Vision and Aspirations for Science and Engineering at NYU

PROVOST’S COUNCIL ON SCIENCE AND TECHNOLOGY
Spring 2012
Dr. David W. McLaughlin, the Provost of New York University, established the Council on Science and Technology in summer 2011 to facilitate and strengthen a University-wide process for strategic planning and tactual implementation in science and engineering at NYU – across its global network. The Council comprises senior University leadership who are drivers of science at NYU, department chairs, and representative senior faculty from the schools.
NYU’s goal is to be one of the greatest and most intellectually vibrant universities in the world, with historic emphases in the social sciences, humanities, arts, and the professions. Science and engineering, which critically inform so many domains of human inquiry, will be an integral part of NYU’s future. Thus, NYU is committed to the development of a dynamic, forward-thinking science and engineering enterprise that will strengthen research and scholarship throughout the University.
NYU is creating a world-class collaborative, synergistic, multi-disciplinary environment for research and education that inspires discoveries in fundamental science, while empowering translation from fundamental science to novel applications and technologies.

This research environment will be nurtured and energized by NYU’s location in New York City, and by NYU’s pioneering structure as a Global Network University through which there will exist robust, fluid connections to centers of academic and research excellence around the world.

NYU envisions the creation of an innovative academic structure that fosters the coordination of research and teaching activities across the sciences. Towards that end, the science and engineering departments will be unified across the Global Network University as system-wide departments – each with a single Ph.D. program and coordinated undergraduate programs, with unified research and trainee programs and “co-located” laboratories, and with a faculty in which some members are jointly appointed across campuses and most, with primary appointments on one campus, frequently visit and work at other campus locations of the department.

Research programs throughout NYU will be, by design, focused in scope, innovative and inventive, and dedicated to making significant contributions to basic science, technology and society.
Our aspiration is for NYU’s programs in research and education to reach the highest level of quality world-wide – based upon the fundamental importance and significant impact of the results originating from these programs. Our priorities in reaching this world-class stature are:

- Improvement of NYU’s existing strengths and a well-established programs – through enhanced synergies with each other, and with science and engineering throughout the Global Network University;

- Development of excellence in engineering at NYU-Poly in the three thematic areas of urban, bio, and communications and computing engineering, and with an overriding culture of i²e (innovation, invention, entrepreneurship) – fully leveraged to excellence in engineering throughout NYU;

- Creation of strong science and engineering at NYU’s two new comprehensive campuses in Abu Dhabi and Shanghai – fully integrated with the rest of science and engineering at NYU;

- Creation of cross-school and cross-campus initiatives in neural science, genomics, biomedical engineering, global public health, urban engineering, computer science, data science, and multi-media technology.
Increase significantly the size and quality of the science and engineering faculty throughout NYU-Washington Square, the Health Sciences Corridor, NYU-Poly, NYU-Abu Dhabi, and NYU-Shanghai.

Increase significantly the quality, quantity and optimal use of the space available for science and engineering throughout NYU.

Increase significantly fundraising in support of science and engineering.
- The size and quality of the faculty
- The impact of the faculty’s published results
- The quality of our educational programs and students
- External funding (from individual research grants and contracts, to large-scale multi-disciplinary grants)
- National and international STEM rankings
- Participation in the development of the STEM programs at NYU-AD and NYU-SH and in other GNU-wide STEM initiatives
- Number of invention disclosures, patents, and start-ups associated with revenue
- Philanthropy in areas designated for development
To define and implement a strategy and tactics that will enable the synergistic development of excellent programs in research and education throughout NYU as the Global Network University.

To ensure that proper resources are available to:

- Provide modern space that is efficient, effective, and appropriate for NYU's research and education programs;
- Develop a faculty of appropriate size – a critical mass for excellence in NYU's research and education programs;
- Enable new cross-school programs;
- Nurture and support young scientists and engineers.

To invest wisely the resources provided by the “new” units of NYU (NYU-Poly, NYU-AD, NYU-Shanghai), thus realizing the vast opportunities for science and engineering which these resources present to NYU.

To provide the optimal infrastructure for research and education, including effective sponsored programs accounting, finance, regulation, and compliance.

To measure and monitor our progress toward our highest priorities and “goals for excellence.”

To attract philanthropic support that enables us to meet our goals and reach for our aspirations.