UNION
connection
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Message from the **Chief Hospital Manager**

Dear Colleagues,

Kung Hei Fat Choy! I would like to take this opportunity to wish you and your family the best in Health and Wellness, as well as prosperity in all your ventures in the Year of the Snake. We had just celebrated the arrival of Year 2025, and four weeks after that we shall be ringing in the Chinese New Year (CNY). When I was a child, the CNY was a great day to look forward to. Since I came from a family which was far from being well-to-do, we could only afford to have new clothes and shoes once a year, i.e., on the eve of the CNY. Moreover, we could keep a portion of the 'lai see' we received as extra pocket money! The other memorable ritual we enjoyed very much during CNY was letting off fire-crackers and small-sized fireworks. This latter was banned by the police in the 1960's because of the significant number of blast injuries to the eyes during the New Year period. Since then, the Chinese New Year Day in Hong Kong has been much more quiet and peaceful, but less lustre!

While reminiscing the good old days of childhood, I realized that my guardian angels or the One above must have looked after me well. My mother was a primary school teacher so my pre-school education (kindergarten in the current system) came from home-teaching. I spent the first four years of primary education in a girls' school, St. Stephen's Girls' College on Bonham Road, in Hong Kong Island which was just 5-minute walk from my home. There were only three other boys in the class and I could still remember their names and those of pretty ones of the opposite sex! In 1950, when St. Paul's Boys' College began to take in pupils on re-opening after World War II, all the boys in St. Stephen's primary class 3 and 4 were transferred to St. Paul's and promoted to Primary 5! Unfortunately, I was down with typhoid fever after a visit to the swimming pool of the Lai Chi Kok Amusement Park. Thus, I had to spend two to three months in hospital/convalescence institution with my schooling in St. Paul's College deferred for one year! After that rather discouraging setback, my academic journey had been smooth-sailing since. I managed to be one of the top scorers in the Hong Kong School Certificate Examination in 1958 and was awarded a Government Scholarship for my matriculation course for two years as well as for the Hong Kong University M.B.B.S. degree course of 5 years. With the tuition fees all paid for, I was also awarded a 'bursary', or grant which supported me to stay in a university hostel for the entire 5-year curriculum.

It is my firm belief that the 5 year sojourn in the Lugard Hall – one of the oldest HKU hostels – had re-shaped my entire life of subsequent years. Let me recount some details of hostel activities. Lugard Hall provided accommodation for about 60 students with a significant number of non-locals coming from Singapore and Malaysia, probably of a pre-existent Commonwealth or Columbo Plan. During the first two weeks of becoming a Lugardite, the small 'i' greenhorns had to visit every senior occupant to introduce one-selves to get their endorsement. This was regarded to be a form of very mild hazing activity. Subsequently, I learned that in another hostel, some of my classmates were taken out to a private residence where they were being ragged very badly. Such acts amounted to 'illegal detention', and some senior students involved were punished severely by the university authorities when their wrong-doings came to light!

The first two years of rather quiet hostel life in Lugard Hall allowed me to study diligently for the so-called first M.B. examination which was the first major hurdle in becoming a doctor. I managed to pass that hurdle with flying colours and two prizes – one in anatomy and the other in physiology. The third year in Lugard Hall saw me being elected to be Chairman of the hostel. With this honoured title came the responsibility of making decisions for 'all' the affairs related to the hostel. The most important of the chores as leader was to ensure that the three meals provided by the contractor of the hostel kitchen were of good quality. This was not difficult because I ate every meal in the hostel and was in good terms with Ah Chan the chief cook! Another important task was to field a team for every inter-hostel competition in ball games. Then the Chairman and the sports-captain of the hostel council members became the MVPs (most valuable players) of the soccer, hockey and volleyball teams etc. The motto of our hostel was 'never give up' and we managed to take part in every inter-hostel game without once being walked over! It was during a hockey game that I crushed the ring finger of my right hand and it left a depressed scar in the pulp even years after healing. Another memorable event during that year was related to being an integral member of the volleyball team of both Lugard Hall and the Medical Faculty. The Lugard team was mediocre in performance but the Medical Faculty became champion in the inter-faculty volleyball competition. During the prize-giving celebrations of the HKU Sports Association, I became drunk after downing a few glasses of beer. That taught me a good lesson on moderation in alcohol intake up to the present days! Those five long years of hostel life were the best gift to me in leadership training. Thus, the seeds were sown for me to take up the position of Chief Hospital Manager of Union Hospital for almost three decades as well as being the Chairman of the Hong Kong Private Hospitals' Association for three consecutive terms about 10 years ago.

I think that I have disclosed enough of my private life which might interest you readers and I would like to end here by saying in Chinese 恭喜發財　金蛇報喜　萬事勝意　身體健康！

Yours most sincerely,

Dr Anthony K Y Lee
Chief Hospital Manager & Medical Director

First Successful Peanut Oral Immunotherapy at the Union Hospital Allergy Centre

Dr Gilbert T. Chua
MBBS, MRCPCH, PDipID, FHKAM, FHKCPaed
Consultant in Paediatric Immunology, Allergy and Infectious Diseases
Deputy Director, Allergy Centre
Union Hospital
Honorary Clinical Assistant Professor, Department of Paediatric and Adolescent Medicine, School of Clinical Medicine, The University of Hong Kong HKSAR, China

THC first visited the Union Hospital Allergy Centre at the age of 2 in 2023, accompanied by his parents due to a suspected peanut allergy. He had a history of mild infantile eczema and developed generalized urticaria, facial angioedema, and repeated vomiting after his first taste of peanut butter. Skin prick testing confirmed that he was sensitized to peanuts. After thorough discussion, his parents decided to proceed with peanut oral immunotherapy (OIT) to address his allergy. He attended the Allergy Centre biweekly to gradually increase his tolerance from approximately 1/240th (1 mg of peanut protein) to about 1.5 pieces (300 mg of peanut protein). The process went smoothly, with only mild urticaria and mucosal edema, easily managed with oral cetirizine. He then continued to consume 1.5 to 2 pieces of peanuts daily at home for a year. After one year of maintenance treatment, THC successfully completed a full dose peanut oral challenge of up to 20 pieces without any allergic reactions, and he was declared desensitized to peanut allergy. (Figure 1)

Can peanut allergy be prevented?

The Learning Early About Peanut (LEAP) study findings demonstrated profound risk-reduction in the rates of developing peanut allergy among high-risk infants exposed to peanuts in infancy vs avoiding peanuts until five years of age.[1] However, some infants may still develop peanut allergy despite early introduction. Australian data have demonstrated that despite a threefold increase in early (before 12 months) peanut introduction from 28.4% from 2007-2011 to 88.6% from 2017-2018, the prevalence of peanut allergy among 12-month-old infants has not significantly decreased.[2, 3]

What are the options if a child is diagnosed with peanut allergy?

Traditionally, peanut avoidance remained the mainstay of management option for children diagnosed with peanut allergy, followed by serial testing to gauge allergy resolution over time. However, only less than 30% of children with peanut allergy develop natural tolerance without any intervention.[4] Though some families prefer avoidance, others find avoidance and having to live with food allergy can be difficult, leading to reduced quality of life and anxiety. Alternatively, initiation of food immunotherapy would be the way out for most families.

Why is peanut OIT recommended for young children with peanut allergy?

Food Oral Immunotherapy (OIT) has been shown to be both effective and safe for preschoolers (children under 6 years old) in multiple real-world studies. Soller et al. found that among 117 preschoolers who underwent low-dose peanut OIT, 78.6% tolerated a cumulative dose of 4000mg peanut protein (equivalent to ~16 – 20 pieces of peanuts) during the exit oral food challenge (OFC), while 98.3% tolerating ≥ 1000mg peanut protein (equivalent to 4 – 5 pieces of peanuts).[5] Additionally, preschool-aged children experienced mild reactions during OIT, with only 0.4% developing anaphylaxis.[6] Soller et al. also compared the effectiveness and safety of peanut OIT in infants (under 12 months) versus non-infants (12-70 months), finding similar effectiveness in both groups, with significantly fewer infants experiencing mild allergic reactions.[7] Likewise, OIT for other food allergies, such as tree nuts and sesame, has demonstrated similar safety and efficacy in preschoolers.[8, 9]

Figure 1. Consent obtained from family for publication at the Union Connection

Conclusion

With recent evidence that preschooler OIT is safe and effective, we have an exciting new window of opportunity for timely intervention as soon as food allergy is diagnosed in children.

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Pioneering Photon Counting CT – Siemens NAEOTOM Alpha Transforms Medical Imaging at Union Hospital

Ms Elaine Chung Yee-kwan
Senior Radiographer, Department of Medical Imaging
Union Hospital

Medical imaging has reached new heights at Union Hospital with the recent installation of a groundbreaking Dual Source Photon Counting Computed Tomography (PCCT) system. This advanced technology, the first of its kind in Hong Kong, has been in full operation since March 2024, ushering in a new era of improved accuracy, efficiency, and patient safety in diagnostic imaging. Since its launch, the pioneering PCCT has already served over 6,000 patients (more than 1,500 patients have done CT coronary angiogram), highlighting its pivotal role in the hospital's unwavering commitment to delivering the highest standards of high-quality healthcare.

PCCT uses advanced semiconductor detectors (Cadmium Telluride) that directly convert X-ray photons into electrical signals, unlike traditional CT technology that involves a two-step energy conversion process. This technology not only enables energy discrimination to differentiate materials based on their attenuation characteristics but also provides higher spatial resolution for clearer images with less radiation.

Photo 1 – The new photon-counting CT scanner has been in full operation at Union Hospital since March 2024.

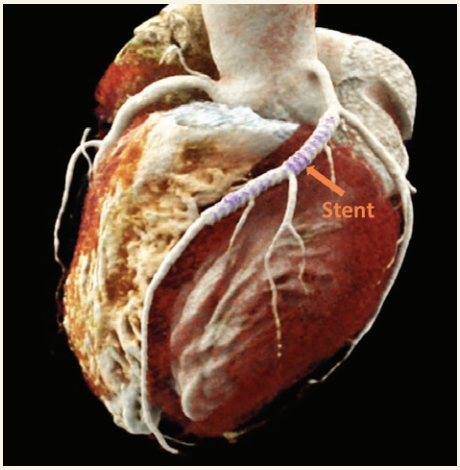


Figure 1 – Experience the remarkable detail of a 3D CT Coronary Angiogram with a stent.

Applications of Photon Counting CT

Coronary Imaging

- ***Ultra-high resolution*** - with **0.2 mm** slice thickness, compared to standard CT scanners' 0.6 mm. It improves the diagnostic quality, visibility of coronary lumen, calcification, and stents. This enables healthcare providers to more properly determine the severity and extent of obstructions.

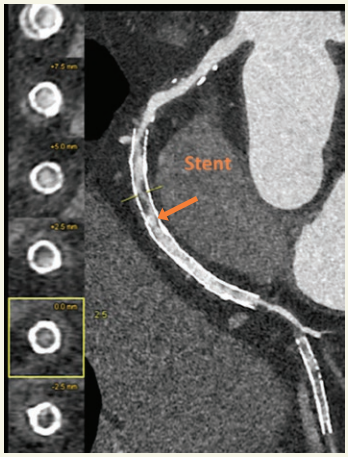


Figure 2 – The ultra-high resolution image shows partial in-stent restenosis at the right coronary artery.

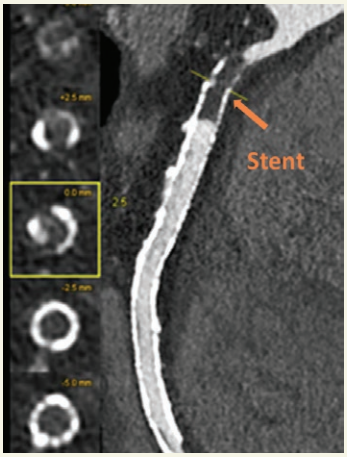


Figure 3 – The image shows in-stent restenosis with total occlusion of the right coronary artery.

- ***Quantum Pure Lumen*** - with the ability to virtually remove calcifications from coronary arteries, it helps clinicians evaluate the vessel's lumen without blooming artefacts and customise preventive treatments.
- ***Assessment of Bypass Grafts and Transcatheter Aortic Valve Implantation (TAVI)*** - assess the patency and quality of coronary bypass grafts and TAVI planning with less radiation, providing critical information for ongoing patient care.

Body Imaging

- ***Lung cancer screening*** - Low-dose CT thorax equivalent to only **two chest X-rays**, representing a **70%** reduction in radiation compared to conventional CT scans. Useful for early detection of lung cancer and monitoring lung disease.
- ***Assessment of pulmonary embolism*** - provides **iodine map** at improved spatial resolution with inherent spectral information and improved tissue contrasts, resulting in simultaneous assessment of the pulmonary vasculature as well as analysis of the parenchymal iodine distribution. It enables better management and treatment decisions.

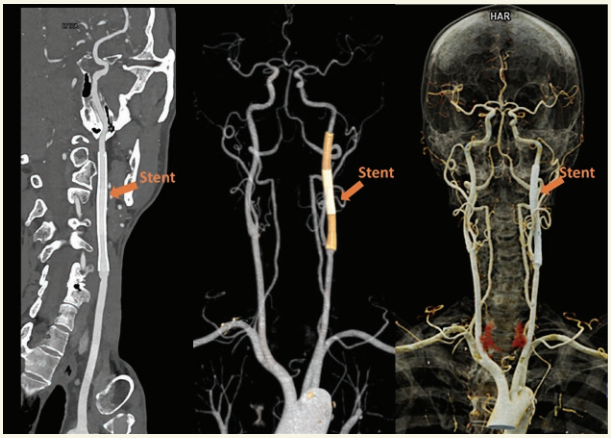


Figure 8 – A curved reformation (left), 3D (middle and right) of the left internal carotid artery with a stent (orange arrows). PCCT has the ability to discriminate between photon energies which significantly minimizes imaging artifacts, leading to a more reliable assessment of stent patency.

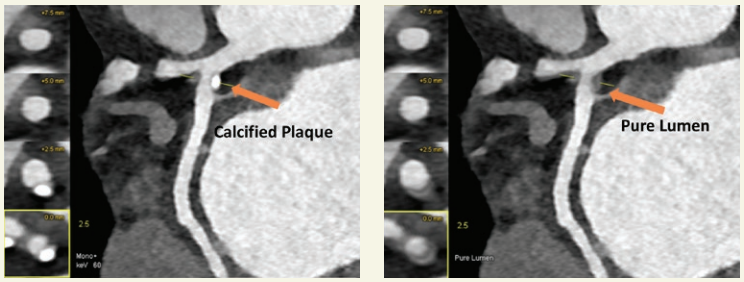


Figure 4 – The Quantum Pure Lumen (orange arrow) technology virtually removes calcifications from the coronary artery.

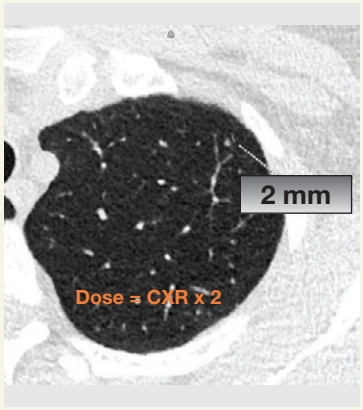


Figure 5 – The low-dose CT thorax shows a 2 mm lung nodule with superior image quality.

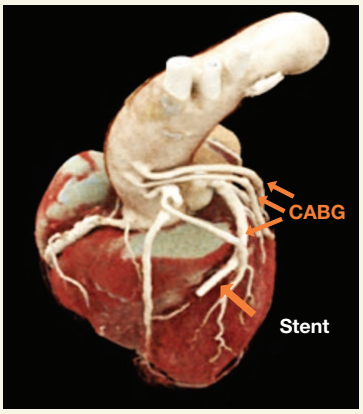


Figure 6 – Experience the remarkable detail of a 3D CT coronary angiogram with a Coronary Artery Bypass Graft (CABG) and stent.

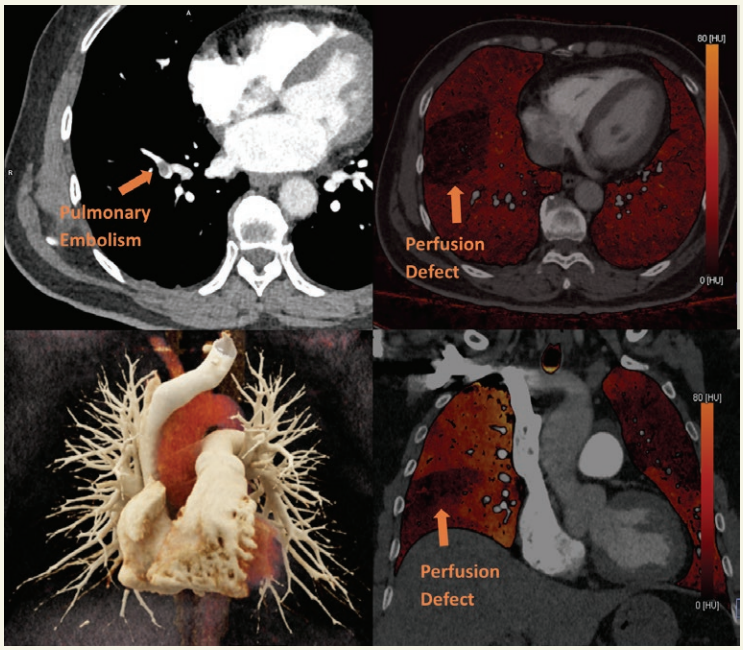


Figure 7 – A contrast axial image of the pulmonary angiogram shows a filling defect (orange arrow) at the right pulmonary artery. Axial, cinematic 3D, and coronal of the lung perfused blood volume images show a wedge-shaped perfusion defect in the right lower lobe of the lung.

- ***Body angiogram*** - the detailed imaging facilitates better detection and characterization of vascular diseases, such as aneurysms, carotid stenosis, and dissections. PCCT can capture images more quickly, reducing motion artifacts and improving the overall quality of the angiogram with **significant less contrast medium injection**.
- ***Dose reduction*** - achieves highquality images with dose reduction by up to **50%** compared to conventional CT, that is particularly important in sensitive populations such as children, young female and patients requiring multiple imaging studies.
- ***Trauma and Emergency Imaging*** - significantly reduces the imaging artifacts by metallic implant (e.g. extermity implants, dental filling, pacemarkers), leading to more reliable diagnostic information.

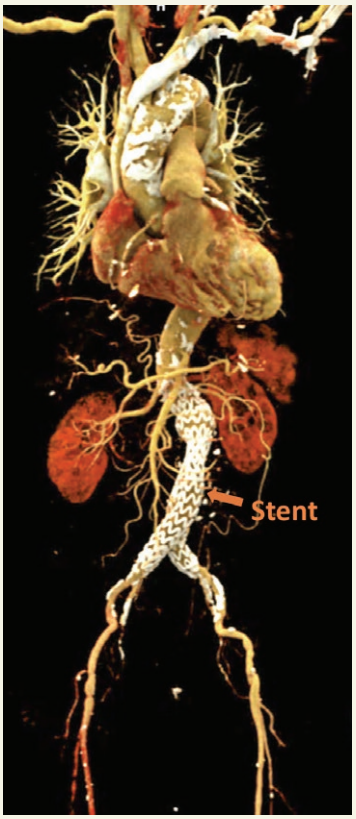


Figure 9 – Experience the remarkable details of a 3D whole-body angiogram with a stent by using only 50ml of contrast medium.

Figure 10 – Experience the remarkable details of a 3D lower limb angiogram.

Conclusion

PCCT is a groundbreaking technology that has made significant strides in improving medical imaging at Union Hospital. Since its launch in March 2024, this advanced Dual Source Photon Counting CT system has underscored its crucial role in the hospital's dedication to high-quality healthcare.

The enhanced capabilities of the Siemens Naeotom Alpha PCCT scanner, including improved spatial resolution, energy discrimination, and reduced radiation exposure, have greatly enhanced the diagnostic process. This transformative technology empowers clinicians to make better-informed decisions that ultimately lead to improved patient management and outcomes.

As the first PCCT system installed in Hong Kong, Union Hospital's pioneering adoption of this innovative solution solidifies its position as a leader in delivering the most advanced medical imaging for the community. Moving forward, this transformative technology will be imperative for clinical use, setting new standards in the pursuit of superior patient care.

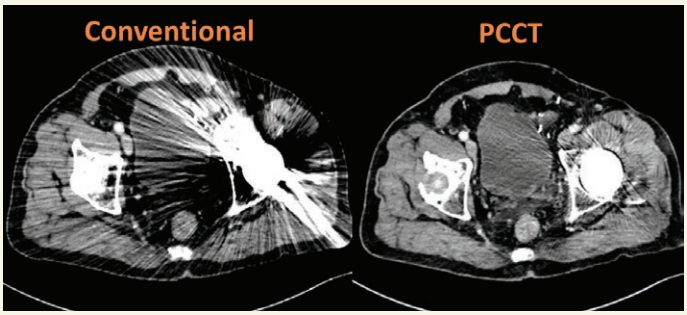


Figure 11 – PCCT offers superior Iterative Metal Artifact Reduction (iMAR) software to yield images (right) with a reduced level of metal artifacts.

Photo 2 – A heartfelt thank you to Mr Thomas Allmendinger, Headquarter Research and Development Specialist at Siemens (Germany), and Mr Mike Yuen, Vice President at Siemens Healthineers (HK), for their unwavering support in helping us achieve superior image quality for PCCT.

UNION HOSPITAL 29th

Annual Lunch

Annual Dinner

ANNUAL CELEBRATION

Performance

Dr Lam Ko Yin, Colin performed a fabulous song.

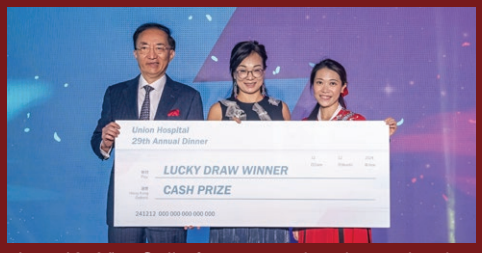
Estate Department Drum Performance.

Doctors' Band Show.

★ Best Dressed Award ★

Best Dressed Award Winners

Lucky Draw Winners



Special thanks to Dr Lam Ko Yin, Colin for sponsoring the cash prizes for the lucky draw.

Post-Event Highlights

Safety and Health Day @ To Kwa Wan (15 December 2024)

The first UH30 charity program,"Safety and Health Day @ To Kwa Wan"（土瓜灣安全健康日）took place on 15 December 2024, organized by the Kowloon City District Council. Featuring health talks by Dr Mak Siu King, Dr Chan Chi Wang and Dr Sin Wing To, the event also included comprehensive eye examinations conducted by Dr Chan Chi Wang and Dr Far Ying for 30 attendees.

Science Park Health Talk (7 January 2025)

Dr Pang Hing Yan, Consultant in Gastroenterology & Hepatology, delivered a talk on "Understanding and Managing Constipation in Urban Life". She delved into the common gastro-intestinal ailments affecting urban populations and provide practical suggestions to restore gut health and alleviate constipation.

CME Programme

Pearls of Anticoagulation Management in Patients with Upcoming Procedures or Active Bleed

Date : **28 February 2025 (Friday)**

Time : **2:00pm-3:00pm**
(Lunch Buffet will be served at 1:30pm)

Venue : 2/F Conference Room, Union Hospital

Speaker : **Dr Louis Ho Shing Lau**
Assistant Professor (Clinical),
Department of Medicine & Therapeutics
Faculty of Medicine,
The Chinese University of Hong Kong

Chairperson : **Dr Yannie O.Y. Soo**
Assistant Chief Hospital Manager
Union Hospital

On-site Registration

Online Registration (Zoom)

2608 3180

cme@union.org

Regular Meetings

Meeting :	X-Ray Meeting
Date : Time :	12 Feb 2025 (Wednesday) 8:30am – 9:30am
Co-ordinator:	**Dr Hui Ping Kuen, John** **Head, Department of Medical Imaging,** **Union Hospital**
Venue:	Training Room, 8/F MIC, Hospital Building, Union Hospital
Booking & Enquiry:	2608 3160 (Quality Assurance and Training Department)

Meeting :	Mortality and Morbidity Meeting
Date : Time :	12 Mar 2025 (Wednesday) 8:30am – 9:30am
Co-ordinator:	**Dr Yiu Ying Chang, Raymond** **Consultant in General Surgery** **Union Hospital**
Venue:	Training Room, 8/F MIC, Hospital Building, Union Hospital
Booking & Enquiry:	2608 3160 (Quality Assurance and Training Department)

New Clinical Members

Please extend a warm welcome to the following health professionals for joining our clinical team!

Dr To Wing Hei, Zion
Consultant in Otorhinolaryngology
Clinical Assistant Professor (Honorary), Faculty of Medicine, CUHK

Dr Chan Tak Hei, Manson
Specialist in Anaesthesiology

New Clinical Sessions

Union Hospital Dental Centre

Booking & Enquiry: 2608 3393	Time Schedule
Dr Cheung Ngai Yu, Iris	Mon 09:00 – 13:00 14:00 – 17:00 Tue 14:30 – 18:00* Thu 09:00 – 13:00 14:00 – 17:00

* Will be on duty on alternative weeks

Union Reproductive Medicine Centre

Booking & Enquiry: 2986 1133	Time Schedule
Dr Choi Sze Ngar, Sylvia	Tue 15:00 – 17:00 Thu 15:00 – 17:00 Sat 10:00 – 13:00
Dr Law Sze Man	Mon 09:00 – 13:00 Tue 09:00 – 13:00 14:30 – 17:00 Wed 09:00 – 13:00 Thu 09:00 – 15:00 Fri 09:00 – 13:00 14:30 – 17:00 Sat 09:00 – 13:00
Dr Kenneth Mao	Mon 11:00 – 12:30 Tue 09:00 – 13:00 Wed 11:00 – 13:00 Thu 09:00 – 13:00 Fri 11:00 – 13:00 Sat 09:00 – 13:00

Union Oncology Centre

Booking & Enquiry: 2159 6100	Time Schedule
Dr Chan Man Hong, Helen	Mon 14:00 – 17:00 Wed 14:00 – 17:00 Fri 14:00 – 17:00
Dr Tong Macy	Thu 14:00 – 17:00

Union Hospital Polyclinic (Tsim Sha Tsui) Dental Centre

Booking & Enquiry: 2686 1166	Time Schedule
Dr Cheung Ngai Yu, Iris	Sat 09:00 – 13:00* 14:00 – 17:00*

* Will be on duty on alternative weeks

Union Hospital Polyclinic (Tsuen Wan)

Booking & Enquiry: 2608 3399	Time Schedule
Obstetrics & Gynaecology **Dr Law Sze Man**	Mon 15:00 – 18:00
Obstetrics & Gynaecology **Dr Li Yau Chung**	Tue 10:00 – 13:00 Fri 10:00 – 13:00 Sat 14:30 – 18:00
Urology **Dr Mak Siu King**	Mon 10:30 – 13:00 Thu 15:00 – 17:00