JOINT NEWS RELEASE

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NTU and NUS renew commitment to share high-value research facilities to advance scientific research in Singapore

To push the frontiers of scientific research in Singapore, **Nanyang Technological University, Singapore (NTU Singapore)** and the **National University of Singapore (NUS)** are renewing their commitment to share high-value research equipment and facilities.

Providing scientists from both universities with access to cutting-edge, multi-million dollar research infrastructure at NTU Singapore and NUS will foster deeper collaboration, enabling more joint research projects, co-authored publications, and stronger funding opportunities.

Such partnerships strengthen institutional ties and promote a culture of knowledge sharing. They broaden training and development by equipping students and researchers with specialised tools and cross-institutional expertise. This leads to higher-quality research, faster innovation, and more effective industry engagement.

NTU President Professor Ho Teck Hua said: “As Singapore’s two largest universities, NTU and NUS compete on the global stage. By partnering with each other through shared research facilities, we are better positioned to enhance Singapore’s standing in global research.”

“Sharing high-end equipment empowers our scientists to increase the impactful research they do, fosters deeper research collaborations, and encourages mutual learning. It also helps us maximise efficiencies in utilising research infrastructure,” added Prof Ho.

In 2025, the Republic ranks No. 16 for its share of top research globally in the Nature Index, which tracks contributions to research articles published in high-quality natural-science and health-science journals.

NUS President Professor Tan Eng Chye said: “This is an excellent win-win partnership between NUS and NTU which serves as a force multiplier in amplifying our research capabilities and accelerating discoveries with greater scale and impact.

Both universities hold complementary strengths in talent, innovation and infrastructure. By combining critical resources and expertise, we will be in a stronger place to accelerate scientific breakthroughs and drive real-world impact locally and internationally. Researchers from both universities are currently collaborating extensively on a wide variety of projects, and we are excited to see these efforts grow even further and champion new solutions to complex challenges."

High-end equipment in NTU available to NUS scientists includes an ultra-powerful microscope, called an **aberration-corrected transmission electron microscope** with energy dispersive X-ray spectroscopy, electron energy loss spectroscopy, and holography capabilities.

It allows researchers to clearly see single columns of atoms in a material at high resolution, identify what elements it is made of, understand the properties of the bonds between the atoms, and visualise the invisible electric and magnetic fields around them. With the microscope, scientists can study materials to make better quantum computers, design more effective nanoparticles for medical diagnoses and drug treatment, as well as develop novel materials for construction and manufacturing.

At NUS, NTU researchers can access advanced tools such as the **Invizo 6000 3D Atom Probe microscope** – one of seven in the world and the first in ASEAN – which allows 3D imaging and chemical analysis of materials at the atomic level. The equipment allows atom probe tomography to be carried out, which is especially useful for studying how elements are distributed in semiconductor devices, the structure of advanced alloys, and how atoms move in energy materials used in batteries and fuel cells. Its high precision makes it a key tool for developing next-generation materials and devices.

The sharing arrangement builds on existing research and innovation partnerships between NTU and NUS, including jointly leading research for the Sustainable Tropical Data Centre Testbed, the world's first testbed in the tropics to advance energy-efficient data centre cooling solutions.

The two universities, together with global investment company Temasek, have also embarked on a joint pilot programme to accelerate the creation of successful deep-tech start-ups from the pipeline of research at NTU and NUS.

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About Nanyang Technological University, Singapore

A research-intensive public university, Nanyang Technological University, Singapore (NTU Singapore) has 35,000 undergraduate and postgraduate students in the Business, Computing & Data Science, Engineering, Humanities, Arts, & Social Sciences, Medicine, Science, and Graduate colleges.

NTU is also home to world-renowned autonomous institutes – the National Institute of Education, S Rajaratnam School of International Studies and Singapore Centre for Environmental Life Sciences Engineering – and various leading research centres such as the Earth Observatory of Singapore, Nanyang Environment & Water Research Institute and Energy Research Institute @ NTU (ERI@N).

Under the NTU Smart Campus vision, the University harnesses the power of digital technology and tech-enabled solutions to support better learning and living experiences, the discovery of new knowledge, and the sustainability of resources.

Ranked amongst the world's top universities, the University's main campus is also frequently listed among the world's most beautiful. Known for its sustainability, NTU has achieved 100% Green Mark Platinum certification for all its eligible building projects. Apart from its main campus, NTU also has a medical campus in Novena, Singapore's healthcare district.

For more information, visit www.ntu.edu.sg

About National University of Singapore

The National University of Singapore (NUS) is Singapore's flagship university, which offers a global approach to education, research and entrepreneurship, with a focus on Asian perspectives and expertise. We have 15 colleges, faculties and schools across three campuses in Singapore, with more than 40,000 students from 100 countries enriching our vibrant and diverse campus community. We have also established more than 20 NUS Overseas Colleges entrepreneurial hubs around the world.

Our multidisciplinary and real-world approach to education, research and entrepreneurship enables us to work closely with industry, governments and academia to address crucial and complex issues relevant to Asia and the world. Researchers in our faculties, research centres of excellence, corporate labs and more than 30

university-level research institutes focus on themes that include energy; environmental and urban sustainability; treatment and prevention of diseases; active ageing; advanced materials; risk management and resilience of financial systems; Asian studies; and Smart Nation capabilities such as artificial intelligence, data science, operations research and cybersecurity.

For more information on NUS, please visit nus.edu.sg.

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