Welcome WISE students, faculty, staff and corporate sponsors to the Fall of 2010. I had a transformative summer, as I traveled with Semester at Sea and the Institute for Shipboard Education to the Mediterranean. I got a true perspective on just how global the world really is, and on how fortunate I am to live, learn and grow here in a diverse culture. I met 750 amazing students from all over the states and world as well as many motivated engaged faculty and staff members. While away I visited several universities with programs that support education for women. I had the opportunity to discuss the status of Women in Science and Engineering with people of different cultures. I came back to Stony Brook with a fresh perspective and immediately welcomed the Class of 2014!

I continue to strive to collaborate with as many partners as are willing. We worked very closely last year with administrators at Brookhaven National Laboratory, the Brookhaven Women in Science group and Stony Brook’s Office of the Vice President at Brookhaven National Laboratories Affairs (OVPBNLA and BNL) to strengthen and enhance their support of WISE. We established several new scholarships through the OVPBNLA and research opportunities at BNL. The OVPBNLA established a WISE Scholarship and BNL supported five spots in the SUU program specifically for WISE students. For the first time, all first year WISE students will perform one of their rotations for WISE 187 at BNL. This is very exciting as it will expose the students to the wealth of research being done there. It will give graduate students an opportunity to teach while allowing the faculty and researchers to experience firsthand how great our students are!

Paul Siegel, Co-Director of TechPREP and I wrote and received another Innovation Generation Grant from Motorola. In addition to offering a Computer Science, Mathematics and Physics modules will be adding one focused on Engineering. We plan to have up to 54 students in the program this winter. We are grateful for the continued support of the College of Engineering and Applied Sciences, Motorola and the TechPREP Advisory Board members. This program established our Sister’s in Science in Technology, Engineering and Science (SISTER) mentor program and brought talented youth from Brentwood and Longwood School Districts to Stony Brook University. We also began collaborating with the Girl Scouts of Suffolk County (GSSC). Stony Brook continued on p. 3
**Girls Learn Int’l** by Himadri Kakran

“We hardly give any thought to the improvement of the character of the educated. The girls, we say, don’t have to earn’ so why should they be educated? As long as such ideas persist, there is no hope of our ever knowing the true value of education.” -Mahatma Gandhi

Fact: More than 60% of the 110 million children out of school are girls. The startling statistic mentioned above is the prime reason why Lisa Alter founded Girls Learn International in July 2003. From then on this international organization has founded 58 high-school chapters and two college chapters across the United States. Each high-school chapter is partnered with one of the 35 partner schools worldwide from Brazil, Cambodia, Haiti to India, Pakistan, Vietnam and many more.

The Stony Brook University chapter was the second in its group of college chapters and is only going through its second year on campus. We are a new and emerging club and would like the most of your active support and involvement to bring this club out on campus and raise awareness about girl’s rights in the field of education. Although we do not have a partner school at the moment, we have numerous events and fundraisers planned throughout the year. For the fall semester we have two events planned, a documentary screening as well as inviting a speaker over during a potluck dinner. We will also be having a large bake sale along with other fundraisers throughout the semester. Join us on Facebook – Girls Learn International at SBU or email us to join our mailing list - girlslearn.sbu@gmail.com.

**WISE SLC** by Sanche Graham

The Wise Student Leadership Council, SLC, is a student-run organization comprised of the women in the WISE program. The SLC helps broaden the horizons of all the WISE women and help them become more involved in not only the WISE program, but also the Stony Brook campus.

The executive board of the SLC works closely with the students and the Director of the program, Carrie Ann Miller, to organize and execute programs geared towards the needs of the students.

Some of our academic events include Research 101 where we introduce the women to upperclass WISE women who have participated in research programs on or around campus. This program exposes the freshmen students to research in a less formal environment and helps them relax for a few hours with their friends.

These programs have been great and are also necessary for the mental health of the students. Many times students over work themselves, but programs like these allow them to relax and for a few hours with their friends.

The SLC has had many successful years in the past and I anticipate the same this year!

**WISE High School Program** by Sharon Pavulaan

This past year the WISE high school program welcomed the Shoreham Wading River School District to our program, and we are pleased to announce that they are sending a second cohort to Stony Brook this academic year. Across the county and on the opposite shore, Islip schools will also be sending their second cohort of students to Stony Brook this year, along with a new accompanying teacher. WISE has expanded to include students from West Hampton Beach as well. Our newest members will join students from the Comsewogue, Port Jefferson, and Riverhead school districts in the current academic year.

In introductory meetings with students and teachers at their schools, I have been impressed with the passion for science that many of them possess. Many Long Island high schools now offer research programs as elective programs within their science curricula and these sophomore students are ready for the challenge of being on a college campus and having the opportunity to be in an environment where authentic research is conducted.

Since the inception of the SISTER mentor program, my teaching WSE242, and my role as GU advisor I have had the opportunity to know many of the college WISE students much more than I had in past years. Because of this, many of them have become active participants in the WISE high school program. I have realized how crucial this component is to the goals of the program. The high school students respond and relate so strongly to the young college women so much more easily than anyone over the age of 30 or so, a generational thing. In terms of role models, seeing someone one step ahead of themselves, the WISE college women meet that criteria.

They try to listen when we (staff, faculty, and professions) talk, but they interact when it is the college women who are speaking with them. WISE High School is coordinated through participating high schools by Eastern Suffolk BOCES. This past year, Carrie-Ann and I have also made a connection with teachers and administrators of a relatively new offering at the Putnam/Northern Westchester BOCES, the New Visions Engineering program. The New Visions students had the opportunity to join WISE high school students and the Society for Hispanic Professional Engineers (SHPE) as well as other local high school students and campus volunteers for our Engineering Day event day this past April. New Visions teachers visited Stony Brook’s Engineering summer camp program and saw the projects our faculty engaged in with young students.
TechPREP by Pina Licata

TechPREP serves students in 6th grade through high school and introduces them early on to aspects of computer science, math and physics. TechPREP utilizes a technology demonstration center, classroom teaching, awareness-building and experimental events in order to aspire young women to gain opportunities in the technology sector.

A cohort of 6th, 7th, and 8th grade young women are introduced to the practical aspects of computing, math and physics through a series of Saturday programs held twice a month and followed up with a two week summer day camp. The age group is chosen because continued achievement and a foundation of eventual success in the sciences starts early in a student’s education.

Last year TechPREP wrapped up its second year. Thirty young women completed the program. We collaborated with the Girl Scouts of America, The Society of Women Engineers, and The Society of Professional Hispanic Engineers to hold various outreach programs on campus.

We are proud to announce that TechPREP has received funding for a third year in a row! TechPREP is funded through a Motorola Innovation Generation grant. This year we will have three cohorts of girls from Longwood and Brentwood school districts partaking. We will have one group in the Computer Science component, one group in Math and Physics, and one group will be doing Engineering. The program will start in March. We are currently planning, and preparing.

Students will be coming to campus on Saturdays starting in the Spring semester and participate in a two-week long summer camp experience. The last day of summer camp will include a showcase of the students’ final projects and an awards ceremony where students will receive certificates. For more information, please visit stonybrook.edu/techprep

Director’s Message (continued from page 1)

hosted an Engineering Fair which was attended by 120 girls from 24 different troops in Suffolk County. TechPREP worked with BAE Systems, Rockwell, SWE, and the GSSC to bring middle school girls to our first Engineering Day program.

I started a new program for the WISE students this year entitled “Lunch with the Director”. The students, along with WISE staff and faculty will meet for lunch once a month. We plan to have an open discussion forum. We met this past month and it was wonderful to have the upper division students and faculty there to answer the first year student’s questions. It’s another way for me to get feedback and to be sure that the programs we are offering are reflective of the students interests.

Finally, we received one of the Presidential Mini-Grants to help support our junior mentor program and graduates 187 Instructors. Both of these programs provide the foundation of WISE and are one of the reasons why WISE is so successful at supporting and retaining our students.

We are thankful and grateful for the continued support of the President’s Office, the Provost Office (which so generously supports our mentor programs, the College of Engineering and Applied Sciences and the College of Arts and Science, and SOMAS). The Friends of WISE Advisory Board participated 100% in the Diamond’s Award drive this past spring as well as the Annual WISE Banquet!

We are looking forward to an exciting year. The class of 2014 is enthusiastic and engaged in the program. Please mark your calendars for May 12, 2011 for our Fifth Annual WISE Banquet!

I am pleased to make the following announcements:

Sanche Graham and Manushi Shah are doing research with Dr. Wendy Tang on Fractal Geometry and its applications. Each received support from the National Science Foundation.

WISE was awarded a Presidential Mini-Grant of $5,000 for our WISE Junior Mentor Program

Erica Palma is the recipient of the PALL Scholarship for 2010-2011

Four SULI- BNL Research Opportunities were given to Faith Consiglio, Shannon Hicks, Alice Wong and Kristine Horvat

Office of the Vice President Brookhaven National Laboratory Affairs Scholarships were awarded to Shannon Hicks and Niya Grozeva

Citigroup Scholarships recipients are Carolina Jakob, Himadri Kakran and Manushi Shah
What We Did in the Summer of 2010

Yaritzy Astudillo (2011): I was a summer intern at Pfizer. This year I plan on continuing to participate in research on campus and take the MCAT. I plan on applying to MD/PhD programs in the Spring.

Niya Grozeva (2011): I attended an REU program this summer at the University of Minnesota where I did research in hydrothermal geochemistry. In addition I plan on continuing to do research this year at the Department of Geosciences here at Stony Brook in pursuit of an honors thesis.

Lacey Kucerak (alum, class of 2010): I am preparing for a two year mission with the Peace Corps in French-speaking sub-Saharan Africa working with agriculture.

Faye-Marie Vassel (2011): This summer I had the fortune of being accepted to three amazing summer research programs: the SHURP program at Yale; the MCQB program at Princeton; and the Howard Hughes Medical Institute program here at Stony Brook. With hopes of making substantial progress on my senior project I decided to accept the HHMI fellowship.

Vincy Abraham (2013): I took summer classes and played for my church’s volleyball team.

Jennifer Muscarello (2011): My summer plans included working as a veterinary assistant at Comer Animal Hospital; shadowing veterinary medicine internal specialist; volunteering with mixed practice/equine vets; volunteering at North Shore Animal Shelter for in-depth pediatric medicine; volunteering with exotic veterinarian at North Fork Animal Hospital, Atlantis Marine World and Riverhead Foundation; and working on applications for veterinary school. My plans for this year include being a WISE mentor, finishing up my last year at Stony Brook and volunteering at the above organizations.

Faith Consiglio (2013): I was working at Brookhaven National Lab on a project that dealt with treating brain tumors in rats under the SULI internship program.

Sanche Graham (2011): I received an internship position at New York Methodist Hospital in Brooklyn as part of their Summer College Internship Program, where I worked in the Emergency Department assisting doctors and nurses in patient care.

Pooja Parekh (2011): This summer I interned at General Electric Transportation in Erie, PA for 10 weeks. My position was train control engineer which involved controls system design for GE’s locomotives.

Jenna George (alum, class of 2010): This year I will be attending University of Central Florida for my first year in the MA program in Counseling Education.

Margaret Evans (junior, BME Major): Over the past summer I took two summer classes (Anatomy and Physiology and Linear Algebra) and was involved in research from the previous semester. The research is in Professor Lei Zuo’s lab in the Mechanical Engineering department. Along with a few fellow students, I am designing an assistive ankle orthotic that is controlled by electromyography (EMG) signals from the ankle muscles. After summer session one, I studied abroad in Italy. The program was based in Rome, but we travelled around Italy to locations like Florence, Venice, Capri, etc. In Italy, I took two classes (Introduction to Business and Immersion in Another Culture) for a month. It was an amazing experience and I learned a lot about Italian culture. This semester, I am still involved in the research in the ankle orthotic. The main goal of this research project is to design a prosthetic limb controlled by EMG signals, but the ankle orthotic is a good, simple start. I am also the president of the Biomedical Engineering Society (BMES). The purpose of BMES is to support the undergraduate students and unite the Biomedical Engineering department, including undergraduates, graduates, and faculty.

Sanhita Reddy (Alum, Class of 2010): I got a Fulbright research grant and am conducting research in Brazil at Fiocruz (The Oswaldo Cruz Institute, equivalent to the NIH of the US). As a WISE Scholar for Medicine I will attend Stony Brook University Medical School in 2011.