NUHS RESIDENCY PROGRAM
SHAPING FUTURE MEDICAL LEADERS
Dear medical students and doctors - our potential residents,

Thank you for showing an interest in the NUHS Residency Program!

The hallmark of our program is that we Care. This prospectus is put together to help you make the right choice in your training. As we build our programs based on the ACGME-I six core competencies of Medical Knowledge, Patient Care, Professionalism, Interpersonal & Communication Skills, Practice-based Learning and Improvement, and Systems-based Practice, we place an even greater emphasis on building evidence-based specialists deeply entrenched in our NUHS TRICE values of Teamwork, Respect, Integrity, Compassion and Excellence. We care that you train to be the best doctor that you can be - one excelling in the science and art of Medicine built on a strong values-based foundation and equipped with the skills to push the frontiers of Medicine! This will stand you in good stead as you progress through your medical career.

The teachers are the cornerstones and make the difference in a training program. At NUHS Residency, we place great importance in the appointment of our Program Directors (PD) and Faculty members. We handpick passionate people with a love for teaching and mentoring, who personify our NUHS values and who care for each and every resident as a unique individual. Entrusted upon them is the mandate of training our next generation of Medical Leaders for Singapore – You! Besides our educators, our NUH CEO, Chairman Medical Board and many senior leaders take a personal interest in our residents too. Many know our residents by name. The grooming of a NUHS resident is not only the job of the DIO or the PDs but everyone in the NUHS family!

As we care and groom our residents, we would also like them to give their best to their patients and the healthcare community. Our residents are doctors with a heart to give back to society through their myriad of talents. We encourage our residents to take part in humanitarian work – both locally and overseas. A NUHS resident is one who is able to look beyond self while upholding the ideals of Medicine.

We look for special people – people who resonate well with us. Come talk to us if you wish for us to develop you to your fullest potential.

Wishing you all my very best,

Associate Professor Shirley Ooi
MBBS (S’pore), FRCS(Ed) (A&E), FAMS (Emergency Med)
Designated Institutional Official (DIO)
NUHS Residency Program
ABOUT NUHS

The National University Health System (NUHS) was established in January 2008 and comprises of the NUS Yong Loo Lin School of Medicine, Faculty of Dentistry, the Saw Swee Hock School of Public Health, the National University Hospital, the National University Cancer Institute, Singapore and the National University Heart Centre, Singapore.

The mission of NUHS is a three-pronged drive for excellence in clinical care, translational clinical research, and education. The enhanced capabilities and capacity will enable the NUHS to deliver better patient care, train future generations of doctors and healthcare providers more effectively and bring innovative treatments to patients through ground-breaking research, with a focus towards the major medical issues challenging Singapore’s population. By developing the campus at Kent Ridge to include a wide range of laboratory and teaching facilities, the NUHS is constantly striving to advance medical care through world-class biomedical research and education.

STRENGTHS OF THE NUHS RESIDENCY PROGRAM

Look forward to a rich and diverse experience at the NUHS Residency Program!

TEACHING EXCELLENCE
- Experienced team of passionate and nurturing teachers.
- Immersion in a culture of excellence that inspires you to reach your maximum potential.
- Expertise in the Medical Education Unit that promotes professionalism and excellence in medical education through: (a) faculty development, (b) medical curriculum development and (c) research in medical education.

RESEARCH EXCELLENCE
- NUHS Research Office that promotes and facilitates research activities and supports young biomedical researchers through mentorship and start-up programs.
- Investigational Medicine Unit (IMU), a key node that integrates ongoing research programs together with upcoming ones in experimental therapeutics and investigational medicine.
- Structured research training opportunities e.g. Clinician Leadership in Research program and Master of Clinical Investigation program.

CLINICAL EXCELLENCE
- Excellent clinical outcomes. We strive to achieve the highest quality standards. This is monitored by the tracking of clinical quality indicators across the different departments. Read more about it on the NUH website at http://www.nuh.com.sg/about-us/clinical-outcomes.html
SHAPING FUTURE MEDICAL LEADERS

ABOUT NATIONAL UNIVERSITY HOSPITAL

The NUH is a 1,062-bed tertiary specialist hospital and major referral centre for a wide range of medical, surgical and dental specialties including Cardiology, Gastroenterology and Hepatology, Obstetrics and Gynaecology, Oncology, Ophthalmology, Paediatrics, Orthopaedic Surgery and Hand and Reconstructive Microsurgery.

A member of the National University Health System, it is the principal teaching hospital of the NUS Yong Loo Lin School of Medicine (YLL SoM).

With combined resources from the NUS YLL SoM and Faculty of Dentistry, the NUH is poised to meet the healthcare needs of patients, train future generations of doctors more effectively, and help develop solutions to our healthcare problems through research.

In 2007, the NUH was tasked by the Ministry of Health to develop two new national centres, the National University Cancer Institute, Singapore (NCIS) and the National University Heart Centre, Singapore (NUHCS) to meet the growing needs for cardiac and cancer treatment. The National University Cancer Institute, Singapore (NCIS) offers a broad spectrum of cancer care and management covering both paediatric and adult cancers. The National University Heart Centre, Singapore (NUHCS) brings together cardiologists and experts from a multitude of medical and surgical disciplines to provide a comprehensive and holistic approach to the treatment of heart problems.

In 2004, the NUH became the first Singapore hospital to receive Joint Commission International (JCI) Accreditation, an international stamp for excellent clinical practices in patient care and safety.

NUHS RESIDENCY PROGRAM

STRENGTHS OF THE NUHS RESIDENCY PROGRAM

LOCATION
- Strong links to NUS Yong Loo Lin School of Medicine which facilitates easy access to information and the medical community.
- Physical proximity to NUS and Biopolis provides opportunity for the multi-disciplinary exchange of research ideas.
- One Integrated Hospital Site - which includes both Paediatrics and Obstetrics & Gynaecology.

FACILITIES
- State of the art training facilities for Surgery at our own Khoo Teck Puat Advanced Surgery Training Centre.
- The Centre for Translational Medicine, which features specialized Research Laboratories and a Simulated Hospital environment, is now operational.
  - The Simulation Centre houses an OT, ICU, three HD units including an Emergency Room, Delivery Room and Paediatrics Resuscitation Room, as well as eight wards.
- The new NUH Medical Centre, with dedicated space for clinical care, research and teaching, will be completed in 2013.

CASELOAD
- Being an Academic Medical Centre, and a tertiary specialist hospital, we have a rich and diverse caseload both in adult and paediatric conditions as we have virtually all sub-specialties in NUHS. Moreover, rotations through the various sub-specialties are easy as they are grouped under one cluster rather than individual departments.
- Caseload mix will provide an unsurpassed source of training materials for our residents.
- The number of residents we take in under the NUHS Residency Program will ensure that all our residents have sufficient numbers of the right type of caseload for training.

COMMUNITY OUTREACH
- Opportunities to take part in voluntary and humanitarian work as part of character building.

LOOKING FORWARD
- Good preparation for a career in academic medicine.
- Proper career tracks for those who are interested in becoming master clinicians, clinician educators, clinician investigators, clinician scholars and clinician scientists.
- Strong links with Jurong Health Services will ensure that many opportunities await the NUHS residents.
ABOUT JURONG HEALTH SERVICES

Jurong Health Services (JurongHealth) is Singapore’s public healthcare cluster formed to facilitate the integration of services and care processes for the community in the West. Working with partners such as healthcare providers like General Practitioners, polyclinics, community hospitals, long term care providers and voluntary welfare associations, we aim to bring health and wellness one step closer to home.

JurongHealth is building the new integrated healthcare hub comprising the 700-bed Ng Teng Fong General Hospital and 400-bed Jurong Community Hospital to provide holistic care for patients. Slated for completion from late 2014, the two new hospitals will be an integral part of the Jurong Lake District Masterplan, with easy access to public transport services (Jurong East MRT Station, Jurong East Bus Interchange) and retail/entertainment hubs.

JurongHealth is currently managing Alexandra Hospital with a comprehensive range of clinical services for the community, as well as Jurong Medical Centre, a unique, one-stop healthcare centre providing a range of quality and affordable specialist services and community health support services for residents in the West.

Ng Teng Fong General Hospital (NTFGH) is the first acute care hospital that is planned and built at the same time with a community hospital, Jurong Community Hospital (JCH), by the side. Located in the heart of Jurong Lake District, the hospitals will be nested in Singapore’s future biggest destination for business and leisure in the west of Singapore.

WHAT WE CAN OFFER OUR RESIDENTS

Join the NUHS Residency Programs, where you will have the unique opportunity of being immersed in the culture of both an academic medical centre and an integrated regional health system throughout your training.

As a participating site to the NUHS programs, JurongHealth is committed to provide residents with a holistic experience from the regional health system perspective.

In addition to reinforcing basic sciences, therapeutic principles, evidence-based and technical skills of medicine, we train our residents to listen closely, and to be cognizant of the patient’s clinical and non-clinical needs outside of the acute care setting.

In 2011 & 2012, we had the opportunity to showcase the CEP at the ACGME Annual Educational Conference and the Asia Pacific Medical Education Conference.

The Evaluation sub-committee supports all NUHS residency programs in continuous improvement through the oversight and evaluation tools and instruments.

The Evaluation sub-committee also acts as a resource for the various programs and is committed to looking at best evidence when developing feedback not only from residents but also faculty.

Here is what some of our residents have to say about the CEP:

“Good focus on basics. Relevant to our stage of learning & practice. Practical case-based scenarios helped to reinforce concepts.”

“Interactive and thought-provoking. Thoroughly enjoyable and useful.”

“Good tips. Good practical relevance. Well done!”

“Lecturers were interactive and engaging!”

Faculty from 24 different disciplines work with tireless enthusiasm to bring together up-to-date knowledge, case-based learning and an interactive format to the CEP sessions. Based on our first year’s success we have added even more modules to the Intern CEP - such as Evidence-Based Medicine, Communication Skills, Introduction to Systems-Based Practice and a formative On-Call OSCE which simulates on-call scenarios commonly encountered on the wards.

As our residents progress beyond PGY1, they will have the opportunity to participate in additional CEP modules geared towards their development as educators and researchers - including Residents As Teachers, Basics Stats & Clinical Investigation and Ethics & Professionalism – which take place on Thursdays 4-6 pm.

In 2011 & 2012, we had the opportunity to showcase the CEP at the ACGME Annual Educational Conference and the Asia Pacific Medical Education Conference.

EVALUATION SUB-COMMITTEE

The Evaluation sub-committee supports all NUHS residency programs in continuous improvement through the oversight and co-ordination of evaluations across the institution.

Assessment and evaluation are key aspects of our residency program. These are administered to evaluate the residents, the faculty members and all individual programs. Accurate, effective and regular evaluations help a resident track his/ her progress in training. They highlight areas of a resident’s strength as well as weakness, and are vital in determining if a resident is on track to reaching his/ her training goals and objectives. Evaluations for faculty are an important component in helping faculty develop themselves further as educators, as well as for the institution to recognise and reward faculty for excellent teaching. Regular program evaluations are essential for continuous program improvement, and these are performed on an annual basis, getting feedback not only from residents but also faculty.

The evaluation sub-committee oversees all the key elements of evaluation and assessment used in all the residency programs within NUHS. Whilst each program can use and develop its own evaluation tools, the evaluation sub-committee will develop and recommend standardised evaluation tools for key components in order for comparisons to be made across programs. The subcommittee also acts as a resource for the various programs and is committed to looking at best evidence when developing evaluation tools and instruments.
FACULTY DEVELOPMENT SUB-COMMITTEE
The Faculty Development Sub-committee makes recommendations on the development and implementation of policies for ongoing faculty development, research and scholarly / professional activities. The sub-committee monitors participation in faculty development activities and provides feedback on a regular basis so that teaching faculty can be encouraged to develop their skills in clinical teaching and pedagogy.

The Faculty Development Sub-committee collaborates with the Medical Education Unit (MEU) of the Yong Loo Lin School of Medicine and has developed a Faculty Training Roadmap for our Program Directors and Core Faculty. This will ensure that our educators are trained to teach and over time ensure that all trainees have the best possible educational experience from trained clinician educators.

RESEARCH SUB-COMMITTEE
Every resident who passes through the NUHS Residency Programme should be well-equipped with the skills that will enable him to become an outstanding leader in Academic Medicine.

The Resident Research Sub-committee is set-up with the mission of promoting research activities amongst NUHS residents and enhancing the culture of discovery and scientific exploration in NUHS. Our long-term vision is to nurture a vibrant research culture in NUHS, driven by a corps of research-savvy NUHS-trained residents.

Eminent Speaker Series: Eminent speakers have been invited to speak to our residents and also medical students to inspire our residents to take up the research pathway. These sessions consist of a short presentation by the speaker and an informal round table discussion on various issues such as research opportunities, networking and opportunities available for residents to embark on a career in academic medicine. The feedback has been extremely positive and we will continue to hold more sessions for residents to come face to face with the experts of the research realm.

Junior Pitch for Funds: The Junior Pitch for Funds was created to encourage budding clinician researchers / scientists to kick start their research projects. There are 2 grant calls annually with up to $12,000 per grant call.

RESIDENT WELFARE SUB-COMMITTEE
The Resident Welfare Sub-committee provides a forum for resident discussion and input into all matters pertaining to GMEC activities. Members of the committee represent different programs and are peer selected.

The sub-committee meets on a regular basis to discuss all aspects of resident life, including educational and work environment as well as their programs. The group also works to ensure effective communication among residents and provide a forum for addressing concerns in a confidential manner.

The sub-committee organizes activities aimed at promoting collegial relationships and establishing strong bonds within the NUHS family.
SHAPING FUTURE MEDICAL LEADERS

PROGRAM INFORMATION

ANAESTHESIOLOGY

Introduction

The NUHS Anaesthesiology Residency Program strives for excellence in all aspects of residency training. The cornerstone of our Academic Mission is the training of high-quality, well-rounded specialists in Anaesthesia, Critical Care and Pain Medicine.

The mission of our Program is the dedicated education of our residents in all areas of knowledge, clinical & technical skills, and professional attitudes related to Anaesthesia. Graduate anaesthetists meet the requirements to become certified specialist anaesthetists, who are proficient to practice anaesthesiology independently.

Outstanding Features of Program

Education Excellence

- Experienced and dedicated team of Faculty Staff, many of whom are MMed Anaesthesia examiners and tutors.
- Strong postgraduate curriculum and training, poised to prepare the resident for specialization in Anaesthesiology.
- Outstanding examination preparatory teaching program and unparalleled exam successes.
- Excellent simulation training facilities with keen and experienced Faculty.

Research Excellence

- Strong research heritage in our University Department, with opportunities in Basic, Clinical and Translational Research.
- Mentor Supervisors actively promote and facilitate research activities, with a focus on research development journey rather than outcome.
- Opportunities for start-up programs and collaboration with other NUHS and NUS Departments and Faculties.

Clinical Excellence

- One integrated training site with all essential anaesthetic subspecialty exposure including obstetric, paediatric, cardiac, neuro-anaesthesia.
- Rich and diverse caseload, unsurpassed source of training materials.
- Emphasis on evidence based practice of Anaesthesia and constant upgrading of anaesthetic practice through audits.

List of Core Faculty

Associate Program Directors
- Dr Addy Tan
- Dr Tay Kwang Hui

Core Faculty
- Assoc Prof Sophia Ang
- Assoc Prof Siau Chiang
- Dr Poon Keah How
- Dr Terry Pan

Assoc Prof Raymond Goy
Program Director

Curriculum and Rotation Roster

1st Clinical Anaesthesiology Year (CA-1): Basic Anaesthesia & Intensive Care Foundation

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<td>Goals</td>
<td>Orientation</td>
<td>Basic Anaesthesia Fundamentals</td>
<td>Anesthesia for General Surgical Conditions</td>
<td>Peri-operative Core I</td>
<td>Pain Core I</td>
<td>ICU</td>
<td>Ambulatory</td>
<td>Regional</td>
<td>ICU</td>
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<td>Actual Rotation (weeks)</td>
<td>Basic Anesthesia Orientation</td>
<td>Basic Science and Clinical Anaesthesia Fundamentals</td>
<td>Anesthesia for General, Orthopaedic, Head, Gynaecological &amp; Trauma Surgery</td>
<td>PACU &amp; Preop Clinic</td>
<td>Acute Pain</td>
<td>ICU</td>
<td>Ambulatory, ENT &amp; Ophthalmic</td>
<td>Basic Regional Anaesthesia</td>
<td>Neuro-ICU</td>
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2nd Clinical Anaesthesiology Year (CA-2): Subspecialty Rotations

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<td>Goals</td>
<td>Subspecialty Rotations</td>
<td>ICU</td>
<td>Pain Core II</td>
<td>Special Risks</td>
<td>Peri-operative Core II</td>
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<td>Actual Rotation</td>
<td>OBAN (Adv)</td>
<td>Neuro Core I</td>
<td>Cardiac Core I</td>
<td>Peds Core I</td>
<td>OBAN Core II</td>
<td>Neuro Core II</td>
<td>Cardiac Core II</td>
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<td>OBAN Core III</td>
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3rd Clinical Anaesthesiology Year (CA-3): Advanced Subspecialty Rotations

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<td>Advanced Subspecialty Rotations</td>
<td>Elective</td>
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4th Clinical Anaesthesiology Year (CA-4): Advanced Subspecialty Rotations

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<td>Professional Practice Modules</td>
<td>ADVANCED RESIDENTS AS TEACHERS (RATTS) CAREER PLANNING MODULE</td>
<td>HEALTHCARE INFRASTRUCTURE MANAGEMENT MODULE</td>
<td>PERI-OPERATIVE RESOURCE MANAGEMENT MODULE</td>
<td>QUALITY ASSURANCE / CRISIS MANAGEMENT MODULE</td>
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<tr>
<td>Advanced Clinical Modules</td>
<td>Cardiac (TEE Competency)</td>
<td>Major and Complex Venous Thoracic</td>
<td>High Risk Obstetrics Regional (Clinical and Audits)</td>
<td>Preoperative Evaluations</td>
<td>Pediatric Special Risk Chronic Pain</td>
<td>Intensive Care Trauma Neuro-Anaesthesia</td>
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As a Program Director, two questions are always asked of me.

The first being “What are the up and down-sides of Residency?” Describing the upside of Residency is an easy task, I can think of many significant improvements instantly.

The ACGME-I Residency is the best change our Ministry of Health has made to the Postgraduate Education System in Singapore. As a Supervisor of Training for our local BST/AST as well as Australian training system of 8 years, I am heartened by the opportunities we are empowered as Faculty Educators to bring forth new structured changes to our education system. The ACGME-I Residency replaces the opportunistic learning of our pre-existing BST/AST system. The elements of formative Resident and Faculty evaluation and feedback are enhanced. There are competency milestones upon which our trainees work towards in their route to Specialization.

It is not longer just about teaching and receiving of information. It is about taking ownership of a Resident’s successes and challenges, their professional and ethical development. Compassion must be the hallmark of all NUHS Residency Programs.

Of course, excellent Education and Training will require additional effort, attention and resources. It is understandable that these new focuses will take people out of their comfort zone (like any new policy will do). In NUHS, our Educators challenge ourselves each day to move out of our pre-conceived comforts to bring forth the best for our Residents.

What about the downside? There is only one I can think of, that is the Residency ‘rat-race’. My advice to our young doctors is that unless you are certain of your career choice, it is perhaps prudent to take a step back and try out new options before embarking on a Residency track. I have must have interviewed or met more than 100 Residency hopefuls in the past 2 years. Our young doctors must realize, in whatever we do, in all our pursuits, hopes and expectations, we first have to be Compassionate Physicians.

This succinctly sums up my experience in NUHS Anaesthesia. The NUHS residency program provides a unique combination of a wide range of case exposure, inspirational dedicated teachers, as well as plentiful opportunities for clinical research, in a warm approachable environment, all within a matter of hours on the same call! Senior staff are supportive and approachable, and go the extra mile to provide a rich and educational training experience and plenty of help for the exams.

As a university hospital, there are also myriad opportunities to be involved in research and undergraduate teaching."

Dr Eric Lee, Anaesthesiology CA2 Resident

“Education excellence. Clinical excellence. Research excellence. This succinctly sums up my experience in NUHS Anaesthesia. The NUHS residency program provides a unique combination of a wide range of case exposure, inspirational dedicated teachers, as well as plentiful opportunities for clinical research, in a warm approachable environment, all within a matter of hours on the same call! Senior staff are supportive and approachable, and go the extra mile to provide a rich and educational training experience and plenty of help for the exams.

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Dr Teco Wei Wei, Anaesthesiology CA2 Resident

“I chose NUHS Anaesthesia for the sheer diversity in clinical exposure that it offers. Here, you can go from anaesthetising for a craniootomy, to a thoracotomy, to an emergency caesarean section, to a paediatric operation, all within a matter of hours on the same call! Senior staff are supportive and approachable, and go the extra mile to provide a rich and educational training experience and plenty of help for the exams.

As a university hospital, there are also myriad opportunities to be involved in research and undergraduate teaching."

Dr Irene Lim, Anaesthesiology CA1 Resident

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As a university hospital, there are also myriad opportunities to be involved in research and undergraduate teaching."

Dr Teco Wei Wei, Anaesthesiology CA2 Resident

“The NUHS Anaesthesia department has its unique strength of providing a holistic training program all “under one roof”. One can expect to deal with any case while on-call, including paediatrics and obstetrics. This allows one to be constantly exposed and in touch with handling a variety of cases adeptly even while rotating through different and unrelated subspecialties. With a strong history and an established infrastructure for research, one has easy access to further one’s research ideas. Priding with a well-equipped, high-technology simulation centre, we have the opportunity to hone our clinical skills through hands-on crisis management in a risk-free environment without any compromise to patient safety. Backed by a strong faculty enthusiastic in teaching, grooming and nurturing future anaesthetists, the NUHS residency program is the place to discover and unleash one’s greatest potential."

Dr Irene Lim, Anaesthesiology CA1 Resident

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This leads nicely to the 2nd question, “How do you choose your Residents?”

I am looking for a unique group of compassionate individuals who care genuinely for their patients, fellow doctors, the Program, Institution and Specialty. I look beyond just academic excellence or previous anesthetic work as selection criteria. I believe firmly that a solid Residency Program can achieve these goals in any interested Resident. However, no comprehensive training program can take the importance of instilling values of compassion in our young doctors.

I would like to stress that the foundations of Anaesthesia do not lie in fancy operating theatres or advanced equipment. Teamwork and vigilance provide the best possible care for our patients. Teamwork and communication stimulate cooperation and push each of us to the best that we can be. Teamwork and dedication help us nurture the next generation of Anaesthesiology Specialists. I would expect all my Residents to possess our NUHS Core Values TRICE - Teamwork, Respect, Integrity, Compassion and Excellence. All Residents must show commitment to the care of our patients and education of our next generation of doctors.
FAQ

What makes our NUHS programs unique and different from other training programs?

A simple answer, People. Medical training involves observant apprenticeship and gracious stewardship.

How would you describe your Anaesthesiology Program?

A value-added, resident-centric Anaesthesiology Program. Get the most out of your residency training. You have to enjoy your journey to specialization. The ACGME clinical requirements for Anaesthesia training simply describe the need for minimal caseloads. This is where NUHS Anaesthesiology makes our mark; to push our residents to their fullest potential and to allow our residents and Specialists to make their mark as Clinicians, Clinician-Educators, Clinician-Researchers and Clinician-Administrators.

What advice would you give to medical school graduates who are considering their choice of residency training, in NUHS and in NUHS Anaesthesiology?

Choose a Career Path that arouses your passion. There will be times in your career where you may feel physically down, clinically stretched or mentally tired. Your love for your patients, your fellowship to your peers and commitment to your Program will be the driving force that makes you pick up and push forward. This is the hallmark of our NUHS Programs, where our patients and residents come first.

Choose a Program that arouses your passion. In NUHS Anaesthesiology, we strive for excellence in all areas of residency training.

Choose a Mentor who arouses your passion. As the Program Director for NUHS Anaesthesiology, I draw strength and courage each working day from the aspirations of my residents. It has not been an easy process. We transited from a UK-based anaesthesia training system into the ACGME-I residency structure over a short span of 1-2 years. Most US programs had taken 10 - 20 years to mature. This feat would not have been possible without the pure idealism of my elective students, Residents and Faculty. This is the same passion I would like to impart to our next generation of Anaesthesia residents.

Whatever you do, be happy with your decision. Medicine is more than a job or profession or residency training, IT IS YOUR CALLING.

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DIAGNOSTIC RADIOLOGY

Introduction

The NUHS Diagnostic Radiology Residency Program is geared towards preparing residents to become all-rounded radiologists. We have an excellent mix of cases with all major radiological modalities and subspecialties represented. Clinical work and teaching are consultant-led with residents introduced to radiological anatomy, radiological pathology, performing and reporting of radiological examinations in a graded and sequential fashion.

Graduates of our program meet the requirements to be certified with the following qualifications: Fellowship of the Royal College of Radiologists (FRCR) and / or Master of Medicine (MMed), Diagnostic Radiology, Singapore. As Specialist Radiologists, they are proficient to practice radiology independently in either an academic institution or in private clinical practice.

Outstanding features of Program

- Great emphasis on teaching and passing examinations
- Fortnightly in-house web-based mock exams modeled after the FRCR Part I and llb written examinations with feedback.
- Thrice weekly consultant-led tutorials, modeled after the FRCR Part llb viva examinations.
- Up to 20 clinico-radiological rounds per week.
- Institutional subscriptions to electronic reference and assessment materials (StatDX, e-Anatomy and RADPrimer)
- Monthly meetings with mentors enabling individual feedback to be given on progress.
- Monthly resident meetings with senior staff.
- Regular auditing of on-call case s by consultant radiologists for quality and educational purposes with monthly audit meeting.
- High priority given to residents’ examination and training leave.
- Opportunities for research and participation in audit and teaching activities.

Dr Lynnette Teo
Program Director
NUHS RESIDENCY PROGRAM

PROGRAM INFORMATION

SHAPING FUTURE MEDICAL LEADERS

ASSOCIATE PROGRAM DIRECTOR
Dr Bertrand Ang

CORE FACULTY
Dr Arvind Sinha Kumar
Dr Anil Gopinathan

PHYSICIAN FACULTY
Prof Vincent Chong
Dr Goh Poh Sun
Prof Lenny Tan
Dr Jeewesh Kapur
Assoc Prof Quek Swee Tian
Dr Lee Chin Hwee
Dr Chai Ping
Dr Loo Hoi Yin
Dr Cindy Hia
Dr Louise Gartner
Dr Eric Ting
Dr Lu Suat Jin
Dr Edwin Siew
Dr Tan Eng Kien
Dr Eugene Liu
Dr Thian Yee Liang
Dr Felicity Jane Pool

CURRICULUM AND ROTATION ROSTER

The radiological subspecialties practiced in NUH include neuroradiology, musculoskeletal radiology, breast imaging, body imaging (including cardiac CT and MR), interventional radiology, ultrasound and nuclear medicine. There are also general radiology stations like plain films, fluoroscopy and intravenous urography. Resident rotations are subspecialty based, summarized in the table below:

<table>
<thead>
<tr>
<th>ROTATIONS</th>
<th>DURATION OF ROTATION (WEEKS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YEAR 1</td>
</tr>
<tr>
<td>Cardiothoracic Radiology</td>
<td>4</td>
</tr>
<tr>
<td>Abdominal Imaging</td>
<td>8</td>
</tr>
<tr>
<td>Musculoskeletal Radiology</td>
<td>6</td>
</tr>
<tr>
<td>Breast Imaging</td>
<td>0</td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td>8</td>
</tr>
<tr>
<td>Neuroradiology</td>
<td>6</td>
</tr>
<tr>
<td>Pediatric Radiology</td>
<td>2</td>
</tr>
<tr>
<td>Vascular and Interventional Radiology</td>
<td>0</td>
</tr>
<tr>
<td>Emergency Radiology</td>
<td>8</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>4</td>
</tr>
<tr>
<td>Pathology</td>
<td>1</td>
</tr>
<tr>
<td>Research</td>
<td>1</td>
</tr>
<tr>
<td>Vacation</td>
<td>4</td>
</tr>
</tbody>
</table>

Total (in weeks) 52 52 52 52

Throughout Years 1 to 4, there are intense in-house and national tutorials to gear residents up for the examinations they are expected to sit for. We also conduct in-house e-learning mock examinations for the film and rapid reporting sections of the FRCR IIB examination. Residents are expected to progress and achieve the examination milestones as summarized below.

<table>
<thead>
<tr>
<th>EXAMINATIONS TO SIT</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>YEAR 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRCR Part I</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>FRCR Part II</td>
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<td></td>
<td>●</td>
</tr>
<tr>
<td>FRCR Part III</td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Year 5, which is after the ACGME-I residency program, is an elective year in which residents opt for the subspecialty that they would like further training in. This would be in the form of 3 monthly postings and residents can request to be posted to other radiology departments.

RESIDENT’S TESTIMONIAL

“The NUHS DR residency offers a comprehensive and rigorous training program. The NUHS DDI community is a comfortably close-knit one, and the core faculty is familiar with each and every resident personally. The department also has a culture of excellence in education with a combination of frequent viva tutorials and online assessments. Program director and clinical director are both very supportive of the training needs of the residents. Program director is passionate about her role and responsive to ideas for improvement. Residents within the program also work together to build a supportive and conducive training environment for new residents. Additional factors which I found helpful include easy access to NUS libraries/resources and additional training funding from NUHS. Overall, the NUHS DR residency program is highly recommended.”

Dr Koh Huiliang

RESIDENTS’ CAREER PATHWAY

Graduating residents can subspecialise after obtaining their exit certification. The subspecialties include body radiology, neuroradiology, musculoskeletal radiology, breast radiology, vascular and interventional radiology, nuclear medicine, pediatric radiology and ultrasound.

Besides subspecialization, NUHS also offers residents who have qualified as specialists 5 career tracks to lead and shape health care. These tracks are distinguished by their focus and allocation on the clinical, research and teaching missions of NUHS. They are: 1) Clinician, 2) Clinician Educator, 3) Clinician Investigator, 4) Clinician Scholar and 5) Clinician Scientist.

FAQ

What criteria are you using to select the Residents?

We look for committed and caring Residents who display integrity, collegiality and respect. Academic or research achievements are not a priority as these can be developed.

Do I still need to sit for external examinations like the Fellowship of the Royal College of Radiologists if I take up Residency training?

Yes. The FRCR / MMed examination will be taken during Residency Training.

Is there a compulsory research requirement?

A first author paper (case report, case series, original article, etc) is a pre-requisite by the National Radiology Advisory Committee prior to exit as a Radiology Specialist in Singapore.

For Residents interested in research, there are ample opportunities.

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Program Coordinator  
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INTRODUCTION

Our program is committed to excellent emergency care of our patients through the training of the next generation of Emergency Physicians who are competent, compassionate and who are also able to contribute to the specialty of EM through leadership roles in health care, education and research.

In NUHS EM Residency Program, the teaching culture permeates all levels – everyone shares knowledge and uses every clinical opportunity to teach & learn. It encourages a life-long learning practice and makes work & training intellectually satisfying. It is this passion to learn that keeps us going and makes us better each day. When you are part of this environment, you will find strength and motivation to strive to be the best emergency physician that you can be.

OUTSTANDING FEATURES OF PROGRAM

- Excellent training environment with strong teaching culture and outstanding teaching faculty.
- Optimal learning opportunity with comprehensive case-mix and moderate patient load to manage patient beyond the initial first hour of emergent care.
- Stimulation of intellectual curiosity with lively discussions during clinical shifts and hand-over rounds.
- Impressive teaching curriculum targeted towards clinical competence as well as preparation for the MCEM / MMed (A&E) exam. The Applied Basic Science Revision Course (ABSRC), developed by our faculty, is an unparalleled structured course in Singapore that prepares the resident for the Part A exam.
- Promotion and inculcation of life-long learning through our practice of evidenced-based strategy in day-to-day clinical care in the ED.
- Enjoy working and learning in a warm, friendly and cohesive department with approachable and personable faculty interested in your holistic development.
- Be immersed in a culture of continuous improvement and pushing the frontiers of EMed care. We were the first ED in Singapore who introduced the use of NIV in COPD patients since 2003 and was awarded the 2010 National Medical Excellence Team Award. In 2011, we again won a similar award for achieving world-class standard in door-to-balloon time for AMI patients.

RESIDENTS’ TESTIMONIALS

“NUHS EM residency takes a holistic approach to growth of the individual, emphasizing on both the academic and personal development of the resident. I had the opportunity to be involved in planning various NUHS residency events & this gave me a sense of belonging beyond my clinical duty. With registrars and consultants who are eager to teach and an administration that is very much pro-teaching, the people & environment are truly amazing! Someone once told me that if you enjoy your job, someday it stops becoming work. Well, the more time I spend in NUHS and the EMD, the more I feel this way!”

Dr David Pflug, 2010 Intake

“If you are looking for a well-organized residency program that has a wide mix of cases, caring and knowledgeable seniors, protected time for learning, and an exciting career then NUHS EM residency would be your best choice.”

Dr Chua Mui Teng, 2011 Intake
RESIDENTS’ TESTIMONIALS

“Since I joined the NUHS EM program, I have been constantly discovering new reasons why this is the best place for learning as a junior doctor in Emergency Medicine. The training in the program is well organized with a core faculty that has great dedication to provide guidance, inspiration and mentorship. They are responsible, dedicated and have great minds to teach, and at the same time they are a group of fun and supportive people to work with, like a big happy family. NUHS really stands out for its strong teaching culture and mentors who are committed in clinical supervision and teaching. NUHS has certainly set the standard in providing training for the junior Emergency Physicians.”
Dr Li Zisheng, 2011 Intake

“In my first week as a “baby” MO, an orthopedic patient in general ward had a STEMI complicated by cardiogenic shock. As the primary team was in the OT, I took charge: considered the differentials, asked for appropriate investigations, delegated tasks to the house officers and nurses. How I had handled this as a relatively junior MO is a testament to how well I have been prepared by the residency training. If I had to choose a residency again, it would undoubtedly be NUHS Emergency Medicine.”
Dr Lee Chengjie, 2011 Intake

“I have had a positive experience working in NUH EMD, where there is a strong focus on teaching and learning. The seniors are inspiring. The nurses and support staff all work together as a team. These factors motivated me to apply for residency at NUH EMD, the best place to be!”
Dr Daniel Chor, 2012 Intake

“Working in NUH gives me a unique opportunity to care for the most critically ill and complex patients. As residents, we are closely supervised, but are also given considerable autonomy to make decisions on our own and learn independently.”
Dr Tam Howen, 2012 Intake

“When you have a PD who frequently whatapps an invitation to the R1s ‘to ventilate’, you can be certain that you have a hip, energetic and committed mentor at the helm! The NUHS EM program embodies this very same spirit of proactive mentorship. This is where you will be challenged, where guidance will be offered and where you will realize your potential!”
Dr Leong Hon Loong, 2012 Intake

FAQ

What criteria are you using to select the Residents?

We select residents who love clinical work, passionate about the EM specialty and are teachable. We also look for those who possess our NUHS Core Values: Teamwork, Respect, Integrity, Compassion and Excellence.

Do I still need to sit for external paper like MRCS or MRCP if I take up Residency training?

The Emergency Medicine (EM) residency is a 5 year program. The first 3 years are designed to give the resident a broad exposure to all aspects of EM including acquisition of core EM knowledge and development of procedural skills in management of emergent patient. This is accomplished through rotations in General Surgery, Internal Medicine, Orthopedic, Cardiology, Paediatric Medicine, EYE/ ENT as well as critical care areas including cardiac, surgical, medical intensive care units. The curriculum prepares the resident for Member of the College of Emergency Medicine (MCEM) / MMed (A&E) exam in Residency Year 3. Resident will sit for the MCEM Part A examination at the end of the first year (R1). An Applied Basic Science Revision Course (modules in Anatomy, Physiology and Clinical Pharmacology) has been specially developed by NUHS EM faculty to assist the residents in this examination.

Upon successful completion of the MCEM exam, resident proceeds to the final 2.5 years of residency before taking the final Specialist Exit Exam conducted by the Joint Committee in Specialist Training (JCST) and will be accredited as an EM Specialist by the Singapore Accreditation Board (SAB). On completion of the program, residents are capable of practicing Emergency Medicine independently and incorporating new skills and knowledge throughout their careers.

Is there a compulsory research requirement?

Research prior to the joining residency is not a requirement. The focus of the residency program is to guide and mentor the resident through the stages of research.

CONTACT DETAILS

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Program Coordinator
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INTRODUCTION

NUHS, in collaboration with St Luke’s Hospital, Raffles Medical Group and Frontier Healthcare Group, is proud to present our innovative all-in-one Family Medicine Residency Program with the best of private and public training that offers our residents a diverse experience in an acute tertiary academic hospital, community hospital and private GP settings.

This program exposes the FM residents to a private-public mix that extends from the breadth of primary care exposure to firsthand experience of private GP practice in graduated blocks of learning, continuity care and chronic disease management in Family Medicine Centre setting, Geriatric inpatient rotation in St Luke’s Hospital, specialist ambulatory care experience and rotating hospital postings in NUH.

To achieve the goals and objectives for the Residency program, the following rotations have been established for the purpose of teaching Family Medicine residents:

- **Family Medicine Centre at Clementi Polyclinic** — regular continuity clinic sessions beginning from Year 1 of the residency and continues through to Year 2 and 3.

- **Inpatient Rotations at NUHS/SLH in**:
  - Adult Medicine (includes Critical Care)
  - Emergency Medicine
  - Obstetrics and Gynaecology
  - Paediatric Medicine
- **Geriatrics**
- **Gastro**
- **General Med**
- **General Med (includes Sports Medicine)**

- **General Practice (GP) block posting at Frontier Healthcare Group or Raffles Medical Group**

- **Clinical attachment/elective posting in**:
  - Dermatology
  - Otolaryngology
  - Palliative Medicine
  - Advanced Maternity Care (applies to elective posting only)

- **Scholarly activities includes**
  - Audit projects
  - Case write-ups
  - Research projects
  - Health Education talks and CME presentations

- **Didactic conferences**
  - NUHS Residency Core Education Program (CEP)
  - Family Medicine Journal Clubs, Business meetings
  - Family Medicine Grand Rounds, Mortality and Morbidity Rounds
  - Family Medicine Conferences (FMTP modules & workshops)

ASSOC PROF TAN BOON YEOW  
PROGRAM DIRECTOR

...exposes the FM residents to a private-public mix that extends from the breadth of primary care exposure to firsthand experience of private GP practice...

ASSOCIATE PROGRAM DIRECTOR

Assoc Prof Goh Lee Gan  
(Senior Consultant, Div of Family Medicine, NUH)

CORE FACULTY

Dr Tham Tat Yean (CEO, Frontier Healthcare Group)
Dr Chng Shih Kiat (DY Medical Director, Raffles Medical Clinics)
Dr Lim Fong Seng (Head, Div of Family Medicine, NUH)

CURRICULUM AND ROTATION ROSTER

SAMPLE ROTATION OF 1 NUHS FM RESIDENT

To NUHS Family Medicine Residency Program is helmed by an impressive faculty with years of experience in clinical care, education and research. This has translated into a holistic and robust training program.

I am also impressed by the faculty’s sincerity and devotion to the residents. I was pleasantly surprised to have them phone me to answer my queries which I sent through emails, and for them to personally send birthday greetings to the residents.

Dr Wang Mingchang

NUHS Family Medicine Residency Program provides opportunities to train a new generation of family doctors that actively partake in pushing the frontiers of medicine, while maintaining the tradition of caring for the patients as a whole.

Thus far, my time in this program has been incredibly rewarding. The guidance from the professors and physicians, and the encouragement from my colleagues have helped me grow as a doctor and as a person.

Dr Shum Oi Han

I know I have made the right choice when I chose to join NUHS Family Medicine Residency Program. Firstly, a lot of emphasis was placed on the residents, especially being the pioneer batch of residents in Family Medicine. Our welfare is well taken care of by core faculty who strives to give us the best learning environment. Dedicated mentors and supervisors have also provided excellent guidance along the way. In addition, the exposure to private medical clinics such as Raffles Medical & Frontier Healthcare will augment our skills and knowledge in the real general practice settings.

Dr Elaine Tan Ai Jia
RESIDENTS’ CAREER PATHWAY

A well trained Family Physician is able to practice/perform in various settings/roles upon completion of his/her training:

1. Ambulatory based setting either in a Family Medicine Centre/Clinic in the public or private setting.
2. An inpatient based setting in a Community Hospital / Restructured Hospital
3. As an academic in an academic medical centre either in education or research.
4. As a clinician leader in an administrative position (eg. Director of MedicalCentre/Department/Hospital).

Family Medicine is also an entry route currently for advanced training in Palliative care, Sports Medicine and Geriatric Medicine.

FAQ

What are the major examination(s) a FM Resident will have to sit for?

There will be In Training Examination (ITE) yearly and a final exam [Masters of Medicine (Family Medicine)].

What is the MMed (FM) exam format like?

MMed (FM) exam format consists of three main parts.

1. Theory
   - Paper 1 (3 hrs):
     - Modified Essay Question (MEQ)
     - Short answer questions (SAQ) which can be one of these: history, physical exam, investigation, acute management or referral, in respect to common disease;
     - Health talk
   - Paper 2 (2 hrs): 120 MCQ (1 best option)
   - Paper 3 (1 hr): 30 slides interpretation questions

2. Oral (30 mins): 50 practice diary & 1 report audit project

3. Clinical:
   - 2 long cases (medicine & paediatrics)-45 min each
   - 4 short cases (medicine, paediatrics, O&G, surgery/orthopedics)-15 min each

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LIST OF CORE FACULTY

ASSOCIATE PROGRAM DIRECTOR
Dr Frances Lim Sheau Huei

CORE FACULTY
Assoc Prof Jimmy So Bok Yan  Assoc Prof Stephen Chang Kin Yong  Assoc Prof Lomanto Davide  Dr Cheong Wai Kit  Dr Thirugnanam Agasthian  Assoc Prof Chan Ching Wan  Dr Alfred Kow Wei Chieh  Dr Seow Choon Sheong (JHS)

CURRICULUM AND ROTATION ROSTER

YEAR 1 ROTATIONS FOR RESIDENTS WHO HAVE NOT COMPLETED INTERNSHIP

<table>
<thead>
<tr>
<th>YEAR 1 (R1)</th>
<th>4 MONTHS</th>
<th>4 MONTHS</th>
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<tbody>
<tr>
<td></td>
<td>Internal Medicine</td>
<td>General Surgery</td>
<td>GS / Trauma / Uro / Neurosurgery</td>
<td>GS / Skin / soft tissue (plastic)</td>
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</table>

YEAR 1 ROTATIONS FOR RESIDENTS WHO HAVE COMPLETED INTERNSHIP

<table>
<thead>
<tr>
<th>YEAR 1 (R1)</th>
<th>2 MONTHS</th>
<th>2 MONTHS</th>
<th>2 MONTHS</th>
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<th>2 MONTHS</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GS / Skin / soft tissue (plastic)</td>
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<td>Colorectal</td>
<td>Breast / Trauma / Endocrine</td>
<td>Neurosurgery</td>
<td>HPB</td>
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</table>

<table>
<thead>
<tr>
<th>YEAR 2 (R2)</th>
<th>3 MONTHS</th>
<th>1 MONTHS</th>
<th>2 MONTHS</th>
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<th>2 MONTHS</th>
<th>2 MONTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vascular</td>
<td>Thoracic</td>
<td>JHS</td>
<td>Endocrine</td>
<td>Breast / Trauma</td>
<td>UGI</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 3 (R3)</th>
<th>2 MONTHS</th>
<th>2 MONTHS</th>
<th>2 MONTHS</th>
<th>2 MONTHS</th>
<th>2 MONTHS</th>
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<td>Critical Care</td>
<td>HPB</td>
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<td>JHS</td>
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</table>

<table>
<thead>
<tr>
<th>YEAR 4 (R4)</th>
<th>3 MONTHS</th>
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</thead>
<tbody>
<tr>
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<td>Thoracic</td>
<td>Elective</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 5 (R5)</th>
<th>3 MONTHS</th>
<th>3 MONTHS</th>
<th>3 MONTHS</th>
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<tbody>
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<td>HPB</td>
<td>UGI</td>
<td>Breast / Trauma</td>
<td></td>
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</tbody>
</table>

RESIDENTS’ TESTIMONIALS

Choosing NUHS as my institution of choice for general surgery training was a simple and straightforward choice to make. Together with clinical excellence, NUHS offers and exciting research opportunities to all surgical trainees and hence provides the perfect training environment to be a well-rounded surgeon. Much effort and planning has been put in to provide trainees with a comprehensive and diverse syllabus for general surgical education. As a current year 2 resident, I must say that the past year has been an absolute blast and I look forward to the rest of my residency years with NUHS.

Dr Ng Jun Jie

RESIDENTS’ CAREER PATHWAY

A career in General Surgery is without a doubt one of the most rewarding and interesting careers available. The diverse nature of the specialty is what makes General Surgery an attractive career choice. As surgeons, we are able to test our hypotheses and see rapid, graphic results from our work. It is immensely gratifying to remove a cancer, convert a cold, bluish ischemic limb to one that is warm and pink, relieve the pain of an intra-abdominal catastrophe, resuscitate, operate and bring back to life a multiply injured patient or help a scarred patient gain better appearance and function.

Surgeons are trained, not born. Intelligence, conscientiousness, creativity, courage, and perseverance are the critical attributes, and they outweigh the small differences in dexterity among most medical students. Becoming a good surgeon is a life-long process. Thoughtful reflection on the outcomes of your decisions and those of others will gradually give you the most important quality, ‘good surgical judgment’.

The residency program training for General Surgery is busy and sometimes intense but the rewards far outweigh the sacrifices. As for other areas of medicine, General Surgeons have demanding jobs and often need to strive for a balance between their professional and personal lives.

You should choose a career in surgery if you:
1. Love being in the operating room, tend to be comfortable with two and three-dimensional imaging.
2. Enjoyed learning anatomy.
3. Find doing concrete physical work for your patients truly satisfying.
4. Thrive on being part of the surgical family and always endeavor to do the best for the patient.
5. Have no problem with flexibility, as a surgeon’s day is seldom predictable and view this unpredictability as an enjoyable challenge.
6. Are committed to life-long learning and thoughtful reflection on the outcomes of your decisions.

Dr Kim Guo Wei

The ACGME-I accredited General Surgery residency programme at NUHS has always been an extremely popular choice amongst undergraduates. One of the most outstanding features of the programme is the team of enthusiastic, amiable and committed core faculty members that has been skillfully assembled by Prof CN Lee. Aply written on the wall mural of the department is the quote “you will never walk alone”. This is indeed true as the faculty members are very supportive and welcoming of new residents. I chose to be a Clinician Scientist at NUHS because of the wealth of research opportunities present. Besides numerous audit research projects, there are also many wet laboratory research opportunities available. This is especially attractive given the growing interest in translational medicine locally. Most importantly, the proficient scientists in NUHS are more than willing to impart their basic laboratory skills to the surgeons. With the expert and astute leadership of the PD, Mr Shridhar and APD, Dr Frances, the General Surgery residency programme at NUHS is set for greater heights. Choosing this programme will be your first step towards becoming an excellent academic surgeon and researcher.

Dr Kaan Hung Leng

6. Are committed to life-long learning and thoughtful reflection on the outcomes of your decisions.
FAQ

What criteria are you using to select the Residents?

In the words of the Chief of Surgery Professor C N Lee ‘We do our best, for every patient, in everything we do’. We are looking for residents who epitomize this philosophy. Every patient includes future patients and everything we do includes doing our best to find ways to do things much better and effectively. Through interviews, CV’s and recommendations we look for residents with initiative and thirst for doing the best.

Do I still need to sit for external paper like MRCS or MRCP if I take up Residency training?

Yes; It is necessary to complete MRCS (General Surgery) and MMed Surgery before completing R3 (Year 3, General Surgery Residency)

Is there a compulsory research requirement?

Research is “a studious inquiry or examination; especially: investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws” (Merriam-Webster Dictionary). Clinical Research is a partnership between, doctors, scientists and patients working together to improve medicine. The quest to improve outcomes for the patients and gain new knowledge should be a fundamental competency doctors must possess. We have components of research methodology incorporated in the training program to equip the residents with the knowledge. There is no compulsory research year in the residency training but we expect residents to participate in scholarly activity during residency.

INTRODUCTION

The University Medicine Cluster at NUHS has a long history of excellence in patient care, education and research. Our Residency Program reflects these strengths. Our program is designed to ensure that training takes place in a setting that is respectful of residents’ needs and capable of delivering patient care efficiently, effectively and safely.

We have configured a program that integrates training in clinical competence, academic scholarship, critical thinking and personal development. Our program will help you achieve a mastery of clinical medicine and prepare you for the contemporary practice of medicine.

OUTSTANDING FEATURES OF PROGRAM

A balanced training experience in both tertiary and community hospitals

National University Hospital, being a tertiary hospital, provides a broad-based training with exposure to both General Medicine and a wide variety of sub-specialties including Geriatric Medicine, Cardiology, Pulmonology, Gastroenterology, Neurology, Nephrology, Dermatology, Critical Care Medicine, Endocrinology, Infectious Disease, Rheumatology, Hematology, Oncology and Rehabilitation Medicine. We emphasize effective teaching and the principle of graded responsibility for patient care to enable our residents to become independent physicians. A flavour of regional hospital internist practice is provided through a rotation at our participating site Ng Teng Fong General Hospital (currently located at Alexandra Hospital).

A premier program with excellent faculty

Residents are mentored by our outstanding cadre of faculty who are recognized leaders in general medicine and subspecialties. Our dedicated faculty ensure that the residents’ development in academic scholarship and critical thinking are integrated with personal development and emotional maturity.

Innovative night-float on-call system

We are the first program in Singapore that has successfully implemented the night-float on-call system. This innovative on-call system ensures adequate rest for residents and prevents fatigue from long continuous working hours.

Comprehensive and innovative tools for teaching and evaluating the core competencies

Simulation laboratories, “learning through testing”, “learning through teaching (residents as teachers)”, online self directed learning modules, examination preparatory courses, resident grand rounds and interactive workshops are examples of our innovations and the extensive resources developed for resident education at NUHS.

Opportunities for research and scholarly activities

As scholarship is a critical element of the University Medicine Cluster’s identity, our residents are encouraged and provided with resources to pursue research opportunities during residency.
SHAPING FUTURE MEDICAL LEADERS

PROGRAM INFORMATION

NUHS RESIDENCY PROGRAM

PROGRAM INFORMATION

CHIEF RESIDENCY

Nurturing our future leaders and active participation from the ground drive our Chief Residency program, the first institution in Singapore to implement this. Peer nominated residents serve as role models for their cohort and are actively involved in administrative decisions and educational initiatives which directly impact the residents. Chief Residents also help promote collegiality within the Department and organize quarterly Drop Everything and Relax (DEAR) parties where the Department gathers for fun, games and food.

JUICE

The Junior Unit against Inefficiencies (JUICE) is a resident-initiated unit which looks into the nitty gritty issues that plague our working lives. JUICE comes up with solutions and implements them while working closely with senior faculty and leadership. Some examples of changes made include a revamp of Internal Medicine (IM) clerking sheets (which was recognized with a Merit Award in our quarterly Quality Improvement Projects review) and implementation of workflows that free up junior doctors from having to check blood for transfusion – a task that is now efficiently performed by nurses.

HIGH SUCCESS RATES IN THE MRCP EXAMS

Our pioneer batches of residents have achieved outstanding pass rates for the UK membership (MRCP) Exams with a 100% pass rate for PACES so far (Correct as of June 26, 2012).

LIST OF CORE FACULTY

ASSOCIATE PROGRAM DIRECTORS

Dr Dariusz Olszyna
Dr Manjari Lahiri

CORE FACULTY (MAY 2013)

Dr Jimmy Teo
Dr Michelle Gowans
Assoc Prof Poh Kean Keong
Dr Noel Tay (JHS)
Dr Low How Cheng
Dr Khin Saw Myint

CHIEF RESIDENT MENTOR

Dr Goh Wei Ping

Our Internal Medicine Residency Program spans 38 months and during our intense and well planned program we hope to expose our residents to all the sub-specialties that our department has to offer whilst training them to be competent internists. Our rotations are designed to allow graded responsibility such that residents are rotated through core postings in their first year and then given the opportunity to revisit the same posting in their third year with a more independent charge coupled with a supervisory role.

WHAT OUR FACULTY ARE SAYING

The faculty at Alexandra Hospital, Juronghealth is committed to develop a strong teaching culture with an emphasis on the clinical training of residents and helping each resident develop the required core competencies. As a regional hospital, we would be able to provide a different clinical and working experience and abundant career opportunities beyond residency.

I would like to welcome all prospective residents to join the NUHS Internal Medicine Program.

Dr Noel Tay,
Site Program Director (Internal Medicine)
Alexandra Hospital (Future Ng Teng Fong General Hospital, Juronghealth)

NUH is an ultra-rich environment for providing clinical service, teaching both undergraduate and postgraduate students, performing clinical research, and also very importantly, great for personal growth and development.

Dr Derrick Aw, Senior Consultant, Dermatology

RESIDENTS' TESTIMONIALS

“The NUHS Residency Program is imperfect. And that is true of all ‘Sponsoring Institutions’. What we have that makes us good, is that we are amenable to change. Throughout the birthing struggles of a fledgling program, I am grateful for that the seniors have always listened, and not just heard. A simple email or a flag-down along the ward corridors are all it takes for you to get your feedback across, and to seniors who are more friends than bosses. You will not be talking to any walls here.”

Dr Lim Ying Hao, 2010 Internal Medicine Resident
FAQ

What criteria are you using to select the Residents?

Our program is looking for ambitious and dedicated doctors who are not only fascinated by medicine and the human body, but actually want to make a difference for our patients. Dedication, enthusiasm and NUHS’ TRICE values (Teamwork, Respect, Integrity, Compassion and Excellence) are some of the factors that the committee would consider in the selection process.

What career paths are available after my residency?

With excellent passing rates at the MRCP examination, upon completion of our program, graduates are ready to continue their specialty training in all registered medical specialties including General Medicine (advanced), Geriatric Medicine, Cardiology, Gastroenterology, Neurology, Nephrology, Dermatology, Respiratory and Critical Care Medicine, Endocrinology, Infectious Disease, Rheumatology, Oncology, Hematology and Rehabilitation Medicine. Our Internal Medicine faculty members are ready to help our graduates to link up with our fellowship programs to help them smoothly progress to the next stage of specialist training.

A new Postgraduate Medical Examination (PGME) will be introduced in 2013. Those who need extra time to pass the examinations will have a chance to do that during the first year of their fellowship training in NUHS.

Is there a compulsory research requirement?

Although encouraged, research is not compulsory for residents joining our program.

CONTACT DETAILS

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Ms Rina Kek
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OBSTETRICS & GYNECOLOGY

INTRODUCTION

The National University Health System (NUHS)’s mission is Advancing Health by Integrating Excellent Clinical Care, Research and Education.

The aim of our four-year OBGYN residency program is to educate the resident in the breadth and depth of the discipline of obstetrics and gynecology and to foster a lifelong commitment to the promotion of women’s health care. The resident will acquire cognitive knowledge, technical skills, and interpersonal skills through didactic lectures, small group conferences, audiovisual media, individual instruction, independent reading, and direct patient care. Upon successful completion of the training program, the resident will be prepared for the specialty practice of obstetrics and gynecology and for advanced training prior to specialist accreditation by the Specialist Accreditation Board of Singapore. The program is firmly committed to providing holistic medical training to develop evidence-based and compassionate clinicians, in a vibrant academic environment and a culture of continual innovations and research that improve the care of women and mothers.

OUTSTANDING FEATURES OF PROGRAM

• Well-funded program with e-learning, medical simulation and animal laboratory workshops.
• Being a university department, we have an extensive research curriculum to train our residents in both basic science and clinical research.
• We have also a high faculty to resident ratio (1:2 for core faculty, and 2:1 for faculty). This ratio ensures that our residents are provided with the best learning environment and adequate educational supervision.
• All morning teaching didactics are protected from service commitments.
• Residents get well-rounded outpatient experiences of OBGYN through general clinics and highly specialized clinics.
• With over 2500 deliveries, 1000 operations, 4500 inpatient volume and 86000 outpatient volume annually, we have ample clinical resources to provide residents exposure to a broad range of OBGYN conditions, and cutting edge treatment and research.
Residents may enter OBGYN residency on the clinician track or the clinician scientist track. Residents with a research inclination contemplating an academic career should consider going onto the clinician scientist track. There are no great differences between the clinician and clinician scientist curriculum in the first 4 years of residency training; clinical competencies and assessment modalities will be the same on both tracks.

Clinician Track: After graduating from the 4 years residency program, the clinician track resident will enter the final 2 year advanced program where the resident has further exposure to the different subspecialties (maternal fetal medicine, benign gynecology, reproductive endocrinology and gynecologic oncology). Upon completing the final 2 years advanced program and satisfying the exit criteria of the Specialist Accreditation Board Singapore, the resident will be certified as an OBGYN specialist in Singapore. OG Clinicians in NUH are renowned for their high standards of holistic care anchored on evidence-based medicine. Our clinicians also have education of the next generation of doctors as a key goal.

Clinician Scientist Track: After graduating from the 4 years residency program, the clinician scientist resident will enter the advanced program. The advanced program is at least two times longer than residents on the clinician track, involving a heavy focus on academic research (basic science / clinical / grants application) leading to a higher degree (MD, PhD). The Clinician Scientist Track resident is required to satisfy the exit Specialist Accreditation Board Singapore at the end of the advanced program before becoming a certified OBGYN specialist in Singapore. The Clinician Scientist Track trained specialist is likely to pursue an academic career in a university department.

FAQ

What makes our program unique and different from other training programs?
We are well funded for simulation training, and conduct obstetric emergencies drills at our newly built Simulation Centre at the NUS Yong Loo Lin School of Medicine (YLLSOM). Other workshops include the Anatomy of Complications Workshop, and minimal access surgery training at the Kho Teck Puat Advanced Surgery Training Centre. We also have a high faculty to resident ratio (1 core faculty to 2 resident, and 2 faculty to 1 resident) to ensure adequate and constant educational supervision. As an academic department linked to YLLSOM, we are successful in many grant applications to allow an extensive research curriculum for our residents. Located in the western cluster where the local demographics reveal a young reproducing population, NUHS attracts an obstetric case mix of both low and high risk. We are also one of the leading institutions in the region to have ventured into robotics for major gynecological surgery.

Residents’ Career Pathway
Residents enter the program before becoming a certified OBGYN specialist in Singapore. The Clinician Scientist Track trained specialist is likely to pursue an academic career in a university department.

What makes our program unique and different from other training programs?
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Residents’ Testimonials

Being part of the NUHS O&G residency program has made a difference to my life and I have never looked back since. I cherish not only the strong camaraderie between fellow residents but also the meticulous guidance and care from our senior doctors. There is a very strong teaching culture in NUHS, and I certainly benefit from the constant feedback from seniors as well as the many opportunities to learn and improve my clinical skills and judgment. There is also a strong support for research which allows us to excel and push our boundaries to the limits. Besides, I have also had the chance to explore and develop my skills in other areas such as organizing workshops and presenting in overseas conferences. I am certainly proud to be part of this family which boasts of a well-rounded working and learning environment.

Dr Lim Li Min
How would you describe your OBGYN program?

Our program is firmly committed to providing holistic medical training to develop evidence-based and compassionate OBGYN clinicians, in a vibrant academic environment and a culture of continual improvement. Translational research is particularly strong in the program with regular Science Tuesdays sessions wherein scientists and clinicians come together to translate bench research into innovations that improve the care of mothers, fetuses, and the aging women.

What criteria are you using to select the Residents?

We are looking for self-motivated, diligent, conscientious, enthusiastic and dynamic individuals to join our Residency program. As our OG department is a massive team of multi professional colleagues, residents joining our department must be good team-players, with initiative and able to work with different members of our dynamic team.

In addition to looking at residents’ academic performance and any previous OBGYN related experience, we are also assessing potential candidates on the NUHS TRICE values. Our residents all possess our NUHS Core Values, Teamwork, Respect, Integrity, Compassion and Excellence. They must show commitment to the care of our patients and the education of our next generation of doctors.

Individuals who wish to have an academic career with solid clinical training in OG, coupled with strong educational and research opportunities in an academic environment are particularly suitable.

Is there a compulsory research requirement?

Being a university academic institution, research requirement is compulsory for residents on both clinician and clinician scientist tracks. Residents are expected to demonstrate scholarly activity annually, and scholarly activities are part of the annual evaluations.

All residents are encouraged to present their research findings at international conferences. When accepted for any presentations, the department will fund the sponsorship for the residents to present their work to the international audience. Impactful publications that improve the care of women are expected to result from these presentations.
OPHTHALMOLOGY

INTRODUCTION
Our department is proud of our strong teaching culture with structured didactic and interactive teaching integrated into daily clinical practice. We have a dedicated faculty committed to nurturing our residents to develop their maximal potential. Residents progress through graded clinical and surgical responsibilities as they attain competence in various areas. Feedback is provided at each assessment and stage of training to help them learn more effectively. We have a structured pre-surgical wet lab program that leads to an early introduction to surgery as attainment of competency permits. We value the importance of translational research and our residents will enjoy opportunities to perform research with leading clinician-scientists and scholars in the field.

OUTSTANDING FEATURES OF PROGRAM

EDUCATION EXCELLENCE
- The Department of Ophthalmology has highly experienced faculty who are enthusiastic mentors and teachers eager to share their experiences and expertise.
- We have built a climate that promotes expertise, professionalism and excellence in Medical Education. We strongly believe in cultivating our residents as individuals, encouraging them in their strengths and helping them overcome difficulties.
- The department has fostered strong links with world-class institutions and respected faculty around the globe. We are fortunate to have guest faculty frequent our department to share their expertise and offer a different point of view. These networks also aid our residents in their preparation for subspecialty fellowships following completion of their residency.
- We believe in an early and structured induction into ophthalmic surgery and the surgical training begins on commencement of the program with regular wet-lab training.

RESEARCH EXCELLENCE
- Strong research culture with numerous opportunities for residents to participate in research within the department as well as cross-faculty research with other departments in NUS namely Basic, Clinical and Translational Research as well as with the Singapore Eye Research Institute (SERI).
- Experienced mentors promote research, provide guidance and facilitate resident research activities.
- Regular research rounds chaired by experienced clinicians scientist and scientist as a platform for residents to present their research projects and receive feedback on their scholarly activities.

CLINICAL EXCELLENCE
One integrated training site with exposure to all essential subspecialties providing excellent breadth of clinical experience for each resident. Clinical and surgical outcomes (of residents and faculty) are regularly monitored to ensure a high standard of patient care. The Department regularly undertakes to improve clinical and administrative processes. Residents will have opportunities to participate in clinical audit and clinical pathway improvement projects.

CURRICULUM AND ROTATION ROSTER
The first 3 years of the residency program (R1-3) are tightly regulated by the ACGME-I requirements. They are geared towards achievement of competencies required for the independent practice of ophthalmology. Years 4 and 5 are regulated by the Residency Advisory Committee and are aimed at consolidation of skills required for registration as specialists in Singapore. Within R4 and 5, there are opportunities to explore clinical and research interests further where program requirements allow.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ROTATION 1</th>
<th>ROTATION 2</th>
<th>ROTATION 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>Cataract Comprehensive and Emergency Ophthalmology (NUHS &amp; JHS)</td>
<td>Oculoplastics</td>
<td>Paediatric Ophthalmology &amp; Strabismus</td>
</tr>
<tr>
<td>R2</td>
<td>Neuro-ophthalmology</td>
<td>Glaucoma</td>
<td>Vitreo-Retina</td>
</tr>
<tr>
<td>R3</td>
<td>Glaucoma</td>
<td>Vitreo-Retina</td>
<td>Cornea &amp; External Eye Diseases</td>
</tr>
<tr>
<td>R4</td>
<td>Neuro-ophthalmology</td>
<td>Oculoplastics</td>
<td>Paediatric Ophthalmology &amp; Strabismus</td>
</tr>
<tr>
<td>R5</td>
<td>Glaucoma</td>
<td>Vitreo-Retina</td>
<td>Cornea &amp; External Eye Diseases</td>
</tr>
</tbody>
</table>

RESIDENTS’ TESTIMONIALS
It was but 3 months ago when I first set foot in this department, the burden of expectation on my shoulders and apprehension in my heart. But all that has melted away, its place taken by a sense of belonging. Perhaps this is what I most value about NUHS. The camaraderie and kinship amongst all is palpable, thanks to approachable superiors and amiable colleagues. Not just in ophthalmology, this “family” atmosphere seems to permeate throughout NUHS, with everyone working towards the good of our patients. This conducive and supportive environment allows our residents to not only provide supervised care for patients, but also to remain focused on training. This is further complemented by comprehensive and established teaching programmes in our department. The individual attention given to each trainee ensures dynamic feedback and tailored training opportunities. These make me honoured to be part of NUHS Ophthalmology, motivating me in the pursuit of excellence, and instill in me the desire to contribute to the department and NUHS.

Dr Charmaine Chai

NUHS Ophthalmology offers its residents a comprehensive, rounded and unparalleled training experience. What is most unique about the department is its close resemblance to a family, having a robust support system dedicated to guide us residents to reach our maximal potential. This department recognises and values the individuality of each resident, paving avenues for self-discovery, enabling us to explore our weakness and cultivate our strengths. As members of the National University Hospital, an academic institute par excellence, we can take pride in upholding the strong teaching ethos and maintain the high standards set by our predecessors. We are privileged to be a part of a thriving institution and our close affiliation with the National University of Singapore only serves to further strengthen our clinical, educational and research distinction.

Dr Chan Hwei Wuen
RESIDENTS’ CAREER PATHWAY

Our aim is to train graduate residents who are competent to undertake the practice of ophthalmology in general or to enter fellowship training for eventual practice in one of the ophthalmic subspecialties. We also aim to help residents develop a portfolio that will help them in their application for faculty positions in hospital practice.

FAQ

What criteria are you using to select the Residents?

We are looking for individuals who are passionate about ophthalmology and have the ability to complete a rigorous residency program. Evidence of academic activity is an advantage as is the ability to conduct independent learning.

Do I still need to sit for external paper like MRCS or MRCP if I take up Residency training?

This is not strictly required. However, there are opportunities for residents to sit for some of these external examinations. The current agreed examination requirement for exit certification for residents on the seamless track is a pass the Master of Medicine (Ophthalmology). However, fitness to enter independent practice is also based on performance during the residency program.

Is there a compulsory research requirement?

While publishing in the scientific literature is not a strict requirement, the residency program in Ophthalmology at NUHS offers residents opportunities and strongly encourages them to participate in existing projects or formulate new ones. There are regular research rounds for residents to present their ongoing work as well as to receive instruction on essential research skills. There are opportunities for participation in collaborative research with clinical and non-clinical faculties in NUS as well as with SERI research organizations.

What are the benefits in choosing the CS track?

Residents on the CS track can expect to benefit from the following:

- Earlier and regular exposure to the research mentors
- Supervised involvement in research projects
- Protected time for participation in research activities
- Protected time for compulsory segments of MCI or PhD courses

Will it be possible for me to switch from the clinician track to the clinician scientist track in the midst of my residency?

Yes, but this will subject to the SI’s training capability, PD recommendation and research mentor assessment.

CONTACT DETAILS

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Associate Program Director
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Program Coordinator
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INTRODUCTION

The mission of the NUHS Orthopaedic Surgery Residency Training Program is to provide our residents with the knowledge and skills, both clinical and surgical, in all areas of orthopaedic surgery necessary to produce orthopaedic surgeons who are, able to provide technically competent & compassionate care of the highest quality to all orthopaedic patients presenting to the National University Health System, and who are knowledgeable of the literature in the field of orthopaedic surgery by the completion of the Training Program.

Clinical mentorship is at the very heart of our Residency Program. Learning through mentorship is invaluable in developing the necessary skills as well as way of thinking of a practicing competent orthopaedic surgeon.

Besides exposure to a wide variety of emergency as well as elective orthopaedic cases, our residency program strives to blend academic and clinical medicine. Having a strong culture of research and teaching, this residency program will also provide mentorship on research methodology and help mould a generation of academic orthopaedic surgeons.

OUTSTANDING FEATURES OF PROGRAM

EDUCATION

- An outstanding and well respected group of faculty members who have great experience with postgraduate training, are expert surgeons and keen on teaching & training.
- A comprehensive didactic teaching programme which more than covers the necessary breadth & depth of orthopaedic knowledge.
- Training facilities for the development of psychomotor skills including experience with cadaveric dissections & motor skills training. Plans are in progress to include Virtual Reality training in arthroscopic surgery etc.

RESEARCH & SCHOLARLY ACTIVITIES

- Research is well integrated into the Program.
- Strong emphasis on research in the Department – clinical, basic science as well as translational. Multidisciplinary research with other clinical & basic science departments is a strong feature.
- Advantage of collaborative links with A*Star, YLLSoM and other research institutes which are in physical proximity to NUH.
- Numerous opportunities for the resident to engage in research under close mentorship.

CLINICAL EXPERIENCE

- All training is done in-house – including Paediatric Orthopaedics.
- Guarantee of a wide range and volume of clinical cases available for teaching.
- As NUH is an Academic Medical Centre, the NUHS Orthopaedics Program receives many tertiary & quaternary level referrals which will serve to enhance the residents’ experience.
- Hands-on experience in the operating theater to develop surgical skills in operative management of a wide range of orthopaedic conditions – all done under the supervision & guidance of master surgeons.
LIST OF CORE FACULTY

ASSOCIATE PROGRAM DIRECTOR
Dr Lingaraj Krishna

CORE FACULTY
Assoc Prof James Hui  Assoc Prof Suresh Nathan  Dr Christopher Pearce
Dr Diarmuid Murphy  Dr Gabriel Liu  Dr Tan Chyn Hong
Dr Tan Ken Jin  Dr Amitabha Lahiri

Residents’ Testimonials

The NUHS Orthopaedic Surgery Residency program provides a complete platform for the development of an orthopaedic surgeon. From world class supervisors, to ample opportunities and guidance for research, you will be nurtured into a competent, well rounded, “thinking” surgeon.

Dr Wong Keng Lin, Francis

Residents’ Career Pathway

The career paths include being a clinician, a clinician-scientist with a keen interest in academic medicine and research and a clinician-educator with a keen interest in teaching and training the next generation of orthopaedic surgeons. The very best of each group will be retained within the NUHS system. However, everyone who graduates from our Program will be recognized as the product of a high quality training program and will, undoubtedly, be highly sought after. It is our stated aim that the NUHS Orthopaedics Residency program will be the orthopaedic training program of choice in the region.

Curriculum and Rotation Roster

<table>
<thead>
<tr>
<th>Resident Year</th>
<th>Rotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year FY</td>
<td>3 months Emergency Medicine</td>
</tr>
<tr>
<td>2nd Year R1</td>
<td>3 months Trauma</td>
</tr>
<tr>
<td>3rd Year R2</td>
<td>3 months Foot &amp; Ankle</td>
</tr>
<tr>
<td>4th Year R3</td>
<td>3 months Trauma</td>
</tr>
<tr>
<td>5th Year R4</td>
<td>3 months Trauma/ General Orthopaedics</td>
</tr>
<tr>
<td>6th Year R5</td>
<td>6 months Any Orthopaedic sub-specialty based on resident’s choice</td>
</tr>
</tbody>
</table>

Residents’ Testimonials

The NUHS Orthopaedic Surgery Residency is definitely the right choice for me. We have a dynamic, comprehensive and supportive learning environment that puts residents first. From the Program Director, to the teaching faculty, to the residents themselves, one can visibly observe that our program is one of camaraderie and shared responsibility. Each resident is given room to grow individually as an orthopaedic surgeon and as a professional. I truly feel that my education here has a solid foundation from which I can confidently build on for the rest of my career.

Dr Lin Shuxun

The NUHS Orthopaedic Residents are a hardworking and close knit bunch who aspires to help one another become skilful, knowledgeable and compassionate surgeons in a collegial and nurturing environment. The NUHS orthopaedic residency program will be a mark of excellence which is synonymous with quality that is well regarded all over the world.

Dr Chen Yongsheng

FAQ

What criteria are you using to select the Residents?

Residents are expected to have a keen interest in orthopaedic surgery. Some of the parameters for assessment and selection include:

- Academic awards and Medical School Performance
- Research and Academic Interests
- Leadership and teamwork
- Work and Professional Ethics
- Communication Skills

Do I still need to sit for external paper like MRCS or MRCP if I take up Residency training?

The MRCS has traditionally been the ‘entry’ level examination required of orthopaedic trainees. Residents will also sit for and are expected to pass all 3 parts of the MMed - Master of Medicine (Orthopaedic Surgery) exams. Currently, the exit examination is still the FRCSOrth which will be taken in R5.

Is there a compulsory research requirement?

Yes. Research training and scholarly activity will be an important and integral part of the Program. All our residents are expected to participate in research and milestones will be clearly stated. All research projects will be closely supervised and a mentor assigned.

Additionally, the Master of Medicine (Orthopaedic Surgery) thesis is based on a research project. This process of doing the research project and writing the thesis is also geared towards equipping the resident with the necessary skills needed to conduct effective clinical and basic science research relevant to the field of Orthopaedic Surgery.

Also, in R5, 5 months will be spent on research.

Contact Details

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Associate Program Director
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Program Coordinator
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INTRODUCTION

The NUHS Otolaryngology Residency Program aims to train dedicated residents. Our faculty has a strong academic and research background which enhances our program. Our team of specialists has undergone post-specialist training in North America and Europe in their sub-specialty fields. Our program curriculum gives a wide exposure to various aspects of otology, rhinology, head & neck surgery and pediatric otolaryngology. Residents in the program rotate to both NUH and JGH.

The program provides residents with training in research skills and allocates a dedicated research rotation. Our faculty mentors them through a project of their choice. An elective period is catered for sub-specialty training and will allow residents to increase exposure in an area of their choice. This elective can be taken within NUHS or outside the cluster. An elective in a training hospital outside Singapore can be done, subject to the program director’s approval.

Medical education training is available to residents who aim to be clinician educators. Residents are involved in education in the NUS medical undergraduate program. Our program is well balanced in providing clinical, surgical, research and academic training.

OUTSTANDING FEATURES OF PROGRAM

EDUCATION
- Highly structured program that adapts to the educational needs of residents.
- Weekly tutorials, including journal clubs and case based discussions.
- Frequent formative assessments to aid passing the in-service exam and summative exams.
- Basic science for ENT, temporal bone, endoscopic sinus, facial plastic courses.
- Subscription to the AAO-HNS Home Study Course.

CLINICAL
- Teaching and learning clinical environment.
- Approachable and dedicated teaching faculty members that coach and mentor residents.
- Comprehensive subspecialty experience, including pediatric otolaryngology.
- Guided operative teaching with routine evaluation and feedback.

RESEARCH
- Mentorship for research projects.
- Ties and collaboration with other faculties in NUS for research.
- Involvement in systems and practice based projects.

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- Ties and collaboration with other faculties in NUS for research.
- Involvement in systems and practice based projects.

When deciding on a sponsoring institution, there was no doubt about where I was going to choose. Even as a medical student, I felt the warmth of the NUH ENT Department. Consultants were approachable, friendly and they inspired me to enter the ENT residency program. As an resident, we are given a multitude of opportunities to develop our clinical, research and surgical skills. The faculty serves as a constant source of inspiration and I am fortunate to learn from the best in the field. A lot of effort and thought has been put into planning our curriculum, such that our learning is maximized. I am fortunate to be part of the NUHS family. Getting in residency is but a small part of the journey to become a good surgeon and I am looking forward to the next few years of my training.

Dr Jenica Yong Su-Ern

I was drawn to NUHS ENT by its structured teaching, rigorous curriculum and strong academic culture. The program promises a challenging and fulfilling training, and I was not disappointed. Dedicated and approachable faculty members who guide me through operations, clinical management and research enhance the rigorous training program. The exposure to a wide variety of tertiary cases at NUH ENT, including both adult and pediatric ENT cases is unique to NUHS. The collegiality and strong family spirit at NUHS ENT makes working and training here an enjoyment. Everyday lays a new challenge to be conquered, a fresh sense of fulfillment to be experienced and new knowledge waiting to be discovered!

Dr Ng Chew Lip
**FAQ**

What makes our NUHS programs unique and different from other training programs?

The programs in NUHS have dedicated and dynamic members to drive the ACGME-I Residency programs. The Graduate Medical Education Committee champions the accreditation process, so as to improve the postgraduate training for our residents. The CEO, CMB and DIO in NUHS shows care and concern for the residents in their welfare and training.

How would you describe your Otolaryngology Program?

The NUHS Otolaryngology Program is a well-balanced training period that has full of challenges ahead. The training period is 5 years in duration. Residents experience the working life of an ENT surgeon in all sub-specialties. As they progress in their training, residents will find that Otolaryngology is a very fulfilling specialty. The faculty looks after the interest and training of our residents.

What criteria are you using to select the Residents?

We seek residents that embrace the NUHS TRICE values of teamwork, that will advance Otolaryngology as a specialty in the region and internationally, participate in clinical research and teach future clinicians. Being an academic medical center, we prefer residents who have a desire to participate actively in the teaching environment.

What advice would you give to medical school graduates who are considering their choice of residency training, in NUHS and in NUHS Otolaryngology?

Do participate in activities that allow you to experience the life of an Otolaryngology Resident and Physician. If you are selected to do an ENT elective, participate actively in the daily work and try to tag on with a current ENT resident on-call. This will help you decide on your career choices. Demonstrate your enthusiasm and potential if you have a chance to participate in our elective programs. If research is an interest you have, approach a faculty member to discuss a research project. At all times, maintain your ethical standards and integrity as a doctor.

**CONTACT DETAILS**

<table>
<thead>
<tr>
<th>Program Director</th>
<th>Associate Program Director</th>
<th>Program Coordinator</th>
</tr>
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<tbody>
<tr>
<td>Dr Raymond Ngo</td>
<td>Dr Loh Woei Shyang</td>
<td>Ms Josephine Ng</td>
</tr>
<tr>
<td><a href="mailto:raymond.ngo@nuhs.edu.sg">raymond.ngo@nuhs.edu.sg</a></td>
<td><a href="mailto:woei.shyang.loh@nuhs.edu.sg">woei.shyang.loh@nuhs.edu.sg</a></td>
<td><a href="mailto:josephine.ng@nuhs.edu.sg">josephine.ng@nuhs.edu.sg</a></td>
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**PAEDIATRICS**

“...PROVIDES BROAD-BASED TRAINING IN AMBULATORY AND ACUTE CARE PAEDIATRICS, AS WELL AS EXPOSURE TO THE FULL RANGE OF PAEDIATRIC SUBSPECIALTIES.”

**INTRODUCTION**

The NUHS Paediatric Residency Program is dedicated to the principal goal of preparing medical specialists-in-training for a lifetime of exceptional clinical service to their patients and the wider community.

This is a 3-year program that is structured to ensure that Residents can achieve their learning goals with supervision and mentorship from senior paediatricians and colleagues. It provides broad-based training in ambulatory and acute care paediatrics, as well as exposure to the full range of paediatric subspecialties. Residents are expected to obtain the Master of Medicine (Paediatrics) degree from the National University of Singapore and the Membership of the Royal College of Paediatrics and Child Health (United Kingdom) through a conjoint examination at the end of the 3-year residency program. Fellowship training in general paediatrics (or neonatology) follows residency training before exit accreditation as a specialist in Singapore.

**OUTSTANDING FEATURES OF PROGRAM**

- Broad case-mix increases trainees’ exposure to a wide range of general paediatric as well as subspecialty paediatric patients.
- Trainees benefit from the shared expertise of being co-located with adult tertiary care in all disciplines (e.g. living-related liver and kidney transplant programs for children).
- A tradition of an excellent structured teaching program:
  - Early morning sessions. (4x per week)
  - Lunch-time teaching sessions. (4x per week)
  - Regular courses and work-shops.
  - Mock clinical exam practice.
- Mentorship program.
- Dedicated faculty, each of whom is a recognized leader in his/her respective field of practice.
- Faculty who will go the extra mile for trainees.
- Opportunities for research and participation in teaching activities.
LIST OF CORE FACULTY

ASSOCIATE PROGRAM DIRECTOR
Dr Cindy Hia

CORE FACULTY
Assoc Prof Roy Joseph  Dr Perry Lau  Dr Koh Pei Lin
Dr Tan Poh Lin  Dr Chew Su Yah

CURRICULUM AND ROTATION ROSTER

The first year provides broad-based training, with rotations to internal medicine, surgery and paediatrics, leading to SMC accreditation. The next 2½ years provide further in-depth training in general paediatrics as well as the various paediatric subspecialties.

<table>
<thead>
<tr>
<th>Resident Year 1</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine (4 mths)</td>
<td>4</td>
<td>General Medicine / Medical Specialties</td>
<td></td>
</tr>
<tr>
<td>Surgery (4 mths)</td>
<td>3</td>
<td>General Surgery / Surgical Specialties</td>
<td></td>
</tr>
<tr>
<td>Paediatrics (4 mths)</td>
<td>1</td>
<td>Paediatric Surgery</td>
<td></td>
</tr>
<tr>
<td>Paediatrics (8 mths)</td>
<td>1</td>
<td>Paediatric Nephrology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Paediatric Oncology</td>
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</tr>
<tr>
<td></td>
<td>1</td>
<td>Paediatric Intensive Care</td>
<td></td>
</tr>
<tr>
<td>Paediatrics (8 mths)</td>
<td>2</td>
<td>Children’s Emergency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 of the 3 blocks</td>
<td>Neonatology (2 NICU, 1 Well baby)</td>
<td></td>
</tr>
<tr>
<td>Paediatrics (12 mths)</td>
<td>1</td>
<td>Paediatric Intensive Care</td>
<td></td>
</tr>
<tr>
<td>Paediatrics (12 mths)</td>
<td>3</td>
<td>General Paediatrics / Adolescent Medicine</td>
<td></td>
</tr>
<tr>
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<td>3</td>
<td>Children’s Emergency</td>
<td></td>
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<tr>
<td>Paediatrics (12 mths)</td>
<td>2</td>
<td>General Paediatrics</td>
<td></td>
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<tr>
<td>Paediatrics (12 mths)</td>
<td>3</td>
<td>Electives / Subspecialty*</td>
<td></td>
</tr>
<tr>
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<tr>
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<td>Neonatology (2 NICU, 1 CDU)</td>
<td></td>
</tr>
<tr>
<td>Paediatrics (12 mths)</td>
<td>3</td>
<td>Subspecialty*</td>
<td></td>
</tr>
</tbody>
</table>

Trainees who have already completed Medicine and Surgery prior to traineeship would not be required to repeat these rotations. Their Y1 program would consist of 12 months of paediatric related rotations.

*Rotations in various paediatric subspecialties may include: Allergy / Immunology, Cardiology, Endocrinology, Gastroenterology, Genetics, Haematology / Oncology, Infectious Disease, Nephrology, Neurology, Pulmonology, Rheumatology

RESIDENTS’ TESTIMONIALS

I chose the NUHS Paediatric residency programme as it gave me a chance to work with some of the top forerunners in their fields of Paediatric healthcare in the region. Working with such eminent seniors serves as an inspiration to the difference that we as Paediatricians can strive to make through new developments, studies and practices. I also find the department and programme unique in that it seems to be a culture for the seniors to constantly provide valuable teaching and close guidance to us junior doctors, so that we hone our clinical skills and provide optimal care to our patients.

Dr Mohana d/o Rajakulendran

Excellent teachers – √
Stimulating case mix – √
Endless fun with children – √
If these are what make you tick, come join us at NUHS Paediatrics, a family I’m proud to call my own.

Dr Tammy Lim Su Hui

In the department, seniors go the extra mile to ensure that junior staff are taught as best as possible. One instance out of the many that exemplifies this was a day where one of the seniors stayed back way after office hours to take us through two interesting and complex cases thoroughly, and even converted part of the tutorial into an exam style CEX to ensure our learning was maximised. This is a program where only superlatives will do in terms of description! I will encourage any aspiring Pediatric trainee - without any hesitation - that NUHS is the best possible choice to make.

Dr Shawn Lee Hsien Ren

RESIDENTS’ CAREER PATHWAY

After completing 3 years of residency, residents will need to complete 3 years of advanced paediatric training before exit certification to independent practice. Upon exit, residents can choose to practice in the community or continue to contribute to the academic mission of the NUHS if that is in line with their personal goals and vision.
FAQ

What criteria are you using to select Residents?
People who share the same mission and vision as us. Residents who are willing to go the extra mile for patients, colleagues and the department.

Do I still need to sit for the MRCPCH if I take up Residency training?
Yes, currently all residents will be required to sit for the conjoint local MMED/MRCPCH examination, as well as the equivalent of a written American Board - I paper.

Clinician Scientist (CS) Track
The department is extremely supportive of the Clinician Scientist Track. Residents in the CS track will complete residency in 4 years (instead of 3). The CS Track can be customized to the needs of the individual resident. The details of which should be discussed with the Program Director, and CS track mentor in the department.

Is there time and opportunity for humanitarian work?
As a department we aim to contribute towards one charitable project each year. There are also opportunities for overseas humanitarian work with members of the department or the hospital (St). However these arrangements are at present informal.

Are there opportunities for subspecialization in paediatrics?
Subspecialization occurs after residency training is completed. Residents will have ample opportunity for exposure to the various subspecialties during training. You will be able to discuss and get advice from seniors, as well as colleagues already in those subspecialties.

PATHOLOGY

Introduction
Surgical pathology has played and will continue to play an increasingly critical role in modern health care. However, the demands and nature of the pathology workload have also grown increasingly complex. As practicing pathologists, we feel a constant need to update and keep abreast of new discoveries and requirements that are modifying our practice and thinking. To prepare for these challenges, it is critically important that the aspiring pathology trainee receives comprehensive training in an environment that combines a long tradition of academic teaching, mentorship and active research.

At the pathology department of NUHS department, we have a dedicated team of highly experienced pathologists and scientists who are very keen to mentor and train residents to ensure that they are prepared for the challenges ahead. The department comprises Histopathology, Cytopathology, Electron microscopy and Diagnostic molecular pathology services. There is also close affiliation with other state of the art research laboratories (e.g. NUS and ASTAR), which provides ample opportunities for research collaboration.

There is a comprehensive range of surgical pathology and cytology cases that allow exposure to a very broad range of clinical material from common routine specimens to rare and unusual diseases and tumors. Furthermore, the faculty has subspecialty interests that give residents the opportunity to undergo in depth training in each discipline. The department also has a vibrant and dynamic integrated molecular diagnostic service that allows residents to gain training in molecular pathology, a rare opportunity, not readily available in most institutions. This morpho-molecular diagnostic approach increasingly forms the backbone of how we diagnose and treat cancer in modern medicine.

Finally, our faculty provides diverse role models for residents and has a proven track record for the highest quality teaching.

Outstanding Features of Program
- Strong teaching culture with an outstanding teaching faculty. Most of our pathologists are academic staff with extensive experience in undergraduate and postgraduate teaching.
- Many of our physicians are leading pathologists and active researchers in their subspecialties.
- Excellent range and quantity of cases to ensure exposure to a wide variety of disease entities.
- Excellent training and teaching facilities for our trainees.
- High physician to resident ratio to ensure highly personalized teaching, attention and care.
- Our trainees have an excellent track record with high passing rates for the pathology exams.
- Access and exposure to research laboratories and facilities for those contemplating a more research oriented career path.
- Access and exposure to diagnostic molecular pathology training. Molecular pathology plays an increasingly critical role in the diagnosis and treatment of many tumors.
LIST OF CORE FACULTY

CORE FACULTY
Dr Seet Ju Ee  Assoc Prof Thomas Putti
Dr Ahmed Qasim  Assoc Prof Fredrik Petersson

CURRICULUM AND ROTATION ROSTER

The aim of the training schedule is to provide an organized and structured educational experience for qualified doctors to acquire the basic competence of a pathologist. Pathology residents are required to fulfill a training period of at least 5 years.

The first three years of training are termed as R1, R2 and R3. Training during this period consists of ‘Core Pathology Training’ (as defined by the RRC). This also prepares a resident for the local part I exam (to be implemented in 2013) or part I equivalent of the UK or Australia Pathology college exams.

The following two years of training are termed as R4 and R5 (senior residency training). These years are a period of subspecialty training (e.g. renal pathology, skin pathology) and consolidated general pathology training. This prepares a resident for the local exit exam in R5 (to be implemented in 2015) or part II equivalent of the UK or Australia Pathology college exams.

During the course of training, residents will be required to rotate to other ACGME accredited participating institutions to complete or complement the training not available in the sponsoring institution. Pathology-related research and scholarly activities are strongly encouraged throughout the residency training.

The following table illustrates the basic structure of the training from R1 to R5

<table>
<thead>
<tr>
<th>Training Level</th>
<th>Description</th>
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<tbody>
<tr>
<td>R1</td>
<td>Core Pathology Training</td>
</tr>
<tr>
<td>R2</td>
<td>Core Pathology Training</td>
</tr>
<tr>
<td>R3</td>
<td>Core Pathology Training</td>
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<tr>
<td>(LOCAL EXAM PART I, TO BE IMPLEMENTED IN 2013)</td>
<td></td>
</tr>
<tr>
<td>R4</td>
<td>Senior Residency Training in General Pathology</td>
</tr>
<tr>
<td>R5</td>
<td>Senior Residency Training in General Pathology</td>
</tr>
<tr>
<td>(LOCAL EXAM IN PATHOLOGY IN R5, TO BE IMPLEMENTED IN 2015)</td>
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</tbody>
</table>

RESIDENT’S TESTIMONIAL

For me, the National University Hospital, Department of Pathology, offers a unique experience of training with room for development on all three fronts: 1. Diagnostic work, 2. Research and 3. Academic teaching. We have many rich sources of learning material from across all the various subspecialties of surgery and disciplines like Obstetrics & Gynecology and Paediatrics. We also regularly receive interesting learning material from overseas referrals around the region.

The department has many consultants with their own subspecialty interest, providing both accurate diagnoses for the patients and giving valuable teaching to the trainees in their area of expertise. The consultants are generally approachable and never far away to give advice on any issues, be it work or non-work related.

All trainees are also given their own working station, individual computer and microscope for working purposes. The department has a well-stocked library with references on all pathological conditions. We have a robust structured teaching program to cater for trainees in different levels of training. Our support staffs are also hardworking, friendly and approachable.

In summary, the department has provided me a conducive environment to train and fulfill all my career aspirations and potential.

Dr Wang Shi (former chief resident)

FAQ

What is pathology?

Pathology is the medical specialty concerned with the study of the nature and cause of all types of diseases. It underpins almost every aspect of medicine, from diagnostic testing and monitoring of chronic diseases to cutting-edge advances in molecular medicine (pathology). The services and contributions of pathologists are essential in the diagnosis of any type of cancer.

How would you describe your Pathology Program?

The most important educational goal of the residency training program is to prepare the residents for independent careers as competent and excellent pathologists whether in general surgical pathology or a chosen subspecialty discipline.

The program helps the resident to develop the technical skills, knowledge, expertise and professional values through a series of graded responsibilities culminating in independent decision-making. The scope of training allows the resident to pursue a potential career in community or academic hospital setting, government-related bodies or a more research focused career path. The residency training program is really the beginning of an ongoing journey of self improvement & discovery, reflection and life long learning process.

The program will incorporate all the six core competencies (patient care, medical knowledge, practice-based learning, interpersonal & communication skills, professionalism and systems-based practice) required by the ACGME-I.

What makes our NUHS programs unique and different from other training programs?

NUHS provides a large variety of cases to ensure adequate exposure both in width and in depth, of every major organ systems including pediatric and gynepathology in one teaching venue. Due to the close association with National University Singapore, our trainees are given ample opportunities to participate in academic related activity both in undergraduate education and research. Our department has an active vibrant molecular pathology laboratory which offers a rare opportunity for specialized training in this field.

What criteria are you using to select the Residents?

Applicants are generally evaluated according to a number of criteria including (but not limited to):

- Interview performance
- SIP performance
- Academic scores
- Previous clinical work experience

In what way can pathology provide a fulfilling and satisfactory career?

Pathology is the medical science that saves lives by helping other doctors to make informed decisions about their patients’ treatments. Pathologists are highly skilled medical ‘detectives’ who accurately diagnose a disease and study the ways in which diseases affect our bodies, across all branches of medicine. The doctors you see in surgery or at a clinic all depend on the knowledge, diagnostic skills and advice of pathologists. Whether it’s a general practitioner arranging a blood test or a surgeon wanting to know the nature of the lump removed at operation, the definitive answer is usually provided by a pathologist. Thus, if you enjoy solving disease-related problems and using scientific technologies to support and advance the treatment and understanding of diseases, pathology would be a fulfilling career for you.

CONTACT DETAILS

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Program Coordinator
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PREVENTIVE MEDICINE

INTRODUCTION

Preventive medicine focuses on the health of individuals and defined populations in order to “protect, promote, and maintain health and well-being and prevent disease, disability, and premature death.” Public health and occupational medicine training programs have now been grouped under the Preventive Medicine Residency Program. This is a National Program, with NUHS as the sponsoring institution for Preventive Medicine in Singapore and the following institutions as affiliated institutions:

Agency for Integrated Care
Communicable Disease Centre/Tan Tock Seng Hospital
Eastern Health Alliance
Health Promotion Board
Ministry Of Health
Ministry of Manpower: Occupational Safety and Health Division
Singapore Armed Forces: Preventive Medicine Unit
Singapore General Hospital

OUTSTANDING FEATURES OF PROGRAM

- This is a national program which offers a broad range of experiential learning across various participating sites throughout Singapore.
- Strong teaching culture with outstanding teaching faculty
- NUHS offers the academic training for those who wish to do this in Singapore
- Our track record - we are an internationally recognized training centre that has trained leaders in preventive medicine in Singapore and the region for more than 5 decades

LIST OF CORE FACULTY

ASSOCIATE PROGRAM DIRECTORS

Dr On Todd
Communicable Disease Centre / Tan Tock Seng Hospital
Dr Jason Yap (Agency for Integrated Care) / Jason.yap@aic.sg
Dr Benjamin Ng (Communicable Disease Centre / Tan Tock Seng Hospital) / benjamin.ng@ttsh.com.sg
Dr Eugene Shum (Eastern Health Alliance) / eugene.shum@easterhealth.sg
Dr Chew Ling (Health Promotion Board) / chew_ling@hpb.gov.sg
Prof Goh Kee Tai (Ministry of Health) / goh_kee_tai@moh.gov.sg
Dr Ho Sweet Far (Ministry of Manpower: Occupational Safety and Health Division) / ho_sweet_far@mom.gov.sg
Assoc Prof Heng Bee Hoon (National Healthcare Group HQ) / bee_hoon_heng@nhg.com.sg
Dr Matthias Toh (National Healthcare Group Polyclinics & HQ) / matthias_toh@nhg.com.sg
Assist Prof Judy Sng Gek Khim (National University Hospital System) / jdy_sng@nuhs.edu.sg
Dr Vernon Lee (Singapore Armed Forces) / vernonjim@hotmail.com
Dr Fong Yuke Tien (Singapore General Hospital) / fong.yuke.tien@sgh.com.sg

CURRICULUM AND ROTATION ROSTER

The R1 to R3 years will lead to acquiring core knowledge and skills across the broad range of preventive medicine and public health competencies. The learning will be structured through a series of planned, guided and varied practical experiences that draw on the relevant knowledge base, cultivate an awareness of systems-based practice, and develop professionalism and communication skills.

The number and length of these core rotations will be at the discretion of the program director, with the following:

a. At least six months in direct patient care for the general population in a primary care or intermediate/long-term care setting.
b. At least three months in a government public health agency.
c. At least three months in communicable disease control including practical, hands-on experience in the investigation and control of a communicable disease outbreak, and clinical rotations with direct patient care. This requirement may be fulfilled on a sessional basis over the practicum phase.
d. Adequate rotation through an institution or department providing comprehensive occupational services to defined work groups, including regular and frequent presence in the worksites served. This rotation includes the planning of at least one practical workforce and environmental public health program.

The advanced practicum in preventive medicine will provide 24 months of training with the goal of developing specialized skills in one or more of the following areas:

a. Public health (leading to specialist certification in Public Health)
   i. Disease control and epidemiology
   ii. Health policy and administration
   iii. Health services research
b. Occupational and environmental medicine (leading to specialist certification in Occupational Medicine)

RESIDENTS’ TESTIMONIALS

I have learnt through my interview and my first meeting with the PD and APDs the diversity of the scope of work the Preventive Medicine specialists do, and the dedication, joy and excitement they share in making a difference to our healthcare system as a whole. This has undoubtedly rubbed off on me, and now I share the same desire to explore all the branches that Preventive Medicine has to offer.

The vast number of sub-specialities one can pursue in this programme gives anyone who joins this Residency a choice to taste them all and learn from the very best, to equip one with the broad overview and experience to continue on whichever path they choose in the future. I can’t wait to make a difference to millions through the skills and knowledge I learn through this residency, and I hope you can join us too and be part of the team!

Dr On Todd
RESIDENTS’ TESTIMONIALS

As a doctor, I have often felt helpless watching patients suffer mortality and severe morbidity from preventable lifestyle diseases. I have also come to realise how health (or ill-health) is affected by a wide range of factors, spanning the social, economic and political realms. I chose to join preventive medicine because I believe that while prevention may not always be possible, it is always better than cure. I am excited about making a difference on a wider level and benefitting not only individual patients, but whole groups of people. Also, preventive medicine offers the chance to work not just at the national level, but the international one as well.

As Singapore moves into the 21st century, with a growing yet ageing population, it will continue to face new challenges in the arena of health. I hope that I will be able to make a difference, however small or great, in the nation and beyond.

Dr Winston Chin

RESIDENTS’ CAREER PATHWAY

Upon successful completion of the training program, the resident will be able to establish a fulfilling career in preventive medicine in the public sector, private sector, academia, NGOs or international health organizations.

FAQ

Who can apply for Preventive Medicine Training?
Medical graduates can apply to enter Year 1 (R1) of the Preventive Medicine Residency program. They may also apply after acquiring 12 months or more clinical experience (transitional year, or equivalent).

What is the duration and scope of Preventive Medicine training?
The program comprises a 1-year clinical, 2-year basic practicum and a 2-year advanced practicum phase.

What are the subspecialties in Preventive Medicine Training?
Residents can sub-specialize in Public Health or Occupational Medicine.

What is the didactic training in the program?
During the course of the program, training sessions consisting of lectures, tutorials, and seminars will be organized for residents. These training sessions will cover the competencies required of the resident in the various stages of the program.

Who supervises the residents?
Every resident will be assigned a mentor. The mentor and resident are encouraged to meet regularly. The mentor will offer advice, provide information, and help in interpreting institutional and department policies. The mentor will also guide the resident in terms of career development and appointments. Residents can also approach the PD, any of the APDs or the core faculty for advice.

CONTACT DETAILS

Program Director
Prof Lee Hin Peng
hin_peng_lee@nuhs.edu.sg

Program Coordinator
Mr Kenny Chiw
kenny_chiw@nuhs.edu.sg • 6772 6396
The NUHS Cardiothoracic Surgery (CTS) Residency Program strives for excellence in all aspects of residency training. Our mission is to train and produce high-quality and skilled cardiothoracic surgeons. The mission of our Program is the dedicated education of our residents in all areas of knowledge, clinical & surgical skills, and professional attitudes related to CTS. We aim for the residents who exit our program to be able to practice CTS independently in either an academic institution or in private clinical practice.

OUTSTANDING FEATURES OF PROGRAM

CLINICAL EXCELLENCE
- One integrated training site with exposure to all essential CTS subspecialties including adult cardiac, congenital cardiac, general thoracic, and minimally-invasive surgery.
- Diverse caseload, rich source of training materials.
- Emphasis on evidence-based practice of CTS and constant upgrading of practice through evidence-based medicine.

EDUCATION EXCELLENCE
- Experienced and dedicated team of faculty members.
- Strong postgraduate curriculum and training, poised to prepare the resident for local exit exam.
- Outstanding examination preparatory teaching program and exam successes.
- Excellent simulation training facilities with keen and experienced faculty members.
- Expertise in medical education that promotes professionalism, excellence in medical education & research.

RESEARCH EXCELLENCE
- Strong research heritage in our University Department, with opportunities in Basic, Clinical and Translational Research.
- Mentor Supervisors actively promote and facilitate research activities, with a focus on research development journey rather than outcomes.

INTRODUCTION

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INTRODUCTION

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OUTSTANDING FEATURES OF PROGRAM

CLINICAL EXCELLENCE
- One integrated training site with exposure to all essential CTS subspecialties including adult cardiac, congenital cardiac, general thoracic, and minimally-invasive surgery.
- Diverse caseload, rich source of training materials.
- Emphasis on evidence-based practice of CTS and constant upgrading of practice through evidence-based medicine.

EDUCATION EXCELLENCE
- Experienced and dedicated team of faculty members.
- Strong postgraduate curriculum and training, poised to prepare the resident for local exit exam.
- Outstanding examination preparatory teaching program and exam successes.
- Excellent simulation training facilities with keen and experienced faculty members.
- Expertise in medical education that promotes professionalism, excellence in medical education & research.

RESEARCH EXCELLENCE
- Strong research heritage in our University Department, with opportunities in Basic, Clinical and Translational Research.
- Mentor Supervisors actively promote and facilitate research activities, with a focus on research development journey rather than outcomes.

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SHAPING FUTURE MEDICAL LEADERS
PROGRAM INFORMATION

Residents' career pathway

One can proceed to a fellowship overseas, or start work as an associate consultant in a public or private setting.

FAQ

What criteria are you using to select the Residents?

Resident selection will be based on interviews at national and institutional levels, followed by ranking and matching. Background information on grades, research experience and previous clinical performance are also taken into consideration.

Do I still need to sit for external paper like MRCS or MRCP if I take up Residency training?

Although these are not compulsory in the training programme, we strongly encourage residents to sit for these examinations.

Is there a compulsory research requirement?

We strongly encourage all residents to take part in research.

INTRODUCTION

The NUHS Hand Residency is a six-year program developed to train residents into competent and compassionate hand surgeons. It is supported by a group of dedicated faculties, many of whom are recognised leaders in their field.

The first two years of Surgery-In-General (SIG) program develops our residents' ability to manage patients in all surgical specialties before embarking on the journey of sub-specialisation. This ensures that residents are not only trained to be experts in their specialty, but they are trained to provide holistic care within a multidisciplinary team.

The following four years of hand surgery training provides residents with exposure to a wide variety of cases and ample research opportunities to develop into a well-rounded hand and reconstructive microsurgeon.

INTRODUCTION TO HAND SURGERY AS CAREER

Thank you for taking time out to find out more about Hand Surgery as a career. Hand Surgery is unique in Singapore as it is a stand-alone specialty. We together with Finland currently have the only Hand Surgery specific training program in the world. As such we pride ourselves as independent pioneers in this field.

We work as a close-knit team and will provide a comprehensive training program to equip you to finish your residency as a well-trained surgeon in all aspects of Hand Surgery.

Some features that make NUHS program unique among the other programs include:

- We have one of the pioneers and founder of hand, reconstructive and microsurgery, Emeritus Prof Robert Pho still actively involved in training at all levels.
- We are the most established hand department in Singapore with the largest group of hand surgeons working together.
- We have the largest dedicated hand centre in Asia housing outpatient clinics, procedure rooms and occupational therapy department all under one roof.
- But most importantly, it is the PEOPLE and the department’s ethos that makes us unique. We share our joy, sorrow, challenges and success and we work together to strive for excellence in patient care and for the speciality of Hand Surgery.
SHAPING FUTURE MEDICAL LEADERS

PROGRAM INFORMATION

NUHS RESIDENCY PROGRAM

PROGRAM INFORMATION

SHAPING FUTURE MEDICAL LEADERS

PROGRAM INFORMATION

NUHS RESIDENCY PROGRAM

PROGRAM INFORMATION

* rotations may not be in the same order

ResidentS’ testimonialS

Being a foreign graduate, I was very apprehensive before I relocated to Singapore. However, as soon as I started work with the NUH hand, reconstructive and microsurgery (HRM) department, my worries were immediately tossed out of the window. The warmth that everyone in the department showed me, made me realize that this is not just a place you get trained, but a place where you bond as a team, as a family.

This is a department where seniors lead by example with not only their competence and passion in hand surgery, but very importantly, their care and compassion for patients. Although it is no easy road- the hours are long and the work is tough, but the science and art of hand surgery is fascinating. The gratification from restoring patient’s hand function would make it all worth while.

Dr Liao Chin-Yi Janice

Hand and Reconstructive Microsurgery is not just about the hand and its five digits alone. It is a subspecialty which involves reconstruction of various other parts of the body, engaging every single tissue type. Patients that we encounter range from the three-month-old baby with a thumb duplication, the construction worker with a traumatic middle finger amputation to the elderly patient with carpal tunnel syndrome. We are also involved in flap reconstructive work with other departments like Orthopedic Surgery and General Surgery.

The Hand and Reconstructive Microsurgery residency program offers 6 years of diverse training. The first 2 years are part of the Surgery in General (SIG) program where the residents are rotated through different surgical disciplines. It is a rigorous program which allows residents to be equipped with the necessary surgical skills to handle the challenges in their careers to come.

Currently I am starting my second year of residency and it has been a fulfilling training program in general surgery over the past year. The training has not only given me exposure to a great variety of general surgical cases, but also has allowed me to forge priceless friendships with residents and seniors from various other disciplines.

Dr Renita Sirisena

RESOURCE PATHWAY

YEAR Rotations

<table>
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<tr>
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<tbody>
<tr>
<td>R1</td>
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</tr>
<tr>
<td>R2</td>
<td>3 months plastics</td>
</tr>
<tr>
<td>R3 - R6</td>
<td>2 months Hand surgery</td>
</tr>
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</table>

Residents’ career pathway

Final year medical students ➔ PGY 1^ (HOPEX or TY* ➔ Medical Officers & House Officers ➔ Matched to Hand Surgery ➔ 2 years of SIG ➔ 4 years of Hand Surgery

FAQ

What criteria are you using to select the Residents?

We are looking for residents who will become part of the team, part of the family. A team that cares for their patients and colleagues; contributes to education of the juniors and strives for excellence in hand surgery.

Do I still need to sit for external paper like MRCS if I take up Residency training?

Yes. You will need to complete MRCS and ABSITE for the first two years of SIG.

Is there a compulsory research requirement?

Yes. You will need to have published an original paper in a relevant hand surgery journal or basic science journal by the end of your training.

CONTACT DETAILS

Program Director  
Dr Frances Lim Sheau Huei  
frances_lim@nuhs.edu.sg

Associate Program Director  
Dr David Tan Meng Kiat  
David_MK_Tan@nuhs.edu.sg

CURRICULUM AND ROTATION ROSTER

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Currently I am starting my second year of residency and it has been a fulfilling training program in general surgery over the past year. The training has not only given me exposure to a great variety of general surgical cases, but also has allowed me to forge priceless friendships with residents and seniors from various other disciplines.

Dr Renita Sirisena
The NUHS Neurosurgery Residency is a six-year program developed to train residents into competent and compassionate neurosurgeons. It is supported by a group of dedicated faculties. The program includes a 2-year Surgery-In-General (SIG) program and 4 years of subspecialty training.

The first two years of Surgery-In-General (SIG) program develops our residents' ability to manage patients in all surgical specialties before embarking on the journey of specialization. This ensures that residents are not only trained to be experts in their specialty, but they are trained to provide holistic care within a multidisciplinary team.

The following four years of neurosurgery training provides residents with exposure to a wide variety of cases and ample research opportunities to develop into a well-rounded neurosurgeon.

**INTRODUCTION TO NEUROSURGERY AS CAREER**

Known to be one of the most technically demanding surgical specialties, neurosurgery focuses on providing consistently excellent surgical service to achieve best clinical outcomes while continuing to participate actively in both extensive research as well as education.

We are proud of our meticulous care to patients, the cooperation in team work, and our strong feeling of responsibility. The program will provide a comprehensive training program to equip you to finish your residency as a well-trained surgeon in all aspects of neurosurgery.

Some features that make NUHS program unique among the other programs include:
- As one of the two neurosurgical centers in Singapore, the volume and diversity of cases ensure a well-rounded training.
- We cover a comprehensive range of open and minimally invasive neurosurgical procedures both for brain and spine conditions, including neurooncology, vascular neurosurgery, skull base surgery, functional neurosurgery, pediatric neurosurgery, head trauma neurosurgery, and spine surgery.
- We also perform radio-surgery, e.g., gamma knife, for suitable patients with a variety of neurosurgical conditions.
- We emphasize on academic research in both basic and clinical levels to consistently improve our understanding and management.

**LIST OF CORE FACULTY**

**ASSOCIATE PROGRAM DIRECTOR**
Assoc Prof Chou Ning

**CORE FACULTY**
Assoc Prof Yeo Tseng Tsai
Dr Sein Lwin

**INTRODUCTION**

The NUHS Neurosurgery Residency is a six-year program developed to train residents into competent and compassionate neurosurgeons. It is supported by a group of dedicated faculties. The program includes a 2-year Surgery-In-General (SIG) program and 4 years of subspecialty training.

The first two years of Surgery-In-General (SIG) program develops our residents’ ability to manage patients in all surgical specialties before embarking on the journey of specialization. This ensures that residents are not only trained to be experts in their specialty, but they are trained to provide holistic care within a multidisciplinary team.

The following four years of neurosurgery training provides residents with exposure to a wide variety of cases and ample research opportunities to develop into a well-rounded neurosurgeon.

**CURRICULUM AND ROTATION ROSTER**

Your rotations through from Clinical Year 1 to 6 will be broad-based, with a challenging mix of varied surgical conditions. Training opportunities will be directed and specially arranged to maximize your clinical exposure to the fullest.

Clinical Year 1 involves rotations through the various divisions of General Surgery including Trauma Surgery, Head and Neck Surgery, Endocrine Surgery, Upper Gastrointestinal and Colorectal Surgery, and High Dependency Unit. This is the period where you will learn general surgical skills including suturing, anastomosis, and basic laparoscopic surgery.

Clinical Year 2 is divided into 4 rotations, each 3 months, including one elective posting, namely: Emergency Medicine, Anesthesia, Neurosurgery, and Elective (Neurology/neuro radiology/orthopedic spine surgery/ENT). Through these subspecialty rotations you will learn about the specialties closely linked to Neurosurgery, and the indications for referral to Neurosurgery.

Clinical Year 4-6 involves subspecialty training in neurosurgery to develop the necessary skills set to become an independent neurosurgeon.

**FAQ**

**What criteria are you using to select the Residents?**

Candidate should have enthusiasm to neurosurgery, learning ability, and creativity.

**Do I still need to sit for external paper like MRCS or MRCP if I take up Residency training?**

All residents need to pass MRCS in the SIG years prior to commencing neurosurgery training.

**Is there a compulsory research requirement?**

Yes, most of our resident will have their research programs as part of the residency training.

**RESIDENT’S TESTIMONIAL**

To start the neurosurgery residency is one of my best dream coming true. I enjoy it because I love it, and you know we can do a great job only if we love it. And we will definitely set a solid foundation in GS rotation. The large volume and diverse cases in neurosurgery, ensure the spectrum of the training, while the people here make it an enjoyable workplace.

Dr Yang Ming, Clinician scientist, Neurosurgery Resident 2012

**CONTACT DETAILS**

Program Director
Dr Frances Lim Sheau Huei
frances_lim@nuhs.edu.sg

Associate Program Director
Assoc Prof Chou Ning
ning_chou@nuhs.edu.sg
INTRODUCTION

The NUHS Plastic Surgery Residency Programme is a multi-tiered programme with the goal of accreditation in Plastic Surgery as a specialty. Residents can either join the programme with direct entry to the surgical specialty after fulfilling the initial common trunk training in Surgery-in-General (SIG), or apply to enter after their general surgery residency.

Residents who enter the programme after completing the two year SIG programme must possess the necessary qualifications (M.R.C.S. or M.Med. (Surgery)) before they can formally commence plastic surgery training. Formal plastic surgery training will consist of 4 years.

Residents who have completed their general surgical residency programmes are also invited to apply. They must possess the necessary qualifications (exit certification in general surgery). Formal plastic surgery training will consist of 3 years. At the end of the training, residents will have dual accreditation in general surgery as well as plastic surgery.

All residents are expected to further pursue an additional year of fellowship in a subspecialty of their choice, at world renowned international centres.

OUTSTANDING FEATURES OF PROGRAM

We have an experienced team and dedicated faculty, all of whom are teaching faculty members of the Yong Loo Lin School of Medicine, and are involved in the national postgraduate teaching programme.

We have a diverse spectrum of cases, including paediatric plastic surgery. The high volume of craniofacial, trauma, and reconstructive cases will provide a rich and fulfilling source of training material. Our subspecialties include: Congenital and acquired cranio-maxillofacial surgery, craniofacial trauma, head and neck reconstruction, breast and trunk reconstruction, lymphoedema and super-microsurgery.

Our team also boasts of strong research background, with opportunities in basic science, clinical as well as translational research. Our strong links will provide ample opportunities for start-up programmes and collaborations with other NUHS / NUS departments as well as various research institutions in the vicinity including Biopolis, Fusionopolis.

LIST OF CORE FACULTY

ASSOCIATE PROGRAM DIRECTOR
Dr Ong Wei Chen

FACULTY MEMBERS
Assoc Prof Lim Thiam Chye Dr Lim Jane Dr Lee Shu Jin

CURRICULUM AND ROTATION ROSTER

Clinical Year 1 and 2
These 2 years will give the residents a firm grounding in the basics of surgery.

YEAR 1 SURGERY IN GENERAL (SIG)

<table>
<thead>
<tr>
<th>6 MONTHS</th>
<th>2 MONTHS</th>
<th>2 MONTHS</th>
<th>2 MONTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Surgery and Trauma</td>
<td>Paediatric Surgery</td>
<td>Vascular Surgery</td>
<td>Neurosurgery</td>
</tr>
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</table>

YEAR 2 SURGERY IN GENERAL (SIG)

<table>
<thead>
<tr>
<th>3 MONTHS</th>
<th>3 MONTHS</th>
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<tbody>
<tr>
<td>Orthopaedic / Hand Surgery</td>
<td>SICU / Intensive care</td>
<td>Otolaryngology Head and Neck Surgery</td>
<td>Plastic Surgery</td>
</tr>
</tbody>
</table>

Clinical Year 3 - 6
Year 3 residents will start formal plastic surgery postings. Residents will be expected to perform supervised surgery in both elective and emergency settings. In the later years, residents will be expected to perform more complex cases and have mastered skills like microsurgery.

Research will play an important component in the training. All residents are expected to have their own research project, which they should develop and carry through their training years. They will have a minimum requirement of one oral and one poster presentation at international conferences, and two publications each year.

The resident will be eligible to sit for the exit examination at the end of year 6 only if all relevant components of training has been satisfactorily completed.

CONTACT DETAILS

Program Director Dr Frances Lim Sheau Huei frances_lim@nuhs.edu.sg
Associate Program Director Dr Ong Wei Chen cfsowc@nus.edu.sg
UROLOGY

COMMITTED TO THE OBJECTIVE OF TRAINING WELL-ROUNDED, THINKING SURGEONS, EQUIPPED WITH THE ABILITY TO LEAD...

DR TIONG HO YEE
ASSOCIATE PROGRAM DIRECTOR

INTRODUCTION

The NUHS Urology residency faculty is committed to the objective of training well-rounded, thinking surgeons, equipped with the ability to lead in the field of urology in research and education both nationally and internationally.

Under the guidance of committed faculty members, training is provided in both general urology and subspecialty care. Residents participate in all aspects of patient care from outpatient clinical evaluation, major and minor ambulatory surgical operations to ward based post-operative care.

OUTSTANDING FEATURES OF PROGRAM

Our program aims to achieve excellence in clinical care, translational research and education – the tripartite mission of NUHS – through the following distinctive features of our program:

1. Subspecialization – Residents will train under faculty staff dedicated to the most advanced and innovative clinical and operative urology in the respective subspecialties of kidney surgery and transplantation, uro- oncology, endourology, neurourology, female urology and andrology/infertility. We have the privilege of providing exposure to the entire spectrum of specialty care at a single tertiary unit.

2. Research excellence is a requirement of all future urologists to ensure competitiveness in both institutional and private settings. Our proximal and established links with NUS, Biopolis and academic record ensure our residents have all the resources and mentor guidance to pursue a further education, ranging from a Masters in Clinical Investigation (MCI), in Public Health (MPH) to a PhD.

3. Our core faculty staff have a wide-ranging fellowship experience in US, UK and Australia, supported by world-renowned Yeoh Ghim Seng Visiting Professor Urs E. Studer, that will provide a comprehensive educational experience for our residents.

LIST OF CORE FACULTY

ASSOCIATE PROGRAM DIRECTOR
Dr Tiong Ho Yee

CORE FACULTY
Prof Kesavan Esuvananathan
Assist Prof David Consigliere
Assist Prof Edmund Chiong

Dr Chua Wei Jin

CURRICULUM AND ROTATION ROSTER

YEAR | ROTATION | LOCATION
---|---|---
R1 - R2 | SIG: Breast/Trauma, General Surgery, Vascular Surgery, Pediatric Surgery, ObGYN, Colorectal Surgery, Renal Medicine, HD/ICU | NUHS
R3 - R5 | General Urology, Female & Recon, ESWL & EndoUrology, Andrology Subfertility | NUHS / JGH
R6 - Chief | Transplant, Uro-oncology, Advanced EndoUrology, Exit Exams and Fellowship Prep | NUHS

RESIDENTS’ TESTIMONIALS

“The NUH Urology faculty is an outstanding faculty in all aspects of clinical work, research and surgery. Most importantly, there is a strong sense of cooperation and collegiality that enables the department to work together as a team. It is a pleasure and an honour to be able to be chosen as a resident to train in this faculty”
— Dr Melissa Tay, NUH Urology Resident for Year 2012

“Having rotated through various Urology services in different hospitals, I find NUH the best place for a trainee to learn about Urology in a step-wise fashion. The training programme is well-structured to cater to trainees at different stages of learning, and I find the journal clubs a fun and interactive way to keep abreast of the latest advancements in Urology. Surgical training in NUH is well-balanced in terms of case variety and numbers. And trainees are given ample opportunities to learn under proper supervision. Most importantly, the department is committed to helping individuals develop their full potential.”
— Dr Joe Lee, Associate Consultant

RESIDENTS’ CAREER PATHWAY

I. Residency at NUHS Urology would stand in good stead to be an outstanding clinician, with opportunities to develop a sub-specialty interest in a academic medical centre. Additionally, research and educational routes will be equally available should you develop an interest during your training. That’s why we believe in a broad based grounding in our residency in clinical, research and education.

II. We aim to provide career paths to our residents as consultants at urological units at both National University Hospital NUH as well as upcoming Jurong General Hospital (JGH)

FAQ

What criteria are you using to select the Residents?

We look for people who respond and resonate to the NUHS core values of Teamwork, Respect, Integrity, Compassion, and Excellence (TRICE). In addition, we want people who will be passionate about what they do. Often at a junior level when exposure to Urology may be limited, it simply means people who are trying and willing to find out vigorously about this specialty and once they start, will enjoy learning about urology. It will be ideal if candidates have rotated through us either as a medical student, elective student as a houseman or MOPEX medical officer.

CONTACT DETAILS

Program Director
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frances_lim@nuhs.edu.sg

Associate Program Director
Dr Tiong Ho Yee
cfshy@nus.edu.sg
We’re proud of the transitional year program at NUH. We’ve made every effort to take care of the educational, professional and supervisory needs of our residents to a standard worthy of a program based in a leading academic medical centre. You’ll still be expected to work hard within your clinical teams but you’ll enjoy all the benefits and responsibilities of a residency and head into the rest of your post-graduate training with strong practice foundations. With rotations available in obstetrics and gynecology, pediatrics, emergency medicine and a wide range of elective specialties we can cater to most needs and interests. Our core education program was specifically conceived with PGY1 residents in mind and offers a series of modules designed to teach you the basics of safe and effective clinical practice. We offer all of this under one roof together with highly capable supervising faculty to guide you. Come and talk to us or get in touch; paul_john_huggan@nuhs.edu.sg

**Outstanding features of program**

- Friendly and approachable faculty and program coordinators
- Workplace experience with a variety of faculty: clinicians, educators, scientists and scholars
- An institution with a genuine commitment to education and training in PGY1
- Access to the Core Education Program: training dedicated to new medical graduates

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**Residents’ Testimonials**

"The NUH TY programme has provided me with a very strong foundation from which to advance to my subsequent specialty of interest. The exposure was sufficiently broad, yet tailored with my eventual specialty in mind; not only did I acquire relevant knowledge and skills but I also got to know seniors and peers whom I will be working closely with in the future. I was supervised closely throughout my postings, where invaluable feedback, detailed discussion and contemplative reflection have been indispensible parts of my learning process. The culture is one that is encouraging and open, where I am not afraid to voice honest opinion and seek help when I need it; I know my concerns will be addressed promptly and I can work and learn in a safe environment. I am very satisfied to have joined NUH's TY programme, and I hope that more of my juniors can benefit from it, as I have."

Dr Low Ying Liang

"I am a terribly cynical person. During my undergraduate days, I too have been instilled with the notion that NUHS is only for brainy academicians with zero clinical inclinations. Thus, while I was attracted to the NUHS Anaesthesia’s impeccable training curriculum structure, I remained apprehensive when I took the leap of faith to join NUHS.

Fortunately, the cynic has been proven wrong. To the oblivion of most undergraduates, the NUHS tutors are not obsessed with research papers. Clinical competency plays a more important role in daily ward work. Residency programme is not examination-oriented. It emphasizes on one’s consistent performance via regular assessments. These modules have been inbuilt seamlessly into the years of residency training, ensuring our synapses are constantly firing. Furthermore, the working pace of NUHS also achieves a good balance between case-mix exposure and personal learning time, giving us time to both see and learn."

Dr Tay Woo Chiao
Residents’ Testimonials

“I have never worked in the other sponsoring institutions, hence I cannot comment who is the best. But I can at least honestly say that I do not regret in ranking NUHS as my first choice for my post-graduate training.

Transitional year has been a great year for me. Yes, it is like HO-MO, with the added admin stuff of mini cex-es, logging of duty hours and feedback forms to fill. But that’s not all. In TY, we get to mix around with colleagues of diverse interests. We meet on a monthly basis to discuss topics of our own choice, all of which never fail to further enrich my knowledge. At such sessions, we get to catch up with one another over tea, improve our presentation skills, and learn new things from one another. We also have strong support from our PD, faculty and PCs, giving me a feeling of security at all times. Transitional year has indeed been a fruitful and engaging year for me.”

Dr Laura Lim Xiu Mei

Residents’ Career Pathway

The Transitional Year is defined as “a well-balanced program of graduate medical education in multiple clinical disciplines designed to facilitate the choice of and preparation for a specific specialty”. Transitional Year residents are therefore a diverse group. Most “undecided” TY make important professional connections at NUHS during the program and leave with a greater understanding of their strengths and weaknesses. With or without a place in a categorical residency program, you’ll finish the year with a better understanding of your abilities and important mentoring relationships to help you into your future.

FAQ

If I have a place in a categorical program that needs a transitional year, who is my program director during the transitional year?

You are a transitional year resident until you enter the categorical program. The TY PD and core faculty administrate your training and supervision, and are responsible to NUHS for training outcomes and to the House Officer Training Committee to confirm your eligibility for full registration with the SMC.

Will I be able to choose my rotations?

We will allocate rotations during a binding arbitration process taking into account the following:

i) SMC and ACGME-I regulations
ii) manpower requirements and constraints within the hospital
iii) resident ranking of available posting combinations and a written statement of career interests.

We aim to offer all Singapore graduates a 2 month elective posting, providing a “second chance” for postings that may not have been allocated during the SMC house officer year.

Curriculum and Rotation Roster

During the five-year residency program, you will participate in a wide range of didactic sessions, with opportunities for supervised clinical experience in general psychiatry and the various psychiatry sub-specialties.

Example of Rotation Schedule:

**Residency Year 1**

- **Inpatient Psychiatry**
- **General Medicine**

**Residency Year 2**

- **Geriatric Psychiatry**
- **Child Psychiatry**
- **Addiction Psychiatry**
- **Elective**

**Residency Year 3**

Continuity Clinic with 2 sessions per week for psychotherapy training
NUHS RESIDENCY PROGRAM

PROGRAM INFORMATION

Curriculum and Rotation Roster

At NUHS, rotations are offered through general psychiatry, child psychiatry, consultation-liaison psychiatry and academic psychiatry.

FAQ

Where will I do my rotations?

You will do your rotations in medicine, surgery, and neurology in the general hospitals. For your psychiatry rotations, you will be rotated to the various participating sites – IMH and the departments of psychological medicine at TTSH, KTPH, SGH, CGH and NUH. Elective rotations are available at KKWCH and the Singapore Armed Forces.

What are the sub-specialties available in psychiatry?

Sub-specialties include general adult psychiatry, community psychiatry, outpatient psychiatry, geriatric psychiatry, child and adolescent psychiatry, consultation-liaison psychiatry, addiction psychiatry, emergency psychiatry, and forensic psychiatry. The SAF residents will be trained in military psychiatry.

You may also be trained further in special areas like women’s mental health, eating disorders, neuropsychiatry, mood and anxiety disorders, and psychotherapy.

What examinations do I have to take to become a specialist in psychiatry?

There will be continuous formative evaluations throughout your five years of residency. In addition, to be registered with the Specialist Accreditation Board (SAB) as a specialist in Psychiatry, you will have to pass either the Master of Medicine in Psychiatry or Member of the Royal College Psychiatry Examinations during your training, followed by the Psychiatry Exit Examinations at the end of your training.

Is there a clinician scientist track for residents?

Residents may opt for the clinician scientist track at R1 or R3.

The first three years of the National Psychiatry Residency Program are common to all residents, including those on the clinician scientist track. In the fourth year of the residency, residents on the clinician scientist track will enter the Academic Psychiatry track which runs parallel to the Year 4 rotations for the other residents.

In the Academic Psychiatry track at NUHS, the Liaison Psychiatry and Inpatient Psychiatry rotations have been lengthened so that the resident can spend some time on research and focus on medical psychiatry. The Academic Psychiatry track at NUHS will offer a total of 12 weeks of coursework in clinical research at NUS to prepare the clinician scientist resident for the research elective in their Fellowship years (Year 5 and Year 6).

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Many of our faculty and residents have contributed time and effort to those less fortunate amongst us in the region.

Here are just some of the stories.

CARING WITHOUT LIMITS

- Mission accounts from Dr Chua Ying Xian, Preventive Medicine Resident

“You want to go see where I sleep? No toilet here, you follow me!”

My arms were held firmly by a prison guard and a fellow inmate, both of whom were at least one and a half times my size, with biceps larger than my legs. One could see their weather-beaten torsos glistening in sweat under the summer heat as they escorted me to their cell, where the only toilet in the prison is located - in their sleeping quarters. There were more than 25 inmates hustled together in a space equivalent to a standard kitchen back in Singapore.

I was part of a medical team who went to a small county in Lebanon in 2011, a first ever attempt into a prison to provide free medical aid and consults for the prisoners. It was indeed a life-transforming moment. I saw inmates having chronic medical and surgical issues ranging from chronic osteoarthritis of the spine due to a gunshot injury following a shootout, to poorly controlled diabetes and loss of vision from cataracts. I was even asked to treat an acute forearm fracture following a fall using ice-cream sticks derived splint. That day, we saw more than a hundred prisoners under the scorching heat.

Since medical school days, I have been given the privilege to lead teams comprising doctors and students to rural areas of Yunnan. Since 2002, we have been liaising with Dr Tan Lai Yong, a familiar face to many in the medical mission line in southern China, where we executed micro-economic projects and health-screening exercises as well as visited the lepers in the rural mountains. In December 2011, I co-led another team of 32 to rural Chennai, India. We visited the marginalized communities, and ran mobile clinics, performed disease screening and community education, including construction of a sanitary facility in a bid to improve the hygiene standards and reduce preventable diseases like gastroenteritis. A humbling moment to many included a visit to a HIV-positive shelter home for children - a sanctuary for the inflicted innocent in the midst of the rising epidemic of a cureless disease.

All these experiences help me to realize how privileged we are in Singapore, practising medicine in the comfort of a hospital, with amenities just an arm’s length away. It has made me appreciate what we have here better and also made me learn to do more with less. The passion that drives physicians to constantly improve should always be patient-centric, performed with humility, while honouring and respecting the needy. My love for medicine has deepened and respect for the needy has been imbued in me. I find medicine, with its many facets - love, compassion, humility and honour, is indeed a wonderful profession.

A quote from Jim Elliot which I always leave my team members with, “He is no fool who gives what he cannot keep to gain that which he cannot lose.” The trade off for my time would be the invaluable lessons I have learnt through these trips - the value of friendship, clinical experience and character development.

DOSH is a 500-bedded military orthopaedic hospital located about 45min drive from downtown Yangon. Equipment and facilities while modest, were certainly more than sufficient for the conduct of safe general anaesthesia but required good understanding of the equipment and proper attention to technique, safety and vigilant clinical monitoring.

The plane skidded to a halt on the tarmac runway of Yangon International Airport and we grabbed our bags and headed for the exit. It was 8 Jan 2012, and I was traveling as part of a team from NUH on a surgical mission trip to Defence Services Orthopaedics Hospital (DSOH), Yangon.

The prospect of practising anaesthesia in a foreign land as a junior trainee was to me both intriguing and daunting at once, daunting largely because of the need to function with unfamiliar and possibly limited equipment, facilities and drugs, yet intriguing because I have always loved traveling, and one of the great appeals of anaesthesia to me when I signed up as a resident was the vast number of opportunities to practice in a diverse range of unique and potentially challenging healthcare settings.

As a junior trainee, the take-homes were many: from airway management, to learning to quickly adapt to unfamiliar equipment and drugs and learning how to modify the anaesthetic technique to suit the needs of each situation, to planning contingencies for the unexpected and managing supplies and logistics while also learning to communicate and function as part of not just a multidisciplinary but also multinational team. The latter was made easy by our gracious and accommodating hosts at DSOH, who went to great lengths to ensure that our needs were most well looked after. A postop review of the patients in the ward showed that things had gone well, and the smiles all around were worth all the travelling and long hours in the OR.

THE BATAM MEDICAL OUTREACH

Shortly after a devastating earthquake struck the Indonesian city of Yogyakarta in May 2006, A/Prof Joseph Thambiah (Program Director, Orthopaedic Surgery) led a team of local doctors and nurses to the site, where they provided post-disaster relief for a week. But his act of providing medical assistance to the poor and needy did not end with the conclusion of that mission. His teams, which comprise both medical and non-medical personnel, visit Batam, the Indonesian island at least once every two months. Each mission extends over a weekend and each mission group consists of 4 teams with a total of 100 volunteers. Each team will serve a different village and therefore 4 locations are served on each trip. Volunteers comprise both medical as well as non-medical persons. They treat on average anywhere between 900—1500 patients on each trip.
ORIENTATION @ OUTWARD BOUND SINGAPORE

Orientation @ Outward Bound Singapore is a signature event at NUHS Residency. Every year, new residents join our CEO, Chairman Medical Board, DIO, Program Directors, Program Coordinators, and Faculty, at an offshore island at Pulau Ubin for a 3-day 2-night grueling but fun-filled induction into the Residency Programs.

Residents are inducted into the way of life in NUHS. Each of the activities during the 3-day is designed to bring across a key learning point that is related to their work in the hospital and the NUHS TRICE values of Teamwork, Respect, Integrity, Compassion and Excellence. Exciting activities include scaling and falling from heights and triyaking 17km across the sea. Residents also get a detailed briefing by our CEO on how they fit into NUHS and the overall healthcare sector; and also the role they play. The highlight of the program is when our Chairman Medical Board presents to the new residents their newly minted staff pass – a sign that they have finally graduated from medical school and are now young trainee doctors.

At the end of this, they form strong bonds with the team, as well as a strong sense of community within NUHS. Like what our CEO always says, “...your friendship with each other will take on new heights when you have slept in the same bunk together, and fed the same mosquitoes!...”

RECOGNIZING TEACHING EXCELLENCE

NUH Postgraduate Teaching Excellence Award: In December 2011, we held the inaugural NUH Postgraduate Teaching Excellence Award, when 7 awards were given out to faculty from 6 departments. This is to recognize inspiring and passionate teachers who exude pride in teaching, convey knowledge and skills in an engaging manner and role model TRICE values. Going forward, the awards will be given out annually at the Residency Year-End Party.

Residents’ Choice Award: The Curriculum Sub-Committee initiated the Resident’s Choice Awards in July 2011, whereby residents nominate the best teachers from the Core Education Program. These awards are given out annually at the beginning of academic years in July.

TEACHERS’ DAY

Most great institutions have their own customs and traditions that remind every generation of the values and culture that they should be proud of. One of the traditions in NUHS Residency is to celebrate Teachers’ Day. Residents surprise our teachers early in the morning by serving them a breakfast of muffins, cookies and hot coffee/tea as a gesture of “thank you”! The enthusiastic group also produced an array of activities to show their appreciation, ranging from posters, to video clips to thank you cards. It is indeed a day for our residents to pay tribute to the great teachers in NUHS. The residents are also joined by our medical, nursing and allied health students too!

For the teachers, who go about their job in teaching because they have a passion to teach, receiving these thanks motivate them to give even more. One of the faculty shared that he had just been given a new teaching assignment and felt burdened by the heavy load. But when he saw all the enthusiasm and spirit, and drank the coffee, he felt that the burden was not heavy anymore and was motivated to want to give 110% in taking on the teaching assignment.

RESIDENCY CELEBRATIONS

All work and no play makes Jack a dull boy!

We believe that it is important for our residents to enjoy the bond and friendship during their years at training. Annually at the end of June, we celebrate the graduation of our residents! Graduating residents are presented with Graduation Certificates, and they in turn present their token of appreciation to their Program Director and Faculty. All are invited and treated to a night of fun and good food too!

In addition, we celebrate each year with a grand Residency Year-end Party, and immerse in the Christmas cheer too! Our CEO will also take time to catch up with our residents and find out how they are doing. It is a relaxing night, filled with music and the sound of laughter in the air.

Yes, as a NUHS resident, there is night float, night calls, and the occasional night parties!
STATE-OF-THE-ART TEACHING FACILITIES

KHOO TECK PUAT ADVANCED SURGERY TRAINING CENTRE (ASTC)

ASTC is designed to be a comprehensive, world-class venue for seminars, workshops and trainings in surgical education. The Surgery and Minimally Access Research and Training Laboratory (SMART Lab) stands as a league of its own. It presents an unprecedented learning platform for surgeons to hone or acquire new surgical skills. An added feature of the SMART lab is the da Vinci Surgical System, HD, which combines a 3D visualization and enhanced agility to ensure great precision and control when operating through tiny incisions. In touch with the latest technological advances, ASTC is fitted with video conferencing facilities, as an additional tool to pave the new-age learning process.

CENTRE FOR TRANSLATIONAL MEDICINE

Centre for Translational Medicine occupies a site located at the east end of the Kent Ridge Campus of NUS. It has a 41,000m² area to house medical education facilities capable of meeting the education needs of NUHS and School of Medicine, with Seminar Rooms, Class rooms, and two 300-seat capacity Lecture Theatres. It hosts a Simulated Hospital including mock Wards and Procedures Rooms. It also consists of Themed labs in the Research Tower with a BSL3 facility to cater for translation medicine research work. In addition, the new medical library is also located in this new building.

NUHS TOWER BLOCK

The NUHS Tower Block houses about 2,400 staff housed here are from the NUH, Yong Loo Lin School of Medicine, as well as the NUHS corporate offices. In addition to the office space, the 14-storey building also comprises 46 meeting rooms, 14 seminar rooms, a MBA-style teaching room, and a 300-pax auditorium.

Resident teaching is often conducted in the various seminar rooms conveniently located on every floor. In addition, Residents are provided with workstations, fitted with computers, within the department that they are located. This enables our residents to interact easily with the faculty and the program coordinators.

They can also look forward to enjoying the available sports and recreation facilities located within the building, which include:

- BBQ Area
- Gymnasium
- Rooftop Garden
- Sports Hall Fitted With 2 Badminton Courts and Table-Tennis Tables
- Washroom with Shower Facilities

NUH MEDICAL CENTRE

Bringing Clinical Care, Research and Teaching under one roof

At NUH, we believe that patient-centric tertiary medical care goes hand in hand with breakthrough translational research as well as innovative and rigorous training of healthcare providers.

Guided by this belief, NUH has embarked on building up the physical infrastructure for well-trained healthcare professionals to engage in cross-specialty collaborations to boost the potential for breakthroughs in research that will eventually translate into better treatment and patient care.

The new NUH Medical Centre is a 20-storey building, occupying a floor area of 72,000 square metres, located above the Kent Ridge MRT Station. It is slated to be completed in 2013.

What it offers our Residents

Ambulatory teaching and learning will take on a whole new dimension with the set-up of the NUH Medical Centre.

Recognising that ambulatory teaching is an important component of our residency training, all our consultation rooms at the new NUH Medical Centre are sized to accommodate both the faculty and the trainee(s). Also, for the first time, dedicated “teaching hubs” will be sited beside consultation rooms. This will allow the trainees to have quick discussions with the faculty in the absence of patients. The “teaching hubs” are equipped to make both teaching and learning in the ambulatory setting an enriching experience for all.

In addition, “teaching rooms” are available to accommodate big group teaching, where rooms are designed like a big consultation room in an ambulatory setting. Where appropriate, patients may be invited to be part of the teaching session.

Finally, the NUH Medical Centre will also feature more eateries and amenities. Indeed, there will be better work-life balance!