



Department of Health Technology and Informatics (HTI) 2016-17

Activities and Achievements

Contents

PolyU Events	1
HTI Seminars and Events	3
Student Exchange	8
Awards and Scholarships	10
Employment Status of Graduates of 2016-17	16
Academic Exchange/ Research Collaboration	17
Other Visits	19
Activities for Secondary Schools	20
Media Coverage	22
Publications	26
Grants	29
Sharing by New HTI Academic Staff	34

PolyU Events

PolyU Education Info Day for Undergraduate Programmes

8 October 2016

PolyU Info Day for Taught Postgraduate Programmes

14 January 2017

PolyU JUPAS Consultation Day 2017: Admissions Strategies

20 May 2017

Every year, PolyU organizes various Info and Consultation Days on campus to provide HKDSE students, JUPAS applicants, career teachers, and the general public with first-hand information on its undergraduate and taught postgraduate programmes.

In 2016-17, a number of information seminars, consultation sessions, laboratories visits, and demonstration sessions were delivered by HTI to give visitors in-depth information on the following programmes, and sharing on campus life experiences during the Info and Consultation Days:

- Master of Science in Medical Laboratory Science
- Master of Science in Medical Imaging & Radiation Science
- Bachelor of Science (Honours) in Medical Laboratory Science
- Bachelor of Science (Honours) in Radiography





**PolyU 22nd Congregation -
Faculty of Health and Social Sciences**
25 October 2016

The 22nd Congregation (Faculty of Health and Social Sciences) was held to confer the academic awards to graduates of the Faculty who have successfully completed their undergraduate or postgraduate study at PolyU in the academic year 2015/16.



HTI Seminars & Events

HTI Research Seminars 2016-17

Prof. Ho-Ling Anthony LIU, Ph.D
 Professor, Department of Imaging Physics
 Division of Diagnostic Imaging
 The University of Texas MD Anderson Cancer Center
 Houston, TX, U.S.
 21 September 2016



Prof. Kwong-kwok WONG, Ph.D
 Professor, Department of Gynecologic Oncology and
 Reproductive Medicine – Research
 Division of Surgery
 The University of Texas MD Anderson Cancer Center
 Houston, TX, U.S.
 19 September 2016



Prof. Chi-Ren SHYU
 Shumaker Endowed Professor
 Director, Informatics Institute
 University of Missouri, U.S.A.
 13 December 2016



Prof. Danny Z. CHEN, Ph.D
 Department of Computer Science and Engineering,
 University of Notre Dame, U.S.
 19 December 2016



Prof. William P. TONG
 10 March 2017



Research Seminars by HTI research postgraduate students



HTI Postgraduate Symposium
28 June 2017



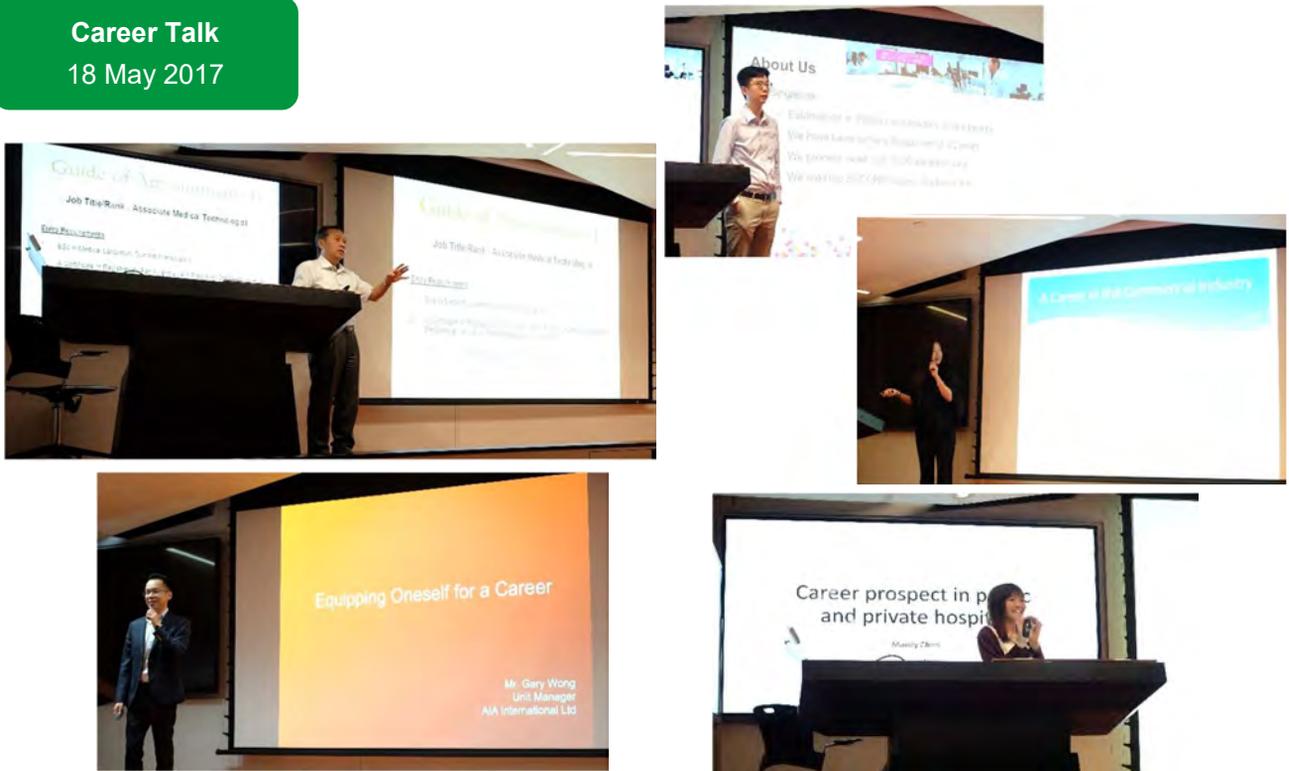
HTI Orientation Day
31 August 2016



HK SciFest 2017
4 March 2017



Career Talk
18 May 2017



Award Ceremonies for HTI Graduates

1 & 5 June 2017

Medical Laboratory Science



Radiography

Special graduation ceremony for Miss Ronnie Chan – graduate of BSc (Hons) in Radiography.

9 August 2016 (more details on p. 7)



HTI Retreat

2 June 2017



Festive Celebrations

(Mid-Autumn / Christmas / Chinese New Year)



Establishment of the 'PolyU Radiation Therapy-Children's Cancer Foundation' Voluntary Services Team (PolyU RT-CCF Team)

16 June 2017

Radiation therapists are health professionals who look after and provide radiation treatment to cancer patients. We are the only government-funded university that offers an internationally recognized radiography programme in Hong Kong. In January 2017, we achieved a milestone by establishing a voluntary service team that offers our students the opportunity to help terminally ill cancer patients during their training. Led by two PolyU professors in Radiation Therapy (RT) and Medical Imaging (MI), the team comprising senior RT and MI students and graduates collaborates with the Children's Cancer Foundation (CCF) to provide essential support to patients with cancers or untreatable illnesses on a voluntary basis.

"The formation of the volunteer team was inspired by the memory of Miss Ronnie CHAN, our 2016 RT graduate who was diagnosed in 2013 with synovial sarcoma, a rare form of cancer" explained Dr Shara LEE. "Throughout her battle with cancer she had shown extreme resilience by persevering with her academic studies and clinical placements while having surgery, chemotherapy and radiation therapy. Despite being diagnosed with incurable metastasis in 2015 she endeavored with her study in the hope to graduate. Having fulfilled all the degree requirements, we arranged an early graduation ceremony for her, and the degree was conferred by Prof Shea Ping YIP and Dr Vincent WU on the 9 August 2016." Ronnie CHAN passed away in the end of September before the actual congregation held on 25 October 2016. "In caring for Ronnie, we recognized the lack of local voluntary resources for young patients requiring palliative care. Moreover, as health care professionals, we were able to provide very important aspects of help which were not normally available. Seeing how rewarding the experience of helping Ronnie was for our students, we initiated the formation of a volunteer service team comprising RT students and graduates. So far, our team has 48 volunteers, providing voluntary services in partnership with the CCF."



The first voluntary service event was held on the 7 January 2017 and the team, together with the CCF, organized a very successful farewell party for a terminally ill cancer victim, Miss '3Y'. Her story was featured at the TVB Sunday Report (星期日檔案) in January and also the Oriental Sunday (東方新地) in April 2017. Ever since, other activities including a memorial activity on Mother's Day (有情相聚) for families who lost their children (14 May 2017), and an inauguration lecture for the establishment of the Hong Kong Society of Children's Palliative Care (HKSCPC, <https://hkscpc.org>) was held on 16 June 2017.

"No doubt the opportunity of meeting and helping cancer sufferers and their families is a rewarding experience that enhances our students' education and empathy with their future patients. Hopefully they will continue to strive and provide their best in caring for cancer patients even after their graduation."



Student Exchange

Inbound Exchange

BSc (Hons) in Medical Laboratory Science

- University of Applied Sciences Krams, Austria
- National Cheng Kung University, Taiwan
- Glasgow Caledonian University, UK



BSc (Hons) in Radiography

- Shantou University, Shantou, China
- Nanyang Polytechnic, Singapore



Outbound Exchange

BSc (Hons) in Medical Laboratory Science

- Tung Ren Hospital, Beijing, China
- KingMed Diagnostics, Guangzhou, China
- SA Pathology (Transfusion Medicine, FMC), South Australia
- Chang Gung Memorial Hospital, Taiwan
- Kaohsiung Medical University Chung-Ho Memorial Hospital, Taiwan
- National Cheng Kung University Hospital, Taiwan
- National Taiwan University Hospital, Taiwan
- National Yang Ming Medical University Hospital, Taiwan
- Glasgow Caledonian University, UK



BSc (Hons) in Radiography

- Sun Yat-sen University, Guangzhou, China (Dec 2016)
- Sichuan University, Chengdu, China (Jun 2017)
- Nanyang Polytechnic, Singapore (Aug 2017)
- Shantou University, Shantou, China (Aug 2017)



Summer@OxBridge 2017

Summer@OxBridge 2017 was opened to universities worldwide, and is a summer programme in University of Cambridge and University of Oxford. This year, 15 and 6 PolyU students were accepted for the Summer@Cambridge and Summer@Oxford programmes respectively. Of the 15 PolyU students accepted for Summer@Cambridge, 1 was from BSc (Hons) in Medical Laboratory Science (MLS) programme, and of the 6 PolyU students accepted for Summer@Oxford, 2 were from BSc (Hons) in Radiography (RAD) programme. This means that 3 out of the 21 PolyU students accepted were HTI students.

NG Tsz Wai Billy (Year-2 MLS student) spent 8 weeks at the University of Cambridge, and LAU Wing Sum Cherry (Year-2 RAD student) and MOK Chung Yu Rachel (Year-3 RAD student) spent 6 weeks at the University of Oxford in 2017 summer.



Visit to Sichuan University West China Hospital Radiation Oncology Centre

On 12-20 June 2017, a group of 2014 intake radiation therapy students from the Radiography programme of HTI department led by Dr Vincent WC Wu visited the Radiation Oncology Centre of Sichuan University West China Hospital. The team was warmly received by the department head Dr Shen Bai and Dr Renmin Zhong, and many of their students.

The visit started with the opening speech from Dr Zhen Bai and Dr Vincent Wu, in which they introduced their radiation therapy degree programmes and employment prospects. This was followed by a student seminar, in which students from both sides actively shared the experience in their studies. In the following few days, the PolyU students attended a series of lectures and conducted by the Sichuan University on radiotherapy and the practices in the West China Hospital. In addition, PolyU student visited different units in the Radiation Oncology and observed their facilities and clinical practices in radiotherapy. On the last day, there was a student symposium where students from both sides could discuss topics related to radiation therapy and give feedbacks on their previous interactions.

Apart from the eye-opening attachment in the hospital, the students were excited to interact with the students in the Mainland and learn their Sichuan cultures. Overall, students agreed that this was a valuable experience. It is expected that similar trip will be arranged annually in the coming years.



Awards and Scholarships

Awards / Prizes

Outstanding Student Award, Department of Health Technology and Informatics, 2016

LEE Nga Lam BSc (Hons) in Medical Laboratory Science

The Radiography Alumni Association Award – The Best Improvement Student of Year 2

SHUM Wun Yu BSc (Hons) in Radiography

Hong Kong Association of Radiation Therapists Award – The Best Improvement Student of Year 3

CHAN Siu Man BSc (Hons) in Radiography

Hong Kong College of Radiographers and Radiation Therapists Award – The Best Final Year Project Poster

Group 12:	CHAN Chi Kin	BSc (Hons) in Radiography
	CHAN Siu Ki	BSc (Hons) in Radiography
	KWAN Tsz Him	BSc (Hons) in Radiography
	LAU Tsz Hei	BSc (Hons) in Radiography
	SUEN Ka Wing	BSc (Hons) in Radiography
	WO Sui Ping	BSc (Hons) in Radiography

Hong Kong Radiographers' Association Award – The Best Student in BSc (Hons) Radiography

LAU Maggie	BSc (Hons) in Radiography – Medical Imaging
CHUNG Tsz Hei	BSc (Hons) in Radiography – Radiation Therapy

Best Young Presenter Paper Presentation Award – 21st Asia-Australasia Conference of Radiological Technologists

LAM Chung Ning BSc (Hons) in Radiography



Awardees for the Best Students in Subjects
BSc (Hons) in Medical Laboratory Science

Award	Awardee(s)
Book Prize from The Hong Kong Society of Clinical Chemistry for the Best Student in Clinical Chemistry	WONG Man Yuet Emily
Book Prize from The Hong Kong Society of Microbiology & Infection for the Best Student in Medical Microbiology	YEUNG Yuk Lam
Book Prize from The Hong Kong Society for Molecular Diagnostic Sciences Limited for the Best Student in Molecular Biology in Medicine	YEUNG Yuk Lam
Book Prize from The Hong Kong Society for Molecular Diagnostic Sciences Limited for the Best Student in Molecular Diagnosis of Human Disease	LEE Nga Lam
HKAML Award from The Hong Kong Association of Medical Laboratory Limited for the Best Student in Honours Projects	YIP Hei Lam

BSc (Hons) in Radiography

Subject	Award	Awardee(s)
Clinical Studies (Medical Imaging)	<i>Best Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i>	CHU Ka Leung LAM Wing Yat SZE-TO Cheuk Yin TSUI Yuen Kwan WONG Man Ho
Clinical Studies (Radiation Therapy)	<i>Best Award</i> <i>Highly Commended Award</i>	TSE Yat Fei CHAN King Lok
Computed Tomography (Medical Imaging)	<i>Best Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i>	CHAN Tsun Kit FAN Ka Cheuk LAM Hin Yeung LAM Hoi Chun NG Yat Hin WONG Chun Kit
Computed Tomography (Radiation Therapy)	<i>Best Award</i> <i>Highly Commended Award</i>	LEUNG Phyllis Ching Laam LAU Chun Ting
Imaging Informatics	<i>Best Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i>	SO Wilson LAU Maggie LEUNG Tak Yan, Bryan LI Wei Kin, Ryan TSANG Chu Fai, Ryan WONG Man Yee
Magnetic Resonance Imaging (Medical Imaging)	<i>Best Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i>	LAM Hoi Chun CHAN Tsun Kit MAN Krystal Tsz Ching WONG Chun To YUEN Chun Hei
Magnetic Resonance Imaging (Radiation Therapy)	<i>Best Award</i> <i>Highly Commended Award</i>	CHAN King Lok CHUNG Tsz Hei

BSc (Hons) in Radiography (cont'd)

Subject	Award	Awardee(s)
Medical Imaging Studies III	<i>Best Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i>	LAU Maggie CHAN Wai San CHENG Yat Man HUI Tsz Kin TSANG Chu Fai WONG Chun To
Project	<i>Best Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i>	WONG Tim Tai AU Ching Ho CHAN Siu Ki CHUNG Yan Chun Michael LEE Chun Yin Andrew SO Wilson
Radionuclide Imaging	<i>Best Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i>	LEUNG Tak Yan CHAN Tsun Kit FUNG Chin Tung LAU Maggie MAN Krystal Tsz Ching TSUI Yuen Kwan
Radiotherapy Equipment & Dosimetry	<i>Best Award</i> <i>Highly Commended Award</i>	TSE Yat Fei CHUNG Kwok Wa
Radiotherapy Patient Management	<i>Best Award</i> <i>Highly Commended Award</i>	CHAN Hoi Yan CHUNG Tsz Hei
Radiotherapy Studies IV	<i>Best Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i>	CHAN King Lok LAU Chun Ting YIP Chun Hin
Special Cancer Therapy	<i>Best Award</i> <i>Highly Commended Award</i>	YIP Chun Hin CHUNG Tsz Hei
Ultrasonography	<i>Best Award</i> <i>Best Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i>	LAU Maggie MAK Sze Ting CHAN Wai San CHEUNG Lok Yin HUI Tsz Kin LEUNG Tak Yan
Vascular & Interventional Radiology	<i>Best Award</i> <i>Best Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i> <i>Highly Commended Award</i>	LAU Maggie WONG Chun To LEUNG Tak Yan MAK Sze Ting TSANG Chu Fai

Scholarships
BSc (Hons) in Medical Laboratory Science

Scholarship	Awardee(s)
Dr Ng Tat-lun Memorial Scholarship	SZE Po Po
Fung Scholarship	LEE Nga Lam
HKSAR Government Scholarship	KWONG Lok Sze Ivy SZE Po Po LAW Ying Hang WONG Pui Yin LEUNG Wan Fei Christine YEUNG Yuk Lam NG Tsz Wai
HKSAR Government Scholarship Fund – Reaching Out Award	FUNG Wai Tung
HKSAR Government Scholarship Fund – Talent Development Scholarship	CHENG Yin Tung LAM Tsz Huen TO Ka Chung WONG Man Yuet Emily
Hong Kong Chiu Chow Chamber of Commerce Scholarship	YIP Hei Lam
HOU Wan Chuen Scholarship for Medical Laboratory Science	CHOI Tsz Wing HUANG Po Yuk
Michael Shum Scholarship	TAI Wing Yi
The Hong Kong Jockey Club Scholarship	WONG Yat Chun
The Hong Kong Polytechnic University Scholarship	TSE Ka Wai
The Hong Kong Polytechnic University Scholarship (Local Academic)	LAW Ying Hang
The Hong Kong Polytechnic University Entry Scholarship (Academic)	CHAN Chun Fung LI Ka Kit CHAU Tsz Tsun LI Wing Yin CHEN Yuen Ting LUI Ying Ying CHEUNG Ho Tang PAU Hoi Ling CHEUNG Siu Kwan POON Kai Lun CHIU Ka Pui Kenneth CHIU Tung Po SHIU Hin Sing CHOI Tsz Wing TOH Jia Cheng HONG Tin Ying Michelle TSO Sum Yi HUANG Po Yuk TUNG Yuen Mei KEE Ka Yee WONG Ho Yin KWOK Chun Hang WONG Sze Hang KWOK Yuen Man WU Lok Yi LAM Tsz Huen YU Cheuk Wing LEE Kwok Tai Vincent YU Kam Mang LEE Mung Kiu
Tigris Education Fund - Medical Laboratory Science Student Scholarship	KWONG Lok Sze Ivy

BSc (Hons) in Radiography

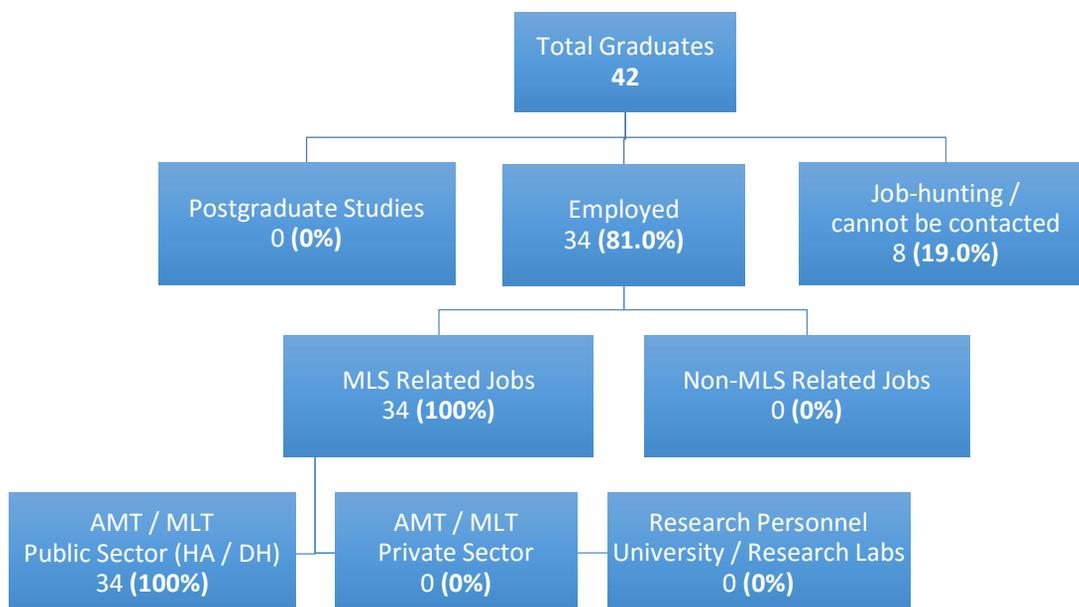
Scholarship	Awardee(s)
Chiap Hua Cheng's Foundation Scholarship	LAU Maggie
Dr Chan Leung Cho Scholarship – The Best Year 3 Student in BSc (Hons) Radiography – Radiation Therapy	CHAN Kit Shing
Fuji Radiography Award	MAK Sze Ting
HKSAR Government Scholarship	AU Wing Shan CHUNG Tsz Hei LAU Maggie MAK Sze Ting TO Lok Hang
HKSAR Government Scholarship Fund – Talent Development Scholarship	LAU Tsz Hei TANG Ki Wan Calvin TSE Chun Yin WONG Chun To WONG Hon Sing
Hong Kong Chiu Chow Chamber of Commerce Scholarship	ONGKY Anita
HSBC Hong Kong Scholarship	TSANG Chi Yim
Innovation and Technology Scholarship Award	FUNG Wai Yin 
The Hong Kong Polytechnic University Scholarship	FUNG Wai Yin

BSc (Hons) in Radiography (cont'd)

Scholarship	Awardee(s)	
The Hong Kong Polytechnic University Entry Scholarship (Academic)	AU Cheuk Hin AU Rinda Cherry CHAN Ching Long CHAN Chui Tin CHAN Hiu Wah CHAN Kam Hung CHAN Suen Wa CHAN Sze Wing CHAN Yee CHENG Yuen Hang CHEUNG Ka Lok CHEUNG King Laam CHEUNG Lok Hin CHEUNG Tsz Wing Flavia CHOI Man Cheong CHONG Ming Kit CHU Chun Yiu CHUNG Pui Shan FAN Dejian FOK Ho Tin FON Cheuk Wang IP Ho Fung KAN Yui Him KOO Serena KWAN Natasha Tong Wey KWOK Chun Ting LAM Wing Yan Vanessa LAU Chung Hin LAU Ka Chun LAU Tak Chun LAU Tsz Chun LAU Wai Sum LEE King Sang LEUNG Chun Hei Sam LEUNG Hin Lap	LEUNG Pui Fung LEUNG Siu Ting LI Yuen Ho LIU Sui Kwan LIU Wang Fung Bosco MA Ka Yan MAN Hung Hing MAN Yui Kuen NG Ka Ying NG Kwong Chuk NG Natalie NGAI Yuen Ming POON Tin Yau PUN Pui Sze PUN Tin Yau TAM Ching Nam TAM Pik Yin TAM Yuen TANG Chi Chung TSANG Hin Fung TSE Tze Kin TSE Ying Kit TSUI Choi Tim TSUI Yi Hang WAN Ka Wing WONG Chun Kin WONG Hon Sing WONG Kin Ho WONG Po Yan WONG Tsun Ming WU Yaobin YEUNG Lok Yan YEUNG Sheung Hei YEUNG Yuk Kin YIM Ka Ko YIP Pak Lam YUEN Pak Leung

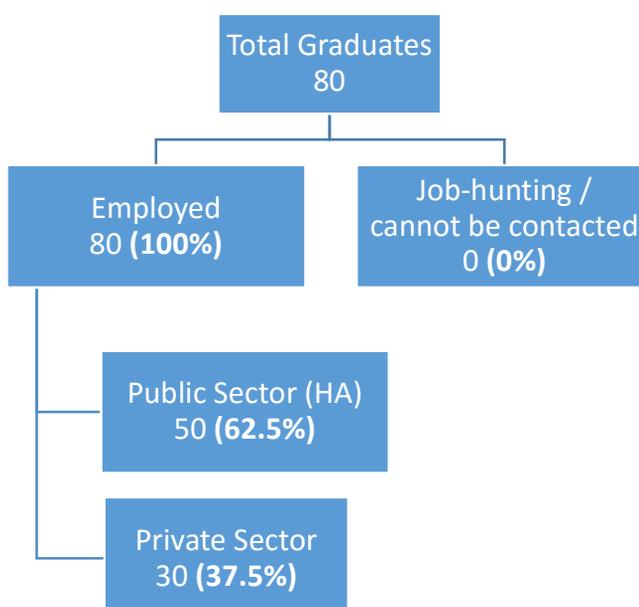
Employment Status of Graduates of 2016-17

Employment status of graduates
BSc(Hons) in Medical Laboratory Science 2017
(as of 10 August 2017)*



* We expect that Hospital Authority will hire more graduates for the AMT post in early October 2017.

Employment status of graduates
BSc(Hons) in Radiography 2017



AMT : Associate Medical Technologist
MLT : Medical Laboratory Technologist
HA : Hospital Authority
DH : Department of Health

(Data collected in August 2017)

Academic Exchange/ Research Collaboration

The Department has been striving for academic and research excellence in biomedical science, radiation science and medical imaging. We have established collaboration bridges with institutions and renowned scholars around the world to facilitate academic exchanges and research collaborations.

In the year of 2016-17, the Department of Health Technology and Informatics has signed Memoranda of Understanding/ Inter-institutional Agreement with the following institutions:

- ❖ Chang Gung University
- ❖ Guangzhou Medical University (KingMed College of Laboratory Medicine)
- ❖ Hong Kong Society of Medical Informatics
- ❖ Huawei Technologies Co., Ltd
- ❖ Karolinska Institute

Zhejiang University, China

6 January 2017



Dr Marie-Paule Kiény

Assistant Directors-General
Health Systems and Innovation
World Health Organization

15 February 2017



Shantou University, China

27 February 2017



University of South Australia, Australia

20 April 2017



National Taiwan University, Taiwan

24 April 2017



Western Norway University of Applied Sciences, Norway

24 April 2017



National Cheng Kung University, Taiwan

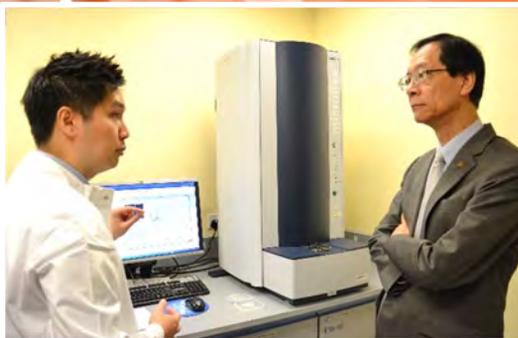
17 August 2017



Other Visits

President's Visit

27 October 2016



Departmental Academic Advisors' Visit

24 February 2017



Visit by the Research Grants Council (RGC)

15 June 2017



Activities for Secondary Schools

Visits by Secondary Schools' Students

2016-17

Marymount Secondary School

9 September 2016



Pui Ching Middle School

22 November 2016



Belilios Public School

20 December 2016



Diocesan Boys School

9 January 2017



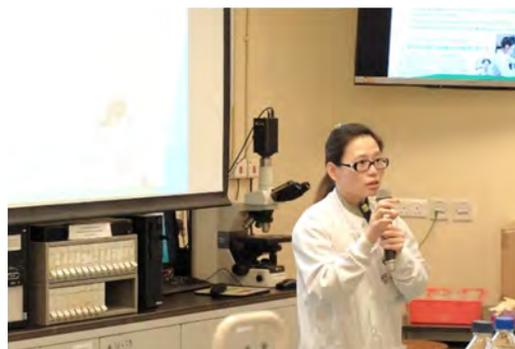
Kwok Tak Seng Catholic Secondary School

8 February 2017

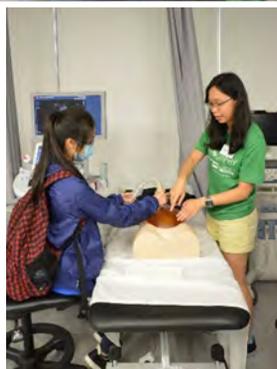


La Salle College

10 March 2017



PolyU Summer Programme – HTI



Average HKDSE Admission Scores* for HTI Programmes in 2015, 2016 and 2017

*Information provided here is the HKDSE examination results of offered applicants in JUPAS main round admission

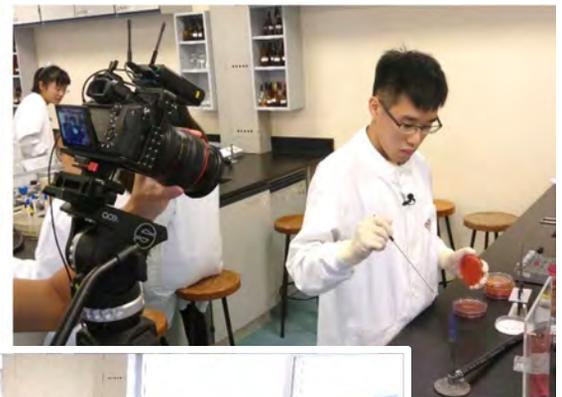
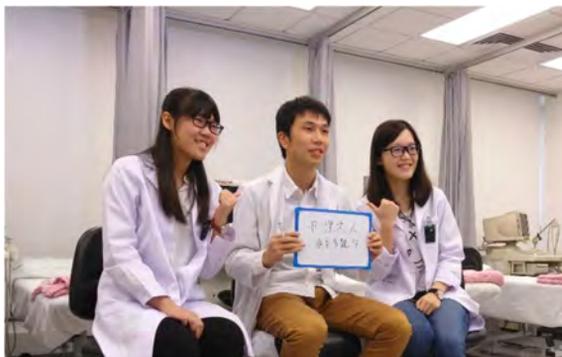
Admission Year	Average HKDSE Score Total (Ranking^) (Any Best 5 subjects)	
	BSc(Hons) Medical Laboratory Science (JUPAS Code: JS3478)	BSc(Hons) Radiography (JUPAS Code: JS3612)
2017	29.3 (2 nd)	28.3 (4 th)
2016	28.4 (3 rd)	28.2 (4 th)
2015	29.6 (2 nd)	28.8 (4 th)

^ Ranking among all PolyU degree programmes

Media Coverage

TV programme "University Secrets" - ViuTV

24 December 2016



Media interview conducted with Dr Michael YING regarding the profession of radiography and our BSc (Hons) in Radiography programme – Sing Tao Daily
11 May 2017

入職醫管局 起薪29000元



隨着人口老化，社會對醫療影像及放射治療需求增加，相關職業前景向好。理工大學醫療科技及資訊學系副教授應天祥 (Michael) 指，未來10年，香港將有數家新醫院陸續落成，放射師和放射治療師的需要有增無減。

記者 廖倩媛

人口老化新院落成 放射師需求日增



Michael認為，放射師的滿足感來自通過放射治療，幫助病人復康。 盧江球攝

人口老化問題愈來愈嚴重，Michael預期未來10年社會對醫療的需求上升；加上多家新醫院陸續落成，需要更多放射師，所以政府提高了理大放射學的收生學額，由原本的每年98名增至110名。

理大收生增至110名

學生在大學時主修醫療影像或放射治療，畢業後可註冊成為放射師或者放射治療師。放射師的主要工作是為病人作X光檢查、掃描、核醫學、造影，亦需要到病房、手術室和急症室工作。放射治療師則為初期癌症病人設計放射治療計畫，並且將影像數碼化及管理。

在本港，大部分放射學的人才都是經理工大學放射學培訓。完成文憑試的學生可通過聯招進入理大修讀放射學4年制學位課程。在一年級時，學生會學習通識課和解剖學，到了二年級時會選擇主修科，當學生完成並通過實習和考試，便可以帶同所需文件到放射技師管理委員會申請成為註冊放射師。

理大的放射學位課程收生分數一直高企，競爭相當激烈。儘管學生壓力大，Michael指由於學生質素高，所以不難順利完成課程。過去5年，90%至95%的畢業生都在行內工作。醫管局是行內最大的僱主，其次是私家醫院、診所和化驗所。

在醫管局，剛畢業和註冊的放射師可成為二級放射師，每月薪酬約29000元，在私人市場則可能有35000元及雙糧等的福利。工作數年後，放射師可成為一級放射師、高級放射師甚至部門經理。放射師較少創業，因為他們需要醫生協助病理報告，以及購置檢查儀器的費用極高。

放射治療師不能色盲

根據放射技師管理委員會，本港已註冊的放射師約有1800人，放射治療師則有360人，其中六成是男性。Michael認為要成為放射師沒有特定條件，但要成為放射治療師不可以有色盲。他希望學生願意關心病人，有責任感，願意學習新技術，以及擁有良好的溝通技巧，願意接受挑戰。他認為放射師的滿足感是來自通過放射治療，幫助病人復康。

放射師暫時無法定進修時數，但業界鼓勵放射師持續進修，尤其是科技和新技術方面，如每年都有放射師到海外參加學術研討會。

港課程艱辛 練就好功夫

Michael指，本港的防護技術和儀器令所釋放出來的輻射愈來愈少，而且有屏風擋着，所以X光檢查不會對放射師有直接傷害或影響。

在二年級至畢業前，學生需要完成至少1300小時的臨床實習，主要到醫管局旗下的醫院工作。實習內容包括跟隨

放射師作超聲波、X光檢查，並學習跟病人溝通，以及體驗如何跟醫療人員合作。學生的表現會受到註冊放射師導師的監察和評分。

海外畢業生需額外實習

實習主要在暑假，四年級學生更要完成13個星期的實習。相比其他學科或海外大學，本港課程編排可能令學生感到辛苦，但Michael指，本港畢業生的臨床經驗足夠他們到醫院就業，部分海外畢業生需要額外臨床實習一年才能成為註冊放射師。在海外大學修讀放射學的學生，亦可以到放射技師管理委員會申請有關牌照，Michael指委員會逐個案考慮，審視其學科和臨床經驗後才決定是否接納其註冊。



■本港已註冊的放射師約有1800人，放射治療師則有360人。

Media interview conducted with Prof YIP Shea-ping regarding the profession of medical laboratory science and our BSc (Hons) in Medical Laboratory Science programme – Ming Pao JUMP

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醫務化驗工作爭分奪秒

FOCUS 查找致病根源挑戰大

醫學科技不斷進步，然而面對跨國交流頻繁、城市人口聚集、環境變化等因素，加速了傳染病蔓延，作為前線醫護人員後盾的醫務化驗人員，要在爭分奪秒下找出致病根源，協助醫生準確診斷，工作挑戰不少...



Ken：關乎人命健康 認真做要快而準

入行近2年，在公營醫院任職副醫務化驗師的Ken（左圖），現正接受為期3年的新入培訓。「選擇血液學範疇，主要是考慮到綜合了儀器及人手操作，而且涉及利用細胞數量及種類是否正確，有助診斷血癌。」

現時他負責血企、凝血機、地中海貧血症等測試。「當收到病人的樣本後，要先使用合適的儀器，然後等候結果，過程中要緊守工作崗位，「快而準」的樣本測試是最大挑戰。

醫務化驗工作性質看似單一，然而充滿使命感，與病人的健康攸關，醫務化驗師認真做好每個工作細節。「若遇到任何問題及特別情況，要及早提出並諮詢上司及病理師醫生，以免影響病人的健康，甚至影響病人的生命。」

Mandy：轉戰私營醫院 化驗室「開荒」涉獵更廣

面對社會醫療需求日增，亦有新醫院陸續投入服務，Mandy（左圖）於去年8月由公營醫院轉投私營醫院任職醫務化驗師。除了負責醫務化驗室日常運作外，還有機會參與建立新的化驗室，涉及行政管理的職務，包括：購買合適儀器的建議、協助推行病人資料及化驗報告系統，需與其他部門（如感染及化驗報告、資訊科技等）的同事緊密合作。是地意料不到的她笑著，做「開荒牛」由右到左，雖然挑戰處處，但所帶來的成功及滿足感，是難以言喻的。

拓闊技能層面 應付角色、職能轉變

為了應付醫務化驗師愈趨多元的角色及職能，Mandy認為，累積工作經驗以外，增進進修也是必須的。她她早已修畢相關碩士課程，以及職安健文憑課程。「化驗不僅是操作化驗程序，還有很多相關的事物，如化驗室運作管理及安全亦十分重要，現時有關醫院都設有安全主任，若醫務化驗師能掌握職安健知識，便能做好與安全主任之間的橋樑角色。」

對於有志投身醫務化驗工作的年輕人，她提醒，工作雖不用面對病人，但需與人合作，故溝通、與人相處的技巧不能忽視；另要有敏銳的觀察力、高度的警覺性及責任感，對有懷疑的測試結果都進行反覆測試加以確認。

本港逾3,000醫務化驗師 工作牽涉人的一身

「醫務化驗主要負責與病有關的測試，在調查、驗方、控制及治療中，對促進估、預防、進行患病研究也大有助。」香港理工大學（下稱「理大」）醫療科技平級教授（左圖）指，醫務化驗師的工作，牽涉到病人的一生，從產前、新生兒、牙齒鑲嵌等，到化驗、醫務化驗師扮演的角色都十分重要。

近年分子測試、基因測試的應用愈趨普及，令本港醫務化驗行業發展起了變化，如開辦了更多相關專門的化驗室，從業員亦需增進有關技能。「以醫管局為例，於2、3年前向外公開招標，為旗下醫務化驗師提供分子測試的內容培訓，而理大成功中標有關項目。」

按學歷及工作經驗 分3個部分 執業限制有別

醫務化驗師主要按學歷及工作經驗劃分為3個部分，執業限制有別。其中理大「醫務化驗科系（榮譽）理學士學位」、HKU SPACE「醫事技術高級證書」等課程的畢業生均可取得香港醫務化驗管理委員會（下稱「委員會」）「醫務化驗師（第II部分）」註冊資格，並獲輔助醫療管理局承認；待取得3年認可的工作經驗，可註冊成為第1部分醫務化驗師。

根據委員會的數據，截至2017年4月，註冊醫務化驗師合共有2,414、935及83人。審裁處估計，當中有1,200至1,300名任職於醫管局、200至300名任職於衛生署。

他不諱言，業界資深人員退休潮已開始，每年大約有20至40名醫務化驗師因退休而流失；以及面對不同類型的病毒出現，大專對年度體檢愈受重視，未來衛生署有新醫院投入服務等，醫管局、衛生署亦將增聘醫務化驗人手，預計未來數年行業仍存在人手短缺的隱憂。

人手供求存隱憂 增學額培訓生力軍

有見市場對醫務化驗師的需求持續，大學撥款委員會由2016/17學年起連續3個學年增加理大「醫務化驗科學（榮譽）理學士學位」課程的學額，自每年44個增至54個。根據過往的聯招收生成績，入讀者最佳五科平均分達28至29分。業

教授說：「成績以外，我們希望入讀者為人細心、對數字敏感；由於醫務化驗工作涉及使用不同顏色的指示劑，故對顏色具敏感度也相當重要。」

上述課程設計按醫務化驗的主要分類，涉獵4大範疇內容：臨床化學（Clinical Chemistry）、細胞病理學（Cellular Pathology）、醫學微生物學（Medical Microbiology）及血液學（Haematology）。「絕大部分醫院都設有上述4大範疇服務；私營化驗室則以血液學範疇服務較為普遍。」

他表示，因應行業發展的需要，課程內容亦有所更新，包括近年新增「人類獲得的分子診斷學」科目；醫學微生物學測試方面，以往較多手作測試，近3、4年則走向自動化發展，以儀器（如MALDI-TOF質譜儀）取代部分工序，故增加了有關儀器操作的內容。學員還要參與12周的實習，以累積臨床的經驗；另學員可申請參加海外交流，以獲得國際學習經驗，拓闊個人眼界。

新人由副醫務化驗師起步

他指，近數年的畢業生差不多已獲醫管局全數吸納，由副醫務化驗師崗位起步。「漁農自然護理署、海洋公園、賽馬會、獸醫化驗室等亦會聘請此學科的畢業生，擔任有關動物疾病診斷的化驗工作。」

Table with 3 columns: 副醫務化驗師 (\$27,690-\$47,007), 醫務化驗師 (\$49,158-\$70,981), 高級醫務化驗師 (\$79,552-\$98,235). Includes salary ranges and benefits.

QR code and 相關課程 (Related Courses) link.

Research conducted by our research postgraduate student Dr Eugenia WOO (Chief Supervisor: Dr. Peter WHITE; Co-supervisor: Dr. Christopher LAI) that published in journal "Muscle and Nerve" was posted on **Live Science**



Live Science > Health

Too Much Tech Tied to Carpal Tunnel Syndrome

By Cari Nierenberg, Live Science Contributor | June 27, 2017 07:24pm ET

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College students who are [glued to their devices](#) may show early signs of developing the painful condition carpal tunnel syndrome, a new study suggests.

Researchers found that young adults who spent an average of 9 hours a day using [mobile phones](#), tablets, gaming consoles and computers reported more pain in their wrists and hands than their peers who spent less time each day using electronic devices. The findings were published online Wednesday (June 21) in the journal *Muscle & Nerve*.

[Carpal tunnel syndrome](#) is a nerve-related condition that causes numbness, tingling and pain in the palm of the hand and wrist. It occurs when there is swelling in a narrow passageway in the wrist known as the carpal tunnel, which puts pressure on the median nerve, a major nerve in the hand. [[9 Odd Ways Your Tech Devices May Injure You](#)]

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* HTI staff members are shown in orange.

Grants

Internal Grants

Internal Grant for General Research Fund (GRF) / Early Career Scheme (ECS) Proposals Rated 3.5 in the 2016-17 Exercise:

Funding Source	Principal Investigator	Co-Investigator (from PolyU)	Project Title	Funding Supported by Central	Funding Supported by Department
Central Research Grant	Dr LAW Ka Wai Helen	--	The role of immune complexes in glomerular endothelial cell injury and lupus nephritis	HK\$105,000	--
	Dr SUI Kit Hang Gilman	--	Combined genomic and transcriptomic approach to elucidate pathogenesis of hypervirulent Mycobacterium tuberculosis during macrophage infection	HK\$105,000	--
	Prof. YIP Shea Ping	Dr HUANG Chien Ling, Prof YAP Keng Hung Maurice [SO]	Genetic susceptibility to myopia: From fine-mapping of selected GWAS signals to functional characterisation	HK\$105,000	--
Departmental GRF and One-line Budget	Dr LAI Yau Ming Patrick	--	Alleviation of articular cartilage and subchondral bone degeneration in osteoarthritis by photobiomodulation therapy	--	HK\$105,000
	Dr SIU Ming Fai Parco	--	Functional characterization of the role of apoptosis in diet-induced skeletal muscle insulin resistance	--	HK\$105,000
	Dr TO Shing Shun Tony	--	Defining the pathogenic roles of each Class IA phosphoinositide 3-kinase catalytic isoform in glioma progression and metabolic reprogramming	--	HK\$105,000
	Dr WHITE Peter	--	A pilot study of the effects of cumulative physical loads and wrist postures during mobile device usage on the compressive stiffness of median nerve using shear wave elastography: comparison of carpal tunnel syndrome patients and healthy subjects.	--	HK\$105,000
	Dr WONG Sze Chuen Cesar	--	Prognostic significance of combined CD133, CD44 and CD166-positive cancer cells and their associated DNA mutations in colorectal cancer patients	--	HK\$105,000
	Dr YING Ting Cheung Michael	--	Carotid Atherosclerosis in Post-radiotherapy Head and Neck Cancer Patients: A Study to Investigate Carotid Plaque Characteristic, Radiation Dose Effect and Genetic Polymorphism	--	HK\$105,000

Internal Grants (Con't)

Start-up Research Fund for New Recruits:

Funding Source	Principal Investigator	Project Title
Departmental Start-up Fund	Dr CHENG King Yip Kenneth	Deciphering the role of adipose tissues in maintaining glucose and energy metabolism
	Dr LIN Liang Ting	Deciphering the Functional Interaction of Musashi-1 and Argonaute-2 Contributing to Radioresistance through Enhancement of DNA Damage Response in Head and Neck Squamous Cell Carcinoma
	Dr MA Chun Hang Alvin	Generating transgenic zebrafish model to study the emerging role of autophagy and mitophagy in hematopoietic diseases
	Dr YOO Jung Sun	Development of in vivo fluorescence imaging technique for detection of glioblastoma using translocator proteins targeted nanoparticles

PolyU Strategic Development Special Projects:

Funding Source	Principal Investigator	Co-Investigator (from PolyU)	Project Title	Total Funding Supported
Block Grant except CRG	Dr SUI Kit Hang Gilman	--	Development of next generation molecular diagnostics for tuberculosis (TB): from latent TB in HIV patients to multiple and extensively drug resistant active TB	HK\$1,499,500
Block Grant except CRG	Prof. YIP Shea Ping	Dr HUANG Chien Ling	Development and Validation of a Novel Single-tube Molecular Diagnostic Assay for Routine Detection of JAK2, MPL and CALR Mutations in Patients Suspected of Myeloproliferative Neoplasms	HK\$1,581,600

Internal Grants (Con't)

Faculty Supported Funding

Funding Source	Principal Investigator	Co-Investigator (from PolyU)	Project Title	Total Funding Supported
Faculty Funds for Collaborative Research between FAMS of Chiang Mai University and FHSS of PolyU	Dr LAI Wai Keung Christopher	--	The protective effects of Danshensu on vascular endothelial cells after exposed to ionizing radiation under different shear stress conditions	HK\$200,000
Griffith University (Health) and The Hong Kong Polytechnic University (FHSS) Collaborative Research Grants Scheme 2016	Dr HUANG Chien Ling (PI) led by Griffith	Prof. YIP Shea Ping	New pro-angiogenic factors for tissue bio-engineering: SDF-1-CXCR4	AU\$30,000
Griffith University (Health) and The Hong Kong Polytechnic University (FHSS) Collaborative Research Grants Scheme 2016	Dr LAI Wai Keung Christopher (PI) Led by PolyU	Dr SIU Ming Fai Parco, LEUNG Kin Chung	Roles of oxidative stress in Metabolic Syndrome and its associated renal complications: a correlational study	HK\$180,000
Malmö University (Faculty of Health and Society) and The Hong Kong Polytechnic University (FHSS) Collaborative Research Grants Scheme 2016	Dr LAI Wai Keung Christopher	LEUNG Kin Chung	The Beneficial Role of Danshensu against Doxorubicin-induced Nephrotoxicity via Nrf2/HO-1 Signaling Axis	HK\$400,000

External Grants

Funding Source	Principal Investigator	Co-Investigator (from PolyU)	Project Title	Total Funding Supported
AIDS Trust Fund	Dr SIU Kit Hang Gilman	--	Prediction of Incident Active TB in PLHIV by Detection of Free-Circulating M. tuberculosis DNA in patient plasma: A Retrospective Longitudinal Study	HK\$479,350
AIDS Trust Fund	Dr SIU Kit Hang Gilman	Dr Sabrina TO, Dr TO Wai Chi Sabrina	Development of Low-Cost Genotyping Assay for Routine Clinical Detection of HIV-1 Integrase Inhibitor Resistance	HK\$495,270
Collaborative Research Fund (CRF) 2016/17	--	Prof. YIP Shea Ping	Establishment of Third Generation Sequencing Core Facility(Led by HKU)	HK\$3,222,257
Health and Medical Research Fund – Call for Applications 2015	Dr CHENG King Yip Kenneth	--	Adipocyte MDM2 as a key determinant of metabolic homeostasis	HK\$1,199,857
Health and Medical Research Fund – Call for Applications 2015	Dr SIU Kit Hang Gilman	--	Rapid and comprehensive prediction of first and second-line drug resistance in Mycobacterium tuberculosis directly from respiratory specimens using massive parallel targeted sequencing: a prospective study	HK\$806,535
National Natural Science Foundation of China (NSFC; Young Scientists Fund 2017)	Dr HUANG Chien Ling	Prof. YIP Shea Ping	Regulation of Smooth Muscle Progenitor Cell-derived Vascular Tissues by Myocardin-mediated Long Non-coding RNA and Its Implications for Bio-engineering	HK\$300,000

External Grants (Cont'd)

Funding Source	Principal Investigator	Co-Investigator (from PolyU)	Project Title	Total Funding Supported
NSFC 面上项目 (CMAO)	Dr CHENG King Yip Kenneth	--	衔接蛋白APPL2对胰岛β细胞生理功能的分子调节机制研究	HK\$820,000
2017/18 Early Career Scheme (ECS) Exercise	Dr YOO Jung Sun	--	Intraoperative imaging system to highlight peripheral nerves using polarized spectral reflectance	HK\$1,248,632
2017/18 General Research Fund (GRF) Exercise	Dr CHENG King Yip Kenneth	--	The E3 ubiquitin ligase MDM2 regulates adipose tissue macrophage inflammation via metabolic reprogramming in obesity	HK\$1,345,438

Teaching Grants

Project Leader	Project Title	Total Funding Supported
Dr LAW Ka Wai Helen	Establishment of Image Donation Scheme and Small Private Online Course (SPOC) in Imaging Pathology for Health Professionals (ImagPathX)	HK\$ 170,000.00
Prof. YIP Shea Ping	Developing a Repository of Digitized Virtual Slides to Promote Active Learning in Haematology Diagnostics via Flipped Practical Approach	HK\$ 169,940.00

Internal Equipment Grants

Funding Source	Project Title	Total Funding Supported
Large Equipment - supported by HTI and Dean	Intravital Microscopic Imaging System	HK\$ 2,986,420

Sharing by New HTI Academic Staff

Medical Laboratory Science

Dr ZOU, Xiang
Associate Professor

After experiencing the Scandinavian wilderness for almost 20 years, I am now privileged to have a close feel of the bustling and enigmatic city of Hong Kong. Joining HTI together with me are also my mast cells, a cell type that I have developed a strong love and affection for over my immunology research career. I hope the warm and humid subtropical Hong Kong climate will be at least beneficial for my skin mast cells even though it is almost asphyxiating my entire body which has been tuned and accustomed to the Scandinavian coolness and tranquillity.



Dr MA, Alvin C.H.
Assistant Professor

It is my great honor to have joined the HTI family last September. It is always challenging to kickstart in a completely new environment, but thanks to all of the very generous support and help from new colleagues and great students, I did manage to survive my first academic year. I would say coming to HTI has brought lots of positive impacts to me and my family, and I am looking forward to the coming years.



Dr CHENG, Kenneth K.Y.
Assistant Professor

I thoroughly enjoyed being a part of the Department. I would like to give a big thank to all the colleagues who helped me quickly adapt to the new environment, initiate my research start-up in PolyU and shared their teaching experience with me. I am happy to work with such a fantastic team. I am confident that we can work as a team to contribute more in teaching and research in the future.



Radiography

Dr CAI, Jing
Associate Professor

After living in the States for 17 years, I made probably the biggest decision in my life, that is to join HTI at HK PolyU. It has been very exciting for my whole family (me, my wife, a 6-year old daughter, and a 3-year old son) ever since I accepted the job offer, until the moment we arrived HK airport a couple weeks ago with 15 luggage bags lying randomly on the ground and realized we would soon start a very much different life in this beautiful yet unfamiliar city. It was undoubtedly doubtable in my mind whether we can adapt smoothly to the new environment, and for me, to HTI. It did not take long for me to find the answer. On the first day of my work, everyone I met in HTI, the faculty and the staff, are all super friendly and welcoming. It is surprisingly a strong feeling of home coming for me that day. Feeling being very welcomed is my first impression of HTI, and I surely believe it is the start of many wonderful things down the road. As I am writing, I am celebrating my one-week anniversary of working at HTI, and through my observation during this short time I have learnt that HTI is a relatively young but highly vibrant department with great visions. The department has recently recruited a number of talented colleagues, and has many plans under way to further expand and enhance itself in various perspectives including research, teaching, and outreaching. I strongly feel I came to the right place at the right time, and therefore am extremely excited about and looking forward to working with everyone in HTI to do right things for the department. Last but not least, I want to say that I am very impressed by the great professionalism and hospitality of our administrative staff who helped me a great deal in my transition. Thank you all and it is my great pleasure to work with you at HTI.



Dr YOO, Jung Sun
Assistant Professor

I am very happy to join HTI. I realized all the colleagues in HTI are very nice, friendly, and supportive. It is also fascinating that we have two different disciplines to create a good synergy for collaborative research. Although I didn't start teaching yet, I feel that our students are very polite and smart. I believe our BSc programs in radiography and medical laboratory science are highly competitive in the world. I am very excited to start my new career as a dedicated teacher and an excellent researcher here in HTI.



Dr LIN, Liang Ting
Assistant Professor

I still remember the very last answer I gave during the formal interview, saying that my girlfriend and I have never come to Hong Kong before, so we travelled together this time in case we may never have another chance. Frankly, it is definitely my great honor to have this privilege joining HTI and also my great pleasure to start my teaching/research career in this remarkable institute. The enthusiasm and hospitality from all the support staff and academic members are impressed and fascinating. There was a TV show called

"Mythbusters" who proved whether the urban myths are applicable or not in scientific ways. Two quotes from the host Mr. Adam Savage inspire me a lot and keep me digging in biological sciences, which are "Failure is always an option" and "If it's worth doing it's worth overdoing" (This is adopted from Mick Jagger, the singer). I hope my spirit of doing science will never fade and is always worth overdoing along with HTI and PolyU.



**The Hong Kong Polytechnic University
Department of Health Technology and Informatics**

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