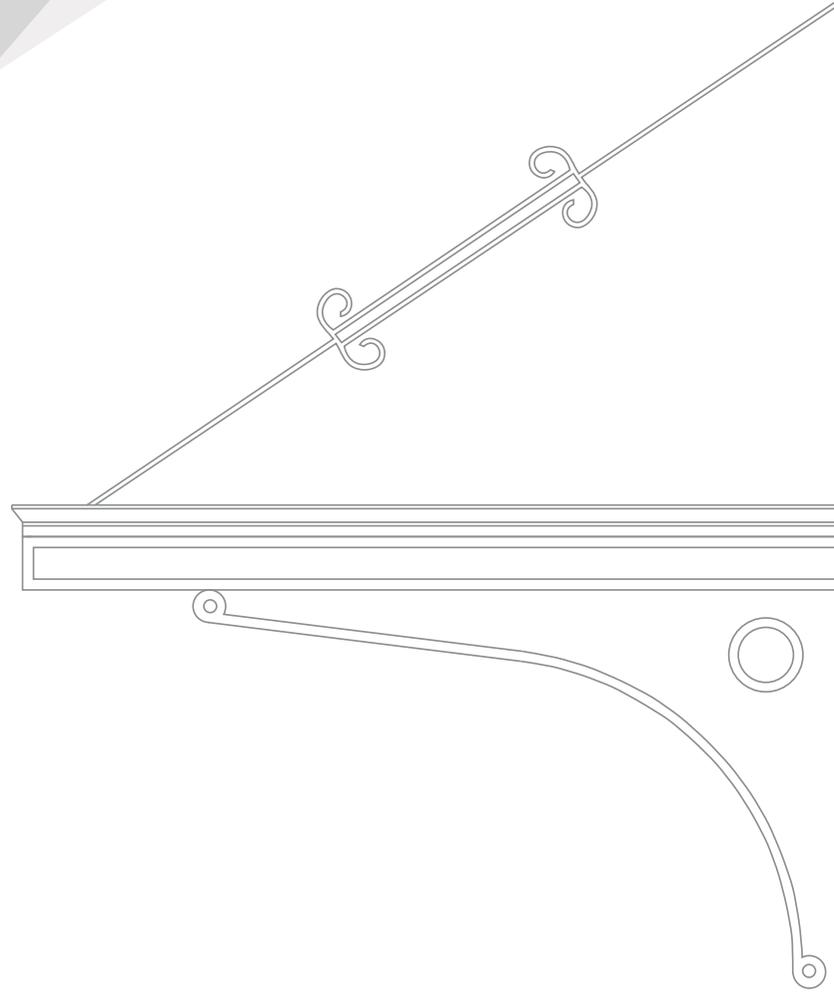


LEE KONG CHIAN
SCHOOL OF
MEDICINE



Imperial College
London



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), a partnership between Nanyang Technological University, Singapore (NTU Singapore) and Imperial College London (Imperial), is training a generation of doctors who will put patients at the centre of their exemplary medical care. 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, named after local philanthropist Tan Sri Dato Lee Kong Chian, was officially opened on 28 August 2017 by Deputy Prime Minister Mr Teo Chee Hean. LKCMedicine aims to be a model for innovative medical education and a centre for transformative research.

Graduates of the five-year undergraduate medical degree programme that started in 2013 will have a strong understanding of the scientific basis of medicine, along with interdisciplinary subjects, including technology, data science and the humanities. Its first doctors graduated in 2018 with a Bachelor of Medicine and Bachelor of Surgery (MBBS), awarded jointly by NTU and Imperial.

OUR VISION

Redefining Medicine, Transforming Healthcare

OUR MISSION

Equipping doctors who advance the science and practice of medicine for the good of humanity. The doctors you and I would like to have 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.

We developed an innovative hi-tech, hi-touch curriculum that combines the best of our parent universities, Nanyang Technological University, Singapore, and Imperial College London – leveraging the strengths of NTU in engineering, biomedical research, and the humanities, and Imperial's top-ranked medical curriculum. Our graduates receive a MBBS degree jointly awarded by both world-class universities.

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, the National Healthcare Group 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 faculties 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), a joint medical school 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. LKCMedicine combines the best of both worlds to fulfil its mission to produce doctors who redefine medicine and transform healthcare, and research that will improve the health of future generations.

“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

“Developing Singapore’s newest medical school with NTU is a great honour for Imperial, and extends the deep links we have held with the country since its founding. Imperial and NTU share the goal of applying science, engineering and medicine to help us innovate in healthcare and improve the quality of life for our patients. Educating generations of Singapore doctors within this approach, and focusing on their service to and compassion for their patients, will create a profound legacy in LKCMedicine that shall be measured across decades and centuries.”

Professor Alice P. Gast
President, Imperial College London

“The future of healthcare will be shaped by new and exciting technologies at the intersections of engineering, the sciences, medicine and population health. Tapping into the strengths of two renowned universities – NTU and Imperial – LKCMedicine brings together the best of East and West to address the global challenges of health and ageing. We are also proud to pioneer new pedagogies in medical education that give graduates broad perspectives on contemporary practice. This is achieved by integrating the science of medicine with patient-centred care and deep understanding of engineering and humanities. Our future-ready doctors and leaders at the forefront of research excellence in medicine will enhance the quality of health and medical care for Singaporeans for years to come.”

Professor Subra Suresh
President and Distinguished University
Professor,
Nanyang Technological University,
Singapore



Continuous Learning. We commit ourselves to continuous learning, innovation and improvement for the advancement of healthcare in Singapore and beyond.

#LKCMedicinevalues

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 jointly by Imperial and NTU Singapore. We map students' learning journey clearly across our curriculum, which draws extensively from the world-renowned medical curriculum of Imperial and 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	<ul style="list-style-type: none"> • Team-Based Learning • Hands-on science practicals
YEAR 2 Integrated science in a medical context 2	<ul style="list-style-type: none"> • Regular communication skills training • Early patient contact
YEAR 3 Core clinical medicine in practice	<ul style="list-style-type: none"> • Hospitals across Singapore • Core Tutors guide learning • Campus teaching weeks • Scholarly Projects and Electives • Student Assistantship Programme
YEAR 4 Medicine for all stages of life & in diverse settings	
YEAR 5 Preparing for practice as a doctor	

"A diverse range of clinical sites is crucial for the training of medical students. Apart from adding diversity in teaching and training, exposure to other training sites will allow our graduating students to have more options for future careers including Residency training."

Professor Pang Weng Sun
Vice-Dean, Clinical Affairs

"We prepare our students for the challenges of modern medical practice across the spectrum of medical careers, with an emphasis on patient-centred care, teamwork, scientific rigour and technological innovation. I am delighted to see LKCmedicine giving our students the very best opportunities to develop their talents."

Professor Naomi Low-Ber
Vice-Dean, Education

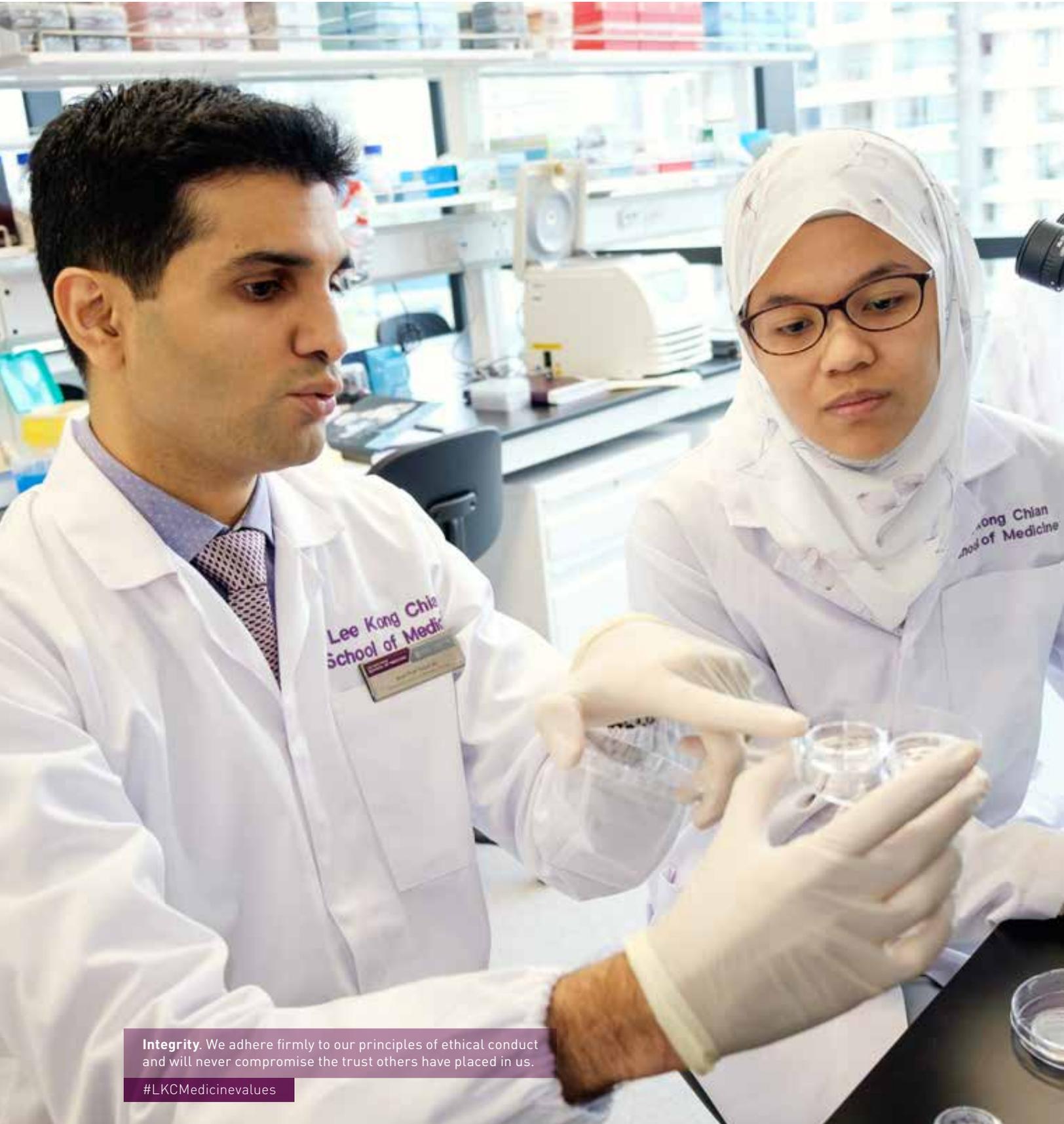
LKCmedicine also offers a one-year Graduate Diploma in Sports Medicine, created in partnership with Changi General Hospital's Department of Sports Medicine.



MBBS
programme



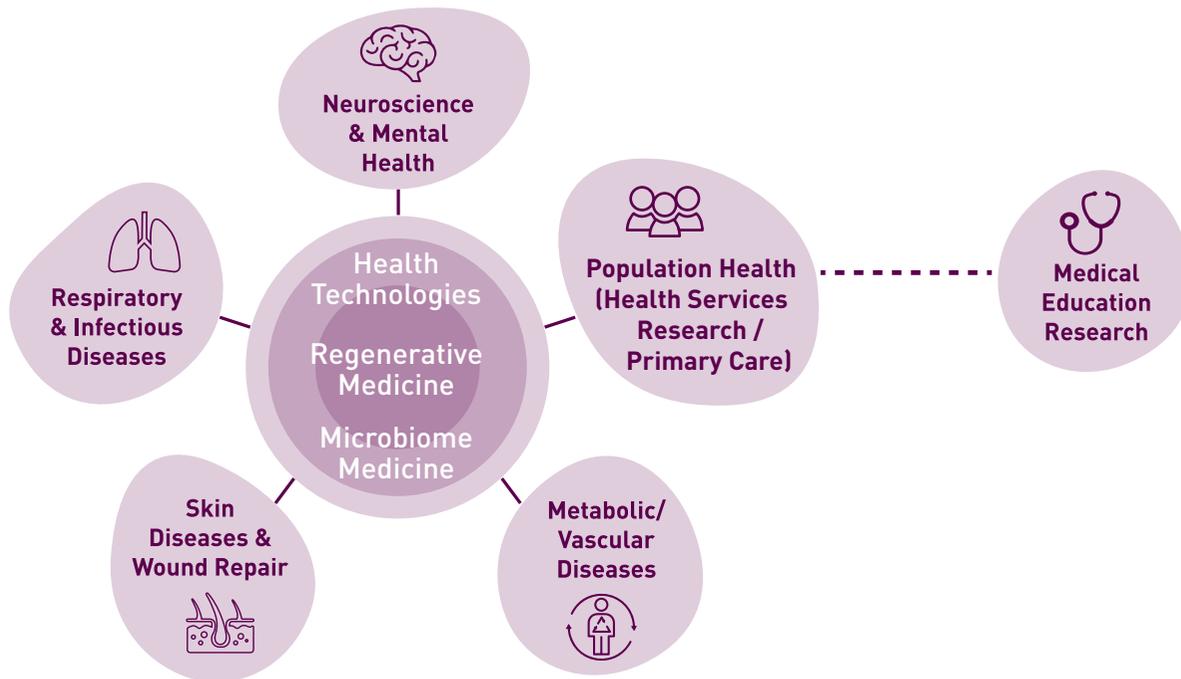
GDSM
programme



Integrity. We adhere firmly to our principles of ethical conduct and will never compromise the trust others have placed in us.

#LKCMedicinevalues

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 Health, Respiratory and Infectious Diseases, Vascular/ Metabolic Diseases 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 Health Technologies, Developmental Biology & 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 inter-disciplinary 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.

“We are building a strong team at LKCMedicine peopled by talented faculty and staff, as well as PhD students, and establishing links with global partners looking to solve complex problems in health and healthcare. Our research strategy promotes and thrives on innovation and interdisciplinary collaborations and it is our goal to improve and advance health.”

Professor Lim Kah Leong
Vice-Dean, Research



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



LKCMedicine research strategy

ESTABLISHING THE LEE KONG CHIAN SCHOOL OF MEDICINE

DECEMBER

Ministry of Education (MOE), Singapore, commissions an international panel to conduct a review of medical education in Singapore.

MAY

NTU commences discussion with Imperial College London on the possibility of establishing a joint medical school in Singapore.

JANUARY

Lee Foundation announces a landmark gift of \$150 million to the new medical school. In recognition, the School is named Lee Kong Chian School of Medicine.

FEBRUARY

The School occupies its first interim office at NTU's Block N2.

JUNE

LKCMedicine Protem Governing Board holds first advance, under Chairman Lim Chuan Poh.

OCTOBER

First External Review of MBBS Curriculum successfully completes.

APRIL

LKCMedicine moves into its restored conservation Headquarters Building at 11 Mandalay Road.

AUGUST

LKCMedicine admits its inaugural intake of 54 undergraduate students.

2001

2004-2009

2009

2010

2011

2012

2013

NTU builds up its science and research capabilities with the launch of the Chemical & Biomolecular Engineering programme in 2004; School of Biological Sciences in 2005; and School of Physical & Mathematical Sciences in 2009.

AUGUST

In his National Day Rally Speech, Prime Minister Lee Hsien Loong announces that Singapore's new medical school will be a tie-up between NTU and Imperial. National Healthcare Group (NHG) is identified as primary clinical partner with Tan Tock Seng Hospital providing the main clinical teaching venue.

OCTOBER

NTU and Imperial sign the Collaboration Agreement to establish Singapore's newest medical school.

MAY

Groundbreaking Ceremony of LKCMedicine's Novena Campus at 11 Mandalay Road, officiated by the Ministers for Health and Education.

DECEMBER

Toh Kian Chui Foundation donates \$20 million to LKCMedicine. In recognition, the Annex at LKCMedicine's Headquarters Building in Novena is named Toh Kian Chui Annex.

JANUARY

Foundation Stone Laying Ceremony of LKCMedicine's Experimental Medicine Building and Clinical Sciences Building is held. President of the Republic of Singapore Dr Tony Tan Keng Yam graced the event as Guest-of-Honour.

AUGUST

LKCMedicine moves into the newly completed Experimental Medicine Building at NTU's Main Campus and launches SG50 tribute exhibition "Humanity in Medicine".

DECEMBER

LKCMedicine celebrates its fifth-year anniversary.

MAY

MBBS Programme's Second Stage Review successfully completes.

AUGUST

Official Opening of LKCMedicine by Deputy Prime Minister Teo Chee Hean.

NOVEMBER

Launch of LKCMedicine inaugural signature conference - FutureHealth 2017 - by Health Minister Mr Gan Kim Yong.

FEBRUARY

Opening of the LKCMedicine Alumni Lounge by Professor Alan Chan, Vice President, Alumni & Advancement, NTU Singapore.

JULY

Centre for Population Health Sciences (CePHaS), hosted by LKCMedicine designated as World Health Organization's first Collaborating Centre for digital health and education.

AUGUST

LKCMedicine celebrates the graduation of the Graduate Diploma in Sports Medicine programme's inaugural cohort.

NOVEMBER

Opening of Brain Bank Singapore.

2014

2015

2016

2017

2018

2019

FEBRUARY

LKCMedicine's integrated research strategy to address Singapore's key health challenges is unveiled.

JULY

Former Head of University of Melbourne's Medical School, Professor James Best is appointed 1st Resident Dean of LKCMedicine.

AUGUST

Tree-planting ceremony to honour the contributions of President of NTU Singapore Professor Bertil Andersson and President of Imperial College London Professor Sir Keith O'Nions.

JANUARY

LKCMedicine welcomes its inaugural cohort of four PhD students enrolled in the LKCMedicine PhD by Research programme.

AUGUST

Apollo's Dream artwork by LKCMedicine's inaugural cohort is unveiled.

NOVEMBER

LKCMedicine celebrates the move to the brand-new Clinical Sciences Building at the Novena Campus.

JANUARY

Professor Subra Suresh is appointed as the 4th NTU President.

MARCH

LKCMedicine welcomes its inaugural cohort of 20 doctors enrolled in the LKCMedicine Graduate Diploma in Sports Medicine programme.

APRIL

Inaugural cohort successfully completes the five-year MBBS programme.

MAY

Opening of the LKCMedicine Heritage Centre.

JUNE

Opening of the Population and Community Health Laboratories to advance the prevention and treatment of the most pressing diseases affecting Singaporeans, by Senior Minister of State for Health and Environment & Water Resources Dr Amy Khor.

JULY

Convocation ceremony of the Class of 2018, first graduates of LKCMedicine.

AUGUST

LKCMedicine receives \$11 million gift from the Estate of Irene Tan Liang Kheng to further medical education and research in healthcare.

NOVEMBER

Launch of joint LKCMedicine - Imperial's inaugural signature medical education conference - Transform MedEd.

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.

“The training of LKCmedicine students to be doctors you and I would like caring for us and our families calls upon the professionalism of our partners and collaborators in the healthcare community who form a vital part of the teaching faculty as adjunct and visiting professors and lecturers.”

Professor Michael Ferenczi
Vice-Dean, Faculty Affairs



WEST CLUSTER National University Health System

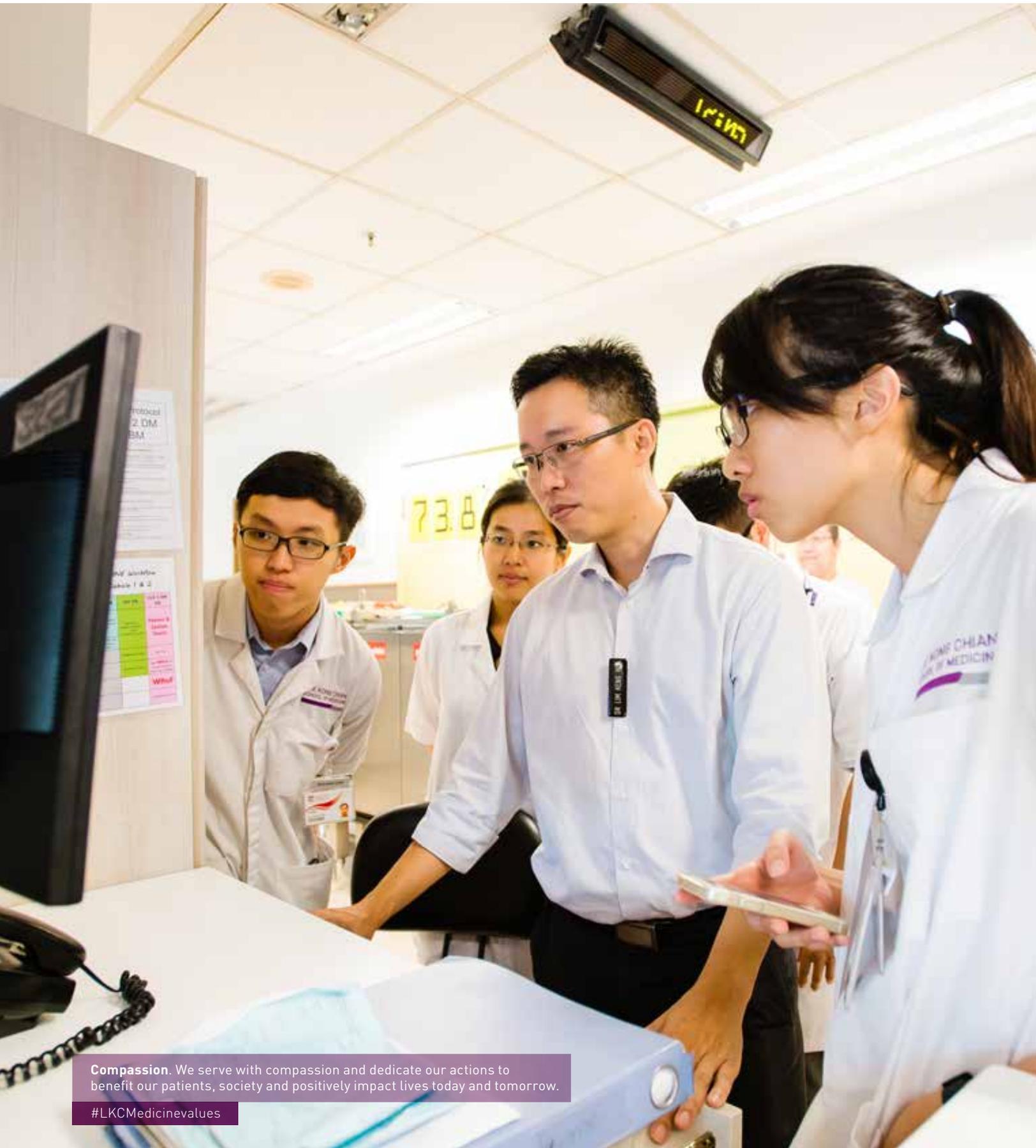
- **General hospitals:** National University Hospital, Ng Teng Fong General Hospital, Alexandra Hospital
- **Community hospital:** Jurong Community Hospital
- **Primary care:** Bukit Batok Polyclinic, Choa Chu Kang Polyclinic, Clementi Polyclinic, Jurong Polyclinic, Queenstown Polyclinic, Bukit Panjang 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

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



Compassion. We serve with compassion and dedicate our actions to benefit our patients, society and positively impact lives today and tomorrow.

#LKCMedicinevalues

MAXIMISING A STATE-OF-THE-ART DUAL CAMPUS

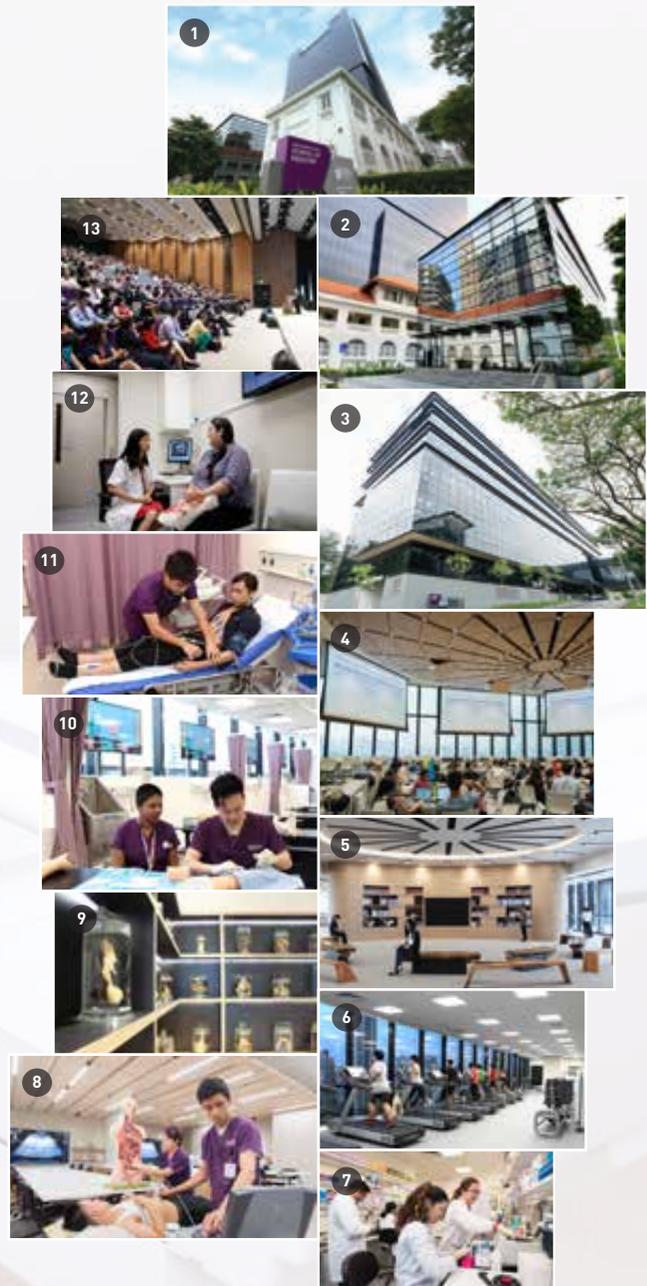
LKCMedicine's dual campus is a 21st-century purpose-built and sustainable medical campus with learner-centred facilities that support a vibrant student life as well as advanced facilities for world-class research. The facilities are designed to promote collaborative learning and interaction among staff, 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 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. Communication Suite
13. Ong Tiong Tat and Irene Tan Liang Kheng Auditorium

LKCMedicine also hosts these specialised translational research centres.

- Brain Bank Singapore
- Centre for Population Health Sciences (CePHaS)
- Cognitive Neuroimaging Centre (CoNiC)
- Family Medicine & Primary Care (FMPC)
 - Centre for Primary Health Care Research & Innovation (CPHCRI)
 - Primary Care Research Network (pcRn)
- gAmes for HeaLth InnoVations CentrE (ALIVE)
- Health for Life in Singapore Study (HELIOS)
- Medical Education Research & Scholarship Unit (MERSU)
- Singapore Phenome Centre (SPC)
- The Academic Respiratory Initiative for Pulmonary Health (TARIPH)
- World Health Organization Collaborating Centre for Digital Health & Health Education (sited at CePHaS)





Professionalism. We perform to the highest standards and seek excellence in the science and practice of medicine.

#LKCMedicinevalues

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

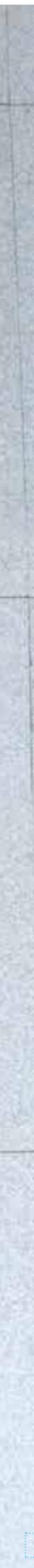
Some gifts have the privilege of a naming opportunity. In making the gift, the donor can also honour the name or memory of a family member, friend, mentor or corporation in a meaningful way. For every \$1 contributed, donors are entitled to \$2.50 in tax exemption and every dollar given will be matched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

Be a part of our legacy of giving. To explore giving to LKCMedicine, please reach out to us via suzanne.lim@ntu.edu.sg or +65 6592 1784.



THE LEE KONG CHIAN SCHOOL OF MEDICINE LOGO

Partnerships that move the future is the concept behind the shape of the logo which is inspired by the DNA helix. The logo depicts two polygons clasped together, akin to a handshake, an interlocking structure that supports and creates a new whole. Our logo celebrates vibrant confluence at several levels: the meaningful partnership between our two parent universities – NTU and Imperial, the synergy between teacher and student as well as doctor and patient, and the deeper affinity with humanity. The logo is swathed in 'Synergy Purple' and 'Noble Grey', exuberating LKCMedicine's passion to transform the landscape of healthcare. Born from the union of the NTU red and Imperial blue, Synergy Purple celebrates LKCMedicine's parentage while exuding a fresh dynamism of its own. Noble Grey is stately, practical and timeless. It represents the noble traditions and values of the medical profession, the solid foundation upon which LKCMedicine builds, in its quest to change the future of healthcare. With its energetic colour combination and fluid angular shape, as a whole the logo strides forward with momentum, connoting transformation and progress.

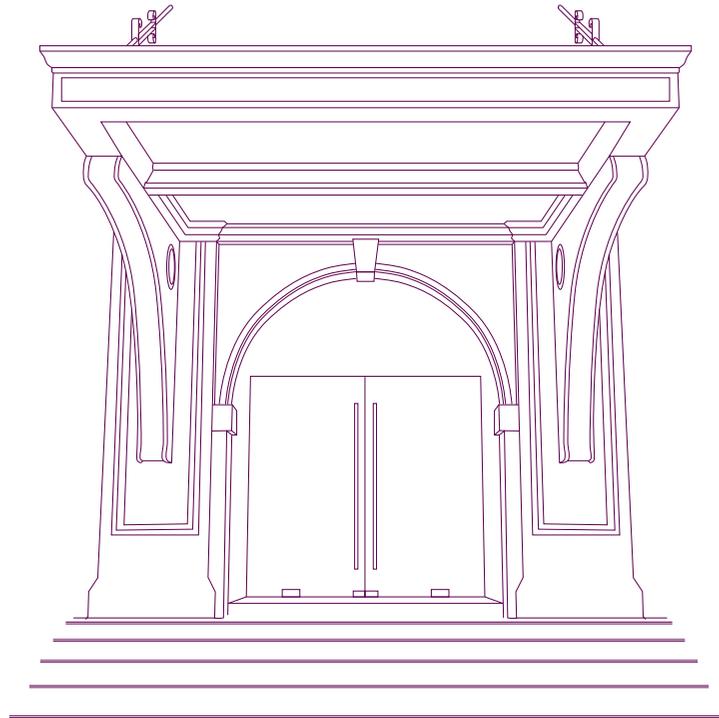


LEE KONG CHIAN
SCHOOL OF
MEDICINE



NANYANG
TECHNOLOGICAL
UNIVERSITY
SINGAPORE

Imperial College
London



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.

Lee Kong Chian
School of Medicine

**Headquarters and
Clinical Sciences Building**

Novena Campus
11 Mandalay Road
Singapore 308232

Experimental Medicine Building

Nanyang Technological University, Singapore
Yunnan Garden Campus
59 Nanyang Drive
Singapore 636921

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Website: www.lkcmedicine.ntu.edu.sg

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