



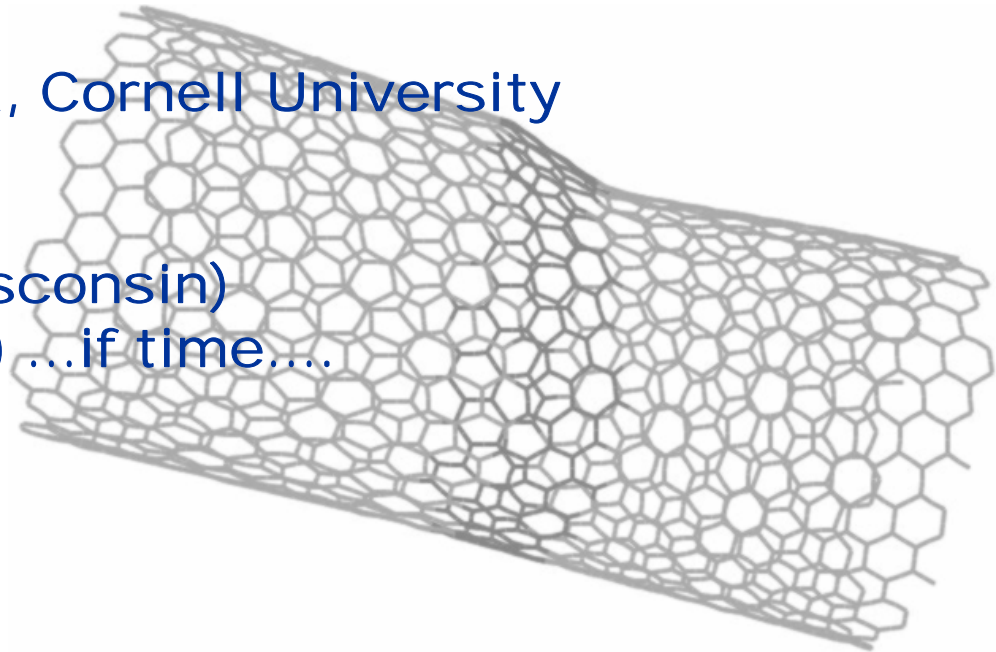
Outreach and Diversity: What Works and What Does Not Work.

Moderator: Alex Gaeta, Cornell University

Dawn Bonnell (Penn)

Andrew Greenberg (Wisconsin)

Jim Yardley (Columbia) ...if time....





Providing Outreach and Education

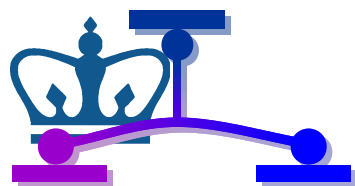


NSEC's are taking leadership in providing for outreach and education!

NanoDay in New York.



Bill Nye, "The Science Guy"



A colorful poster for "NanoDay in New York". The title "NanoDay in NEW YORK" is written in large, bold, yellow and white letters. The background is a vibrant blue and purple with various scientific motifs like atoms, molecules, and a DNA helix. Several circular portraits of speakers are scattered across the poster. Text on the poster includes: "SHAKE HANDS WITH SCIENCE!", "AN ALL-DAY, CITY-WIDE SCIENCE AND ENGINEERING EXTRAVAGANZA DESIGNED TO INCREASE HIGH SCHOOL STUDENTS' AWARENESS OF NANOSCIENCE AND NANOTECHNOLOGY AND THE IMPORTANT ROLE THESE DISCIPLINES WILL PLAY IN THE FUTURE OF GLOBAL SOCIETY", "A PRESENTATION OF THE COLUMBIA UNIVERSITY NANOCENTER AND THE CITY COLLEGE OF NEW YORK Saturday, March 31, 2007", "8:30AM - 1:00PM - Aaron Davis Hall", "1:00PM - 3:00PM - The Great Hall", "The City College of New York", "135th Street and Convent Avenue", "New York, NY 10031", "NanoDay in New York is brought to you by the collaboration of Columbia University, the City College of New York, Barnard College, and Rowan University", "the BARNARD CENTER FOR NANOSCIENCE AND NANOTECHNOLOGY", "For more information about NanoDay in New York, please call (212) 854-3286", "In association with NYSER", "HIGHLIGHTS INCLUDE", "Featured Speakers", "Professor Horst Stormer", "Nobel Laureate, Physics", "Professor Vicki Colvin", "Bill Nye the Science Guy", "An Expo featuring exhibits and demonstrations of cutting-edge science and research", "A chance to win prizes through a 'Nano Raffle'", and "SPACE IS LIMITED ASK YOUR SCIENCE TEACHER HOW YOU CAN ATTEND NANODAY".



An unmet need: "hands on" nanotechnology "research" at advanced High School level.

Tremendous demand!

[some genuine]

...can question whether this is desirable...

What do we do at Columbia?

Science Honors Program....

Highly successful Nanotechnology course.

-No real follow-up at present.

Summer Institute (with minority fellowships)

NanoDay

RET

But....this is not what many are looking for.

**Have considered "forum" for HS teachers and students,
either real or virtual.**



Education...what does not work.

Lab tours are difficult....(facilities are spread out)

Considering building video library.

Web education is difficult.

Large video project, PBS style....is difficult.

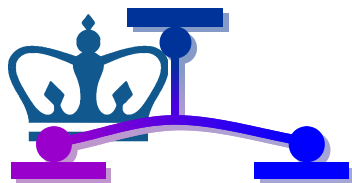
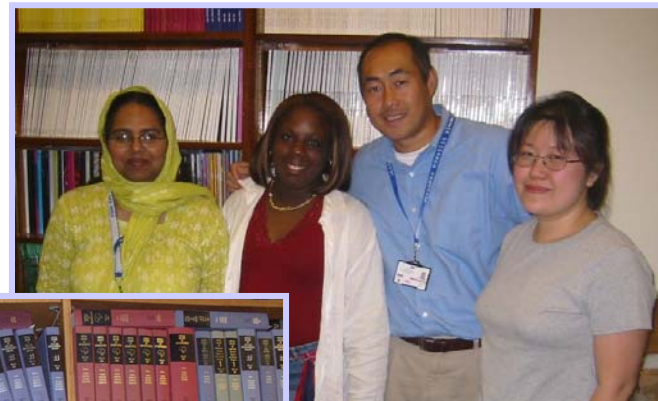
Safety and Environment education (of quality)....is difficult.



Promoting Diversity.



NSEC's are actively building diversity within the new generation of scientists and engineers.





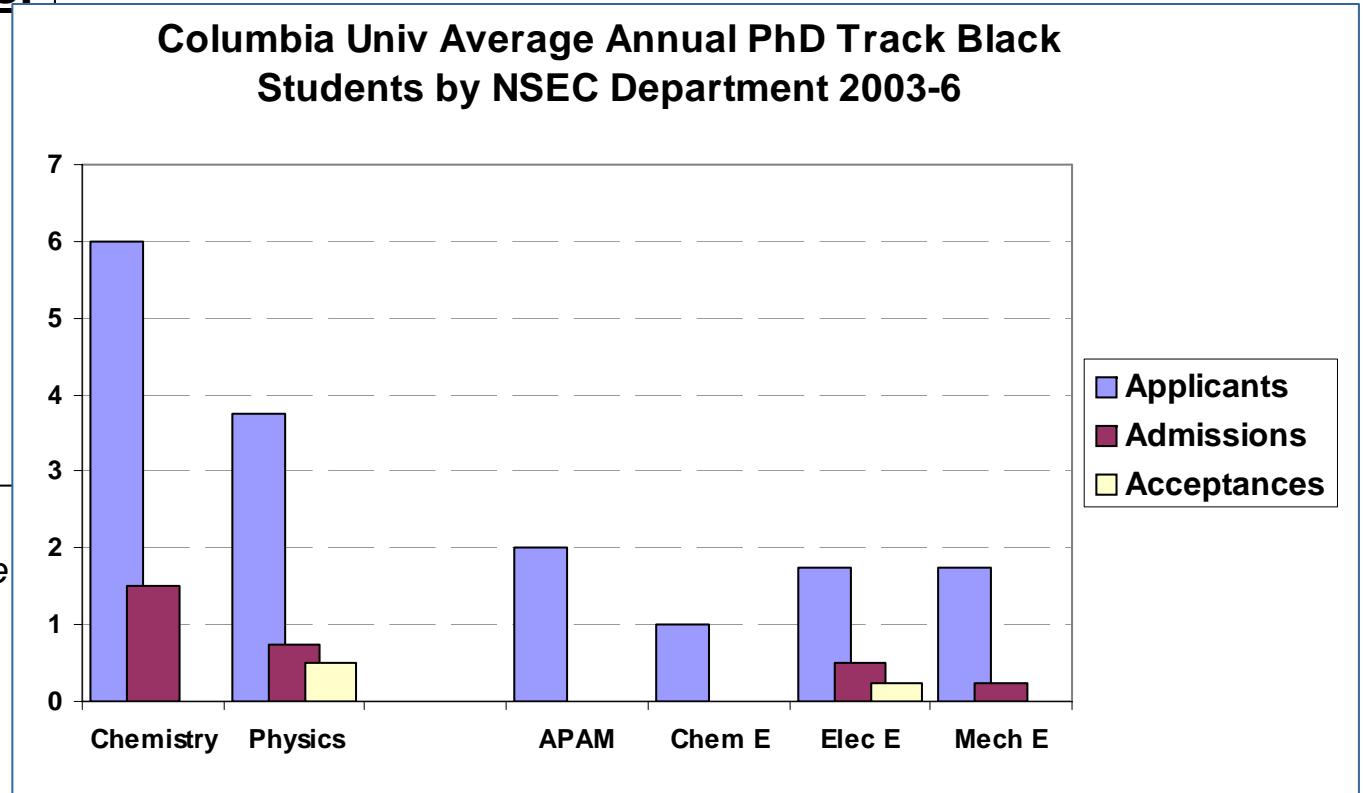
Diversity...What Doesn't Work (Columbia Univ. Perspective).

Graduate student demographics not ideal for building diverse graduate research program!

Ethnicity Categories:

- Asian
- Black
- Hispanic
- Native American
- Undeclared
- White
- Other
- International *

** international students are not otherwise classified with respect to ethnicity.*





**Graduate student demographics not ideal for building diverse graduate research program!
----has driven us toward grad student minority recruitment.**

But.... Center builds from 6 departments and has limited control over recruitment process.

We are:

Building partnerships: CCNY, others...

Collaborating with departments.

Engaging in our own recruitment through individual faculty efforts.

Strongly supporting the minority students that we do have....creating minority-friendly culture.

May be working....