

PRESIDENT'S SCIENCE & TECHNOLOGY MEDAL 2025

Tan Eng Chye

President, National University of Singapore

“For his transformative contributions in advancing Singapore’s research and innovation landscape through interdisciplinary education, international partnerships, deep tech innovation and ecosystem building; and for nurturing future leaders and elevating Singapore’s global standing in science and technology.”

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Professor Tan Eng Chye has dedicated his entire career to driving science and technology (S&T) research, through spearheading innovative initiatives, fostering international collaborations and nurturing critical talent in this field.

This lifelong commitment culminated in his appointment as President of NUS, where he astutely steered academic units to raise their standards in recruitment, talent development and research to world-class excellence. His foresight played a critical role in NUS’s strong performance in recent global university rankings, ranking among the world’s top 10 in S&T disciplines, including Chemistry, Data Science and AI. In education, Prof Tan instituted far-reaching reforms that have shaped S&T education in Singapore. Recognising the need for graduates with broad perspectives and technical depth, he led NUS to evolve from a disciplinary model towards one that is flexible, interdisciplinary and integrative. This is exemplified by the curricula of the College of Humanities and Sciences, College of Design and Engineering, and NUS College. A common curriculum now underpins flexible pathways, with foundations in data literacy, critical thinking, and 21st-century skills such as AI and computational thinking. This model prepares the next generation of scientists, engineers and graduates to think critically and across disciplines, remain agile in learning, and apply global and regional perspectives.

With an eye for talent, Prof Tan pioneered and developed schemes to recruit and nurture scientific talent for Singapore. This included, bringing in eminent scientists to lead programmes in strategic areas and appointing outstanding directors to helm the Research Centres of Excellence (RCEs) at NUS. Under their leadership, the RCEs advanced strong research programmes and trained a pool of S&T PhD talent, boosting Singapore's capabilities in quantum technologies, mechanobiology and intelligent materials.

With a consistent focus on nurturing Singaporean talent, Professor Tan also championed programmes such as the NUS Overseas Graduate Scholarships and Overseas Postdoctoral Fellowships to cultivate future academic leaders. He spearheaded the Presidential Young Professorship scheme, which has, to date, been awarded to nearly 120 individuals who are leading pioneering work across diverse fields, strengthening Singapore's research ecosystem.

Under Prof Tan's stewardship, translational research and research commercialisation took off strongly. In 2018, NUS launched the Graduate Research Innovation Programme (GRIP) to transform NUS technologies into investible, scalable deep tech startups. To date, 177 teams have been trained, and GRIP start-ups have attracted some S\$70 million in external investments. Collaborating with the Nanyang Technological University (NTU) and with funding support from the National Research Foundation (NRF), NUS further established the National GRIP, which aims to train up to 300 start-up teams by 2028 and nurture more than 150 spin-offs by 2030.

Prof Tan also strengthened NUS' global engagement, with a special focus on Southeast Asia. He expanded education, research and enterprise collaborations by fostering connections among university leadership, academics, entrepreneurs, industry and students. NUS Overseas Colleges and BLOCK71 accelerators grew to new locations in the region. NUS' S&T collaborations with global partners also deepened, including CREATE programmes with top institutions and joint university-wide research partnerships with 14 leading universities in North America and Europe. In Asia, Prof Tan

set up four research institutes in China, creating opportunities for joint research, education, and new market entry for NUS start-ups.

Beyond NUS, Prof Tan has played a central role in shaping Singapore's S&T ecosystem, serving in leadership capacities across national institutions, including the National Research Foundation, Economic Development Board, National University Health System, NUS High School of Mathematics and Science, A*STAR, Defence Science and Technology Agency, and Defence Science Organisation.

With his visionary leadership and foresight, Prof Tan has been pivotal in advancing Singapore's research and innovation landscape and placing Singapore's S&T capabilities and achievements firmly on the world map.

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