

REDEFINING MEDICINE, TRANSFORMING HEALTHCARE

"The practice of medicine is an art, not a trade; a calling, not a business; a calling in which your heart will be exercised equally with your head."

– William Osler



The Lee Kong Chian School of Medicine (LKCMedicine) trains doctors who put patients at the centre of their exemplary care. The School, which offers both undergraduate and graduate programmes, is named after local philanthropist Tan Sri Dato Lee Kong Chian. Established in 2010 by Nanyang Technological University, Singapore in partnership with Imperial College London, LKCMedicine aims to be a model for innovative medical education and a centre for transformative research. The School's primary clinical partner is the National Healthcare Group, a leader in public healthcare recognised for the quality of its medical expertise, facilities and teaching.

The School is turning a new chapter in its young history, transitioning to an NTU Medical School, ahead of the 2028 successful conclusion of the NTU-Imperial partnership to set up a Joint Medical School. In August 2024, we welcome our first intake of the NTU MBBS programme, that has been recently enhanced to include themes like precision medicine and Artificial Intelligence (AI) in healthcare, with an expanded scope in the medical humanities. Graduates from the five-year undergraduate medical degree programme will have a strong understanding of the scientific basis of medicine, with an emphasis on technology, data science and the humanities.

OUR VISION

Redefining Medicine, Transforming Healthcare

OUR MISSION We advance the practice and science of medicine through education and research for the good of humanity. Our doctors are whom you and I would like caring for us.

DEAN'S MESSAGE

On 5 August 2013, the Lee Kong Chian School of Medicine (LKCMedicine) warmly welcomed our inaugural cohort of 54 medical students. Our cohort size has since grown exponentially, matriculating about 150 aspiring young doctors yearly, who learn and work with some of the best talents in healthcare and medicine.

Our world-class curriculum that leverages the best of NTU Singapore and our primary clinical partner National Healthcare Group (NHG) equips our students with the knowledge and skills of doctors for tomorrow. As we believe in delivering care with compassion, our students work with patients and learn from our established clinical-educators and researchers.

Alongside this mission to produce doctors who put patients at the centre of their exemplary care, LKCMedicine embarks on transformative research within the walls of its laboratories.

With the support of the Ministry of Education and Ministry of Health; our primary clinical partner, NHG and other healthcare partners; and sister medical schools as well as key research institutes in Singapore, we advance the science of medicine through discoveries and inventions that are of national and global impact.

Our students and faculty explore the boundaries of medical science for better patient management, working towards competent and compassionate delivery of care, as well as breakthroughs and solutions in medicine and healthcare for our population and beyond.

To this end, we are happy to welcome Singapore's brightest students and scientists to join our LKCMedicine family.

Professor Joseph Sung
Dean, LKCMedicine
Senior Vice-President (Health & Life Sciences)
Distinguished University Professor, NTU Singapore

Humility. We serve with humility and appreciate our individual and collective roles towards advancing medicine and transforming healthcare.

#LKCMedicinevalues







THE BEST OF BOTH WORLDS

The Lee Kong Chian School of Medicine (LKCMedicine), when it was first set up jointly in 2010 by Imperial College London and Nanyang Technological University, Singapore, leverages the historic and illustrious legacy in education and research as well as the multidisciplinary innovative strengths of both parent universities. Ahead of the conclusion of our collaboration with Imperial in 2028, we have enhanced our MBBS programme to include themes like precision medicine and Artificial Intelligence (AI) in healthcare, with an expanded scope in the medical humanities. In August 2024, we welcome our first intake of the NTU MBBS programme. Graduates from the LKCMedicine five-year undergraduate medical degree programme will have a strong understanding of the scientific basis of medicine, with an emphasis on technology, data science and the humanities.

"The School has grown at a remarkable rate, with exceptional student cohorts, a distinguished global faculty and world-class facilities designed to inspire a new generation of medical students and facilitate medical discoveries and innovations. As we move forward, my fellow governing board members and I will continue to work closely with the leadership and management of the School for its continued success. Building on the firm foundation laid down by our various stakeholders including benefactors like the Lee Foundation who have generously supported us from the beginning, I am confident that the School will deliver on its mission to produce doctors you and I would like caring for us."

Mr Lim Chuan Poh Chairman, Lee Kong Chian School of Medicine Governing Board

"Since the School was founded in 2010, it has punched above its weight and quickly gained a reputation as a medical school of choice for students, academics, partners, and collaborators from Singapore and other parts of the world. The School has entered into the ranks of the top 100 medical schools according to the QS World University rankings, and our graduates are now serving patients across Singapore with compassion and confidence. I hope you are as excited as I am on this next chapter of the medical school. We have bold ambitions and big ideas. I look forward to achieving them together."

Professor Ho Teck Hua President and Distinguished University Professor Nanyang Technological University, Singapore





OFFERING A WORLD-CLASS MEDICAL EDUCATION

LKCMedicine offers a five-year undergraduate programme leading to a Bachelor of Medicine and Bachelor of Surgery (MBBS) degree, awarded by NTU Singapore. We map students' learning journey clearly across our curriculum, which leverages the strengths of NTU in biomedical sciences, engineering and humanities. Each stage of the curriculum has a different area of focus, with different approaches to teaching and learning.

LKCMedicine Curriculum

YEAR 1

Integrated science in a medical context 1

YEAR 2

Integrated science in a medical context 2

- Team-Based Learning
- Hands-on science practicals
- Regular communication skills training
- Early patient contact

YEAR 3

Core clinical medicine in practice

YEAR 4

Medicine for all stages of life & in diverse settings

YEAR 5

Preparing for practice as a doctor

- Hospitals across
 Singapore
- Core Tutors guide learning
- Campus teaching weeks
- Student-Researcher Immersion Programme
- Scholarly Projects and Electives
- Student
 Assistantship
 Programme

Vertical themes:

- Anatomy and Pathology
- Clinical Pharmacology & Therapeutics
- Digital Health & Precision Medicine
- Clinical Practice & Patient Safety
- Medical Humanities
- Professional Growth
- Professionalism, Ethics, Law & Leadership
- Public & Population Health
- Research & Scientific Enquiry

"Providing a diverse range of sites for clinical postings of our students is crucial for ensuring that they are well trained and attuned to the health challenges faced by Singaporeans. This diversity of exposure also affords our graduating students more options and opportunities in their future careers when they apply for residency training with the healthcare clusters."

Professor Kwek Tong Kiat Vice-Dean, Clinical Affairs "Our goal is to prepare and empower our students for an evolving 21st century healthcare system. We do so by balancing humanism and technology, emphasising the connections between education and the delivery of healthcare. By emphasising patient-centred care and teamwork, scientific rigour, educational and healthcare innovation, LKCMedicine gives the very best opportunities to develop their aptitudes and professional identity."

Professor Jennifer Cleland Vice-Dean, Education

 ${\sf LKCMedicine\ also\ offers\ several\ graduate\ programmes,\ including\ our\ four-year\ PhD\ by\ Research\ programme.}$



MBBS programme



PhD by Research programme



ADVANCING THE SCIENCE OF MEDICINE



The motivation of LKCMedicine's research is to shape future medicine and healthcare through disruptive discoveries and inventions that are of national and global impact.

Accordingly, our research programmes focus on addressing therapeutic priority areas that are relevant both locally and globally. The five key research foci at LKCMedicine are: Neuroscience and Mental Health, Population and Global Health, Respiratory and Infectious Diseases, Nutrition, Metabolism and Health and Skin Diseases and Wound Repair - strategic programmes that directly address Singapore's healthcare challenges of tomorrow, including caring for its rapidly ageing population. Intersecting with these programmes are cross-cutting themes such as Data Science & Artificial Intelligence, Cancer Discovery & Regenerative Medicine and Microbiome Medicine for which we have unique strengths.

We recognise that human health and potential is the product of multi-organ and multi-system interactions, and that diseases occur in a multifaceted manner. We therefore seek to promote cross-talk and synergies

between and among different research themes as well as across different disciplines. Members are often represented in multiple programmes and are engaged in inter-programme and interdisciplinary collaborations (e.g. with engineers) to maximise research interactions and outcomes. Such a holistic "Systems Medicine" approach is a defining feature of LKCMedicine research that represents the key towards realising our vision. Another innovative feature is the strategic positioning of medical education research into our research framework. This effectively bridges biomedical research with medical education, and allows for cross-talk between research and education that is critical for advancing the science and practice of medicine.

LKCMedicine's researchers have access to state-of-the-art platforms and facilities, and work at the centre of national and international networks, delivering world-class science and medicine via collaborative initiatives and Research Centres.

By investing in people, creating the best research environment, and approaching healthcare's most complex translational challenges through focused interdisciplinary research between biomedical and engineering sciences, we undertake transformative science, provide innovative education, and ultimately, change lives for the better.

"At LKCMedicine, we have established an exceptional team of faculty, staff and PhD students, backed by national partners and global alliances to tackle the most pressing challenges in health and healthcare. Our research strategy is driven by a commitment to discovery and innovation, a relentless spirit of inquiry, and strong interdisciplinary collaboration. We are not just aiming to advance health; we are on a mission to transform it."

Associate Professor Sanjay H. Chotirmall Vice Dean (Research)



Underpinning the research strategy is our four-year PhD by Research programme.



LKCMedicine research strategy

ENGAGING HEALTHCARE PARTNERS IN SINGAPORE AND BEYOND

LKCMedicine engages all three regional healthcare clusters in Singapore – our primary clinical partner, National Healthcare Group, Singapore Health Services and National University Health System – to provide a wide range of training sites for our students' Clinical Postings, Selectives and Electives, Scholarly Projects and the Student Assistantship Programme. LKCMedicine also has links with healthcare institutions abroad including in Australia, ASEAN and Asia, the United States, Europe and the United Kingdom, to give our students the opportunities to experience different healthcare environments, and to partner world-class institutions to realise our research goals.



WEST CLUSTER
National University Health System

- General hospitals: National University Hospital, Ng Teng Fong General Hospital, Alexandra Hospital
- Community hospital: Jurong Community Hospital
- Primary care: Bukit Batok Polyclinic, Choa Chu Kang Polyclinic, Clementi Polyclinic, Jurong Polyclinic, Queenstown Polyclinic, Bukit Panjang Polyclinic, Pioneer Polyclinic
- National specialty centres: National University Cancer Institute, Singapore; National University Heart Centre, Singapore; National University Centre for Oral Health, Singapore
- Medical centre: Jurong Medical Centre
- Medical school: Yong Loo Lin School of Medicine, National University Singapore

CENTRAL CLUSTER
National Healthcare Group

- General hospitals: Tan Tock Seng Hospital, Khoo Teck Puat Hospital
- Community hospitals: Yishun Community Hospital, Woodlands Health Campus
- Primary care: Ang Mo Kio Polyclinic, Geylang Polyclinic, Hougang Polyclinic, Toa Payoh Polyclinic, Woodlands Polyclinic, Yishun Polyclinic
- National specialty centres: National Skin Centre, National Centre for Infectious Diseases, Centre for Healthcare Innovation
- **Specialised hospital:** Institute of Mental Health
- Medical centre: Admiralty Medical Centre
- Medical school: Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore

"Alongside our vibrant community of capable and committed students, we have world-class medical researchers coming from around the globe, working alongside clinicians here to tackle common and important diseases. These researchers collaborate closely with our clinicians to address pressing health challenges and common diseases. The field of medicine and health is evolving at an extraordinary pace, making international collaborations more vital than ever. Such partnerships not only enhance our research capabilities but also empower us to tackle significant global challenges in healthcare and medicine."

Associate Professor Yusuf Ali Vice-Dean, International Relations

"Our aim is to develop LKCMedicine students to be the kind of doctors you and I would like caring for us and our families. This highlights the importance of building a community of dedicated and talented researchers, educators, clinicians, and clinician -scientists. Our partners and collaborators in Singapore's vibrant healthcare and research community, as well as across the world, are vital to our strategic mission. We are passionate about recruiting the best talent to join us and fostering their careers at LKCMedicine."

Associate Professor Yasunori Saheki Vice-Dean, Faculty Affairs

EAST CLUSTER Singapore Health Services

- General hospitals: Singapore General Hospital, Changi General Hospital, Sengkang General Hospital
- Community hospitals: Bright Vision Hospital, Outram Community Hospital, Sengkang Community Hospital
- Primary care: Bedok Polyclinic, Bukit Merah Polyclinic, Marine Parade Polyclinic, Outram Polyclinic, Pasir Ris Polyclinic, Sengkang Polyclinic, Tampines Polyclinic, Punggol Polyclinic
- National specialty centre: National Cancer Centre Singapore, National Dental Centre Singapore, National Heart Centre, National Neuroscience Institute, Singapore National Eye Centre
- **Specialised hospital:** KK Women's and Children's Hospital
- Medical school: Duke-NUS Medical School



MAXIMISING A STATE-OF-THE-ART DUAL CAMPUS

LKCMedicine's dual campus is a 21st-century purpose-built and sustainable medical campus with learner-centred facilities that support a vibrant student life as well as advanced facilities for world-class research. The facilities are designed to promote collaborative learning and interaction among staff, students and researchers, while advancing research collaborations across groups.

The campus' key facilities include learning studios, seminar rooms and alcove clusters, facilitating Team-Based Learning (TBL). Teaching and research laboratories as well as a host of recreational facilities complement the teaching and learning that take place at the School's partner healthcare sites. Together they support the School's integrated curriculum and its pedagogy, using small-and large-group interactive seminars, TBL, extensive use of eLearning and clinical simulation.

- 1. Clinical Sciences Building (CSB) and LKCMedicine Headquarters
 - Located at the heart of HealthCity Novena
- 2. LKCMedicine Headquarters, Toh Kian Chui Annex
- 3. Experimental Medicine Building
 - At NTU's Main Campus in Jurong West
- 4. Learning Studio at CSB
- 5. Medical Library
- 6. Gym
- 7. Research Labs
- 8. Anatomy Learning Centre
- 9. Anatomy Research Centre
- 10. Practical Skills Lab
- 11. Simulated Ward
- 12. Ong Tiong Tat and Irene Tan Liang Kheng Auditorium
- 13. Communication Suite

LKCMedicine also hosts these specialised translational research centres.

- Centre of Al in Medicine (CAIM)
- Brain Bank Singapore
- Cogitive Neuroimaging Centre (CONIC)
- Primary Care and Family Medicine (PCFM)
- Centre for Primary Health Care Research & Innovation (CPHCRI)
- Singapore Primary Care Research and Knowledge Network (SPARK)
- gAmes for heaLth InnoVations cEntre (ALIVE)
- Health for Life in Singapore Study (HELIOS)
- Medical Education Research & Scholarship Unit (MERSU)
- TARIPH Centre for Respiratory Research Excellence
- Singapore Phenome Centre (SPC)
- Centre for Biomedical Informatics (CBI)
- Dementia Research Centre (Singapore)
- Centre for Microbiome Medicine (CMM)
- Academy of Clinician Scientists and Innovators (ACSI)





BUILDING A LEGACY OF GIVING

Even before admitting our first cohort, LKCMedicine has been extremely privileged to be the beneficiary of great generosity. In January 2011, the Lee Foundation made a landmark gift of \$150 million to the School. In recognition, the School was named Lee Kong Chian School of Medicine, after the founder of the Lee Foundation, renowned business tycoon and philanthropist Tan Sri Dato Lee Kong Chian (1893 – 1967). Today, the Lee Foundation is recognised as one of the path-breakers in philanthropy in Singapore.

Other benefactors include the Toh Kian Chui Foundation which made a gift of \$20 million to establish a Distinguished Professorship, an undergraduate student scholarship and a top student gold medal as well as to further education and research at LKCMedicine; and the E I Parrish Trust which made a \$1.96 million gift to establish a bursary to benefit medical students with financial needs. In August 2018, LKCMedicine received an \$11 million gift from the Estate of Irene Tan Liang Kheng to set up an endowment fund, known as the Irene Tan Liang Kheng Memorial Fund, to further medical education and research in healthcare.

Our benefactors' giving allows us to ensure that our students can pursue a quality medical education and training, and our faculty can engage in cutting-edge transformative research, with the potential to impact medicine and healthcare in Singapore and the rest of the world.

Every gift adds to the depth and breadth of education and research at LKCMedicine.

Forms of support include:

- Distinguished Professorships
- Chair Professorships
- Postdoctoral Fellowships
- Undergraduate Student Scholarships
- Graduate Student Scholarships
- Medals and Prizes

Some gifts have the privilege of a naming opportunity. In making the gift, the donor can also honour the name or memory of a family member, friend, mentor or corporation in a meaningful way. For every \$1 contributed, donors are entitled to \$2.50 in tax exemption and every dollar given will be matched one-for-one by the Singapore Government.

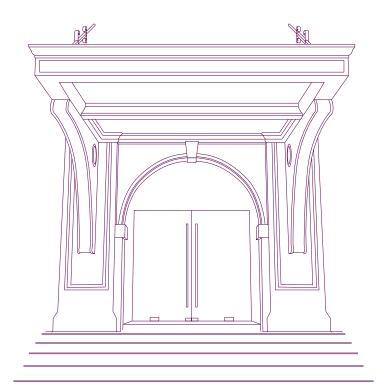
Be a part of our legacy of giving.

THE LEE KONG CHIAN SCHOOL OF MEDICINE LOGO

With its refreshed identity as an NTU medical school, LKCMedicine has evolved its logo, inspired by both our heritage and our way forward in shaping the future of medicine and healthcare.

The NTU logo and LKCMedicine polygon are linked by the forward slash, a coding character synonymous with technology, representing dynamism, drive, and progress. It reflects our global outlook and proactive pursuit of collaborations in education and research to enrich our offerings and broaden the horizons of our students and researchers.

In recognising the School's origins, the original identity's purple colour is retained - a blend of Imperial College's blue and NTU's red. The LKCMedicine polygon is adapted from the DNA double helix - which had shaped our original logo - symbolising the synergies between medicine and technology, which can lead to new paradigms to redefine medicine and transform healthcare.



Georgian-style buildings tended to have hooded porches, or doors with projected pediments or decorative crowns resting on pilasters. Here, the flat-hooded porch is a simpler version of Georgian hooded porches, with an added short flight of stairs to access the recessed door.

The front cover also features a part of the hooded porch.

Headquarters and Clinical Sciences Building

Novena Campus 11 Mandalay Road Singapore 308232

Experimental Medicine Building

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