THE FUTURE BELONGS TO THOSE WHO PREPARE FOR IT.

CSTEP COLLEGIATE SCIENCE AND TECHNOLOGY EDUCATION PROGRAM

SPOTLIGHT

FALL 2012 II

FEATURED IN THIS ISSUE:
- Community Service: Campus Health Educator (CHE)
- Community Service: Habitat for Humanity
- Research Interns’ Spotlights
- CHE Students’ Spotlights
- CSTEP Outstanding Alumni
- CSTEP Kudos
- Blue & White Fellow - Hector Coco
- Top Ten Test Taking Tips
- Graduate School Preparation

CSTEP

LAPTOP

Loaner Program

- Did your computer crash?
- Is it running slow?
- Need one for the semester?

CSTEP has a laptop loaner program. Students interested in borrowing a mini netbook should stop by the office today!

NEXT CSTEP MEETING

End of Semester Reception & Research Luncheon
Friday, December 7, 2012
Noon
567 Capen
Lunch will be served!

Serve AND Learn

Are you interested in becoming a COMMUNITY HEALTH EDUCATOR?

OUR MISSION

The goal of a Community Health Educator (CHE) is to increase the number of minorities participating in organ donation. This goal will be achieved by engaging students pursuing allied health majors in service learning, and training them to conduct educational workshops for UB students during the Spring 2013 semester, and facilitating a campus-wide organ donation drive.

REQUIREMENTS
- Must attend orientation AND training sessions
- Must conduct educational workshops to UB student organizations
- Must plan and facilitate a campus-wide donation drive
- Must complete 75 hours of service
- Must demonstrate outstanding commitment

BENEFITS INCLUDE
- Structured training as a Community Health Educator
- Develop presentation & leadership skills
- Opportunity to present at the CSTEP Statewide Conference in Albany, NY
- Use of Mini Computer for spring semester
- 1 credit hour course
- Recognition during CSTEP Student Dinner

For more information, contact Shanna Crump-Owens, CSTEP Director at 645-2234 or email socrump@buffalo.edu

Applications Due Monday, December 3, 2012
Training starts Wednesday, January 9, 2013

UB University at Buffalo The State University of New York | REACHING OTHERS
On Saturday, September 22, 2012, CSTEP and the National Society of Black Engineers (NSBE) participated in a community service project with Habitat for Humanity. Habitat for Humanity is a non-profit charitable organization seeking to alleviate the shortage of affordable housing within the U.S. and abroad. Habitat has built over 75,000 homes in the U.S. and over 225 in the Buffalo community. Through volunteer labor and donations, Habitat for Humanity-Buffalo has built and rehabilitated homes for families who have difficulty obtaining a home through other means. To qualify for a home, a family must provide at least “500 hours of sweat equity.” Qualified families purchase Habitat homes with a zero-interest mortgage, enabling them to own their home.

Thirty CSTEP Students and Staff members reported early Saturday morning in the pouring rain at 130 Hastings, Buffalo, NY to gut the house to make way for a new renovation. After a quick briefing on the task to be done - with hard hats, gloves, face mask, hammers, and shovels - the group quickly divided into two. One group worked on the first floor of the house, and the other group worked on the upper level. In a matter of hours, CSTEP students managed to break down all the dry wall, surrounding boards, and remove all the insulation from both floors. The volume of work completed would have normally taken the Habitat for Humanity 6-8 Saturdays to complete. The students truly reflected the CSTEP Motto “to who much is given, much is expected.” Service is a key component of CSTEP and the opportunity to work with Habitat for Humanity was a rewarding experience.

For more information on Habitat for Humanity Buffalo visit www.habitatbuffalo.org.
**Khalif Osson, Pre-Pharmacy**

Without research, we cannot develop new ideas, so research is very necessary. The understanding of my research this summer required knowledge in Anatomy, Physics, and Chemistry which are all courses I have taken at UB. During the CSTEP Summer Research Program, effects were observed via micro-electro clamping surgically removed eggs from frogs to inject proteins into 1a and 1b hERG channels. My research topic was “Effects of Tamoxifen on HERG channels”. This research focused on two naturally occurring splice variants, HERG 1a and 1b. They were identical except for divergent N-termini. The HERG 1a N-terminus has 396 amino acids whereas 1b has only 56 of which 36 are unique. HERG 1b has faster activation and its deactivation kinetics is greatly accelerated. Since the effect of Tamoxifen was tested only on HERG 1a, this study investigated HERG 1a effect on HERG 1b channels.

**FUTURE PLANS:** To become a licensed Pharmacist.

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**Ashley Narain, Pre-Chiropractic**

The program ended up being all that I expected and more thanks to my peers and the entire CSTEP staff. All of the workshops, events and classroom time allowed me to get to know my peers, whom I consider good friends now. The workshops were motivating and helped open my eyes to all of the educational opportunities that are available. I now know that you can expand your horizon beyond the UB campus with all types of internships, fairs and conferences.

I am currently working on a project titled Silicon based nanotheranostics for Biomedical Applications. It is a combination of Plasmonic Gold and Luminescent Silicon Nanoplatforms for Multimode Imaging of Cancer cells and Silicon Quantum Dot Theranostics using Metabolomic and Proteomic data in Cardiac Ischaemia. These two projects are similar because they both utilize Silicon Quantum Dots (SiQD’s). SiQD’s are used because they are non-toxic. My focus is cancer (all types) as well as cardiac ischaemia. The particles created can aid in photothermal treatment of cancer and analyze drug release profiles in heart medication.

**FUTURE PLANS:** I would like to obtain a Doctorate in Chiropractic Degree and an MBA. I plan to open my own Chiropractic office in the Bronx.

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**FALL II 2012**
Chiamaka Agbasionwe, Biological Sciences

My expectation prior to CHE was to understand racial factors affecting organ donation and how to increase the amount of underrepresented groups that donate organs. This CHE program was very educational; I learned topics that I knew very little about and new skills such as communication, problem solving skills, which I can use to help others in the future. I was able to understand that Service Learning is learning about topics about the community and using that knowledge to serve the community. This program reminded me how important it is for me to become a doctor. It showed me the importance of team building and giving back to the community. I have a greater sense of pride in the community as a result of participating in this program.

FUTURE PLANS: To graduate with a Bachelor of Science in Biology and possibly obtain a Master’s Degree with a concentration in Physiology. I will also obtain a medical degree and continue researching.

Tavia Garvey, Pharmacy

I participated in the CHE program to learn about minorities and organ donation and to learn how to educate people on the importance of it so that I can take what I learned and apply it in my home community. Prior to the program, I understood service learning as engaging in a community activity where you are learning by hands-on-experience; and taking what you have learned and applying it while bettering the community. After the program, my view of service learning has been enriched. I learned about the importance of organ donation and how to increase awareness about such a sensitive topic in the community. I learned about the statistics and my misconceptions were clarified. I learned how to approach people about this topic, listen to their opinions and clarify their misconceptions. The program was great because I was applying what I learned during training and using it to educate other students. I am more aware of organ donation and more aware of health issues that lead to a person needing an organ or being listed for an organ transplant. I would like to educate others on prevention of these issues. Lastly, I was accepted to Pharmacy School this year because this program enhanced my communication skills, time management and writing skills. I believe this Service Learning program has made a great impact in our campus.

FUTURE PLANS: To become a Pharmacist.
As a junior in Applied Mathematics at the University at Buffalo, I have plans to attend graduate school to earn a Ph.D in Applied Mathematics and Statistical Analysis. The most influential assignment I have had as a CSTEP student was talking to students during the CSTEP Day of Service at International Prep Academy. Speaking to those students to motivate them and teach them the importance of attending college was an honoring experience. CSTEP breeds leaders who take advantage of the things they offer, and most importantly they have a family atmosphere that you might have never had.

In the future, I will continue publishing books. I am also interested in starting a youth empowerment organization, to mentor youths throughout high school, and beyond. It should be up and started by summer 2013.

I believe you can be anything you want to if you put your mind to it; that statement comes without boundaries. Dream your biggest dream for your actions of success will be limitless. Always keep in your head that you ARE the difference.

DR. KEBA ROGERS
Associate Director, Nationally Certified School Psychologist

CSTEP Alumas, Dr. Keba Rogers is now the Associate Director of the Office of Diversity and Inclusion (ODI) at the Johnson Graduate School of Management at Cornell University. In her current role, she is ODI’s liaison to the Office of Student Services and advisor to Johnson’s diverse student clubs. She also supports diversity recruitment, manages event planning for all internal ODI events and is a member of the Johnson Diversity Council. Prior to Johnson, Keba worked as a Licensed Psychologist at Counseling and Psychological Services at Cornell.

In 2010, Keba was awarded the Delbert Mullens Thinking Outside the Box Award, in 2009 she was awarded the CSTEP Excellence Scholarship, and in 2007 she was awarded the CSTEP Outstanding Alumni Award.

During her time at UB, Dr. Rogers received her BA in Psychology and Community Mental Health, an MA degree in School Psychology, and Doctor of Philosophy degree in Counseling Psychology and School Psychology.

As a former CSTEP student and graduate assistant she exemplifies the motto, “To whom much is given, much is required”.

CSTEP STUDENT PUBLISHES BOOK

NIGEL BROWN-WARD
Junior, Applied Mathematics

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Dr. Ngozie Agbasionwe, Licensed Pharmacist

Ngozie Agbasionwe, Licensed Pharmacist

**DEGREE(S) YEAR OF GRADUATION:** Pharmacology and Toxicology, BS 2010 and PharmD, 2012

**CURRENT CITY:** Brooklyn, NY

**COMMUNITY INVOLVEMENT:** Planned and assisted in multiple wellness clinics and educational programs held in community pharmacies in underserved communities of Buffalo and Brooklyn NY.

**ORGANIZATIONS AND AFFILIATIONS:** Dean’s Student Ambassador, President- Student National Pharmaceutical Association, Events Coordinator- Christian Pharmacists Fellowship International, American Pharmacist Association, American Society of Health-System Pharmacists, American College of Clinical Pharmacy.

**ONE FOND MEMORY OF UB AND/OR CSTEP:** From the day I went into the office during my sophomore year, my life was transformed. CSTEP supported me throughout my undergraduate years, the organization taught me professionalism, discipline and showed me the importance of giving back to the community.

**WHO YOU WOULD LIKE TO THANK:** My parents, Kofi Hayford, my friends-Nadia, Uzy, Henry, and Getrude; my first research mentors and close friend, Dr. Folarin Erjobogbo, Dr. Mark T. Swihart, Shanna Crump-Owens and CSTEP Staff.

Akinlaja Caulcrick, Manufacturing Engineer

Akinlaja Caulcrick, Manufacturing Engineer

Akinlaja Caulcrick, Manufacturing Engineer, DuPont

**DEGREE(S) YEAR OF GRADUATION:** Electrical Engineering, BS 2004, Power System and Control, Electrical Engineering, MS 2011

**CURRENT CITY:** Amherst, NY

**COMMUNITY INVOLVEMENT:** Buffalo Church of Christ, Bible Discussion Leader, B.E.A.M. Saturday Academy, Peer mentor at Seneca High School, Buffalo, DuPont Mentoring Program at MLK Institute, Buffalo School #39 – mentor and lead interactive activities for 6th and 7th graders.

**ORGANIZATIONS AND AFFILIATIONS:** National Society of Black Engineers (NSBE), Alumni member; Collegiate P.R. Chair, Institute for Electrical and Electronic Engineers (IEEE) and Industry Applications Society (IAS), Buffalo-Area Engineering Awareness for Minorities (BEAM), Board of Director and Volunteer.

**ONE FOND MEMORY OF UB AND/OR CSTEP:** Late nights studying and sleeping on the floors of Capen library and later heading out to Denny’s for breakfast with my peers prior to taking an exam in the morning.

**WHO YOU WOULD LIKE TO THANK:** Dr. Jennifer Zirnheld for being the CSTEP mentor every student needs in a college as big as UB. She inspired every student under her, including myself, to seek a deeper understanding and insight in my area(s) of interest. JZ (as she prefers to be called) prepares you for the “real world” by instilling self accountability and high expectations.

“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
Veronica Ivey, Licensed Social Worker

DEGREE(S) YEAR OF GRADUATION: Social Work, MSW 2011

CURRENT CITY: Buffalo, NY

COMMUNITY INVOLVEMENT: Volunteer through Literacy Volunteers of Buffalo & Erie County, Inc. at Enterprise Charter School. Volunteer with an inner city GIRLS Sports Foundation in creating and implementing activities for the girls which educated them on life’s issues and emotions. Provide monetary payments, participated in STOP THE VIOLENCE Neighborhood Clean-Up efforts and reading and writing chapter summaries for books on the Mayor’s Summer Reading List.

ORGANIZATIONS AND AFFILIATIONS: Stop the Violence Coalition, Literacy Volunteers of Buffalo & Erie County, Inc., Buffalo Association of Black Social Workers, National Association of Social Workers, UB DREAM Program.

ONE FOND MEMORY OF UB AND/OR CSTEP: Attending the Statewide CSTEP Conference.

WHO YOU WOULD LIKE TO THANK: Parents Rozetta Kyle and Ronald Ivey, mentor Mr. Diggs (Program Coordinator for Weed & Seed), my Pastor at Greater Refuge Temple, CSTEP Director Shanna Crump-Owens, and everyone at CSTEP who helped me through my educational journey!

Royston Ogbaugu, Nurse Practitioner

DEGREE(S) YEAR OF GRADUATION: Biochemical Pharmacology, BS, Psychology, BA 2005, Nursing RN BS, 2005 Nurse Practitioner, MS Anticipated May 2014

CURRENT CITY: Yonkers, NY

COMMUNITY INVOLVEMENT: Professional Career Guest speaker as a Psychiatric Nurse at Facing History High School for Volunteer and Mentoring Services to graduating High School Seniors. Health Screening Volunteer at White Plains Homeless Veteran Shelter.

ORGANIZATIONS AND AFFILIATIONS: National Student Nurses Association-Activity Coordinator, Concordia Nursing School, Bronxville, NY - Student Advocate, New York Presbyterian Hospital-Night Committee Unit Representative.

ONE FOND MEMORY OF UB AND/OR CSTEP: During the Journey Beyond Excellence Statewide conference trip in April 2005; the keynote speaker stated "life after graduation feels like you become a stray dog set into world to fend for himself." When I heard that, I never wanted to break any ties with UB or CSTEP because I always wanted to belong and UB/CSTEP was a huge comfort zone for me.

WHO YOU WOULD LIKE TO THANK: GOD for blessing me by placing certain people in my path during my stay at UB. Shanna Crump-Owens, Mrs. Rose for being cool, and Folarin Erogbogbo a PhD graduate and fellow CSTEP cohort from 2005.
What Makes A Stellar Graduate School or Scholarship Application?

Graduate school admission is a competitive process, that generally rewards academic excellence, as well as early preparation. CSTEP offers assistance with drafting and editing the personal statement, which is a critical component of the application. In addition, your overall application including your GMAT, GRE, MCAT, PCAT, or LSAT score are weighed heavily by many admission committees. Ensure that your application conveys your seriousness and is impeccable. We hope these guidelines will make the application process easier, and improve your chances, when being considered for a scholarship award. The following suggestions will help you to be more efficient and effective in the application process.

APPLICATION

- Be prepared. Maintain a high GPA, evaluate your strengths, participate in activities, and set goals for your education and career. Follow all directions and be sure not to miss deadlines!
- Ask for assistance. Build a network of educators who are willing to write recommendations, proofread your packet, and guide you. The application process is competitive process; use care and stay alert.
- An incomplete application is a common error. Proofread your application. Pay particular attention to any spaces you have left blank -- blank spaces can deem your application incomplete and ineligible! Re-read the directions -- did you follow all directions? Did you enclose all required materials?

PERSONAL STATEMENT

- Generic essays are easy to detect. Make certain you cover all required topics one-by-one in detail, using specific examples. Stating each new topic as a title and providing an organized, tidy application helps to make the selection committee’s reading task easier. Topics may include: research experience, current research interests, other relevant experiences, and career goals.
- Part of your proofreading should include attention to tone. Do you sound like a student the school or scholarship committee would be proud to call upon to represent them? The way you phrase your statement can have a positive influence on the selection committee.

Helpful Websites:  (1) www.accepted.com;  (2) www.essayedge.com  (3) www.personalstatement101.com

LETTER OF RECOMMENDATION

- Give the writer advance notice so that he or she has time to do a great job for you. Find a professor or school advisor who will give you a letter that addresses all requested points in the instructions, on official school letterhead. Be polite and always supply the writer with a copy of the instructions when making your request.
- Make sure that the letter is written specifically about you since template letters can be detected. Did the writer cover all points and is the letter complimentary? If not, you may try to find another qualified person, provided that you have left yourself enough time. Although, many times you are not allowed to see the letter of recommendation, try to find a recommender who will write you a strong letter.
- Show your appreciation by writing a thank-you card to the person(s) who took the time to help you.
This Fall, CSTEP nominated Hector Coco, a Junior, Civil Engineering major for the Blue and White Fellow Award. The Blue and White Fellows Program encourages outstanding talent students to pursue their own creative, intellectual, or professional inclinations. The Blue and White Fellows award provides UB with a unique way to recognize and reward extraordinary students and to encourage them to continue in their pursuits of excellence in whatever path they choose.

While overcoming obstacles, Hector continues to enhance his leadership skills by serving on the executive board UB Chapter of National Society for Black Engineers (NSBE) and PODER and engaging in research.

Awards were made to three students, each in the amount of $1,500. The award may be used toward whatever the recipients wishes: to pursue new interests, explore new areas of study - either related or completely unrelated to their current field of study/interest. Congratulations Hector!

**ELIGIBILITY CRITERIA**

The Blue and White Fellows is a program through Student Affairs for talented students who have shown extraordinary originality and dedication in their academic and co-curricular pursuits and a significant degree of self-motivation. Applicants must exhibit:

- Service to the community
- Promise for future accomplishments
- Exceptional character
- An overall GPA of 2.5
- At least one year left in their program of study

**SELECTION PROCESS**

Students are nominated on the basis of their past accomplishments and/ or extraordinary experiences and will not be apprised of their application or its status, until award notification.

Nominations are evaluated by the Blue and White Fellows Committee composed of leaders from UB Student Affairs.

The nomination and selection process for the Blue and White Student Fellows is confidential. Each nomination will consist of the Blue and White Fellows nomination form. Nominations will be accepted from a broad range of areas across UB, to provide the most diverse and rich pool of applicants as possible.
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.