

Class of 2009
APPLICATION FOR STEP/DREYFUS RESEARCH FELLOWSHIP
at Hamilton College

Return application by **April 11, 2005** to: Leslie North, Coordinator of Summer Science Research
Hamilton College
198 College Hill Road
Clinton, New York 13323
Fax: (315) 859-4744
Lnorth@Hamilton.edu

The STEP/Dreyfus Fellowship Committee will review the information below and will refer to the academic records and recommendations previously provided to the Admissions Office. Finalists will be contacted for a telephone interview with the project supervisor. The Committee plans to announce awards by April 23, 2005.

Name _____ Date of birth _____
 First MI Last

Prefer to be called _____ Gender _____

Email Address _____ Telephone (____) _____

Street Address _____ City _____ State _____ Zip _____

High School(s): _____

Math and Sciences Courses Elected: _____

(Indicate if Honors or Advanced Placement)

Possible College Major: _____

Possible Career Goal(s): _____

Please describe any previous work experience in science or research:

Please indicate if you have a specific research interest:

(Choose from: Biochemistry, Chemical Physics, Chemistry, Neuroscience and Physics)

Prioritize your interest in the following research projects, rating them 1-7, with 1 indicating the project of greatest interest:

- Undergraduate researchers in Professor Shields' lab use computers to study biochemical and atmospheric chemistry processes, see <http://www.chem.hamilton.edu/faculty/shields.html> for details.
- Students in Professor Rosenstein's will use organic chemistry to develop methods for making complex molecules or for studying the details of reaction processes. Their findings may be applied to the synthesis of compounds which have pharmaceutical uses. See <http://www.chem.hamilton.edu/~irosenst/> for details.
- Students in Professor Brewer's lab will participate in a collaborative project between physics and chemistry to synthesize europium and terbium compounds, incorporate them into sol-gel silica, and characterize them by fluorescence spectroscopy. See <http://www.chem.hamilton.edu/~kbrewer/>
- Professor Kinnel's group investigates the chemistry of natural products, including prospecting for anticancer agents in marine invertebrates and studying the chemical ecology of butterflies and their host plants. See: <http://www.chem.hamilton.edu/faculty/kinnel.html>
- Students in Professor Lehman's lab use modern molecular cloning and biochemical methods to analyze nervous system structure and function. <http://www.hamilton.edu/academics/faculty.html?dept=Biology>
- Professor Weldon's group will be using electrophysiological recording techniques in rats to investigate the neural correlates of attention to significant events. http://www.hamilton.edu/academics/Psych/Psych%20Faculty%20Final/DW_web_page
- Students in Professor Jones' group will help design, build, and test a compact solenoid used to produce a uniform, shielded magnetic field. The solenoid is one of the elements needed to polarize neutrons using optically pumped ^3He gas. See <http://academics.hamilton.edu/physics/gjones/gjones.htm>.

Statement of interest: Please write 200-400 words describing your interest in a research opportunity and your goals for the future.
