**PROGRAM PRAISE**

“It was good to see what we ourselves could be doing in a few years.”

“The program has increased my desire to do research and pursue a career in science.”

“I enjoyed the way each subject was incorporated into some unique activity.”

“I woke up each Saturday looking forward to what I would be learning from the session.”

“The Barnard students were so helpful and informative in answering our inquisitive questions about their studies and Barnard.”

“I enjoyed the fact that I learned just to learn, without the pressure of having to take a test or write a paper.”

“The best part of the program was that the professors taught us new and current research.”

“I wish it was longer. The lectures were so interesting I didn’t want it to end.”
THE S³ PROGRAM
SATURDAY SCIENCE SEMINARS
AT BARNARD COLLEGE

The S³ Program brings together 11th grade girls who exhibit strong academic ability and enthusiasm for the sciences as presented at the college level. Over the course of five Saturdays in January, February and March 2011, we will offer interactive explorations of academic subjects. Professors from the departments of Environmental Science, Chemistry, Physics & Astronomy, Mathematics and Biological Science will each offer a challenging and lively class.

S³ CLASSES ARE SCHEDULED FOR THE FOLLOWING DATES:

- January 29, 2011
- February 5, 2011
- February 12, 2011
- February 26, 2011
- March 5, 2011

PLEASE PLAN TO ARRIVE BY 10:15 AM

Classes will begin at 10:30 am in Room 1115 Altschul Hall on Barnard College’s campus. Discussion will be held from 12:00 to 12:30 pm. Students will be joined by Barnard students majoring in the subjects taught in each seminar.

GROUNDWATER AND SEDIMENTS

BRIAN MAILLOUX
ASSISTANT PROFESSOR
ENVIRONMENTAL SCIENCE

Brian Mailloux received his B.A. from the Johns Hopkins University and his Ph.D. from Princeton. He then came to Columbia as an Earth Institute Fellow and has been teaching at Barnard for four years. His specialty is groundwater microbiology. Microbes are ubiquitous in the subsurface and control the water chemistry. In particular, he is studying how microbes facilitate the mobilization of arsenic from rocks to groundwater. Outside of academics, he enjoys sailing and swimming.

THE MATHEMATICS OF CARD SHUFFLING

DAVID A. BAYER
PROFESSOR
MATHEMATICS

Professor David Bayer graduated from Swarthmore College in 1977 with highest honors and received his Ph.D. in mathematics from Harvard University in 1982. He has been on the faculty of Barnard College since 1990. Professor Bayer was the mathematics consultant for the film A Beautiful Mind. He is an avid hiker and is passionate about cooking.

EXPLORATIONS ON THE NANOSCALE

MARISA BUZZEO
ASSISTANT PROFESSOR
CHEMISTRY

Marisa Buzzeo received a B.A. from Barnard College and her Ph.D. from the University of Oxford. She completed postdoctoral work with Professor Jackie Barton (BC ’74) at the California Institute of Technology and was then a visiting scientist at Columbia’s Nanocenter before beginning her assistant professorship in the Chemistry Department in 2009. A physical chemist by training, Professor Buzzeo is interested in applying electrochemical methods to biological systems, specifically those that are capable of self-assembly. Professor Buzzeo primarily teaches physical chemistry lecture and laboratory courses.

WONDERS OF LIGHT AND COLOR IN NATURE

TIM HALPIN-HEALY
PROFESSOR
PHYSICS & ASTRONOMY

THH is Professor of Physics at Barnard since 1989. His research concerns statistical mechanics, pattern formation & fractals in Nature. In recent years, his favorite course to teach has been the Barnard lecture & lab class on classical waves & optics.