

SURE AWARDS MADE FOR SUMMER '00

Eleven Stonehill College students will work with six faculty members on a variety of research projects over the coming summer of 2000. The scholars and their faculty mentors are the fifth group to work under the Stonehill Undergraduate Research Experience (SURE) program, whose purpose is to provide students with an opportunity to perform significant, publishable research under the guidance of an experienced faculty researcher. The research experience will help to provide students with a competitive advantage in graduate and professional school applications and in post-college employment opportunities, as well as to provide assistance to faculty in research activities.

Daniel F. Tardiff '02 will work with **Craig A. Almeida**, Assistant Professor of Biology, on "Characterization of a Transposon-based Gene Replacement Method." Tardiff, a Biology major, will perform specific research activities as part of Professor Almeida's ongoing project to develop a gene replacement technique in the microscopic soil nematode *Caenorhabditis elegans*. The technique ultimately can be used as a major tool by other *C. elegans* researchers in their efforts to elucidate gene function, with the goal of understanding the molecular basis of genetically inherited diseases and the potential development of treatment strategies.

Kimberlee Simonelli '01 will work with **John Broderick**, Professor of Sociology, on the preparation for publication of a book, *Advice for the Year of Volunteer Service: Before, During and After*. Simonelli, a Psychology major, will work with Professor Broderick to obtain and edit written evaluations of the experiences of former volunteers, survey agencies which employ volunteers, interview former volunteers and agency representatives, and obtain permissions to quote in the book manuscript. Publication of the book is anticipated in early 2001.

Robin Milley '01 and **Sara Swan '01** will work with **Roger M. Denome**, Associate Professor of Biology, on two projects exploring population genetics. Milley, a Biology major, will focus on "Genetic Variation and Interspecies Hybridization in Maine coyotes." This project will determine levels of genetic variation and population differentiation in coyotes from four regions in Maine; it will also determine the levels of hybridization between coyotes and wolves in these areas. The project is important to wildlife research and management. Biology major Swan's project is "Assays of genetic variation in Thompson Island skunks," which will determine the genetic differences between striped skunks from Thompson Island, in Boston harbor, and those from the mainland population of striped skunks from the Boston area. The results of this project are of interest to wildlife managers, primarily because skunks are a major reservoir for rabies.

Nicholas J. Greco '02 and **Erin M. Leone '02** will work with **Louis J. Liotta**, Associate Professor of Chemistry, on "Asymmetric Synthesis of Polyhydroxylated Pyrrolidines," Professor Liotta's long-term research funded by the Research Corporation and the Petroleum Research Fund of the American Chemical Society. Greco, a Chemistry major, and Leone, a Biology major, will each work on separate aspects of the research, building on work done in previous summers by earlier SURE Scholars. The project, at the forefront of chemical research, has the potential for applications in both medicine and agriculture.

Eric Dickens '01, **David DiMartino '01**, and **Claire Hamilton '02** will work with **Erika Schluntz**, Assistant Professor of Religious Studies, on "The Archaeology of Stonehill College: Excavation and Research of the Daily Homestead." This project, whose goal is to expand the Stonehill community's knowledge and appreciation of our campus's social history, focuses on the historical research and archaeological excavation of an eighteenth century farmhouse located on the campus. This summer the work will continue and build upon that begun during the summer of 1999 with earlier SURE Scholars; the program was featured in several local newspaper articles, as well as the Fall 1999 issue of the Stonehill alumni magazine. Dickens, a Political Science major; DiMartino, a History major; and Hamilton, an International Studies major, will research the history of the site, and learn and apply the processes of archaeological excavation.

Evan Jellison '01 and **Mary Porter-Goff '02** will work with **Maura G. Tyrrell**, Associate Professor of Biology, on two marine biology projects. Jellison, a Biology major, will study "Harbor Health: Forage Fish as Bioindicators in New Bedford Harbor," and Porter-Goff, also a Biology major, will study "Buzzards Bay Harbor Health." Both projects address the need for a simple, inexpensive way to index environmental pollution stress to compare harbor health from year to year. The work will be done with finfish, which show many responses to sublethal pollution stress. Jellison and Porter-Goff will collect fish samples on site and perform lab analyses. The work will build on research done during the summer of 1999 under the SURE program.

SURE Summer 2000 awards

SURE Scholars will begin the program on May 30 for an eight or ten week period. They will engage in weekly meetings to discuss the progress of their projects and other topics of general interest, and will be paid a stipend for their full-time service. All SURE Scholars will present summaries of their summer's work at an all-campus poster session in the early fall.

The SURE program is partially funded by a three-year grant from the Arthur Vining Davis Foundations. The gift of a SURE Scholar stipend has also been made by Danielle Zeedick, a former Stonehill College student. The Zeedick scholar for summer 2000 is Kimberlee Simonelli, working with Professor John Broderick.

Students and faculty members who wish to pursue a SURE research project for the summer of 2001 may contact the Office of Academic Development Duffy 119-A, Ext. 1069, for further information. Deadline for applications for the summer of 2001 is December 15, 2000.

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