OFF-CAMPUS STUDY - FALL 2022

COLGATE AT NIH

Director:
Ana Jimenez,
Department of Biology

Tentative Program Dates:
mid-August to mid-December, 2022

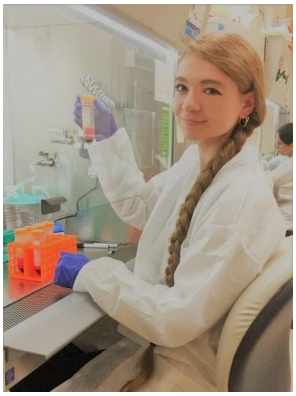
Learn about the 2022-23 Colgate Study Groups and Talk With Faculty Directors at the Study Group Fair at the Hall of Presidents on Wednesday, October 6th, 2021, 4:00–5:00: https://www.colgate.edu/academics/off-campus-study/campus-opportunities/virtual-study-group-fair

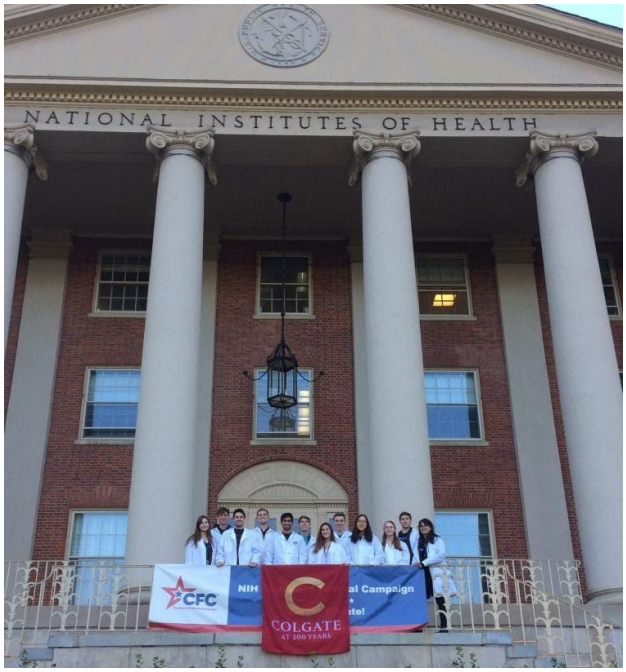
For more information about the program:
Please contact Prof. Jimenez at ajimenez@colgate.edu

Information Sessions will be held on:
Thursday, October 14 at 4pm in 217 Ho Science Center and
Friday, October 15 at 9am in 217 Ho Science Center

Colgate University's

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 research laboratories in the world. The NIH in Bethesda, MD, housing over 5000 active researchers, are the official federal health-related 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.





Prerequisites and selection criteria

The group is open to selected members of the classes of 2023 and 2024 who are in good academic standing. Successful applicants should be highly motivated toward a career or postgraduate education in the biological or health sciences, and be capable of 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), and Molecules, Cells and Genes (BIOL 182) is required. One course in Mathematics or Computer Science is desirable before attending the study group. Typically, successful applicants have been majors in Biochemistry, Biology, Chemistry, Molecular Biology, or Neuroscience.

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:
In addition to the two research courses, all study group participants are required to enroll in the following course:

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.

Electives:
Students will choose one of the following two elective courses in addition to the three required courses listed above:

DIRECTOR'S COURSE
BIOL 318: Vertebrate Physiology
This course will be taught by Prof. Jimenez, and examines the relationship between structure and function in the vertebrate body, starting at the level of molecules and cells, and moving through tissues, organs, and organ systems. Major topics include the endocrine, nervous, and cardiovascular systems; digestive physiology; and water, salt, pH balance in the body and the effects of global climate change on vertebrate physiology.

CHEM 353: Proteins and Nucleic Acids
A survey of biological polymers and of the physical and chemical methods of biopolymer research. Focuses on amino acids; protein structure; the function of proteins as cell structural materials and catalysts; and the structure, function, and chemistry of nucleic acids. This elective will be taught by an instructor from the DC area.

Excursions:
The study group includes three or four events of cultural interest in the Washington, DC area. These may include a tour of DC, a sporting event, a performance at The Kennedy Center, a visit to Mt. Vernon, and a political-comedy show by the Capitol Steps.

Living arrangements:
Currently, it is expected that students will live in furnished apartments in a hall owned and operated by NYU located at 1307 L. Street NW in the District of Columbia. Each residential floor contains mostly 4-person, 2-bedroom, 1 bathroom apartments. Colgate students will share an apt. with other Colgate students. Students also have access to a game room, resource center, laundry room, serenity space, and ample multipurpose space. A full-time Residential Life Coordinator and part-time Residential Life Administrators reside in NYU Washington, DC to provide advice, guidance, support, programming, and activities. Colgate will make the necessary arrangements for apartment leases and will charge students for housing.

Students will have access to a shared kitchen in their apartments and will prepare their own meals.

The study group includes a Metro card. Students will use the Red subway line from Metro Center to Medical Center to commute to the NIH campus each day. The commute will typically take 30-40 minutes each way. Classes will be held onsite at the NIH. Onsite parking at NIH is not available. Off-street parking is expensive in DC. On-street parking is difficult to find. Colgate discourages students from having a private vehicle in Washington, D.C.

Extracurricular:
The Metro underground public transportation system provides easy access to Washington, DC, and all the opportunities of our nation's capital city.

Costs:
For details of student expenses on this study group, please see the student cost estimate sheet on the Colgate University Off-Campus Study website.

Calendar and Deadlines:
The study group application will open on Wednesday, October 6, 2021, and will close on Wednesday, November 3, 2021. Applications are to be submitted online at offcampusstudy.colgate.edu. The faculty director will interview applicants after all submissions have been received. The faculty director will announce admissions decisions by early January 2022.