NTU Research Momentum

44% publications in the Top 10% most impactful journals in given fields
4,149 collaborating institutions from all sectors
39,351 publications

1,867 Valid Patents
505 Technology Transfers
14 University Spin-offs in 2018-2019 (estimated)
5 Consortia of Key Technologies

11 Colleges + 56 Departments + 112 Graduate Institutes

> 2,200 academic staff
> 16,000 bachelor’s students
> 11,000 master’s students
> 3,600 doctoral students

Office of Research and Development
ord.ntu.edu.tw/en/
Integrating multiple omic approaches to comprehend in depth mechanisms and therapeutic strategies of three clinical unmet needs: infectious diseases, stress medicine, and cancers.

Scrutinizing data sets from public and private sectors to analyze Taiwan's public policies and to provide strategic foresight that outlines tangible solutions to real-life problems.

Integrating knowledge and technology in geosciences, environmental engineering, humanities, and social sciences to amplify research capacity in sustainability science and to tackle global environmental challenges.

Encompassing materials growth by atomic design, expert system for atomic-material characterizations, and atomic/molecular functionalization, altogether aiming at new materials from Taiwan.

Developing core technologies, including renewable and recycled materials, green energy materials, and green electronic processes.

Applying AI theories on robotics, modern engineering, biomedicine and cognitive science, to develop new technologies that enhance human health and welfare.

Building up a big data center for efficient storage and management to guide policy-making of integrated precision public health service system.

Aiming at developing and integrating multidisciplinary technologies to improve healthcare quality and to address critical issues in the environment.

19 out of 22 Research Fields Ranked Top 1% by Essential Science Indicators (ESI)

<table>
<thead>
<tr>
<th>Computer Science</th>
<th>Engineering</th>
<th>Materials Science</th>
<th>Biology &amp; Biochemistry</th>
<th>Ecology / Environment</th>
<th>Microbiology</th>
<th>Molecular Biology &amp; Genetics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Sciences</td>
<td>Social Sciences, General</td>
<td>Economics &amp; Business</td>
<td>Chemistry</td>
<td>Geosciences</td>
<td>Pharmacology &amp; Toxicology</td>
<td>Psychiatry / Psychology</td>
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<tr>
<td>Plant &amp; Animal Science</td>
<td>Clinical Medicine</td>
<td>Immunology</td>
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</tbody>
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Office of Research & Development

City-Data through Real-Time Images
Prof. Chun-Ting Chou:
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Prof. Ai-Chun Fang:
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Prof. Shou-De Lin:
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Fighting Diseases with Healthy Cells
Prof. Jih-Luh Tang:
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New Technological Services and Models for Long-term Care 2.0
Prof. Shi-Cheng Jessy Kang:
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Office of Academic Affairs

International Interdisciplinary Master Degree Programs
Prof. Tsai-Kun Li:
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Best Education for All
@ NTU
A. P. Hsi-Y. E. Chou:
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NTU D-SCHOOL
Summer Camp: A Social Practice, the Social Responsibility
Asst. Prof. Shu-Wei Huang:
shuweil@ntu.edu.tw

College of Life Science

NTU and Academia Sinica Cast New Light on Neuroblastoma Treatment
Prof. Hoi-Yue Lee:
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Polyamines Enhance DNA Repair
Prof. Hung-Yuan Chih:
peterchi@csie.ntu.edu.tw

The Secret of Using Far-Red Light for Photosynthesis in Cyanobacteria
Prof. Ming-Yang Hsu:
mingsh@csie.ntu.edu.tw

College of Electrical Engineering & Computer Science

Equivalent Capacitance Guided Dummy Fill Insertion for Timing and Manufacturability
Prof. Hui-Ru Jiang:
huijjang@ntu.edu.tw

Improving the Sensitivity of Radio Astronomical Receiver by High Linearity MMIC Amplifier
Prof. Huei Wang:
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Power Converters for Emerging Solar Photovoltaic Systems
Prof. Katherine A. Kim:
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College of Law

The Development of Digital Technology and the Future of Law
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Legal Integrity Safeguards for State Institutions and National Public Officials
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