The future belongs to those who prepare for it.

A heartfelt thank you to everyone for making CSTEP’s 25th Anniversary Scholarship and Alumni Gala held on Friday, May 4th at the Buffalo Niagara Marriott Hotel a success! Your generous support helped us recognize our outstanding alumni, 2012 graduates, distinguished faculty research mentors, and research interns. Thank you for enacting CSTEP’s motto: “To whom much is given, much is required.”

We look forward to working with you in the future as we continue supporting and preparing talented underrepresented students pursuing Science, Technology, Engineering and Mathematics (STEM) fields as well as the licensed and allied health professions.

Please note that we are still accepting donations towards our “Drive for $25k” to fund CSTEP research scholarships. Please make all checks payable to CSTEP and send it to the CSTEP office at 222 Norton Hall, Buffalo NY 14261.

Congratulations to the following ten students who are recipients of a $50 card to the University Bookstore for exemplifying excellence in academics by consistently maintaining a superior GPA:

1. Avonelle Brandon
2. Howard Chen
3. Jenny Chen
4. Paul Glenn
5. Sharlene Green
6. Jade Lewis
7. Li Li Lin
8. Andrew Ortiz
9. Amanda Osei
10. Brittany Sainz

NEXT CSTEP MEETING
ABC’s of Graduate School Graduate School Panel Friday, October 19, 2012 Noon 567 Capen Food will be served!
CSTEP 20TH ANNUAL STATEWIDE STUDENT CONFERENCE

This 2012 spring semester, 20 students from the UB, CSTEP Program, participated in the 20th Annual CSTEP Statewide Conference entitled Journeys Beyond Excellence, held April 13-15th, 2012 at the Sagamore Resort on Lake George. Over 650 CSTEP students and staff from 50 colleges across New York State were present. The three-day conference exposed students to a variety of motivational, academic and career-related workshops, dynamic and engaging speakers, and a graduate and opportunities fair. In addition, the research poster competition served as the conference centerpiece.

During the conference, 150 students competed in the Research Poster Competition in natural sciences, physical sciences, technology, social sciences, and human services categories demonstrating research conducted via the CSTEP Research Program. Hector Coco and Damian Ogbonna presented their research via oral presentation in the Technology category. Our poster presenters included: Naihah Sinclair, Tavia Garvey and Richard Hunte in the Natural Science category, Shanney Lacey in the Technology category, Belle Cunningham in the Physical Science category and Jonathan Feliciano in the Social Science category.

UB CSTEP had an unprecedented 5 winners across all categories. Belle Cunningham, Hector Coco and Jonathan Feliciano were awarded as Honorable Mentions. Richard Hunte and Shanney Lacey were awarded 1st Place.

The conference ended with an insightful keynote address by CSTEP Alumnus Dr. Gezer Ortega, a Pediatric Surgery Researcher at St. John’s Hopkins Hospital: Children Center. He addressed the importance of CSTEP’s goal - to continue the assault on the problem of underrepresentation of minorities in STEM and the licensed professions. He discussed the differences between mentors and coaches, the core values of a person, and his experience as a CSTEP student. He also discussed the challenges and realities that students must face as they strive for excellence in academics and the importance of establishing a personal mission.

2012 SUMMER RESEARCH INTERNS

Student Spotlight

Sharece Blake, Electrical Engineering

My career goals are to attend graduate school and then work at a corporation. I applied to the CSTEP Summer Research Program because research examines areas of study in depth which generates new ideas and discoveries. To be honest, I did not know what to expect, but I’m glad I took a chance. The CSTEP Summer Program has definitely given me an experience to remember because it allowed me to get hands on involvement in my field which you can not get in lectures.

I am working at the Energy Systems Institute (ESI) with Dr. Jennifer Zirnheld. The title of my research project is “Effects of Transient Currents on the Electrical Characteristics of a Thin Wire.” The purpose of the project is to electrically stress a wire and evaluate the thermal effects due to resistive heating by building a circuit that could generate constant current pulses at durations and amplitudes of choice.

FUTURE PLANS: I plan on obtaining a Masters in Electrical Engineering. In the future, I want to develop, test and design electrical products and equipment that can then be manufactured. I would like to enhance existing technologies and make them more captivating.

Summer Mentor: Dr. Jennifer Zirnheld, Director of Energy System Internship Placement: Energy System Institute

Sharece Blake

“My summer research helped me solidify my graduate school pursuits because it will make me a more qualified candidate.”

Nurys de la Cruz, Psychology

From this experience, I expected to gain skills to conduct and present research. The take away concept for me was, to whom much is given much is required. I should take everything that I have learned this summer and pass it on to those around me. Not only did we learn how to conduct and present research but the mentors provided insight into graduate school. My mentor answered all my questions about research and graduate school in general.

My research project was entitled, “Investigation of Parenting Approaches Between Mothers and Fathers of Children with ADHD.” This investigation compares maternal and paternal interactions with ADHD diagnosed children from 15 families. Child led play, parent led play, and clean up were recorded and then coded for parent behavior and child behavior. Results were analyzed to investigate differences in parenting approaches by gender. The approaches that mothers and fathers take when interacting with their child could be used to further the development of effective ADHD interventions.

FUTURE PLANS: My career goals are to pursue a Ph.D. in Clinical Psychology, with a concentration in Neuropsychology. Ultimately, I want to work in a hospital environment with children.

Summer Mentor: Gregory A. Fabiano, Associate Professor
Internship Placement: Department of Counseling, School & Educational Psychology

“the take away concept for me was, to whom much is given much is required.”

Sharece Blake, Electrical Engineering Student

Fall 2012

Sharece Blake

“the take away concept for me was, to whom much is given much is required.”

Nurys de la Cruz, Psychology Student

2012 Summer Research Interns
Mohamed Abdulla, Mechanical Engineering

Upon completing my junior year, I felt that my grades were fairly competitive in terms of applying for a Mechanical Engineering graduate program. However, I lacked experience and needed to be a little more hands on during my undergraduate studies. The summer research program actually turned out to be more than I expected! Not only did I get the hands on research experience I needed, but I also attended countless workshops that helped me become well-rounded, and had the chance to take a practice GRE and see where I stand. I also had the opportunity to familiarize myself with faculty members and Ph.D. candidates.

My summer research project was entitled “Virtual Prototyping (VP) of Intuitive Surgical’s da Vinci Mega Needle Driver”. The goal is to use commercial VP software to make design improvements to a tool used by a surgical robot.

FUTURE PLANS: To pursue a Masters degree in Mechanical Engineering and a Masters of Business Administration.

Melina Bowdwin, Nuclear Medicine Technology

This past summer, I developed a strong interest in Public Health and Preventive Medicine, that I would like to pursue in graduate school. I applied to the summer research program because I wanted to get a good handle on what research really is and what it takes to pursue a career in research. I wanted to see if research is really what I would like to do or not. The program was what I expected, but I do wish we had more time to spend in the lab before producing our poster. Despite some of the obstacles I faced in my first few weeks in the lab, I am very happy with the data analysis I have done and how my project is coming along.

My research project was entitled, “Negative Pressure Breathing to enhance Nitrogen Elimination during DSSUB and other Diving Operations.” I work under Dr. David Pendergast, who is a professor of physiology. Before the CSTEP program, I did not have any other internship or research experience.

FUTURE PLANS: To obtain a Master’s degree in Public Health with a concentration in Epidemiology and Environmental Health or a Master’s degree in Exercise Science to be able to work in a clinic to facilitate diagnostic imaging with radionuclides as well as radionuclide therapy for cancer and tumors.
Ian Waite, Engineer

**Degree(s) Year of Graduation:** Industrial Engineering, BS 2009, Industrial Engineering MS, 2011

**Original City:** Kingston, Jamaica

**Current City:** Hudson Falls, NY

**Current Job Position:** Quality Engineer, General Electric Company


**Organizations and Affiliations:** American Society for Quality (Hudson Mohawk Chapter).

**One Fond Memory of UB and/or CSTEP:** Having great guidance and mentoring from Patricia (Tia) Greer and Shanna Crump-Owens from the CSTEP office.

**Who You Would Like to Thank:** Shanna Crump-Owens, Patricia Greer, Dr. Rakesh Nagi (Department of Industrial & Systems Engineering), Dr. Sean Wu (Department of Industrial & Systems Engineering), Dr. Victor Paquet (Department of Industrial & Systems Engineering), Dr. Pamela McCaulay Bush, all CSTEP members.

Richard Linares, Engineer

**Degree(s) Year of Graduation:** Aerospace Engineering, BS 2009, Control and Estimation Theory, PhD Candidate, 2013

**Original City:** Yonkers, NY

**Current City:** Buffalo, NY

**Current Job Position:** Research Aerospace Engineer, CUBRC


**Organizations and Affiliations:** American Institute of Aeronautics and Astronautics (AIAA), Students for the Exploration and Development of Space (SEDS), Electrical and Electronics Engineers (IEEE), American Astronautical Society (AAS), American Geophysical Union (AGU), American Meteorological Society (AMS).

**One Fond Memory of UB and/or CSTEP:** CSTEP trip to the Medical Research Corridor in downtown Buffalo during the Summer Research Program and taking part in the Brush-Up-Buffalo community service activity.

**Who You Would Like to Thank:** I would like to thank Shanna Crump-Owens for her help, advice, and assistance during my graduate career.

Olayemi Ola, MD

**Degree(s) Year of Graduation:** Biology and Psychology, BA 2006, Medicine, MD 2011 (American University of Antigua)

**Original City:** Queens, NY

**Current City:** Marlton, NJ

**Current Job Position:** Medical Doctor (Resident Doctor-Post Graduate Year 1), UMDNJ Camden Campus Cooper University Hospital

**Community Involvement:** Church youth Leader, Praise and Worship Leader, International Pediatric elective at University of Ibadan, College of Medicine (Nigeria), University of Buffalo Gospel Choir - President (Twin)

**Organizations and Affiliations:** Pediatric Association Society, Eastern Scientific Pediatric Research

**One Fond Memory of UB and/or CSTEP:** Tearing up at the CSTEP office because I was not sure if I could get into medical school. I was introduced to Ms. Crump-Owens who encouraged me that nothing is impossible and that I could get into medical school as long as I work hard. She even gave me some examples of people who had struggles but were able to get into medical school. She informed me of the CSTEP Kaplan Scholarship which offered the MCAT course. I cannot say thank you enough, I am truly grateful.

**Who You Would Like to Thank:** I would like to thank god, my parents and siblings for the constant support and encouragement, CSTEP, especially Shanna Crump-Owens, my mentors Dr. Sarumi and Dr. Fadoju, and finally, I would like to thank the love of my life.

Chidiebere Onyishi, RN

**Degree(s) Year of Graduation:** Medicinal Chemistry, BS 2007, Nursing, BSN 2010, Family Nurse Practitioner, DNP Anticipated 2014

**Original City:** Bronx, NY

**Current City:** Buffalo, NY

**Current Job Position:** Registered Nurse, Kaleida Health

**Community Involvement:** Food & Clothing Drives, Flu Clinics

**Organizations and Affiliations:** Graduate Nursing Organization

**One Fond Memory of UB and/or CSTEP:** The Annual CSTEP Graduation Ceremony and how everyone came together to celebrate all the hard work and difficult times at UB.

**Who You Would Like to Thank:** Hilary Onyishi, Oloma Asogwa, Mr. & Mrs. Eluma Asogwa, Preston Niland, and Shanna Crump-Owens.

“Success is liking yourself, liking what you do, and liking how you do it.”

MAYA ANGELOU

AMERICAN AUTHOR AND POET

“The difference between a successful person and others is not a lack of strength, not a lack of knowledge, but rather a lack of will.”

VINCE LOMBARDI

NFL FOOTBALL COACH

“Education’s purpose is to replace an empty mind with an open one.”

MALCOLM FORBES, PUBLISHER OF FORBES MAGAZINE

“There are no secrets to success. It is the result of preparation, hard work and learning from failure.”

COLIN POWELL, 65TH UNITED STATES SECRETARY OF STATE
Funding Your Research - $500 Undergraduate Research Awards

Are you doing research? If so, the Center for Undergraduate Research and Creative Activities (CURCA), $500 undergraduate research awards may be of interest to you.

This research award could potentially be used to purchase new equipment or materials that may be vital in conducting your research. This funding could also be used to cover the cost of covering your attendance to a research conference to present your research.

The Benefits:
- Receiving funding for your research looks good on applications to graduate schools
- This money could be used for materials your lab may not otherwise have access to
- Attending a research conference to present or to attend can be an enlightening experience
- Applying for this Award is great practice for other grants you may be interested in applying to in the future

Applications are accepted and reviewed throughout the Fall and Spring Semesters. It would a good idea to start working with your research mentor on your application now; the first deadline for applications this fall semester will be October 3, 2012 by 3:00 PM.

For more information, visit http://curca.buffalo.edu/students/funding.php

CSTEP Laptop Loaner Program

Did your computer crash? Is it running slow? Need one for the semester? CSTEP now has a laptop loaner program for the Fall 2012 semester. Students interested in borrowing a mini netbook should stop by the office today!

Career Services Mentor Program

Working with a mentor in your field can be a great asset in helping prepare you for a future career in your field. A mentor has been where you currently are as a student and have the benefit of more life experience which they can share with you. The Career Services office and the UB Alumni Association have partnered together to create a mentor network for UB undergraduates to benefit from.

What can a mentor do for you?
- Help you explore the possibilities within your field of study
- Guide you through your undergraduate career
- Offer insight into the life after graduating
- Help you prepare applications and personal statements for graduate schools and jobs

If you are interested in participating in this mentor program, you can easily register online from the career services website. Participants must register and create a profile. Mentors can then view your profile and contact you if they believe they would be a good match.

For more information visit: www.ub-careers.buffalo.edu/mentor

Consider a Fulbright Scholarship?

FULBRIGHT BEGAN IN 1946 AS A FLAGSHIP INTERNATIONAL EDUCATIONAL EXCHANGE PROGRAM SPONSORED BY THE U.S. GOVERNMENT. IT IS DESIGNED TO "INCREASE MUTUAL UNDERSTANDING BETWEEN THE PEOPLE OF THE U.S. AND THE PEOPLE OF OTHER COUNTRIES."

I started organizing my thoughts during the summer; just a few weeks after the end of the semester. I took the first step in applying for a Fulbright fellowship and met with the UB Fulbright Advisor, Dr. Kenneth Shockley, to help me understand the application process better. I continued communicating with him during the entire process.

WHO CAN APPLY?

Graduating college seniors, graduate students, professionals and artists to study, teach, or conduct research. A bachelor's degree (or equivalent) is required by the start of the Fulbright grant period. Students are chosen for their academic merit and leadership potential. The 2013-2014 applications are online. The National deadline October 17th. All UB students who apply for the scholarship must apply through UB and adhere to all deadlines.

The waiting period is hectic, but I am grateful for the scholarship. I would not have done it without my support system; advisors, mentors, friends, family, etc. I am encouraging everyone to apply because the scholarship provides a unique experience. Expenses are covered, including flight, but each country varies to how much that person receives. For Tajikistan, I should be receiving approximately $30,000.

Waiting until the last minute is not a good idea because there are many things to be done in advance. Planning can ease the stress.

GRANT BENEFIT INCLUDE:
- Round-trip transportation to the host country
- Funding to cover room, board, and incidental costs, based on the cost of living in the host country
- Health benefits

In some countries, grants may also include:
- Book and research allowances
- Mid-term enrichment activities
- Full or partial tuition
- Language study programs
- Pre-departure and in-country orientations

I encourage you to apply. For more information visit the website: http://fulbright.state.gov/

TIMELINE

September - UB application due
October - UB Interviews
October - Application submitted to a national competition
January - I was notified by the National Screening Committee that I was moved to the next round
Mid February - I was interviewed by the Embassy for Tajikistan
April - I was notified that I received the scholarship contingent upon obtaining medical clearance.
May - I obtained medical clearance
June - Departure orientation (each geographical region has its own)

APPLICATION REQUIREMENTS

Below are some of the items needed:
- Online application (leadership, plans, biography)
- Recommendation letters
- Letters of Affiliation
- Personal Statement
- Project proposal (what you plan on doing abroad)
- Transcripts from all institutions attended beyond high school

Grace Mukupa will use the Fulbright award to explore the effect of food incentives as strategy for attracting and retaining young students in educational institutions of the Khatlon Province in Tajikistan.
**CSTEP Calendar**

**SEPTEMBER**

3 MON  
CSTEP Welcome Back BBQ 1:00-4:00PM, South Lake Village Community Room

10 MON  
CSTEP Research Internship Program Begins

14 FRI  
Research Opportunities Fair 1:00-4:00PM, UGL Library Lobby

19 WED  
Interview Like a Pro for the Professional Health Schools, 4:00-5:30PM 145C, SU

21 FRI  
CSTEP MONTHLY MEETING: Study Abroad: Noon, 567 Capen-LUNCH SERVED!

22 SAT  
Community Service: Habitat for Humanity - Building/Renovating a House 9AM site 130 Hastig Ave, Buffalo NY 14215

**OCTOBER**

5 FRI  
CSTEP Research Luncheon: Session A, Noon, 567 Capen - LUNCH SERVED!

9 TUES  
Early Assurance Programs at UB’s Medical and Dental Schools, 5:00-6:00PM, 272 Capen Hall

10 WED  
Kaplan Practice Exams: DAT, GRE, LSAT, MCAT, and PCAT 6:00PM Ste 201, UB Commons, call (716) 636-1882 for more information

19 FRI  
CSTEP MONTHLY MEETING: Graduate School Pannel: Noon, 567 Capen hall - Refreshments will be served!

25 THURS  
RX For Success “Pharmacy” : 5:00PM, 183A Kapoor Hall, South Campus Pharmacy School - FREE FOOD!

26 FRI  
CSTEP Night Out - 7:00PM at Lasertron

**NOVEMBER**

6 TUES  
Election Day - VOTE!

9 FRI  
Panel of Professionals - Noon, 567 Capen Hall - LUNCH SERVED!

19 MON  
Campus Health Educator (CHE) Service Learning Project - Application Deadline

30 FRI  
CSTEP Fall Internship Program Ends

**DECEMBER**

7 FRI  
CSTEP End of Semester Reception -Research Luncheon: Session B Noon, 567 Capen Hall, LUNCH SERVED!

7 FRI  
Recruitment begins for CSTEP Summer Research Program - Applications Available

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**CONSIDERING GRADUATE SCHOOL?**

**October 19, 2012**

**Noon**

**567 Capen Hall**

**A Graduate Student Panel**

Will share their experiences regarding:
- The Application Process
- Balancing Course Loads
- Funding Sources

LUNCH WILL BE SERVED!!!

For more information please contact: kerishah@buffalo.edu
The Collegiate science and Technology entry program (CsTep) provides services and activities to increase talented underrepresented students’ retention into the licensed professions and careers in science, technology, engineering and mathematics (STEM). CsTep meets this objective by providing the following services: academic and career advisement paid academic year and summer research/internship opportunities, tutoring, academic and career workshops, the CsTep/Kaplan Scholarship, personal statement review and assistance with the graduate school application process, the CSTEP Excellence Scholarship, monthly student meetings, newsletters, attendance to conferences, and other enrichment activities.

CSTEP MISSION STATEMENT

The Collegiate Science and Technology Entry Program (CSTEP) provides services and activities to increase talented underrepresented students’ retention into the licensed professions and careers in science, technology, engineering and mathematics (STEM). CSTEP meets this objective by providing the following services: academic and career advisement paid academic year and summer research/internship opportunities, tutoring, academic and career workshops, the CSTEP/Kaplan Scholarship, personal statement review and assistance with the graduate school application process, the CSTEP Excellence Scholarship, monthly student meetings, newsletters, attendance to conferences, and other enrichment activities.