



The Institute of Biosciences and Bioengineering
at Rice University

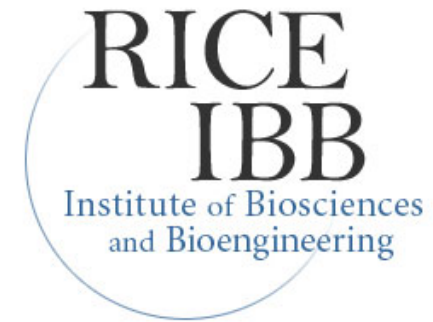
“In 2005, only 20% of twelfth-grade students in the United States performed at or above proficiency levels in science achievement.” National Center for Education Statistics, May 2006

“The critical lack of technically trained people in the United States can be traced directly to poor K–12 mathematics and science instruction. Few factors are more important than this if the United States is to compete successfully in the 21st century.” 2005 Report of the National Academies

“...African-Americans and ethnic minorities constitute 24% of the total population but only 7% of the science and engineering labor force.”
Envisioning a 21st Century Science and Engineering Workforce for the United States, Report to the National Academies, 2003



Rice University
Institute of Biosciences and Bioengineering
MS-144, P.O. Box 1892
Houston, TX 77251-1892



Summer Academy

For High School Students





Summer Academy for High School Students

Welcome to the Institute of Biosciences and Bioengineering at Rice University! We are pleased to tell you about the IBB Summer Academy, which represents our commitment to increasing the number of bright, young students entering science and engineering university programs throughout the country.



Jennifer L. West, Ph.D.
Director, Institute of Biosciences and Bioengineering
Cameron Professor of Bioengineering
Rice University

“The IBB Summer Academy is an intensive summer program designed to excite pre-college students about science, engineering and biotechnology and to expose them to research.”

Contact IBB (<http://ibb.rice.edu>).
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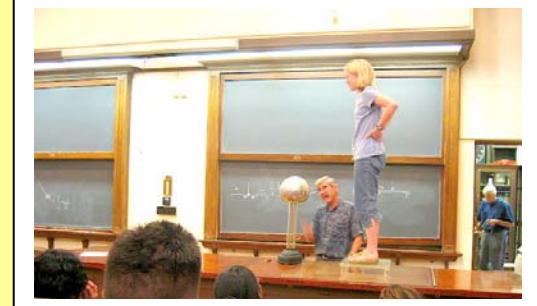
2006 IBB Summer Academy

Students are brought to the Rice campus for two weeks during the summer. The program includes:

- **Communications workshops** led by Rice English Professor Dr. Mary Tobin and focused on writing a college application essay. Students leave the program with a draft essay that has been through several revisions.
- **Lectures and demonstrations** about possible majors and career options, lab tours, research publications and several hands-on activities including “The Balloon Project”, a fun exercise that involves the forming and testing of hypotheses to create the ‘perfect balloon.’
- **Field trips** to NASA, M.D. Anderson Cancer Center, and the Baylor College of Medicine ‘Brain Lab’ provide opportunities for the students to see first-hand real world applications of science and engineering.
- **Mentoring:** Students are each paired with one of our pre-doctoral trainees as a ‘mentor’.
- **Research:** The visiting students spend ~15 hours (over 2 weeks) shadowing a graduate student in the lab, getting to see what the environment is like, how research is done, and in most cases even getting a little hands-on experience.



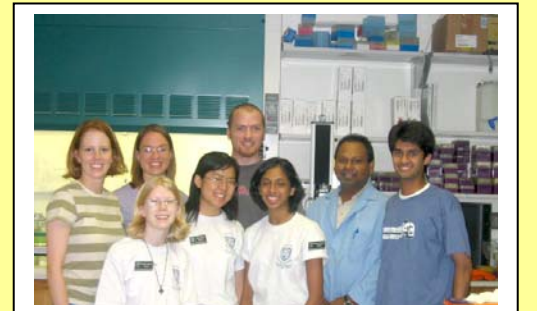
Field trip to NASA



A student volunteers to help with a physics demonstration.



A graduate student mentor assists with a hands-on math activity.



Students with their mentors in the lab.