The National Institutes of Health (NIH) Study Group offers the opportunity for Colgate students interested in the biomedical sciences to spend a full semester working in some of the most exciting, “cutting edge” research laboratories in the world. The NIH in Bethesda, MD, house over 5000 active researchers are the official federal research facilities of the United States. The hallmark of the study group is an intensive research experience involving 30+ hours of research each week in an NIH laboratory of the students’ choosing.

Program Structure: Students will carry a normal course load of four credits while on the study group. The research experience will count for two of the required four course credits. Colgate course credit will appear on the transcript upon satisfactory completion of study group courses.

Required Courses: All study group participants are required to enroll in the following courses:

- **BIOL 391Y & BIOL 491Y**, Independent Study. This comprises the research component of the NIH experience. To meet the requirements for these courses, students will choose a research lab at the NIH and agree to spend a minimum of 30 hours each week (often longer) engaged in a meaningful research project under the direction of an NIH researcher. Performance will be evaluated by the NIH lab director, and will be based on progress made in the research project and the quality of a final poster presentation in scientific format at the end of the semester.

- **BIOL 392Y**, Topics in the Primary Literature of the Molecular Biosciences. This classroom-based course will meet one day weekly. Students will take turns leading a discussion summarizing the primary literature relating to each individual’s research project. Each student will also be required to write a summary of the literature presented by the other students in the course. Students will be evaluated on the basis of their oral presentation, weekly summaries, and class participation. In addition, each student will be required to submit a final paper in scientific format describing the outcomes of their laboratory research project.

**Prerequisites & Selection Criteria.** The group is open to selected members of the classes of 2005 and 2006 who are in good academic standing. Successful applicants should be highly motivated toward a career or postgraduate education in the biomedical or health sciences, and have proven capability for working independently in a research environment. Completion of a year of general chemistry (CHEM 101-102 or CHEM 111), a year of organic chemistry (CHEM 263-264), Cellular Biology (BIOL 202 or BIOL 212) and at least one course in Mathematics or Computer Science is required. Typically, successful applicants have been concentrators in Biochemistry, Biology, Chemistry, Molecular Biology, or Neuroscience.

**Electives.** Students will choose one of the following two elective courses in addition to the courses listed above:
• **CHEM 353Y, Proteins and Nucleic Acids.** This course will be taught by an instructor from the Bethesda area. This course provides an opportunity for students concentrating in Biochemistry, Chemistry, Molecular Biology, or Neuroscience who have not already done so to fulfill one of the requirements toward the concentration.

• **BIOL 451Y, Topics in Cellular Physiology.** This course, taught by the Study Group leader, is a suitable elective for students concentrating in any of the sciences who have already completed CHEM 353 or its equivalent.

**Living Arrangements.** Students will live in housing arranged by Colgate University, either in the Rockville area or in the District of Columbia. Colgate will ensure that housing will be within a reasonable commute from the NIH and in close proximity to a Metro station. Students will not need a car to participate in the NIH Study Group. Colgate will make the necessary arrangements for leases, and will charge students for housing.

**Extracurricular Opportunities.** The Metro underground public transportation system provides easy access to Washington, DC, and all the cultural and governmental opportunities of our nation’s capitol city.

**Field Trips.** The group will take four trips during the semester to attend events of cultural and scientific interest in the Washington, DC area. These will include an afternoon at the Baltimore Inner Harbor and Aquarium, a cruise down the Potomac River to Mt. Vernon, an evening meal and show, and a visit to the Washington Mall and Capitol area, including the Smithsonian Museums.

**Costs of the Program.** Student costs, in addition to Colgate tuition, include apartment rent, utilities, board, travel to and from the study group site, travel to and from the NIH from the prearranged housing area, and incidentals. There are no additional matriculation costs.

**Calendar.** It is anticipated that classes will begin on Tuesday, September 7, and will end on Friday, December 10, 2004. There will be an appropriate Thanksgiving recess during the week of November 22.

**Special Features of the Program.** The NIH attracts some of the world’s finest scientists. There can be as many as 50 public lectures each day; so many that the NIH campus has its own daily news sheet just to keep its population informed. The library at the NIH has one of the best collections of scientific literature in the world. Colgate students often obtain summer employment in research laboratories at NIH or work opportunities after graduation as a direct result of contacts made while attending the NIH Study Group.

**Application Procedure.** Applications are available in the Office of Off Campus Study in McGregory Hall. The application deadline is Monday, November 24, 2003. Applications should be submitted to Janice Holt in the main office of the Department of Biology (204 Olin Hall).