Summer Internship / Fall Semester Research at Memorial Sloan Kettering Cancer Center

What is this?

This program is an opportunity to experience research at one of the premier research institutions in the world. You will spend the summer working in a laboratory, learning new techniques and immersing yourself in full-time research.

What sort of research could I do?

There are a number of different areas to work in. These include bench research in a number of areas (see following pages), as well as opportunities in Public Health.

Could I just go for the summer and not the fall?

Yes. Most students spend only the summer and then return to Bates.

Could I just go in the fall and not the summer?

No. In order to get the maximum benefit from this kind of experience, you will need the summer to master the routine of the lab and become familiar with the research. Through the fall, you will work on a project full time under the supervision of a laboratory member. You are expected to work as a full member of the laboratory, and attend lab meetings, seminars and other educational opportunities. This is the equivalent of a semester away from Bates, and you will receive 4 college credits for successfully completing the semester. One or two credits could possibly be counted toward your major, depending on what your major is.

If I spend the summer and fall, what is expected of me when I return?

If you are using the research at MSK as your senior thesis, you are expected to register for Senior Thesis your second semester, and spend that semester writing up your research. This will be done under the supervision of a Bates faculty member; this must be arranged ahead of time. Depending on your major, you will be expected to present your work to the public at some point, either at a Department seminar or the Mount David Summit.

Is the same expected of me if I only spend the summer working there?

No, the summer internship does not count for college credit and therefore does not have the same requirements as a full semester of research. As a summer intern you will gain experience, but you likely will not generate enough data for a thesis. It is possible, however, that the summer internship experience could lay the foundation for future laboratory work.

Do I have to pay to participate?

No, you will receive a stipend. This will help defray your living expenses, including housing, which is not provided. However, students who have spent time at MSK in the past will have suggestions and advice. If you are at MSK for a school semester, questions about tuition can be answered by the Off-Campus Study office (<u>http://www.bates.edu/offcampus/</u>).

How do I apply for the summer internship?

Fill out the application form and turn it in by the deadline.

You will need to supply the following to be considered for a summer internship:

- A letter of recommendation from a Bates Faculty Member
- A statement of what you hope to accomplish during your time at MSK
- Identify the area of research you are interested in, and 3 faculty members that are doing research that interests you.

You will need to supply the following to be considered for a summer/fall research experience:

- Successfully completed Biology 242.
- A letter of recommendation from a Bates Faculty Member
- A statement of what you hope to accomplish during your time at MSK
- Identify the area of research you are interested in, and ideally 3 faculty members that are doing research that interests you.
- Complete the paperwork from the Off-Campus Study office. Since you will be receiving college credit for your time at MSK, it is considered a Semester Abroad/Away and you must fulfill all those application requirements as well.

You will need to supply the following to be considered for a summer/fall research experience that would be used for Senior Thesis:

- The same requirements as for a summer/fall research experience (above)
- A signed statement from a Bates faculty member that he/she is willing to supervise your thesis writing, based on your research done at MSK.

All applicants may be asked to meet with Dr. Howard Scher, the Head of Genitourinary Oncology at Memorial Sloan Kettering, and the sponsor of these internships.

Research Areas at Memorial Sloan Kettering in New York City

- <u>Cancer Biology & Genetics</u>: Our goal is to pursue research bridging basic and clinical aspects of the genesis, progression, prognosis, prevention, and treatment of cancer.
- •
- <u>Cell Biology</u>: Our activities are directed toward understanding the molecular mechanisms that control normal cell behavior and how these are disrupted in cancer.
- •
- <u>Computational Biology</u>: Our aim is to build computer models that simulate biological processes on the molecular level to the organism as a whole and to use these models to make useful predictions.
- •
- <u>Developmental Biology</u>: Our investigators study the mechanisms that control cell proliferation, cell differentiation, tissue patterning, and tissue morphogenesis.
- •
- <u>Immunology</u>: The Immunology Program incorporates a wide range of basic and medical research areas. We are dedicated to translating laboratory findings into effective clinical applications.
- •
- <u>Molecular Biology</u>: Research is directed at understanding how cell growth is regulated and how the integrity of the genome is maintained.
- •
- <u>Molecular Pharmacology & Chemistry</u>: The Molecular Pharmacology and Chemistry Program is dedicated to bringing discoveries in the basic biological sciences to preclinical and clinical evaluation.
- •
- <u>Structural Biology</u>: Our researchers are dedicated to understanding biology at the structural and mechanistic levels, and aiding the development of new cancer therapies.
- To learn more about specific research areas and investigators, go to: <u>http://www.sloankettering.edu/gerstner/html/53168.cfm</u>

Application for Research Experience at Memorial Sloan Kettering

Application Deadline for 2012 year: February 1, 2012

Date:	
Name:	
Current Mailing Addre	SS:
Phone number:	
Email:	
Expected graduation: MonthYear	
Current year: Sophomore Junior	
Major:	
Advisor:	
Cumulative GPA to date:	
I am interested in:	Summer Internship Summer Internship/Fall Semester
	Summer Internship/Fall Semester for Senior Thesis
Relevant courses:	
<u>Course</u>	Laboratory course (Yes / No)?

Do you have any other research experience? If so, please describe it.

- For information about the research, see the research areas above, and the Memorial Sloan Kettering web site

Please indicate your preferred research areas of interest:

1st Choice:

2nd Choice:

3rd Choice:

Identify three MSK faculty members you are interested in working with during the summer. *Placement with a specific faculty member cannot be guaranteed.*

1st Choice:

2nd Choice:

3rd Choice:

Name of Recommender:_____

Please attach your personal statement on what you hope to accomplish during your MSK experience.