



National University  
Heart Centre  
Singapore



# NUHCS YEARBOOK 2025

# About NUHCS

Established in 2008, the National University Heart Centre, Singapore (NUHCS)'s goal is to provide world class, specialised and dedicated cardiovascular healthcare services that incorporate the best skills, clinical practice, and equipment to make a difference in the lives of our patients.

In all that we do, improving patients' quality of life is central to our mission.

Comprising a team of internationally recognised surgeons and cardiologists from the cardiothoracic and vascular specialties, NUHCS serves as a referral National Centre to provide comprehensive treatment solutions to the most challenging heart, lung and circulatory diseases.

NUHCS is ranked top in Singapore and is the only centre in the nation to rank globally for five consecutive years, from 2022 - 2026, for the specialty of Cardiac Surgery in Newsweek's "World's Best Hospital Award".

NUHCS at National University Hospital (NUH), Kent Ridge - Main Operations

NUHCS Heart Clinic @ Ng Teng Fong General Hospital (NTFGH)

NUHCS Heart Clinic @ Alexandra Hospital (AH)

NUHCS Heart Clinic @ Jurong Medical Centre (JMC)



# Executive Director

This year has been one of both challenge and growth for NUHCS. As we reflect on 2025, we are reminded of both the privilege and the responsibility of caring for the hearts of our patients, as well as of our role in advancing cardiovascular care in Singapore and beyond.

This yearbook is an opportunity to reflect on the many journeys we have shared with our patients, colleagues, and partners. It is filled with stories of hope—ranging from new gene therapies for amyloid heart disease, to shorter hospital stays for percutaneous coronary intervention, and less invasive aortic surgery through Personalised External Aortic Root Support (PEARS). It also captures the numerous outreach initiatives undertaken in 2025—more than double those in 2024—whether reaching out to the heartlands of Singapore or travelling to distant places such as Fiji to provide congenital heart surgery for children in need.

The raising of the NUHCS banner in

the National University Hospital (NUH) main building symbolises our identity as a National Centre. We are also delighted to welcome our long-standing colleagues from Vascular Surgery at Ng Teng Fong General Hospital, who have officially joined us as part of the larger NUHCS family. At the same time, we continue to deepen our engagement with the community by working closely with general practitioners and community leaders. Staff morale has never been higher, marked by a clean sweep of NUH Patient Service Associates awards for Best Inpatient Ward (7A), Best Clinic (Heart Clinic @ Level 1), and the highest number of individual award recipients. In research, we continue to strengthen our impact, achieving a 20% increase in high-impact publications in 2024 compared with 2023.

As we close the year together, let us continue to look ahead with our partners and friends, pushing boundaries while keeping our patients firmly at the centre of everything we do.

A/Prof James YIP



# Deputy Executive Director

As 2025 comes to a close, I would like to reflect on several key accomplishments in my role as Deputy Executive Director overseeing clinical and research activities at NUHCS.

Our clinicians continue to be recognised among the nation's best. Adj A/Prof Chai Ping received the 2025 Distinguished Senior Clinician Award (DSCA), while our interventional cardiology team performed complex procedures live at international meetings, including AICT-AsiaPCR.

The NUHCS Aortic Centre, led by Adj A/Prof Vitaly Sorokin, continues to advance cutting-edge procedures such as Personalised External Aortic Root Support (PEARS) for thoracic aortic aneurysms. Our congenital cardiac surgery team, led by A/Prof Laszlo Kiraly, remains one of the few centres globally capable of performing complex cardiac surgeries in newborns.

Our nursing team, guided by Ms El Fuon, won Best Oral Presentation at

the Ministry of Health Appropriate and Value-Based Care Conference for the Same-day Discharge Programme at the NUHCS Angiography Centre, which reduced hospital bed days by more than 70%.

In research, NUHCS investigators and trainees presented nearly 50 abstracts at the European Society of Cardiology Congress. Eight clinicians were also featured on the Stanford 2025 World's Top 2% Scientists List, including myself, Prof Roger Foo, Adj Prof Graeme MacLaren, Adj A/Prof Ramanathan K.R., A/Prof Choi Hyung Won, A/Prof Christopher Chen Li-Hsian, Dr Sia Ching Hui and Dr Nicholas Chew. Our teams continue to publish in leading journals such as *Circulation*, *JACC*, *European Heart Journal*, *Nature Reviews Cardiology*, and *The Lancet*, supported by our dedicated clinical research coordinators and strong interdisciplinary collaborations with the NUHCS Cardiovascular Research Institute (CVRI).

Finally, our colleagues made significant contributions to continuing medical education, including the American College of Cardiology (ACC) Asia 2025-Singapore Cardiac Society (SCS) Meeting, highlighted by memorable sessions such as Adj A/Prof Lim Toon Wei's 36th SCS Lecture.

NUHCS remains home to an exceptional team that excels in patient care, research, and education. Thank you, Team NUHCS.

**A/Prof Mark CHAN**



# Senior Advisor

I have been privileged to serve as the Founding Director and now Senior Advisor to NUHCS, witnessing its remarkable growth in clinical excellence, research innovation, and the strength of its people and culture.

Over the past year, our leaders and staff have worked with passion and purpose to advance cardiovascular medicine in Singapore. Key initiatives include the development of Community Cardiology at Jurong Medical Centre (JMC), overseas training to explore new models of care, the use of artificial intelligence for early risk detection in heart failure, coronary heart disease, and atrial fibrillation, as well as the introduction of health coaches and a strong patient support group to guide patients along their heart health journeys.

Recognising that research forms the heartbeat of scientific progress, NUHCS has fostered a strong culture of inquiry, collaboration, and purpose-

driven discovery. We are proud of the robust pipeline of outstanding clinician-scientists, reflected in their numerous successful grant applications and high-quality abstract and manuscript publications.

In education and training, NUHCS continues to nurture generations of cardiologists and cardiovascular leaders, both locally and internationally.

Looking ahead, it is my personal hope that NUHCS will continue to thrive, ignite hope through healing, and inspire scholarship through teaching and research—becoming the epitome of excellence that defines who we are.

**Prof Huay Cheem TAN**



# Group Chief of Cardiothoracic Surgery & Head of Department of Cardiac, Thoracic, & Vascular Surgery

An organisation's greatest asset is its people, and the Department of Cardiac, Thoracic, & Vascular Surgery (CTVS) is proud of its cohesive and experienced team. Our divisions of Adult Cardiac, Thoracic and Vascular Surgery, Congenital Cardiac Surgery, and the Cardiothoracic Intensive Care Unit (CTICU) care for patients across the full spectrum of ages, complexities, and clinical needs.

Clinical excellence demands continuous development and innovation. In Adult Cardiac Surgery, Personalised 3D-printed External Aortic Root Support (PEARS) was introduced for the first time in Singapore and the region. Thoracic Surgery continues to advance through early detection of solitary pulmonary nodules and extensive robotic programmes. In Vascular Surgery, hybrid procedures, the diabetic foot clinic, and service expansion to Ng

Teng Fong General Hospital (NTFGH) and Alexandra Hospital have strengthened regional care. CTICU leads the cluster-wide Extracorporeal Membrane Oxygenation (ECMO) programme and remains an international key opinion leader. In recognition of these achievements, the Asian Society for Cardiovascular and Thoracic Surgery (ASCVTS) has designated CTVS a Centre of Excellence, with the unit consistently ranked among the global top 50.

In 2025, structured in-house training was introduced to nurture the next generation, supported by a new Education Director, while the International Fellowship Programme remains highly sought after. CTVS was a key organiser of the ASCVTS Annual Conference in Singapore, delivering well-attended workshops to an international audience. With

a new Research Director, research is increasingly embedded into daily practice.

CTVS also welcomed the Vascular Surgery team from NTFGH, with further expansion planned. Our paediatric cardiac surgery mission to Fiji in 2025 strengthened teamwork and delivered life-changing care. Not all challenges and achievements can be captured here, *“...but while there’s music and moonlight... let’s face the music and dance.”*

A/Prof Laszlo KIRALY



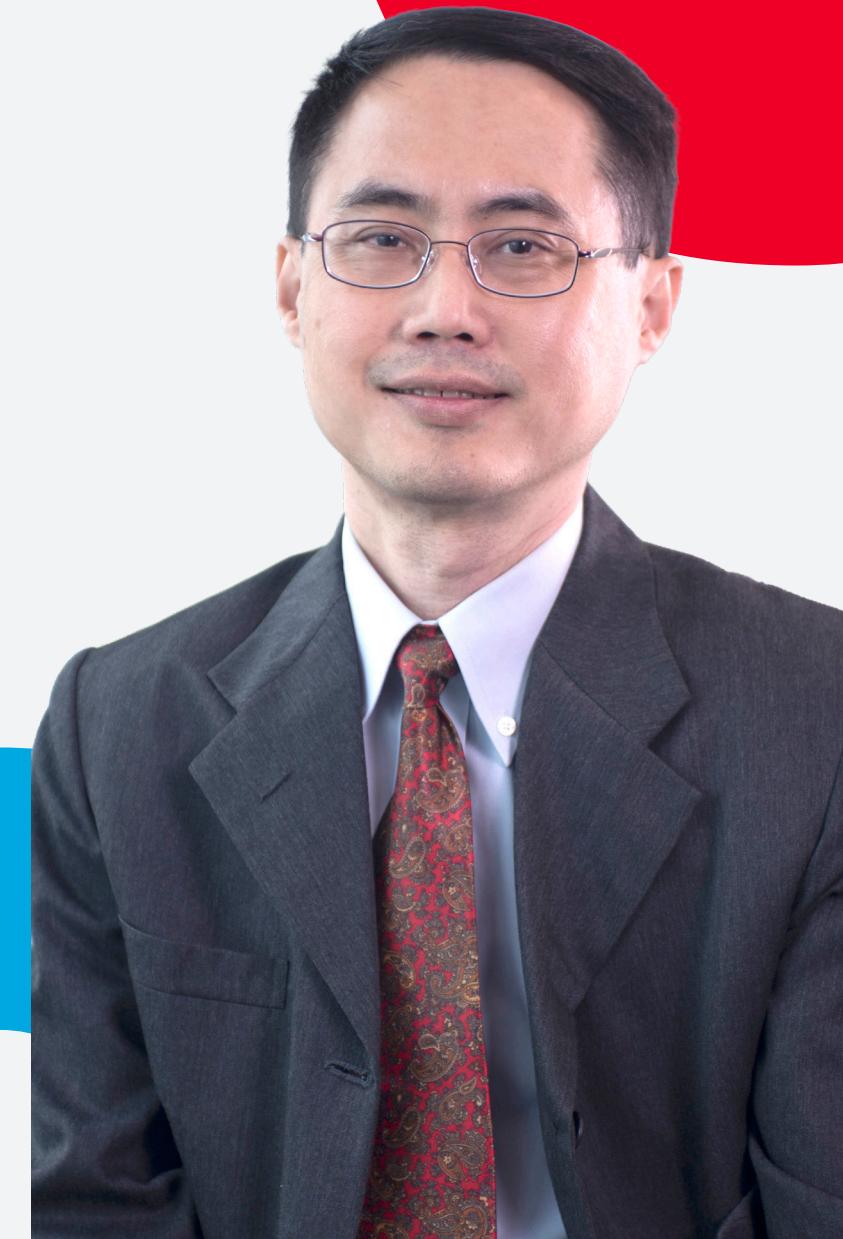
# Group Chief of Cardiology

At the group level, we have harmonised staff employment across NUHCS institutions, including at the National University Hospital (NUH), Ng Teng Fong General Hospital (NTFGH), Alexandra Hospital (AH) and Jurong Medical Centre (JMC).

Instead of being hired by individual hospitals, cardiologists are now employed at the NUHCS cluster level, allowing greater flexibility in staff deployment. For cardiology trainees who have passed the exit examinations, we have standardised the promotion timing and criteria to reduce disparity in renumeration and subsequent promotions.

In addition, clinical protocols and workflows have been aligned, enabling cross-coverage of staff among the various hospitals and medical institutes within NUHCS. Resources from one hospital are now accessible to others under the auspices of NUHCS. As a result, patients visiting one hospital can have their investigations performed at another if the waiting time there is shorter, enhancing the overall patient experience and quality of care.

**Adj Prof Tiong Cheng YEO**



# Head of Department of Cardiology

The Department of Cardiology had a highly successful year in 2025. We continued to provide comprehensive care to thousands of patients, ensuring equitable access to cardiovascular services while promoting heart health across our communities. We pursued meaningful improvements in care delivery and earned accolades for initiatives that reduced wait times for subsidised echocardiography and enabled same-day discharge after percutaneous coronary intervention—measures that enhanced patient safety and experience.

Our outpatient clinics and inpatient wards were again recognised for efficiency and patient-centred care. Staff received awards for exemplary service, leadership, and long-standing contributions to public healthcare. We sustained excellence in teaching and mentoring medical undergraduates, internal medicine and cardiology trainees, and allied health professionals, while hosting record numbers of international clinical fellows and observers. We also delivered numerous public talks and continuing professional education sessions for our primary care partners.

Our research programme flourished, with multiple high-impact publications and clinical trials, including the first-in-Asia gene-editing trial for transthyretin amyloidosis cardiomyopathy. Several leading investigators were listed

among Stanford University's Top 2% Scientists for 2025. Despite the challenges of an evolving healthcare landscape, we remained steadfast in delivering compassionate, patient-centred care while exercising judicious use of cutting-edge diagnostics and interventions.

I am privileged to serve alongside such dedicated and multi-talented teams who continually support and uplift one another.

**Adj A/Prof Ping CHAI**



# Assistant Chief Operating Officer

As we look toward to 2026 and beyond, the Operations and Administration team stands at the centre of both meaningful endeavours and possible challenges.

Yet, each challenge also offers unique opportunities. Our super-aged society calls for new ways of thinking, and the four transformations articulated by our National University Health System (NUHS) Chief Executive—transforming our healthcare workforce, transforming model of care, harnessing technology and innovation, and leveraging on system enabler—provide a clear compass for the road ahead.

In the transformation of our healthcare workforce, the Operations and Administration team will work closely with clinical and corporate partners to optimise manpower, simplify processes, and systematically eliminate waste—so that we can work smarter and achieve more with less.

In transforming our model of care, NUHCS has lined up key initiatives,

and our teams will continue to support our doctors to enable new care models to succeed, thus bringing healthcare deeper into the community.

We are also embracing technology and innovation as early adopters, leveraging Artificial Intelligence (AI) to enhance productivity and decision-making. As system enablers, we are partnering with the National University Hospital (NUH) Master Planning team to design a new hospital campus that fosters collaboration, informal interactions, and idea generation.

This integrated approach ensures that our efforts across manpower, patient care, technology, and infrastructure are aligned to create a cohesive and future-ready healthcare environment.

The journey ahead is challenging yet promising, and I look forward to what we will co-create together.

**Mr Teck Chong TAN**



# Head of Nursing

2025 – What a year it has been for our nursing team! Our nurses continue to exemplify what it means to care with both skill and heart.

This year, we marked milestones such as the successful implementation of nurse-led services, including as Spontaneous Breathing Trial Extubation, Walk-in Clinics, Pre-Operative Assessments, Accountable Discharge and Same-Day Discharge initiatives. These efforts have led to improved patient outcomes and reduced hospital re-admission rates.

Beyond clinical care, our nurses actively contributed to research, drove quality improvement projects, and upheld national cardiovascular care standards. They proudly represented NUHCS at the annual World Evidence-Based Healthcare Day, and participated in both national and global conferences to advance the field of cardiovascular nursing.

But what truly sets our nursing team apart is their unwavering team spirit, strong interdisciplinary collaboration, and heartfelt dedication to patient care.

Trained with specialised skills and driven by purpose, they care not just for hearts—but from the heart. And through it all, they balance intensity with joy, working hard and playing hard.

**Ms Doreen CHEW**



# OUR NATIONAL CENTRE LOCATIONS

# NUHCS @ National University Hospital

NUHCS @ NUH continued to play a pivotal role in delivering comprehensive and highly specialised cardiovascular care in 2025. Our teams managed a broad spectrum of complex cardiac conditions while ensuring timely access to care, patient safety, and seamless coordination across inpatient and outpatient services.

Working closely with our colleagues at NUHCS @ NTFGH, AH, and JMC, we strengthened care integration across service locations, enabling smoother referrals, shared-care models, and continuity for patients across the western region. This collaborative approach allowed us to optimise resources while maintaining consistent standards of care throughout the network.

Amid rising clinical demands, our multidisciplinary teams remained focused on patient-centred practice, supported by efficient workflows and judicious use of advanced diagnostics and interventions. Our clinics and wards continued to be recognised for their efficiency, professionalism, and quality of care.

NUHCS @ NUH also remained a key pillar for education, training, and research, supporting trainees, hosting international fellows, and contributing to impactful cardiovascular research. I am deeply grateful to our teams for their dedication, resilience, and collaborative spirit as we continue advancing cardiovascular care together.

**Adj A/Prof Ping CHAI,  
Head of Department of Cardiology,  
NUHCS @ NUH**



# NUHCS @ Ng Teng Fong General Hospital

As Ng Teng Fong General Hospital (NTFGH) marks its 10th anniversary, I am honoured to reflect on a transformative year as the newly appointed Head of the Cardiology Division at NUHCS @ NTFGH. Assuming this role in early 2025, I joined a dedicated team delivering world-class cardiac care to the western region amid organisational growth, manpower transitions, and rising patient demand.

We addressed manpower challenges by welcoming new consultants and resident physicians, strengthening capacity and morale. Strong teamwork and a shared sense of purpose enabled us to meet increasing service demands while maintaining high standards of safety and professionalism.

Operational efficiency improved through refined rostering, better workload distribution, and optimised laboratory

workflows. Beyond operations, we remained deeply committed to the human element. Staff welfare initiatives—including division dinners, birthday celebrations, and year-end gatherings—fostered camaraderie and reinforced the sense that we are a family united by purpose.

Looking ahead, our vision is clear: to deliver excellent, safe, and sustainable cardiovascular care for patients in western Singapore, while cultivating a resilient and cohesive team. While challenges remain, our shared purpose, collaboration, and commitment to our patients and to one another will continue to drive NTFGH Cardiology to greater heights.

**Adj A/Prof Anand AMBHORE,  
Head of Division of Cardiology,  
Department of Medicine,  
NUHCS @ NTFGH**

Clinicians: Adj A/Prof Anand AMBHORE, Adj A/Prof Poay Huan LOH, Adj A/Prof Raymond WONG, Asst Prof Ivandito KUNTJORO, Asst Prof Weiqin LIN, Asst Prof Yoke Ching LIM, Dr Elaine BOEY, Adj Asst Prof Christopher KOO, Adj Asst Prof Eugene TAN, Asst Prof Kevin LEONG, Dr Andie DJOHAN, Dr Hui Wen SIM, Dr Isabel AHMAD, Dr Jeanne ONG, Dr Mayank DALAKOTI, Dr Perryn NG, Dr Sara TYEBALLY, Dr Yinn Shaung OOI



# NUHCS @ Alexandra Hospital

Seven years after its re-establishment, Alexandra Hospital (AH) has evolved from a former British military hospital and interim care site into an integrated general hospital offering a broad range of subspecialty services.

In 2018, cardiology services at AH were provided by just two cardiologists. Today, the team has grown to four cardiologists, supported by a cardiac diagnostics laboratory that has expanded from two to nine medical technologists. In 2023, our first technologist, Ms Cherlyn, attained a Master's degree in Medical Ultrasound (Echocardiography) with distinction from Imperial College London, inspiring further professional development within the team.

AH emphasises holistic care by managing both cardiac and non-cardiac conditions, reducing unnecessary specialist visits and strengthening doctor-patient relationships. This is supported by the

"Firm" model—multidisciplinary teams led by a principal physician to enhance continuity and efficiency of care.

Looking ahead, AH aims to care for over 1,000 inpatients by 2028. With the Urgent Care Centre accepting emergency ambulance cases since October 2025, and close collaboration with NUHCS and regional partners, AH remains committed to delivering seamless, high-quality care.

**Dr Jeanette TING,**  
**Head of Division of Cardiology,**  
**Department of Medicine,**  
**NUHCS @ AH**

**Clinicians:** Dr Jeanette TING,  
Dr Alfred YIP, Dr Laureen WANG,  
Dr Marie HOUDMONT

*"AH emphasises holistic care by managing both cardiac and non-cardiac conditions, reducing unnecessary specialist visits and strengthening doctor-patient relationships."*



*“These cardiology community care initiatives have since been adopted by national workgroups for island-wide implementation.”*



## OUR NATIONAL CENTRE LOCATIONS

# NUHCS @ Jurong Medical Centre and Community Cardiology

Community cardiology emerged from the recognition that patient care does not exist in isolation and that close integration with our Primary Care Partners (PCPs) is essential for delivering high-quality and efficient cardiovascular care.

We began by collaborating with Bukit Batok Polyclinic to establish nurse-led clinics for patients with atrial fibrillation, and subsequently expanded these services to include patients with ischaemic heart disease. More recently, we developed virtual professional consultation chat groups with primary care physicians and implemented shared-care programmes for patients with chronic ischaemic heart disease and heart failure. These initiatives have since been adopted by national workgroups for island-wide implementation.

In the coming years, our goal is to further expand preventive cardiology, both within our hospitals and through deeper engagement with community partners, to identify and manage patients at elevated risk of cardiovascular events.

**Adj A/Prof Toon Wei LIM,  
Head of Community Cardiology,  
Department of Cardiology,  
NUHCS**

Clinicians: Adj A/Prof Toon Wei LIM, Dr Vinay Bahadur PANDAY

# DEPARTMENT OF CARDIOLOGY

# Cardiac Rehabilitation

***“Beyond clinical care, we host international and regional observerships to share knowledge and foster collaboration.”***



Cardiac rehabilitation is a proven and cost-effective strategy for managing heart conditions, yet participation rates remain low worldwide. At NUHCS, our team works tirelessly to raise awareness among both patients and healthcare professionals.

Our core team of cardiac rehabilitation physicians, nurses, specialised physiotherapists, and advanced practice nurses works closely with pharmacists, dietitians, occupational therapists, and medical social workers to deliver comprehensive, multidisciplinary care. We also partner with the NUS Nursing team led by Prof Wang Wenru to explore innovative approaches, including the integrative smartphone-based cardiac rehabilitation programme (iCREST),

which has demonstrated promising results in clinical trials.

Beyond clinical care, we host international and regional observerships to share knowledge and foster collaboration. It is a privilege to be part of this close-knit team, whose collective efforts have improved heart health for many patients over the years. We encourage colleagues to refer eligible patients to our programme, and we will ensure they receive the highest standard of care.

**Asst Prof Tee Joo YEO,  
Clinical Director of Cardiac Rehabilitation Unit,  
Department of Cardiology,  
NUHCS**

**Clinicians: Asst Prof Tee Joo YEO, Dr Jeanne ONG**



# Cardio-Oncology

Over the past year, we have continued our close collaboration with the National University Cancer Institute, Singapore (NCIS) to address the heightened cardiovascular risks faced by patients with cancer. We conduct pre-treatment cardiovascular risk assessments, and our multidisciplinary discussions aim to both prevent and manage cardiac side effects related to cancer therapies. Through these efforts, we strive to integrate cardiovascular care seamlessly into each patient's cancer journey while optimising their heart health.

Looking ahead to the coming year, we look forward to strengthening both local and international research collaborations.

Adj Asst Prof Christopher KOO,  
Consultant,  
Department of Cardiology,  
NUHCS

Clinicians: Adj A/Prof Li Ling TAN, Adj Asst Prof Christopher KOO



***“First Centre in Asia  
Accredited as a Global  
Centre of Excellence in  
Cardio-Oncology”***



# Critical Care Unit

We are all familiar with the 'controlled chaos' that defines the Critical Care Unit (CCU)—the constant alarms, the rows of infusion pumps, and the tireless pace of our nurses and doctors. I am immensely proud of our team who give their all every day - their dedication and resilience are a constant source of inspiration, reminding us of the incredible impact we have on our most critically ill patients.

Beyond clinical care, this past year marked a significant milestone for education. We successfully conducted our first in-person Cardiac Critical Care masterclass, a nationwide collaboration that brought together expertise from across multiple institutes. It is a privilege to work alongside such exceptional colleagues who excel in both bedside care and academic leadership. Thank you for an incredible year; I look forward to everything we will achieve together in the year ahead!

**Dr Shaun CHOOK,**  
Consultant,  
Department of Cardiology,  
NUHCS

**On behalf of Adj A/Prof Anand Adinath AMBHORE,**  
Clinical Director of Critical Care Unit,  
Department of Cardiology,  
NUHCS

Clinicians: Adj A/Prof Anand Adinath AMBHORE, Asst Prof Robin CHERIAN,  
Asst Prof Shir Lynn LIM, Dr Shaun CHOOK, Dr Zan NG

*"It is a privilege to work alongside such exceptional colleagues who excel in both bedside care and academic leadership."*



# Cardiac Electrophysiology and Pacing

Founded in 2008 with the launch of NUHCS, the Electrophysiology (EP) team has grown from a single-consultant service into a team of eight specialists trained locally and at leading international centres. Another integral part of our EP family is our exceptional team of technicians, nurses and case managers. Together we deliver the best care for our patients.

We perform a broad range of cardiac ablation procedures using advanced three-dimensional mapping technologies. Since early 2023, we have adopted Pulsed Field Ablation (PFA) for pulmonary vein isolation in atrial fibrillation, positioning Singapore among the first in the region to implement this technology. Since 2024, we have also conducted dedicated courses in atrial fibrillation ablation using both radiofrequency and PFA techniques.

In cardiac pacing, the team is a regional leader in conduction system pacing and cardiac resynchronisation therapy, having

trained over 200 physicians since 2008. Our Fellowship in Cardiac Electrophysiology and Pacing has trained 20 international fellows who now serve as leaders in their local EP communities. NUHCS was designated the first Asia Pacific Heart Rhythm Society (APHRS) Training Centre in Southeast Asia in 2018.

Through innovation, education, and collaboration, we continue to shape the future of arrhythmia care.

**Asst Prof Wee Tiong YEO,  
Clinical Director of Cardiac  
Electrophysiology and Pacing,  
Department of Cardiology,  
NUHCS**

**Clinicians:** Asst Prof Wee Tiong YEO, Adj A/Prof Swee Chong SEOW, Adj A/Prof Toon Wei LIM, Dr Elaine BOEY, Adj Asst Prof Eugene TAN, Asst Prof Kevin LEONG, Dr Alfred YIP, Dr Wei Yao LIM



# Heart Failure & Cardiomyopathy Programme

***"We rely not only on clinical excellence and cutting-edge technology, but also on the strength of our team's camaraderie and unwavering commitment to patient-centred care as we lead the fight against heart failure."***



Launched in 2001 as an outpatient chronic disease management service, the programme has evolved into a multidisciplinary team providing care across the full spectrum of heart failure—from patients in cardiogenic shock requiring mechanical circulatory support to those with undiagnosed cardiomyopathies.

Our dedicated case managers, advanced practice nurses, and pharmacists play vital roles in guiding patients through their care journey, empowering them to manage their condition and maintain a good quality of life beyond the hospital. Since 2021, we have trained cardiologists from across the region, building expertise and forging lasting professional relationships that strengthen regional care networks.

As Singapore's burden of heart failure continues to rise, we rely not only on clinical excellence and cutting-edge technology, but also on the strength of our team's camaraderie and unwavering commitment to patient-centred care as we lead the fight against heart failure.

**Asst Prof Weiqin LIN,**  
**Clinical Director of Heart Failure and Cardiomyopathy Programme,**  
**Department of Cardiology,**  
**NUHCS**

**Clinicians:** Asst Prof Weiqin LIN, Adj A/Prof Ping CHAI, Adj A/Prof Raymond WONG, Adj A/Prof Swee Chong SEOW, Prof Roger FOO, Asst Prof Robin CHERIAN, Asst Prof Yoke Ching LIM, Dr Elaine BOEY, Adj Asst Prof Ching Hui SIA, Dr Jeanne ONG, Dr Perryn NG, Dr Tony LI



# Interventional Cardiology

The NUHCS Interventional Cardiology team plays a central role in delivering high-quality cardiovascular care. Operating around the clock, the team ensures rapid diagnosis and timely intervention for patients with acute cardiac conditions - including myocardial infarction - achieving excellent door-to-balloon times and strong clinical outcomes.

Beyond emergency care, the team provides comprehensive diagnostic coronary angiography and percutaneous coronary interventions. Initiatives such as same-day discharge for selected angioplasty patients have improved patient comfort, reduced hospital stays, and optimised resource utilisation while maintaining high safety standards.

The team is actively involved in research, contributing to the development of novel interventional techniques and therapies. Education remains a key focus, with the hosting of the annual AICT-AsiaPCR conference and

training of both local and international cardiology fellows.

Our success is underpinned by close collaboration among nurses, radiographers, medical technologists, and the cardiac rehabilitation team. Through this multidisciplinary approach, the NUHCS Interventional Cardiology team exemplifies evidence-based, patient-centred care—restoring health and offering hope to patients and their families.

**Asst Prof Gavin NG,**  
Clinical Director of Coronary Intervention and  
Angiography Centre,  
Department of Cardiology,  
NUHCS

**Clinicians:** Asst Prof Gavin NG, Prof Huay Cheem TAN, Prof Ronald LEE, A/Prof Adrian LOW, A/Prof Mark CHAN, Adj A/Prof Poay Huan LOH, Asst Prof Koo Hui CHAN, Adj Asst Prof Christopher KOO, Dr Andie DJOHAN, Dr Hui Wen SIM, Dr Jason CHEN, Dr Yinn Shaung OOI, Dr Nicholas CHEW, Dr Rodney SOH, Dr Wesley YEUNG



***“Initiatives such as same-day discharge for selected angioplasty patients have improved patient comfort, reduced hospital stays, and optimised resource utilisation while maintaining high safety standards.”***

# Supportive and Palliative Care

Launched in 2021, the NUHCS Cardio-Palliative Care initiative integrates palliative care principles into cardiology, ensuring comprehensive support for patients with advanced heart conditions.

Since its inception, the programme has hosted multidisciplinary teaching sessions that bring together cardiologists, palliative medicine specialists, and nurses. These case-based discussions equip teams to manage complex patient needs with both clinical skill and compassion, underscoring the importance of timely, holistic care.

*“... we care for the whole person—not just the heart condition—setting a new standard for compassionate cardiac supportive care.”*

Throughout the years, we have implemented several patient-focused initiatives:

1. Compassionate Discharge
2. Protocols for Compassionate Withdrawal of Mechanical Ventilation in the Critical Care Unit (CCU)
3. Palliative Care Resource Nurse
4. Home Inotrope Programme
5. Partnership with Home Hospice Services

Through this holistic, patient-centred approach, we care for the whole person—not just the heart condition—setting a new standard for compassionate cardiac supportive care.

**Dr Perryng NG,**  
Consultant,  
Department of Cardiology,  
NUHCS



# Post-Graduate Education

Taking on the role of Programme Director last year has been a journey of growth and learning for me. I have witnessed first-hand how our residents embody the spirit of “work hard, play hard”—tackling demanding rotations with grit while still finding time for laughter and camaraderie. This year, they excelled in research and shone on both national and international conference stages, showcasing the strength of NUHCS training.

Their achievements reflect not only clinical excellence, but also creativity, resilience, and balance. Leading such a dynamic and committed group has been truly inspiring, and I look forward to supporting and nurturing both their professional development and personal milestones in the years ahead.

**Asst Prof Robin CHERIAN,**  
Education Director of the Cardiology Senior Residency Programme,  
NUHCS

Clinicians: Asst Prof Robin CHERIAN,  
Dr Andie DJOHAN

*“This year, our residents excelled in research and shone on both national and international conference stages, showcasing the strength of NUHCS training.”*



# Resident Physicians

As NUHCS Cardiology physicians, we play a vital role in delivering high-quality inpatient care. We are often the first to assess new admissions, conduct thorough evaluations, formulate management plans, and present cases for consultant review. During on-call duties, we respond promptly to emergencies, manage acute situations, and escalate appropriately to ensure definitive care.

In recent years, our responsibilities have expanded to include coverage of patients in the Emergency Department, ensuring timely diagnosis and treatment. This has contributed to improved patient outcomes and shorter hospital stays.

We also rotate through outpatient clinics, gaining valuable experience in patient communication, counselling, and continuity of care. These experiences complement our inpatient training and broaden our clinical perspective.

Beyond clinical duties, we actively participate in Continuing Medical Education sessions to update our medical knowledge, exchange clinical insights, and reinforce our commitment to lifelong learning.

Through these diverse experiences, we continue to develop as well-rounded clinicians, dedicated to delivering compassionate, safe, and excellent cardiovascular care.

**Dr Constantine Thei Nwe Myet Shu Htwe,  
Resident Physician II,  
Department of Cardiology,  
NUHCS**

**Resident Physicians: Dr Constantine Thei Nwe Myet Shu Htwe, Dr Atiqah Binti AHMAD ASMADI, Dr Aye Mon Kyi**

*“... we actively participate in Continuing Medical Education sessions to update our medical knowledge, exchange clinical insights, and reinforce our commitment to lifelong learning.”*



# Structural Intervention

This year, our team continued to support individuals with structural heart conditions across the lifespan—from childhood through adulthood. We provide comprehensive care, from early diagnosis to complex interventions, while continually adopting new techniques and devices to enhance safety and clinical outcomes. As a regional training centre for structural procedures such as Transcatheter Aortic Valve Implantation (TAVI) and Patent Foramen Ovale (PFO) interventions, we mentor and train the next generation of specialists. Our fellows gain expertise that benefits patients at their home institutions, and we actively contribute to research and clinical registries that help advance cardiac care worldwide.

Our philosophy, *“Growing up with you”*, reflects our commitment to being more than clinicians—we are partners in each patient’s healthcare journey. Whether supporting patients through a new diagnosis or

celebrating life milestones, we remain dedicated to walking alongside those who entrust us with their care. This year has been another meaningful chapter of connection, progress, and compassionate care.

**Asst Prof Ivandito KUNTJORO,**  
Clinical Director of Structural Heart Programme,  
Department of Cardiology,  
NUHCS

Clinicians: Asst Prof Ivandito KUNTJORO, A/Prof James YIP, Adj A/Prof Ting Ting LOW, Asst Prof Robin CHERIAN and Asst Prof Yinghao LIM

***“Whether supporting patients through a new diagnosis or celebrating life milestones, we remain dedicated to walking alongside those who entrust us with their care”***



# Valve Programme

“ The Valve Team of NUHCS is a mixed bag of Cardiologists and Cardiothoracic surgeons. These are echocardiologists, structural heart interventionists and cardiac surgeons with interest in valve disease. We run regular Valve Clinics for patients with complex valve disease, and patients with previous valve surgeries who require long-term surveillance. There is also a monthly Valve Round to discuss difficult or interesting cases. All colleagues from Cardiology and Cardiothoracic Surgery are welcome to join in and contribute their expert opinions. Nowadays, as valve patients live longer, we are seeing progressively more complicated cases, so all contributions are more than welcome! ”

**Dr Wern Min SOO,**  
Senior Consultant,  
Department of Cardiology,  
NUHCS

Clinicians: Adj Prof Kian Keong POH, Adj Prof Tiong Cheng YEO, A/Prof Lieng Hsi LING, Adj A/Prof William KONG, Dr Wern Min SOO, Dr Benjamin TUNG

“ Valvular heart disease is a growing global health challenge, particularly in ageing populations. In response, NUHCS established its Valve Programme to deliver comprehensive care through the integration of clinical excellence, research, and education. ”

At the core of the programme is a multidisciplinary team of cardiologists, cardiothoracic surgeons, imaging specialists, anaesthetists, and nurses who collaborate to develop personalised treatment plans for each patient.

Beyond clinical care, the team contributes actively to peer-reviewed research, advancing understanding of valvular outcomes, imaging strategies, and disease predictors—especially in Asian populations. These efforts have strengthened both local practice and global knowledge.

NUHCS remains committed to developing future leaders through fellowships, regional workshops, and international collaborations. Through the dedication of its team, the Valve Programme continues to position NUHCS as a regional leader in valve care, transforming lives one heart valve at a time. ”

**Adj Prof Kian Keong POH,**  
Senior Consultant,  
Department of Cardiology,  
NUHCS



# Women's Heart Health Programme

***“What began with just two female cardiologists has since grown into a team of seven, delivering care across NUH, NTFGH, and AH.”***

*“Why do you need a women’s heart programme? Men also have heart what.”*

When the Women’s Heart Clinic was first proposed in 2012–2013, its necessity was questioned by many. In a field traditionally dominated by male cardiologists, a clinic focused specifically on women seemed unnecessary—after all, hearts are the same, aren’t they? However, women often experience heart disease differently, and their unique needs were frequently overlooked.

With the foresight and support of the NUHCS leadership, and the dedication of early champions Prof Carolyn Lam and Dr Chan Wanxian, the programme took root. What began with just two female cardiologists has since grown into a team of seven, delivering care

across the National University Hospital, Ng Teng Fong General Hospital, and Alexandra Hospital. Working alongside specialised nurses and health coaches, the team provides tailored care for conditions that are more prevalent or complex in women.

Beyond treatment, the all-female cardiology team places strong emphasis on preventive heart health—from pregnancy through menopause and beyond—empowering women to take charge of their cardiovascular well-being.

**Adj A/Prof Ting Ting LOW,  
Clinical Director of Women’s Heart Health Programme,  
Department of Cardiology,  
NUHCS**

**Clinicians: Adj A/Prof Ting Ting LOW, Asst Prof Yoke Ching LIM, Dr Hui Wen SIM, Dr Jeanne ONG, Dr Laureen WANG, Dr Sara TYEBALLY, Dr Marie HOUDMONT**



# Secretaries

Our secretarial team works closely with doctors and colleagues across the department to ensure that daily operations run smoothly. From supporting Medical Officers to Senior Consultants, we manage the administrative details that allow the wider clinical team to remain focused on patient care.

What we value most is our strong sense of camaraderie. We support one another through busy periods and quieter moments alike—sharing meals, taking short walks together, and looking out for one another like family. These simple routines keep us grounded and create a warm, supportive workplace.

We are grateful for the friendship, dedication, and positive spirit within our team. By supporting one another and remaining committed to our roles, we contribute to seamless operations while helping to make the workplace a brighter and more welcoming place each day.

Ms Christina NG,  
Manager,  
Department of Ops & Admin,  
NUHCS

*“We support one another through busy periods and quieter moments alike—sharing meals, taking short walks together, and looking out for one another like family.”*



# DEPARTMENT OF CARDIAC, THORACIC, & VASCULAR SURGERY



# Adult Cardiac Surgery

The Adult Cardiac Division continues to set benchmarks through international visibility, innovation, and strong teamwork. Nurses, allied health professionals, researchers, fellows, residents, and doctors all contribute to the division's success. Building on our legacy in minimally invasive surgery, we have expanded our expertise in aortic disease management and surgical treatment of atrial fibrillation. The minimally invasive team, led by Dr Kang Giap Swee and Dr Chang Guohao, is moving towards robotic approaches to minimise trauma and enhance recovery. Dr Kristine Teoh has established the full Maze procedure with cryoablation as the standard for concomitant surgical interventions.

Our aortic surgery team has gained regional recognition, incorporating 3D printing for personalised external aortic root support under the leadership of Adj A/Prof Vitaly A Sorokin and Dr Jai Sule. Dr Qian Qi's appointment as the Transcatheter Aortic Valve Implantation (TAVI) Lead for cardiac surgery further strengthens our structural heart programme.

As part of the wider CTVS family, the Adult Cardiac team works closely with the Vascular, Paediatric, and Thoracic teams. The Asian Society of Cardiovascular & Thoracic Surgery (ASCVTS) International Meeting in Singapore in May 2025 showcased CTVS as a department united by collaboration and excellence.

Adj A/Prof Vitaly SOROKIN,  
Head of Division of Adult Cardiac Surgery,  
Department of CTVS,  
NUHCS



Clinicians: Adj A/Prof Vitaly SOROKIN, Emeritus Prof Chuen Neng LEE, Adj A/Prof Michael George CALEB, Asst Prof Giap Swee KANG, Asst Prof Kristine TEOH, Dr Guohao CHANG, Dr Jai Ajitchandra SULE, Dr Qi QIAN, Dr Choon Tang LIEW, Dr Stephanie KOH

*“Building on our legacy in minimally invasive surgery, we have expanded our expertise in aortic disease management and surgical treatment of atrial fibrillation.”*

# Aortic Centre

The CTVS family has built a strong portfolio in the management of aortic disease. Our Adult Cardiac Division works closely with the Vascular, Paediatric, and Thoracic teams to deliver integrated care for patients with aortic conditions. This collaborative approach forms the foundation of our multidisciplinary partnership—the NUHCS Aortic Centre.

The Aortic Centre is dedicated to serving patients in Singapore and across Southeast Asia. Our development of advanced clinical services, including hybrid procedures and contemporary aortic root management strategies is distinctive both locally and regionally.

Beyond clinical care, the Aortic Centre has established a robust academic presence. Our team participates actively in international clinical trials and contributes to global guidelines for aortic disease management. We regularly present our work at major conferences in Europe, Asia, and the United States. With an ageing population and an expanding regional referral base, we continue to broaden our impact on patient care and research.

Adj A/Prof Vitaly SOROKIN,  
Clinical Director of Aortic Centre,  
Department of CTVS,  
NUHCS

Clinicians: Adj A/Prof Vitaly SOROKIN, Adj A/Prof Dhamaraj Rajesh BABU, A/Prof Jackie HO, Adj A/Prof Jun Jie NG, Asst Prof Kristine TEOH, Dr Raj Kumar MENON, Dr Jai Ajitchandra SULE, Dr Qi QIAN, Dr Reuban Toby D'CRUZ



***“Our development of advanced clinical services, including hybrid procedures and contemporary aortic root management strategies, is distinctive both locally and regionally.”***

# Case Management Officers

The CTVS Clinical Case Management Officer (CMO) team may comprise just eight members among more than 130 CMOs across NUH, but our role is uniquely significant.

We support more than 25 CTVS surgeons by assisting with operating list coordination and clinic management—responsibilities that are not typically undertaken by CMOs outside surgical departments. Serving as a vital bridge between patients and surgeons, we help facilitate the entire surgical journey,

from pre-operative investigations and patient education to admission coordination and post-operative care. In many ways, we act as both trusted partners to our surgeons and dedicated guides for our patients.

Beyond the demands of our work, our team thrives on strong camaraderie. As reflected in our shared moments over meals and conversations, these bonds of trust, collaboration, and mutual support are what truly define and strengthen our team.

Ms Jie Er NG,  
Senior Case Management Officer,  
Department of CTVS,  
NUHCS



*“Serving as a vital bridge between patients and surgeons, we help facilitate the entire surgical journey, from pre-operative investigations and patient education to admission coordination and post-operative care.”*

# ECMO Programme

2025 was the busiest year ever for our Extracorporeal Membrane Oxygenation (ECMO) team. The team contributed to the 33rd Annual Meeting of the Asian Society for Cardiovascular and Thoracic Surgery. Prof Giles Peek from the University of Florida and a legend in the ECMO community spoke at the conference and spent one afternoon visiting our Cardiothoracic ICU and teaching the team some tips and tricks he has acquired over a 35-year career managing patients in some of the highest volume ECMO centres in the world.

Doing ECMO well requires tremendous collaboration between nurses, surgeons, perfusionists, respiratory therapists, and intensive care physicians, as well as support from our other partners in the hospital, such as cardiologists, anaesthetists, social workers, dieticians, physiotherapists, and the staff of the Blood Bank.

Particular acknowledgment must be made to our surgeons and perfusionists who provide a 24/7 service to patients, ready to go out to other hospitals at any time of day or night in order to cannulate them onto ECMO and bring them back to NUH. It is a credit to them all that they can keep pace with the ever-increasing number of ECMO patients, who are among the most critically ill in Singapore.

It is because of this vast collaboration and the amount of effort everyone contributes that our patients' outcomes are, and will remain, world class.

**Adj Prof Graeme MACLAREN,  
Head of Division of Cardiothoracic ICU,  
Department of CTVS,  
NUHCS**

Clinicians: Adj Prof Graeme MACLAREN, Adj A/Prof Ramanathan Kollengode RAMASWAMY, Asst Prof Theng Wai FOONG, Dr Senthil Subbian KUMAR, Adj A/Prof Oon Cheong OOI, Dr Guohao CHANG, Dr Jianye CHEN, Dr Lowell LEOW, Dr Qi QIAN, Dr Yue LI, Dr Hari Kumar SAMPATH

***"It is because of this vast collaboration and the amount of effort everyone contributes that our patient's outcomes are, and will remain, world class."***



# Operating Theatre

Calm under pressure and united by purpose, our operating room nurses are the steady hands and compassionate hearts behind every cardiac, thoracic, and vascular surgery. They provide expert care for patients undergoing procedures involving the heart, lungs, and major blood vessels. In the operating theatre, our nurses work closely with surgeons, anaesthesiologists, and the wider healthcare team to ensure patient safety and optimal outcomes.

Our team is committed to achieving the best possible results through meticulous attention to detail, strict adherence to high theatre standards, and a relentless pursuit of excellence.

We actively embrace innovation—from robotic surgery and minimally invasive techniques to AI-guided surgical navigation—to enhance precision and elevate patient care.

Even in high-stress situations, our nurses remain composed and focused. Experienced team members mentor and support new nurses, fostering a culture of continuous learning, teamwork, and mutual respect. Together, we create a collaborative environment where every contribution is valued and every patient receives the highest standard of care.

*“Experienced team members mentor and support new nurses, fostering a culture of continuous learning, teamwork, and mutual respect.”*

**Ms Corina LAU,  
Senior Nurse Clinician,  
NUHCS**



# Congenital Cardiac Surgery



Congenital cardiac surgery at NUH began in 1985, with the first operation performed by Prof Lee Chuen Neng on a seven-year-old boy with an atrial septal defect, who recovered well and later completed National Service as a Guardsman.

Since then, the volume and complexity of congenital cardiac surgeries have increased steadily, with excellent outcomes. In 2009, the hospital performed its first successful paediatric Extracorporeal Membrane Oxygenation (ECMO) on a six-year-old boy with severe pneumonia, supported on veno-venous ECMO for 33 days. ECMO has since become an integral part of paediatric cardiac care when clinically indicated.

Beyond clinical care, the paediatric cardiac surgical team has been deeply committed to humanitarian work since 2000, conducting missions to Cambodia,



Vietnam, Myanmar, and annually to Fiji since 2022, providing life-saving surgery while strengthening local healthcare capabilities.

In 2010, CHAPPS—the Congenital Heart Association for Parents and Patient Support group—was established with the support of the National University Heart Centre, Singapore (NUHCS) to provide families with a supportive community. Its annual gatherings bring together patients, families, and healthcare teams, reinforcing enduring support networks.

**Asst Prof Winn Maung Maung Aye,  
Senior Consultant,  
Division of Congenital Cardiac Surgery,  
Department of CTVS,  
NUHCS**

**On behalf of A/Prof Laszlo KIRALY,  
Head of Division of Congenital Cardiac Surgery and  
Head of Department of CTVS,  
NUHCS**

**Clinicians: A/Prof Laszlo KIRALY, Asst Prof Winn Maung Maung Aye, Dr Senthil Kumar SUBBIAN**



# Perfusionists



This year, our team of 15 perfusionists played a vital role in supporting 710 open-heart surgeries at the NUH Main Building Operating Theatres (MBOTs), caring for patients ranging from fragile newborns to elderly individuals with complex medical conditions.

Amid rising demand for Extracorporeal Membrane Oxygenation (ECMO), the team provided life-sustaining support to 55 patients in the Cardiothoracic Intensive Care Unit (CTICU) and Paediatric Intensive Care Unit (PICU), stabilising patients whose hearts and lungs were unable to function independently.

Beyond clinical care, our perfusionists actively contribute to education and

research by leading ECMO training workshops and leveraging virtual reality technology to enhance immersive learning experiences. As a high-volume ECMO center, we conduct workshops for both in-house and international participants. Regular training and simulation exercises ensure the team remains well-prepared for critical, life-threatening situations.

Their commitment also extends beyond Singapore. In 2025, NUHCS completed its third humanitarian mission to Fiji, performing nine paediatric cardiac surgeries for underprivileged children. It is the collective skill, passion, and dedication of our perfusionists that underpin every successful surgery and life-saving intervention.



Mr Si Guim GOH,  
Head of Perfusion,  
Department of CTVS,  
NUHCS

***“It is the collective skill, passion, and dedication of our perfusionists that underpin every successful surgery and life-saving intervention.”***

# Resident Physicians

The very mention of vascular surgery often evokes fear – if not immediate aversion – among peers and junior doctors. I cannot fault them. The truth is that this subspecialty demands more than physical endurance or technical competence. It demands complete presence. Your attention, your resolve, and, at times, your soul. For it is in the smallest details – the most delicate vessel, the briefest lapse in judgment, the thinnest reserve of patience – that the difference between survival and loss is quietly, irrevocably decided.

Beyond the routines of ward rounds, clinics, and the operating theater lies something less tangible but far more enduring: the opportunity to evolve. Not only as a vascular surgeon, but as a person. Within a supportive ecosystem such as NUHCS, one is afforded the space to strive toward self-actualisation – regardless of seniority, age, or the relentless passage of time. The work is demanding, but the growth is profound.

And in time, the responsibility turns outward. The mentee becomes the mentor; the inspired, an inspiration. What begins as survival transforms into stewardship. This cycle – of learning, teaching, and leading – has the power to reshape perceptions, cultivate resilience, and instill quiet confidence in those who dare to enter the demanding, ever-evolving world of vascular surgery.

**Dr Caesar Lopez GIMAO,**  
**Senior Resident Physician,**  
**Division of Vascular Surgery,**  
**Department of CTVS,**  
**NUHCS**

Clinicians: Dr Caesar Lopez GIMAO (Division of Vascular Surgery), Dr Manish KUMAR (Division of CTICU), Dr Choon Tang LIEW (Division of Adult Cardiac Surgery)



***The mentee becomes the mentor; the inspired, an inspiration. What begins as survival transforms into stewardship.***

# Thoracic Surgery

The Division of Thoracic Surgery has had another outstanding year, performing a record 800 operations—reflecting both the rising disease burden and the exceptional care delivered by our team. As Singapore's busiest thoracic surgery centre, we continue to advance our Uniportal Video-assisted Thoracoscopic Surgery (UVATS) and robotic-assisted surgery programmes.

We also celebrate several important team milestones. Dr Ooi Oon Cheong was promoted to Senior Consultant, Dr Chen Jianye to Consultant, and Dr Hari Kumar to Associate Consultant. Dr Stephanie Koh joined the Hospital Clinician Programme, further strengthening our clinical capabilities.

In May 2025, we organised the Thoracic Surgery Programme at the ASCVTS Conference in Singapore, bringing together global experts to share the latest innovations in the field. Another highlight was the keynote lecture, *"Uniportal Thoracoscopic Extended Segmentectomy,"* delivered to an audience of 20,000 surgeons during the China Surgical Academic Week. Our team also presented their work at EACTS, APSR, and other leading international meetings.

**Prof John TAM,**  
**Head of Division of Thoracic Surgery,**  
**Department of CTVS,**  
**NUHCS**

**Clinicians: Prof John TAM, Adj A/Prof Oon Cheong OOI, Dr Jianye CHEN, Dr Lowell LEOW, Dr Yue LI, Dr Hari Kumar SAMPATH, Dr Stephanie KOH**



***“As Singapore’s busiest thoracic surgery centre, we continue to advance our Uniportal VATS and robotic-assisted surgery programmes.”***

# Vascular Surgery

In 2025, NUHCS strengthened its role as a regional hub for vascular care, education, and research. In April, we hosted the Peripheral Endovascular Training Programme, providing hands-on training for regional vascular surgeons in contemporary management of peripheral arterial disease.

We played a prominent role at the Asian Society of Vascular Surgeons (ASVS) Congress in August, including hosting the 6th Vascular Cadaveric Workshop. Our International Fellowship Programme continues to attract specialists seeking advanced training, reflecting NUHCS's strong global reputation. Faculty members remain actively engaged in international conferences to promote collaboration and knowledge exchange.

Locally, vascular services expanded to Alexandra Hospital and Ng Teng Fong General Hospital, improving access

to high-quality care across western Singapore. Our Vascular Diagnostic Laboratory achieved the International Accreditation Commission (IAC) accreditation, affirming our commitment to diagnostic excellence and patient safety.

Clinical outcomes improved, with the National Vascular Audit reporting lower amputation rates through early intervention and multidisciplinary limb salvage. With the NUH Main Building Hybrid Operating Theatre 18 nearing completion, the Vascular Surgery Division continues to advance world-class vascular care.

**Adj A/Prof Dhamaraj Rajesh BABU,  
Head of Division of Vascular Surgery,  
Department of CTVS,  
NUHCS**

**Clinicians: Adj A/Prof Dhamaraj Rajesh BABU, A/Prof Jackie HO, Dr Raj Kumar MENON, Adj A/Prof Jun Jie NG, Dr Reuban Toby D'CRUZ**

***“The Vascular Diagnostic Laboratory achieved IAC accreditation, affirming our commitment to diagnostic excellence and patient safety.”***



# NURSING

# Ward 7A

Ward 7A at NUHCS is a medical-surgical unit recognised for excellence in patient-centred care. Since NUHCS assumed responsibility for the ward on 15 December 2014, Ward 7A has grown, adapted, and met challenges with resilience.

The team received the NUH Incredible Care Excellence Award and the Excellence in Falls Safety Award, achieving zero inpatient falls in 2025. Leadership is shared across all staff, fostering trust, ownership, and continuous learning. The ward also embraces innovation through Quality Improvement and AI initiatives, including the INVEST communication framework and MyChart Bedside AI, empowering patients and families.

What truly sets Ward 7A apart is the unwavering dedication of its staff to place patients before self, delivering compassionate and competent care every day. Thank you, Team 7A, for your steadfast commitment to excellence and the difference you make with every act of care.

May the satisfaction that comes from caring for others warm your hearts and continue to fuel your passion in this ever-giving yet noble profession.

**Ms Beatrice CHEN,  
Nurse Manager I,  
NUHCS**

***"The ward also embraces innovation through Quality Improvement and AI initiatives, including the INVEST communication framework and MyChart Bedside AI, empowering patients and families."***



# Ward 20

## Cardiothoracic ICU (CTICU)

Beyond caring for complex cardiothoracic and vascular patients, Ward 20 is one of Singapore's two National ECMO Centres, providing life-saving support - including Ecpella - and hosting internationally recognised, ELSO-accredited ECMO workshops. Training and collaboration are central to our work. Through Cardiothoracic Intensive Care Crisis and Emergency Management (CCICEM) simulation training, we strengthen multidisciplinary crisis management skills, while the Nurse-Led Cardiothoracic Intensive Care Liaison Programme (CTICAP) extends critical care expertise beyond the unit.

At the heart of Ward 20 is a strong sense of "family." We believe in balancing hard work with enjoyment at work. Our recreation team organises team-bonding activities such as the Healthy Fun Walk, festive celebrations, and Healthy High Tea, promoting physical



*"At the heart of Ward 20 is a strong sense of family."*

and psychological well-being while strengthening staff engagement.

Together, these initiatives build trust, collaboration, and resilience. What sets Ward 20 apart is our spirit of togetherness and commitment to creating a supportive, positive environment where teamwork and well-being go hand in hand.

**Ms Hui Mien TEH,  
Nurse Manager II,  
NUHCS**



# Ward 28

## Coronary Care Unit (CCU) and Cardiac Monitoring Unit (CMU)

Ward 28 is where dedication and teamwork come together every day. From early mornings to late shifts, the team meets challenges with focus, skill, and a healthy dose of humour. Even routine drills and safety exercises become opportunities to work together and ensure our patients remain in safe hands.

Continuous learning remains a priority, with colleagues sharing updates and practical insights that support patient care. We also make time, within and beyond the ward, to recharge and strengthen the bonds within our team.

Life in the CCU follows a familiar rhythm—from early handovers to management of Electrocardiograms (ECGs), medications, and patient reviews. Emergencies and night shifts keep us alert as we care for patients around the clock.

Through it all, the Ward 28 team multitasks with professionalism and heart—supporting patients and families while still finding moments to share a laugh when it matters most.

**Ms Susan LAM,  
Senior Nurse Manager,  
NUHCS**



# Ward 63

Our team comprises dedicated and diverse professionals who work closely together to deliver safe, high-quality, and compassionate care to our patients. Teamwork and collaboration are at the heart of what we do, enabling us to overcome challenges, achieve milestones, and grow together.

Beyond our daily responsibilities, we value the moments that strengthen our bonds—celebrating achievements, participating in formal events, and creating meaningful shared experiences. These moments remind us that unity and mutual support are essential to our success.

What truly sets us apart is our ability to balance professionalism with camaraderie. We are more than colleagues—we are a team that uplifts one another, grows stronger together, and remains committed to the well-being of both our patients and our people. Together, we deliver care with compassion, excellence, and unity—because teamwork is the heartbeat of everything we do.

Ms Shan Nee KHOO,  
Nurse Manager I,  
NUHCS

*“Together, we deliver care with compassion, excellence, and unity—because teamwork is the heartbeat of everything we do.”*



# Ward 64

***“We foster a supportive, blame-free environment where every nurse is empowered to grow, learn, and excel.”***



Ward 64 nurses embody resilience, compassion, and responsibility, consistently upholding our TRICEP values — Trust, Respect, Integrity, Compassion, Excellence, and Patient-Centredness — in every aspect of patient-care.

We stand united, supporting one another through every challenge and success. When faced with obstacles, we seek innovative solutions and continuously strive to improve the way we work.

We celebrate diversity and deeply value each team member's contributions. By nominating passionate nurses for appropriate awards, and commemorating team achievements

and milestones, we recognise excellence and uplift staff morale.

Our commitment extends beyond bedside care. We actively pursue better patient outcomes through Quality Improvement projects, and our nurses have proudly presented their work at international conferences.

We are also dedicated to nurturing the next generation of nurses. Through preceptorship and Clinical Instructor support within our unit and across cluster wards, we provide guidance, mentorship, and a strong foundation for learning. We foster a supportive, blame-free environment where every nurse is empowered to grow, learn, and excel.

**Ms Vikeswary D/O MURUGIAH,  
Nurse Manager I,  
NUHCS**



# Cardiothoracic Vascular Nursing



*“... delivering safe,  
evidence-based, and  
compassionate care  
for patients...”*

We are a dynamic, multidisciplinary team of nurses with diverse expertise in the management of cardiothoracic and vascular surgery patients.

Together, we provide care across the full surgical continuum—from meticulous pre-operative preparation to steady intra-operative support and compassionate post-operative care—accompanying our patients at every stage of their journey.

While each team member brings a unique skill set, we are united by a shared commitment to delivering safe, evidence-based, and compassionate care for patients undergoing complex cardiothoracic and vascular procedures. Through collaboration, trust, and teamwork, we ensure that every patient receives not only specialised clinical care but also the reassurance and comfort of a team working seamlessly together.

**Ms Adeline TEO,  
Nurse Clinician I,  
NUHCS**



# SERVICE LOCATIONS



# Angiography Centre

*“Emergencies and surprises always appear, but teamwork and laughter rewrite the day, every time.”*



The Angiography Centre is more than a clinical space—it is the heartbeat of NUHCS, where precision meets purpose and every procedure carries the weight of a life. Interventional cardiologists, nurses, radiographers, and technologists work in synchrony, navigating high-pressure moments with quiet strength and trust.

Whether responding to emergency ST-segment Elevation Myocardial Infarction (STEMI) activations or performing complex structural heart interventions, the team moves as one—anticipating each step and grounded in mutual respect. In uncertainty, we lean on one another; in success, we celebrate together. From the adrenaline of a life

saved to the quiet joy of recovery, each experience strengthens our collective resilience.

Our camaraderie extends beyond the catheterisation laboratory to rooftop barbecues, shared laughter between cases, and heartfelt support during personal trials. What truly defines the Angiography Centre is not just technical excellence, but the human connection behind it.

Fun fact: our unofficial motto is “trust the team, not the timetable.” Procedure lists may look organised—until reality intervenes. Emergencies and surprises always appear, but teamwork and laughter rewrite the day, every time.

**Ms Kwee Fong HOE,  
Nurse Manager I,  
NUHCS**



# NUHCS Clinics

At NUHCS Outpatient Services, we are supported by a vibrant team of over 120 Patient Service Associates (PSAs), nurses, and medical technologists working together to deliver high-quality, patient-centred care. Our PSAs provide frontline support—from registration and financial counselling to coordinating diagnostics and managing the call centre. Our nurses deliver essential clinical services, including screenings, phlebotomy, treatments, and wound care, while our medical technologists perform key diagnostic procedures such as Holter monitoring, pacemaker checks, echocardiography, exercise stress testing, and vascular scans.

Our dedication has been recognised with multiple Achievers Awards, including the Specialty Outpatient Clinic (SOC) of the Year award for two consecutive years from 2024 to 2025.

What sets our team apart is the seamless integration of clinical and administrative expertise, strengthened by strong camaraderie and pride in our work. Whether at the frontlines or behind the scenes, every member plays a vital role in positively shaping our patients' healthcare journeys.

**Ms Beiyun CUI,  
Head of Clinical Operations Section,  
Department of Ops & Admin,  
NUHCS**



***“Our dedication has been recognised with multiple Achievers Awards, including the Specialty Outpatient Clinic (SOC) of the Year award for two consecutive years from 2024 to 2025.”***



# Diagnostic Cardiac Laboratory

At the heart of NUHCS lies the Non-Invasive Cardiology Squad, a multidisciplinary team of medical technologists, nurses, doctors, patient service associates, and housekeepers working seamlessly within the Diagnostic Cardiac Laboratory (DCL) to deliver timely, high-quality care.

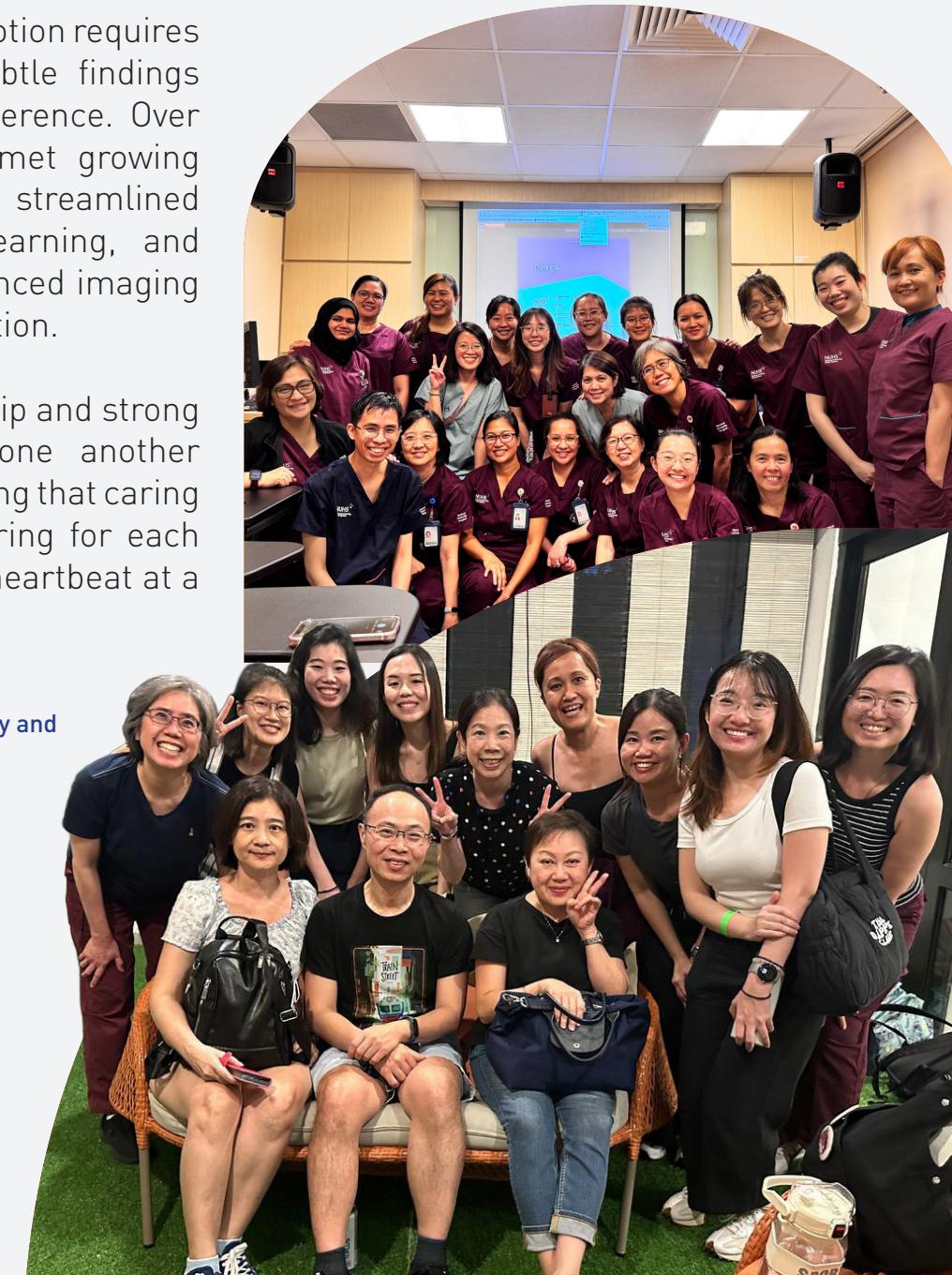
Although our work does not involve scalpels or stents, it demands precision, empathy, and excellence. We transform diagnostic data into insights that guide life-saving decisions. From echocardiography and stress testing to Holter monitoring and Electrocardiograms (ECGs), every investigation is more than a procedure—it is a window into a patient's story. We are clinicians, educators, innovators, and healers.

***“Although our work does not involve scalpels or stents, it demands precision, empathy, and excellence.”***

Interpreting the heart in motion requires skill and intuition, as subtle findings can make a profound difference. Over the past year, we have met growing demands through streamlined workflows, continuous learning, and innovation, including advanced imaging and AI-assisted interpretation.

Guided by shared leadership and strong teamwork, we support one another through challenges, knowing that caring for hearts begins with caring for each other—one scan and one heartbeat at a time.

**Adj A/Prof William KONG,  
Clinical Director of Echocardiography and  
Non-invasive Diagnostic Cardiology,  
Department of Cardiology,  
NUHCS**



# Diagnostic Vascular Laboratory



***"In 2024, we became the first vascular laboratory in Asia to receive Intersocietal Accreditation Commission (IAC) accreditation for Vascular Testing, reflecting our strong commitment to quality and patient safety."***

At the heart of patient care at NUHCS, the Diagnostic Vascular Laboratory (DVL) plays a vital role in diagnosing and monitoring a wide range of vascular conditions, from arterial occlusions to venous insufficiency. Equipped with high-resolution ultrasound systems and supported by a dynamic team of vascular technologists, the DVL delivers high-quality diagnostic imaging that guides clinical decisions and life-saving interventions.

Through ongoing training, active participation in conferences, and engagement in quality assurance and

community initiatives, the DVL sets a high standard for excellence in vascular diagnostics. In 2024, we became the first vascular laboratory in Asia to receive Intersocietal Accreditation Commission (IAC) accreditation for Vascular Testing, reflecting our strong commitment to quality and patient safety.

Beyond clinical excellence, the DVL is defined by strong teamwork, mentorship, and camaraderie. Together, we do more than scan vessels—we uncover stories, guide treatment, and make a meaningful impact on patients' lives.

**Ms Julie LOW,**  
Senior Principal Medical Technologist,  
NUHCS



# Nuclear Cardiology Laboratory

The Nuclear Cardiology team has always been a welcoming, positive, and enjoyable place to work. Under Dr Raymond's calm and steady leadership, and supported by an efficient and dedicated team, the unit runs like a well-oiled machine. Each day reflects a balance of professionalism and camaraderie—work is handled



seamlessly, yet the atmosphere remains light and uplifting.

A strong culture of appreciation defines the team. Milestones, especially birthdays, are thoughtfully celebrated with cakes and treats that bring everyone together and boost morale. Even during the busiest days, there is always room for laughter, shared jokes, and moments of connection. It is this blend of efficiency, warmth, and positive energy that makes the department not just a workplace, but a community we are proud to belong to.

Ms Florence FOO,  
Principal Medical Technologist,  
NUHCS

***"Milestones, especially birthdays, are thoughtfully celebrated with cakes and treats that bring everyone together and boost morale."***



# RESEARCH

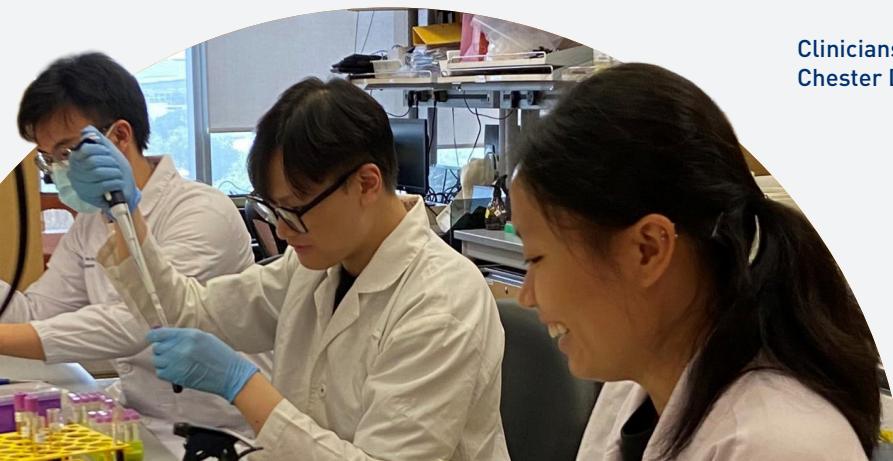
# Cardiovascular Research Institute

The Cardiovascular Research Institute (CVRI) is the research arm dedicated to advancing knowledge and innovation in cardiovascular health. At its core, CVRI drives scientific discovery through research — cultivating curiosity, encouraging critical questioning, and translating findings into meaningful impact for patients and the community. Beyond research, CVRI plays a key role in increasing student engagement, providing opportunities for students to interact with world-class researchers, build confidence, and bridge the gap between laboratory learning and real-world application.

Our CVRI Biobank serves as a vital research resource, housing over 184,000 biological samples (including blood, tissue, urine, and saliva) collected from both patients with cardiovascular disease and healthy individuals across 29 projects. Through collaborative initiatives such as Project RESET — a five-year, government-funded effort involving public healthcare clusters, industry, and community partners — CVRI continues to study and implement better ways to prevent heart disease, heart attacks, and strokes in Singapore's population.

**Prof Roger FOO,**  
Director of Cardiovascular Research Institute,  
NUHCS

**Clinicians:** Prof Roger FOO, A/Prof Mark CHAN, Adj A/Prof Chester DRUM



***“Beyond research, CVRI plays a key role in increasing student engagement, providing opportunities for students to interact with world-class researchers, build confidence, and bridge the gap between laboratory learning and real-world application.”***

# Clinical Trial Unit

The Clinical Trial Unit (CTU) supports the planning, execution, and management of clinical research studies at NUHCS. In 2025, our team of 15 research coordinators partnered closely with investigators, sponsors, collaborators, and institutional stakeholders to advance high-quality cardiovascular research, enabling clinicians to focus on scientific priorities while ensuring full regulatory compliance.

The CTU supported 69 industry-sponsored and investigator-initiated studies across multiple cardiology subspecialties, managing the full research lifecycle from feasibility assessments and regulatory submissions to participant follow-up, data management, safety reporting, and study close-out.

Beyond study delivery, the unit strengthened research operations through standardised workflows, new administrative roles, and facility upgrades. Ongoing mentorship supported staff development and consistent study quality. The team successfully passed sponsor audits and Health Sciences Authority inspections with no major findings. The CTU also fosters a supportive team culture through ongoing staff development, concluding the year with a team review and bonding activities.

**Ms Cher Yi WONG,**  
Director of Clinical Trial Unit and  
Senior Clinical Research Coordinator,  
NUHCS

***“Beyond study delivery, the unit strengthened research operations through standardised workflows, new administrative roles, and facility upgrades.”***



# Translational Research Programme

The Cardiovascular Metabolic Disease (CVMD) Translational Research Programme (TRP) is a leading collaborative network within the NUS School, built on strong partnerships between basic scientists and clinician-scientists. Over the past year, TRP members continued to generate impactful research outcomes and secure competitive grants supporting both clinical and basic cardiovascular research.

Prof Roger Foo's RESET project, which aims to deeply phenotype 3,000 Singaporeans, is progressing well and has already revealed concerning levels of metabolic dysregulation and subclinical atherosclerotic cardiovascular disease in the population. A/Prof Mark Chan serves as co-director of the national CADENCE programme and is leading multi-

centre trials focused on post-acute coronary syndrome care (PASSIVATE) and telehealth-enabled, pharmacist-supported long-term care (AMI-HOPE).

Other TRP investigators have delivered high-impact findings across therapeutic target discovery, bioengineering, technology platforms, and cardiometabolic mechanisms, including fatty liver disease. TRP has also been home to multiple national Talent Awards in recent years.

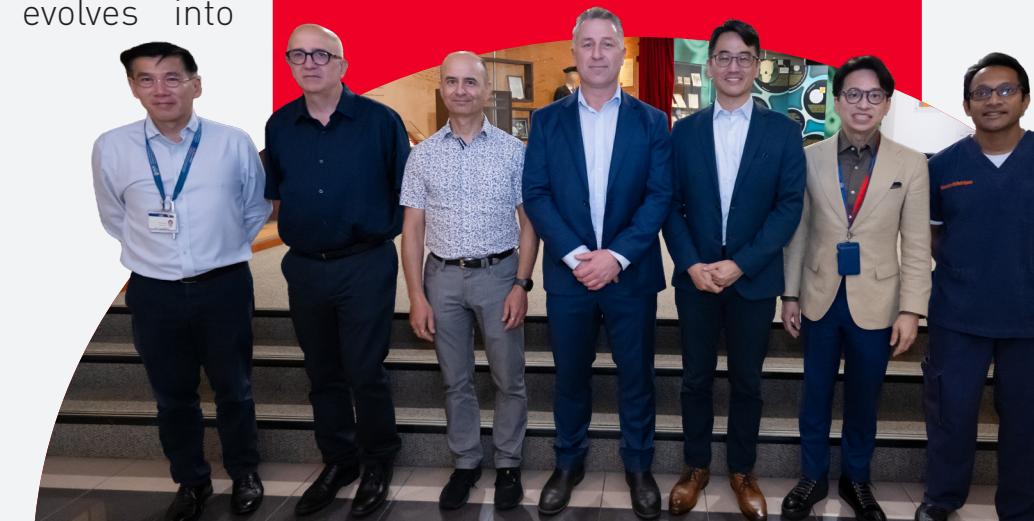
We are deeply grateful to our faculty, researchers, trainees, and administrative teams, and we look forward to continued partnership with NUHCS as TRP evolves into

a comprehensive cardiometabolic research programme focused on multimorbidity.

**A/Prof Hyung Won CHOI,  
Chair of CVMD TRP,  
NUS Yong Loo Lin School of Medicine**

**Clinicians: Prof Roger FOO, A/Prof Mark CHAN,  
A/Prof Hyung Won CHOI**

***“TRP has also been home to multiple national Talent Awards in recent years.”***



# OPERATIONS

# Information Technology Administration

NUHCS Cardiology Informatics, pioneered by A/Prof James Yip, began in 1999 with a single Apple Macintosh G3 server housed beneath the old Cardiac Office Level 3 reception counter. Since then, it has grown into a unified digital ecosystem encompassing Electrocardiogram (ECG) management, medical standard imaging and clinical reporting systems integrated with the electronic medical record.

While much of our work takes place behind the scenes, it plays a crucial role in enabling clinicians to make timely, informed decisions that enhance patient safety and improve clinical outcomes.

Through close collaboration with clinicians, technologists, the central Information Technology (IT) team, and our industry partners, we continually drive improvements in cardiology—advancing system capabilities, optimising workflows, and supporting digital transformation initiatives.

We remain committed to future-proofing cardiology systems that are secure, sustainable, and scalable to evolving clinical needs. Our goal is to ensure that technology works seamlessly and effectively, contributing to better experiences for clinicians and supporting them in delivering the best possible care to our patients.

**Ms Fauziah Binte AZIZI,**  
**Assistant Director (Information Technology),**  
**NUHCS**



# Operations & Administration

We are the heartbeat of the departments—the connective force that brings people, processes, and purpose together. From managing expenditure across clinical care, nursing support, and allied health services to procuring everything from daily consumables to high-value medical equipment, we ensure our clinical teams have the resources they need to deliver exceptional care.

When new clinical service plans are introduced, departments turn to us for support, and we are proud to be the steady hands working behind the scenes.

***“When new clinical service plans are introduced, departments turn to us for support, and we are proud to be the steady hands working behind the scenes.”***

Our communications team plays a key role in amplifying our work through digital platforms and traditional media, while also bringing our mission closer to the community by organising meaningful outreach events that bridge the gap between hospital and heartland.

We believe every staff member should feel valued and connected. Through inclusive events that celebrate our people and strengthen our sense of family, we foster a culture where everyone belongs—because when people feel connected, we all thrive together. I am also delighted to share that thanks to the hard work of the team, our Heart Clinic at Level 1 was awarded the “Clinic of the Year, 2025”. This is the second year in a row that we have won this award. Kudos to the team!

**Mr Teck Chong TAN,  
Assistant Chief Operating Officer,  
NUHCS**



# Research Administration

The NUHCS Research Administration team serves as a compassionate and steadfast partner to our clinician-scientists, providing dedicated support across all aspects of research grant development—regardless of background, seniority, or specialty. We guide investigators through the complexities of the grant process, offering consistent and reliable assistance at every stage.

Together with our NUHCS secretaries and colleagues from clinical operations and communications, we form a unified support network for NUHCS clinician-scientists. We celebrate breakthroughs, quietly shoulder setbacks, and champion potential where others may see obstacles—helping to transform aspirations into funded research that ultimately improves lives.

**Mr Zheng Long TEO,**  
Senior Manager,  
NUHCS

***“We celebrate breakthroughs, quietly shoulder setbacks, and champion potential where others may see obstacles—helping to transform aspirations into funded research that ultimately improves lives.”***



# Editor's Note

Twenty years ago, the Cardiology Department and the Department of Cardiac, Thoracic and Vascular Surgery were relatively small units, housed in modest offices within the Main Building of the National University Hospital. The establishment of the National University Heart Centre, Singapore (NUHCS) in 2008 marked a significant milestone —the creation of a national centre for cardiovascular medicine and surgery in Western Singapore.

Since then, NUHCS has grown into a regionally and globally recognised centre of excellence. Over the years, many internationally renowned clinicians and scientists have contributed to its success.

The idea of publishing this inaugural Yearbook first took root in early 2025. NUHCS is a distinguished institution with nearly 20 years of history. Despite its relatively short existence, the institute has achieved remarkable progress in clinical service, research, and education.

It is therefore timely for us to document these accomplishments in the form of a Yearbook. With the blessing of the NUHCS leadership and unwavering support of our communications team, this has now come to fruition.

We hope it will serve both as a reference for future members of NUHCS and as a memoir for those who have shaped its journey. In line with our commitment to inclusivity and pride in our institution, we have made this Yearbook open access, so that all — Singaporeans and non-Singaporeans alike — may share in the achievements of NUHCS.

I would like to express my sincere appreciation to everyone who has contributed their ideas and articles. In particular, I would like to acknowledge Ms Mindy Neo and Charis Chee for their exceptional support throughout this process.

**Prof Ronald LEE,**  
**Group Director of Clinical Research and**  
**Senior Consultant,**  
**Department of Cardiology,**  
**NUHCS**



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