Memoríes From the SEAS Tíme Capsules

The Fourteenth Decade: 1995-2004



New York Moments The Fourteenth Decade: 1995-2004



- The renaissance of New York City is in full swing.
- Business and tourism zoom as crime plummets.



The graph is from http:// www.bbc.com/news/ magazine-20536359

Economics minor planned for SEAS

SEAS to create new engineering minors

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- As reported in the March 29, 1995 *Spectator*, IEOR majors will be able to minor in economics.
- Minoring across disciplines expands beyond departmentspecific programs to the whole school. The April 17, 1996 *Spectator* reports that SEAS students majoring in one department will be able to minor in another SEAS department.



Students travel the Information Superhighway

Administrators plan to increase public terminals



Students gain increasing access to e-mail and the internet via public terminals and Rohm Data Phones in their rooms, as reported in the April 26, 1995 Spectator.



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- Shown is an early example of the SEAS home page, from the Spring 1996 Engineering News.
- *Newsweek* magazine proclaimed 1995 as "The Year of the Internet."







1996 – Students working with Prof. Christian Meyer on glasscrete, a decorative combination of concrete and recycled glass that can be used on buildings and other structures, as shown in the Fall 1996 Engineering News.



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Gateway laboratory dedicated to alumnus

By MEG BARTELT Contributing Writer

Science dedicated its Gateway Laboratory-a certainly the jewel in Columbia Engineering." state-of-the-art multimedia computing facility-to engineering alumnus Edward facility "is absolutely crucial for engineering Botwinick, at a ceremony held yesterday education, especially for first year students," afternoon.

Botwinick, who received a BA in Physics from Columbia in '56 and a B.S. in Electrical resource for all students, noting that it has Engineering in '58, contributed \$1 million to been used by art, math, physics, and engithe lab located on the 12th floor of the Mudd neering students. Rupp introduced Engineering Building. Botwinick served on Botwinick, thanking him for a facility that Columbia's Board of Trustees from 1988 to 94 "will be indispensable as we prepare students and was instrumental in obtaining a \$25 mil- to be engineers in then twenty-first century." lion grant from the National Science Timeplex, Inc., a data communications firm the facility. in 1969 and he now invests in small hightechnology firms.

Dean of the School of Engineering and Applied Science Zvi Galil praised the lab as The School of Engineering and Applied "one of the jewels on Columbia's crown and

University President George Rupp said the all of whom take a class in the lab.

Rupp emphasized that the lab is a

Botwinick emphasized his hope that the Foundation for Columbia. He founded students would be the main beneficiaries of







• Above, the Oct. 10, 1996 Spectator reported on the dedication of the Botwinick Multimedia Learning Laboratory, used for the Gateway course.



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- Whereas SEAS undergraduates generally took courses exclusively in the College their first two years, only coming to SEAS to begin their majors in the junior year, this begins to change.
- The Gateway laboratory course in computerization and technology, introduced in Nov. 1994, is required of all first year students and as of Fall 1997 entering undergraduates are required to take at least one "preprofessional course" in their first two years.
 - Initially, seven "preprof" courses are offered.
 - Two of these courses were first introduced in 1996-1997:
 - *Introduction to Electrical Engineering*, by Prof. Tsividis (shown, upper).
 - *Physics of the Human Body*, by Prof. Herman (shown, lower, on the right).





STATE PHOTOGRAPHISH-MATT KING Yesterday President George Rupp presented Z.Y. Fu with a plaque in honor of his \$26 million donation to SEAS.

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- SEAS is officially renamed "The Fu
 Foundation School of Engineering
 and Applied Science" in recognition
 of a generous gift from the Fu
 Foundation. This is celebrated on
 Oct. 22, 1997, as reported in the *Spectator* the following day.
- APAM Prof. C.K. (John) Chu and Dean Zvi Galil are instrumental in cultivating this donation.
- This gift is used to build up the School's efforts in computer science, applied mathematics, biomedical engineering, and electrical engineering.



Engineers Design Race Car for Competition



GRAPHIC COURTESY OF SAE **Columbia's Society for Automotive Engineers designed** a car they will race in at May's SAE competition.

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The Fu Foundation School of Engineering and Applied Science

SEAS students' new Society for Automotive Engineers constructs a car to race against entries from 110 other colleges at a competition organized by the Formula Society for Automotive Engineers (SAE), as reported in the March 31, 1998 Spectator.

• This is expected to be an annual activity.



1998 – Prof. Horst
Stormer shares the Nobel
Prize in Physics with two
colleagues "for their
discovery of a new form
of quantum fluid with
fractionally charged
excitations."







• SEAS students enter Solar Splash, the world's first inter-collegiate solar/ electric boat regatta, with entry "Bubbles" placing second overall, as reported in the Fall 1998 *Engineering News*.









Columbia Energy Frontier Research Center Redefining Photovoltaic Efficiency through Molecule-Scale Control

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 1999 – For the first time, the average SAT score of first-year undergraduates is higher in SEAS than in Columbia College.



New York Moments The Fourteenth Decade: 1995-2004



http://en.wikipedia.org/wiki/Brooklyn#mediaviewer/ File:New_York_City_Demographics_05_500px_Julius_Schorzman.png

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- 2000 After a decade of growth, the population of New York City reaches 8 million for the first time, a sign of the City's rebirth.
 - After reaching a peak of 7.89 million in 1950, the population of New York City declined to 7.07 million in 1980, signaling to many a declining quality of life in the City.
 - Growth continues after 2000, with the population reaching 8.41 million in 2013.
 - The population of the five boroughs is shown (in millions), with Brooklyn (green), Queens (orange), Manhattan (blue), the Bronx (red), and Staten Island (purple).



- January 1, 2000 The Department of Biomedical Engineering (BME) begins, assisted by a grant from the Whitaker Foundation, with Prof. Van C. Mow as founding chair.
- In 2004, the ASME establishes the annual Van C. Mow Medal to honor a person who earned their doctorate ten to twenty years earlier for contributions to bioengineering through research, education, professional development, leadership, mentorship, and service.





New York Moments The Fourteenth Decade: 1995-2004



- 2000 The New York Yankees
 win their 101^{st*} World Series
 championship, including their
 fourth in five years, as they
 defeat the New York Mets.
- This was the first "Subway Series" (intra-New York City World Series) since 1956, when the Yankees beat the Brooklyn Dodgers, as Don Larsen pitched the only perfect game in World Series history.



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* In base 5; 26th in base 10.









• 2000 – Dean Zvi Galil places the Materials Science and Engineering Program of the Henry Krumb School of Mines within the Department of Applied Physics and Applied Mathematics, thereby creating a department with interacting applied physics, applied mathematics, and materials science and engineering programs.



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New York Moments The Fourteenth Decade: 1995-2004



• September 11, 2001 changes New York City and the world.







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- 2002 Dr. Michael Massimino (ENG'84) (shown) took a Columbia Engineering School flag on his first space shuttle flight (STS-109).
- On his second (STS-125), in 2009, he took a gray Columbia Engineering T-shirt covered with the signatures of as many Engineering School students and faculty as could fit.
- Fellow astronaut Gregory H. Johnson MS'85 pilots the Space Shuttle Endeavour in 2008 and again in 2011, its last mission and the penultimate mission of NASA's Space Shuttle program.





- 2003 The Earth and
 Environmental Engineering
 (EEE) Department, the
 newest department in SEAS,
 is founded, with Prof.
 Nickolas Themelis as
 founding chair.
 - This is part of a reorganization of the Henry Krumb School of Mines, which is now composed of the EEE department and the materials science and engineering program in APAM.

