作關係，藉此擴闊合作網絡，優化研究成果，並提高教學質素及啟發研究人員新思維，拓闊學生視野。

瑞典馬爾默大學(Malmö University)健康及社會學院院長Tapio Salonen教授於2013年11月11至14日，率領一行11人的代表團到訪醫療及社會科學院，商討雙方於醫療科學及社會關懷範疇上的科研合作可能性，以及交換生計劃的安排。醫療及社會科學院院長葉健雄教授、副院長余雲楚博士及黃金月教授，及五位學院/學系主任向代表團介紹學院最新的學術及科研發展，亦剖析香港「3+3+4」新學制，以及香港的醫療架構及社會正在面對的問題。Tapio Salonen教授則簡介馬爾默大學的背景，以及瑞典的福利制度，而其他代表則介紹了所屬學系的課程及學術研究。

為進一步了解理大的交換生學習計劃，代表團會晤了理大國際事務處職員。學院更安排各位嘉賓參觀校園設施，以及根據各人的學術研究範疇，與相關的理大學者進行會面，探討合作事宜。

澳洲科廷大學(Curtin University)代表團亦於11月12日到訪康復治療科學系，商討加強未來合作機會的安排。來訪代表團由該校健康科學系 Celia Cornwell 副教授帶領，另外三位學者分別來自該校物理治療學院、心理學和言語病理學學院，及職業與社會工作學院。代表團成員與醫療及社會科學院院長葉健雄教授、康復治療科學系系主任吳賢發教授及副系主任曾永康教授進行會談，交流康復治療上的發展近況及促進雙方聯繫，嘉賓亦參觀了多個研究實驗室以及了解學系最新的科研成果。

 FHSS actively pursues collaborations with overseas universities to enhance the quality of teaching, learning and research, benefiting staff and students of PolyU and the partner universities alike, since cooperation can help to make better use of limited resources, stimulate new ways of thinking, and spur improvements, productivity and motivation.

In November 2013, delegations from Sweden's Malmö University and Australia's Curtin University visited FHSS to explore opportunities for working together. Malmö University's delegation was headed by Prof Tapio Salonen, Dean of its Faculty of Health and Society, and included 11 other faculty members from its Departments of Biomedical Science, Care Science, Criminology, Health and Welfare Studies, and Social Work. They visited FHSS from 11 to 14 November to explore potential areas for collaboration and possibilities for student and staff exchange programmes. FHSS Dean Prof Maurice Yap, Associate Deans Dr Shae Wan-chaw and Prof Frances Wong, and the heads of FHSS's 5 constituent departments and schools welcomed the group. Prof Yap introduced the work of FHSS, outlined Hong Kong's new 3+3+4 educational structure, and gave an overview of health care issues in Hong Kong. Prof Salonen gave a brief introduction of Malmö University and Sweden's welfare system, while his colleagues outlined the academic programmes and research in their departments. The delegates were given a guided tour of PolyU and informed about the university's student exchange programmes by its International Affairs Office. FHSS also arranged for the visitors to meet with various PolyU academics according to their research interests and fields.

FHSS also welcomed a delegation from Curtin University on 12 November comprising Associate Professor Celia Cornwell, Dean International of Curtin's Faculty of Health Sciences, and a representative each from its School of Physiotherapy and Exercise Science, its School of Psychology and Speech Pathology, and its School of Occupational Therapy and Social Work. The visit aimed to establish a relationship between the two universities, with the main focus on rehabilitation and therapy-based fields. FHSS Dean Prof Yap, Prof Gabriel Ng and Prof Hector Tsang, who are Head and Associate Head of PolyU's Department of Rehabilitation Sciences (RS), respectively, greeted the guests and discussed the potential for collaboration between the two universities. The 4 delegates were also given a guided tour of RS's research laboratories and a summary of the department's latest research studies.



## 護理學院成立香港創意學院鼓勵業界勇於創新 Hong Kong Innovation Academy Established to Promote Local Health Care Inventions

 即使你未必是專業工程師，其實亦能發揮創意潛能，改善人類的生活。不少健康護理界專業人員都會於照料病患者時，獲得啟發，從而注入創意新思維，發明新穎及別具創意的器具及概念，讓病患者獲得更佳的照料。這些創新成果，很多時只用於發明者的工作間，往往未能供其他醫護人員普及使用。有見及此，護理學院成立香港創意學院，期望聯合本地醫療健康護理界的科研發明人員，展示及推廣其嶄新發明及概念，吸引及推動商界注資發展，將方案生產並推出市場，惠及更多病患者及有需要人士。

香港創意學院的首項重要的大型活動，為於2013年12月11日在理大校園舉行的香港創意日（醫療及健康護理），同日並舉辦香港創意大獎比賽。醫療及社會科學院院長葉健雄教授致辭時強調，嶄新發明及概念未必是成本昂貴，但卻成效顯著。葉院長說：「即使很少的改動，卻可帶來明顯的分別。」

護理學院講座教授兼學院主任莫禮士教授致開幕辭時表示，要表揚及宣傳健康護理界的嶄新發明及概念，就要透過舉辦公開比賽，正如香港創意學院舉辦是次香港創意大獎比賽。

首屆香港創意大獎比賽獲得業界大力支持，大會共收到四十六份參賽方案，參賽者分別來自學術界、醫院及醫療器材組織。大會甄選出十份最傑出的方案進入決賽，發明者於香港創意日當日即場向大會評審團闡述其概念及回答提問，評審團以其專業知識及經驗，就參賽作品對於解決醫療問題及商品化的可能性作出評價，選出比賽的優勝者。

冠軍得獎者為理大紡織及製衣學系李翼教授團隊，其得獎作品是“A Novel Drug-loaded Biodegradable Weft-knitted Stent for the Treatment of Colorectal Cancers”；理大護理學院的蔡及時博士團隊以“An Innovative Rehabilitation Simulation System for Learning Activities of Daily Living”獲得亞軍；季軍則為瑪麗醫院心臟暨胸肺外科的黃莉圓小姐團隊，其得獎作品是“Create An Infusion Trolley for Enhancing the Effectiveness, Efficiency and Safety in Post Open Heart Surgery Patient Transportation”。此外，理大眼科視光學院胡志城教授團隊以“Instant Vision Assessment Device: A Stenopaic Slit Refraction System with a

 You don't need to be a professional engineer to invent something that could improve people's lives. Many health practitioners have created novel devices to make their delivery of care and their patients' lives safer and easier. However, the inventions are often only used in their immediate workplaces, even though the innovations have the potential to help patients and health practitioners elsewhere. To address this, PolyU's School of Nursing (SN) set up the Hong Kong Innovation Academy (HKIA) last year to highlight such inventions that have been created in Hong Kong, to promote the adoption and commercialisation of them, and to encourage a culture of technological innovation in health care in general.

The HKIA's inaugural event was the 1st Hong Kong Innovation Day on 11 December 2013, which included the final on campus of its inaugural Innovation Award Competition. Prof Maurice Yap, Dean of FHSS, gave the welcome address in which he emphasised that inventions need not always be expensive to be effective. “Even small changes can make a big difference,” he observed.

In the opening speech, Prof Alex Molasiotis, Chair Professor of Nursing and Head of SN, said one way to give recognition to and publicise good inventions in health care was to hold a contest, like HKIA's Innovation Award Competition.

Open to people from health care institutions, post-secondary educational institutes and the health care device industry, the 1st Innovation Award Competition attracted 46 entries, of which 10 made it to the final. They were assessed by a jury of experts from PolyU and the commercial sector for scientific, technological, intellectual property, and business potential. The winning project was a novel drug-loaded biodegradable weft-knitted stent for colorectal cancer treatment by a team led by Prof Henry Li from PolyU's Institute of Textiles and Clothing. Second place went to a rehabilitation simulation system for children with upper-limb disabilities to learn activities of daily living, which was developed by a team led by SN Associate Professor Dr Thomas Choi. Third place was awarded to a team led by Wong Lee-yuen from Queen Mary Hospital's Department of Cardiothoracic Surgery for their infusion trolley that was enhanced for increased effectiveness, efficiency and safety for transporting patients who have just undergone open-heart surgery. Meanwhile, audience



Binocular Telescopic Optometer”獲得現場觀眾最喜愛大獎。三甲得主獲頒發現金獎作進一步深化其創新意念，而香港創意大獎的冠軍方案更會代表香港參加2014年於瑞士日內瓦舉行的世界創意日，與世界各地的創意大獎的得獎作品一較高下，競逐全球創意大獎。

其他入圍作品包括：理大康復治療科學系學生曾婉玲(譯音)團隊的“Package Opener, Easy way to improve QoL”；理大護理學院蔡及時博士團隊的“Tremor Measurement and Assessment Using Smartphone”；理大護理學院蔡及時博士及香港紅十字會雅麗珊郡主學校陳德賢(譯音)的“Accessibility-friendly Mathematics Input System for Disabled Students”；沈詠文(譯音)及三名康復治療科學系學生的“U Hold, I Hold”；瑪麗醫院心臟暨胸肺外科李惠清(譯音)團隊的“An Innovative Wheelable Chest Drain Stand to Enhance Patient Empowerment on Early Mobilization”；以及ACE Communications Ltd Andrew van Hassell 教授團隊的“ACEHearing”。

大會請得理大創新及科技發展總監劉樂庭博士分享各種形式的嶄新發明及概念、如何保護有關發明、如何成功地將發明及概念轉化為商品、以及創新及科技發展處如何在不同過程中協助理大教職員。



此外，大會亦請得評審團之一的香港醫療及保健器材行業協會副主席陳偉傑先生分享出色的發明及概念的要素。陳先生強調：「首先，發明方案必需是全新的方程式，只按現有的產品作出改動，只會很快被取代。第二，發明者有時可運用逆向思考去解決難題。第三，就是組成跨界別的團隊參與創意發明，因為創意產品及概念具備越多特性、該項方案便越具持續性及更能吸引投資者。」

莫禮士教授總結香港創意日活動時表示，所有香港創意大獎比賽的參賽方案均具意義及影響力。他特別鳴謝ACE Communications Ltd的參與，其作品ACEHearing方案獲得高度評價，但因方案已跟製造商進行商談生產，其性質在大會評審範圍以外。

members at the final voted the Instant Vision Assessment Device, a stenopaic slit refraction system with a binocular telescopic optometer, by a team led by Prof George Woo, Emeritus Professor at PolyU's School of Optometry, as their favourite. The top 3 projects were awarded with cash prizes for their further development, and the winner also received free airplane tickets to represent Hong Kong at the 2014 World Innovation Day in Geneva, Switzerland.

The other projects that made it to the final were the Easy Package Opener by a team led by Tsang Yuen-ling, a student from PolyU's Department of Rehabilitation Sciences (RS); a smartphone app created by a team led by SN's Dr Choi to measure and assess tremor movements in patients; a mathematics input system for computers for disabled students by SN's Dr Choi and Chan Tak-yin of Hong Kong Red Cross Princess Alexandra School; “U Hold, I Hold” assistive devices for people who have difficulty feeding themselves by Sham Wing-man and 3 other RS students; an enhanced wheelable chest drain stand that improves patient empowerment and recovery by enabling their early mobility, which was devised by a team led by Rita Li Wai-ching from Queen Mary Hospital's Department of Cardiothoracic Surgery; and the ACEHearing app that assesses and compensates for hearing loss, which was designed by Prof Andrew van Hassell and his team from ACE Communications Ltd.

In the keynote speech, Dr Terence Lau, Director of PolyU's Innovation and Technology Development Office (ITDO), described different types of innovations, how to protect them, how to make them commercially successful, and how ITDO can help PolyU staff in this process.

The next speaker was one of the jury members, Mr Benjamin Chan, who is Vice Chairman of the Hong Kong Medical and Healthcare Device Industries Association. He suggested to budding inventors that there are 3 keys to a good innovation. “First, you need to set a new formula and not just create a variation or an example of an existing formula, otherwise your innovation could be replaced very quickly. Second, sometimes you need to tackle a problem from the reverse direction in order to get at the solution. And, third, work in interdisciplinary teams because the more attributes you include in your innovation, the more sustainable and attractive it will be for investors from different sectors,” he advised.

In his closing remarks, Prof Molasiotis said all of the projects were very meaningful and impactful. He also acknowledged the merit of the ACEHearing project, which the jury scored very highly but in the end was judged to be perhaps outside the scope of the competition since the inventors were now in talks with manufacturers about it.



## 2014高等分子病理/診斷技術國際會議 PolyU Hosts International Conference on Advanced Molecular Technologies 2014

 嶄新的分子病理/診斷科技，讓科研及醫護人員揭開人體的種種奧秘及隱藏訊息。美國影星安祖蓮娜·祖莉透過進行分子血液診斷，得知其屬於罹患乳癌的高風險群，早前接受預防性雙乳切除手術以降低罹癌之風險。糖尿病患者每日需要驗血或驗尿以監測血糖值；懷孕的媽媽亦可透過驗血得知胎兒的生長情況及患上某些症病的機會率。有見分子病理/診斷為醫療化驗科學、病理學及病人關懷範疇中迅速發展的一門專科，理大醫療科技及資訊學系於2014年3月7日至9日，在理大校園賽馬會綜藝館舉行「2014高等分子病理/診斷技術國際會議」。是次會議更聯同本港及海外多個專業學會合辦，當中包括香港分子生物診斷學會、中美臨床微生物學會(美國)、美國分子病理學會，以及新加坡病理學會。

為期三天的會議以「分子病理/診斷—新時代·展未來」為主題，深入探討分子病理/診斷專業範疇的最新發展，並作為業內專業人員的溝通交流平台。於會議中，來自本港、歐洲及美國的專家發表共超過25個討論題目，吸引逾300位本地及國際學者、研究人員，以及專業及執業人士參與。有見高通量或次世代定序(NGS)技術迅速地被納入廣泛臨床應用，大會更於會議前特別舉辦一個有關次世代定序技術(NGS)的工作坊，讓參與人士更充份掌握分子病理/診斷的不同技術，以及其現在與未來的應用發展，當中包括如何透過檢驗身體中某些蛋白質的出現，得知患上不同癌症的機會。

香港分子生物診斷學會，以及美國分子病理學會於會議首日更簽署結盟契約，標誌兩地將進一步加強分子病理/診斷方面的研究合作。

 If you think “molecular diagnostics” sounds rather boring, think again. The results of a molecular diagnostics blood test famously led Hollywood star Angelina Jolie to find out that she had inherited a faulty copy of the BRCA1 gene and to her eventual decision to undergo a preventive double mastectomy last year to reduce her very high risk of developing breast cancer. Millions of diabetics around the world rely on a blood test or urine test to monitor their blood sugar level regularly every day, while expectant mums often opt to have their blood tested to find out the chances of their babies’ developing a particular birth defect or condition. With molecular diagnostics being an integral part of modern medicine, PolyU’s Department of Health Technology and Informatics (HTI) jointly organised the International Conference on Advanced Molecular Technologies 2014 and the 4th Asia Pacific Symposium on Advanced Molecular Technologies on 7-9 March at PolyU’s Jockey Club Auditorium with the Hong Kong Society for Molecular Diagnostic Sciences, the US-based Chinese American Association for Clinical Microbiology, and the US-based Association for Molecular Pathology, while the Singapore Society of Pathology co-organised.

Themed “New Era of Molecular Diagnostics: The Way Forward,” the historic conference-cum-symposium attracted some 300 overseas and local scholars, researchers and professionals. In addition to lectures and posters during the three days, on the first day of the conference, which started in the evening, a pre-conference workshop comprising several sessions on different aspects of “Next-Generation Sequencing: Clinical Utility, Laboratory Implementation and Bioinformatics Analysis” was also held. Next-generation sequencing, or high-throughput sequencing, has advanced quickly, especially in the past decade, from being primarily a research tool to a widely available clinical method, allowing the growth of molecular diagnostics in health care and benefiting many patients. The sessions enabled attendees to learn about current and future uses of molecular diagnostics, such as in detecting certain proteins that may indicate the presence of specific kinds of cancers, and the variety of technologies used in molecular diagnostics.

The first day also saw the presidents of the Hong Kong Society for Molecular Diagnostic Sciences and the Association for Molecular Pathology sign an agreement to strengthen research collaboration in molecular technologies internationally.



## 活齡學院獲社聯頒發獎項並與恒基合辦第三齡體驗大學課程 Institute of Active Ageing Wins HKCSS Gold Star Award, Collaborates with Henderson

 活齡學院於12月9日獲香港社會服務聯會頒發「長者友善措施致意行動2013」金星獎，以表揚學院一直透過教育、科研及實踐以推動長者擁有優質、自主及豐盛人生不遺餘力。此外，學院多年來成功舉辦的第三齡體驗大學課程一直備受外界關注，本年1月6至10日，學院與恒基兆業地產集團物業管理部合辦「第三齡體驗大學課程2014」。共40名第三齡學生包括恒基物業管理部退休員工、現職員工家屬、恒基旗下屋苑的住戶，以及非牟利長者機構的會員，一同體驗終身學習的樂趣。為鼓勵第三齡人士積極參與，恒基更透過旗下的恒愛慈善基金特別為所有參加者提供全費資助或半費資助。

學院特別安排了六位修讀應用老年學(榮譽)理學士課程的一年級同學擔任學生大使協助教學，並於課堂以外的時間為參加者提供協助，體現長青共融、互相學習的理念。畢業典禮於1月19日在理大校園舉行，總結第三齡參加者的學習成果。

 The important contribution of PolyU's Institute of Active Ageing (IAA) to the community was recognised recently when on 19 December 2013 it won a Gold Star Award in the Age Friendly Hong Kong Appreciation Scheme 2013 run by the Hong Kong Council of Social Service. Requests by external parties to collaborate are also another sign of public recognition. IAA's short Mini-U for the Third Age programme in previous summers has always been well received and it attracted the attention of Hang Oi Charity Foundation. On 6-10 January 2014, the foundation and IAA jointly organised a one-week Mini-U for the Third Age programme for 40 older adults comprising retirees and family members of Henderson Land Development Co Ltd staff, residents of properties managed by the company, and nominees by NGOs.

Six students from IAA's Bachelor of Science (Honours) in Applied Ageing Studies programme served as ambassadors in the course, giving the third-agers a great chance to experience lifelong learning as well as engage in intergenerational exchange. The Mini-U for the Third Age programme concluded with a graduation ceremony for the participants on 19 January.



 眼科視光學院於2013年在本港及海外接連舉辦多個重要的眼科視光學會議。

由亞太眼科視光學會主辦、並由理大眼科視光學院及韓國眼科視光學會協辦的第19屆亞太眼科視光學會議，於2013年10月2-4日假南韓首爾舉行。會議主題為“Advancing Education in Optometry”，吸引了超過600多位國際眼科視光專業人員、科研人員及學者參加。

於11月7-8日，學院聯同香港貿發局及香港光學會合辦第11屆香港視光學會議，主題探討「眼科視光護理進階」。會議在香港會議展覽中心舉行，吸引共800多名來自世界各地的參加者出席。

由香港執業眼科視光師協會主辦、理大眼科視光學院協辦的第三屆綜合護理眼學術會議於12月8日在理大校園舉行。是次會議以高血壓為主題，超過200名家庭醫生、神經科專家、營養學家、眼科醫生及眼科視光師一同參與研討。

## 眼科視光學院舉辦多個學術會議 School of Optometry Co-Organises Major Conferences

 In the latter months of 2013, PolyU's School of Optometry (SO) co-organised a few major optometric conferences in Hong Kong and overseas.

Along with the Korean Optometric Association, SO was a co-organiser of the 19th Asia Pacific Optometric Congress, which was organised by the Asia Pacific Council of Optometry from 2-4 October at the 63 Convention Center in Seoul, South Korea. Over 600 eye care professionals, researchers and scholars from 21 countries and territories attended the congress, which adopted the theme of “Advancing Education in Optometry.”

On 7-8 November, SO, the Hong Kong Trade Development Council, and the Hong Kong Optometric Association jointly organised the 11th Hong Kong Optometric Conference, which had “Advance Optometry Care” as its focus. Held at the Hong Kong Convention and Exhibition Centre, the conference attracted some 800 participants from around the world.

And on 4-5 December, SO co-organised the 3rd Primary Eye Care Conference with the organiser Hong Kong Association of Private Practice Optometrists, which ran with the theme “Vascular Diseases with a Focus on Hypertension.” The interdisciplinary conference at PolyU drew more than 200 family doctors, neurology specialists, dieticians, ophthalmologists, and optometrists.





## 應用社會科學系及 康復治療科學系周年慶典活動

### APSS and RS Celebrate 40th and 35th Anniversaries



應用社會科學系及康復治療科學系於2013年分別慶祝其成立40及35周年，透過舉辦不同活動，回顧過去，展望將來。

為慶祝40周年大日子，應用社會科學系於2013年11月2日假尖沙咀街坊福利會禮堂舉行40周年誌慶晚宴暨第四屆傑出校友頒獎禮。超過380位校友、學生、教職員及嘉賓聚首一堂，共享難忘的時光。傑出校友選舉的目的，正是為表揚校友們在所屬行業中的出色表現，以及對社會的重大貢獻。

學系更特別於11月7-30日將辦公室走廊變身成藝術畫廊，展出應用社會科學系助理教授黃月珍博士以及藝術家麥強偉以「茁壯成長·新體驗」為題的畫作。

此外，學系於11月23日在理大校園舉行了「社會工作教育：反思、鑒識與再定位」研討會，並邀得曾乃明博士為專題講者，吸引超過160名參加者參與其中。

康復治療科學系亦舉行了兩項重頭活動，以慶賀其成立35周年的輝煌成就。學系聯同香港運動醫學及科學學會於11月30日在理大校園舉行了以“Lifelong Exercise — From Amateur to Elite”為題的運動科學、醫學及康復治療的學生會議，超過125名出席者包括來自本港及海外研究生、學生、科研人員及學者。來自Harvard Medical School's Spaulding National Running Center 的 Irene Davis 教授及昆士蘭科技大學 Tony Parker 教授為會議擔任主題講者。學系於2003年舉行第一次運動科學、醫學及康復治療的學生會議，讓大專學生發表其科研成果，更可透過活動與同業及專家交流，引發創新意念及思維。

同日，學系假君怡酒店舉行晚宴，慶賀多年以來，學系努力不懈，人才輩出，培育了不少業界領袖。超過200名出席者在精彩的表演中，渡過一個愉快並別具意義的晚上。



In 2013, PolyU's Department of Applied Social Sciences (APSS) and Department of Rehabilitation Sciences (RS) celebrated their 40th and 35th anniversaries, respectively, by holding events that simultaneously reflected on past successes and looked ahead to the future.

APSS held its 40th anniversary dinner cum 4th Outstanding Alumni Award ceremony on 2 November 2013 in Tsim Sha Tsui District Kai Fong Welfare Association's Hall. Some 380 graduates, students, staff and guests enjoyed the memorable evening, which featured various performances. The Outstanding Alumni Award aims to give wider public recognition to the achievements and work of APSS's graduates.

A special art exhibition called "Growth and Experimentation" was also put on from 7-30 November along the corridor from APSS's general office. APSS Assistant Professor Dr Ng Guat-tin and Mr Mac Mak, a professional artist, were the talents behind the captivating paintings.

In addition, APSS held an on-campus symposium themed "Social Work Education: Reflection, Appreciation and Reorientation" on 23 November to not only mark its 40th anniversary but also its 40th year of providing professional education in social work. With a keynote speech by APSS Visiting Fellow Dr Tsang Nai-ming, the symposium attracted more than 160 participants.

Meanwhile, RS held two signature events on 30 November as the climax to its 35th year. Over 125 postgraduate students, researchers and scholars from across Hong Kong and abroad attended the Student Conference in Sports Sciences, Medicine and Rehabilitation 2013 at PolyU, which was jointly organised by RS and the Hong Kong Association of Sports Medicine and Sports Science with the theme "Lifelong Exercise — From Amateur to Elite." Prof Irene Davis, Director of Harvard Medical School's Spaulding National Running Center, and Prof Tony Parker, Emeritus Professor at the School of Public Health and Social Work, Queensland University of Technology, who is a past Vice President of the International Council for Sports Science, were the keynote speakers. RS began the conference series in 2003 to give students from Hong Kong's tertiary education institutions a valuable chance to present their research, network with peers and experts, and gain ideas and insights.

The student conference's dinner at the Kimberley Hotel in Tsim Sha Tsui doubled as RS's 35th anniversary dinner in a celebration of its role in nurturing past, present and future leaders in rehabilitation sciences. Some 200 attendees enjoyed a wonderful night, which included performances by special guests, alumni and students.