V.6 | SPRING | 2012

▶ Hear from CWIT's May graduates & read about what is new with the Alumni 2

▶ Want to know what really happens in CWIT? Check out this recap of some Spring events 3

▶ CWIT Student Accomplishments and Shout Outs. Plus, CWIT's progress with grants 4

CWIT update

THE CENTER FOR WOMEN IN TECHNOLOGY AT UMBC

A Word From the Director

By Dr. Penny Rheingans

It's been a busy semester here in CWIT as we continue old traditions (Bits & Bytes, CWIT Showcase, Spring into Leadership) and try new things (USA Science and Engineering Festival, Let's Get Techy). There's too much going on to capture here in the Update, but this will give you a taste of what our community is up to.

Graduation season is upon us. Next week, I'll get to watch eleven CWIT and SITE Scholars collect their diplomas: Priyanka Bushana (IS), Kevin Roberts (IS), Amy Ciavolino (CMSC), Rachel Davies (CBE), Kristen Dagenais (CBE), Katelyn Williams (CBE), Terrence Dickerson (CBE), Chesska O'Neal (ME), Andrea Robinson (CMPE), Tim Burke (CMSC), and Bryant Szelistowski (CMPE). I can't wait to see what this group does next!

We've finished selecting our C11 cohort of CWIT Scholars who will begin in the fall. This highly accomplished group of fourteen is Bhuvana Bellala (Mount Hebron HS), Amanda Borowy (Baltimore Catholic HS), Mark Cirincione (James Hubert Blake HS), Nicole Dawson (Hammond HS), Celia Drew (Mount Saint Dominic Academy), Shannon Donelan (Northeast Senior HS), Beatrice Garcia (Governor Thomas Johnson HS), Katherine Geisler (Middletown HS), Alicia Goldstein (home schooled), Holly Johnson (Governor Thomas Johnson HS), Samantha McDonald (Perry Hall HS), Nicole Racine (North Harford HS), John Swank (Paterson Mill HS), and Haley Sweeton (Reservoir HS). We're excited that they've chosen CWIT and UMBC and doubly excited that they will all be joining the CWIT Living Learning Community.

Pictured (L to R): USM Chancellor, Dr. Brit Kirwin; USM Board of Regents Chair, Dr. Patricia Florestano; Penny Rheingans; UMBC President, Dr. Freeman Hrabowski

CWIT Adds Transfer Scholar Program

By Dr. Susan Martin

The National Science Foundation estimates that 44% of all science and engineering graduates, and 52% of all underrepresented minorities graduating in these fields, have attended a community college. Transfer students face many academic and financial challenges that can impede their success including managing a commute, juggling family responsibilities and working more than ten hours a week. These challenges can be overwhelming and detrimental to the success and persistence of transfer students pursuing engineering and IT majors. To address these needs, CWIT has created the Transfer Scholars in IT and Engineering program, or T-SITE for short. T-SITE is funded by $599,977 S-STEM grant from the National Science Foundation (Award DUE1154300). The T-SITE project will recruit, retain and graduate a total of 30 academically-talented transfer Scholars with demonstrated financial need over a five-year period, with an emphasis on women and underrepresented minorities.

Continued on next page...

Penny Rheingans Receives Award for Mentoring

Congratulations to CWIT Director and Professor of Computer Science, Dr. Penny Rheingans, the recipient of one of this year's University System of Maryland (USM) Regents' Faculty Awards for Mentoring. Awarded to no more than four USM professors each year, the USM Regents' Faculty Award for Mentoring is regarded as the Board's highest honor to recognize outstanding faculty achievement. Read more here: http://goo.gl/SjU1o

conGRADulations!

CWIT & SITE Graduating Seniors

Terrence Dickerson
(SITE Scholar)
Chemical Engineering
Co-Op with NAVAIR;
Working full-time at NAVAIR
"SITE/CWIT has helped me develop the soft skills required to not only secure a job but also to succeed while at the job. It not only motivated me to better myself as a student but also as a representative of the STEM fields."

Timothy Burke
(SITE Scholar)
Computer Science
Internship with Johns Hopkins University Applied Physics Lab (JHU APL); Working full-time at JHU APL; Attending graduate school in the Fall.

Chesska O'Neal
(SITE Scholar)
Mechanical Engineering
Internship with Walter Reed GEMS Program; Internship with General Electric

Katelyn Williams
(CWIT Scholar)
Chemical Engineering
Research at University of Baltimore;
Entering MD/PhD program in Biomedical Science at the Medical University of South Carolina

Rachel Davies
(CWIT Scholar)
Chemical Engineering
Internship with UMBC's Technology Support Center; Completed on-campus research with Dr. Gymama Slaughter in the Bioelectronics Lab

Priyanka Bushana
(CWIT Scholar)
Information Systems
Completed research at the Johns Hopkins University; Interned with Harris Corporation
"I really appreciated the support that CWIT offered me-- during my four years at UMBC, I always knew that I had a safe place where my ideas would be taken seriously, and my interests could grow safely."

Amy Ciavolino
(CWIT Scholar)
Computer Science
Completed REU at RIT;
Interned with Google;
Working full-time at Etsy Inc. in NYC
"CWIT started me out on the right path from my first day at UMBC. Without the retreat, the LLC, my faculty mentor and all the other great resources and support, I wouldn't have ended up where I am today!"

Andrea Robinson
(CWIT Scholar)
Computer Engineering
Internships with Verizon Telecom and Lockheed Martin; Attending graduate school in the Fall.

Bryant Szelistowski
(SITE Scholar)
Computer Engineering
Internships with College of Notre Dame of Maryland and SAIC

Kevin Roberts
(CWIT Scholar)
Information Systems
Internship with Stanley Black & Decker; Working full-time at Stanley Black & Decker

Kristen Dagenais
(CWIT Scholar)
Chemical Engineering
Completed REUs at the University of South Carolina and James Madison University
"With two REU experiences and four years of chemical engineering, I am looking forward to whatever life has for me. As I move forward by applying to jobs and graduate schools, I will be exploring my creative writing and hopefully reviving my web comic with my free time. Can you believe it? I'll have free time!"

Alumni Update

CWIT and SITE Alumni at May's End-of-Year Picnic
Pictured (L-R): Lawrence Sebald (C4), Justin Pickering (C4), Katie Chrzanowski (C2), Bethany Meyer (C3), Lindsay Cox (C1), Methzli Rodriguez (SITE '11), Michael Rahimi (C6), Emily Toy (C5), Teresa Oswald (C5), Paridhi Jain (C6). Attended, but not pictured: Dana Douglas (C2).

Lauren Anthony (C4) is moving to Denver, CO this summer for her position as a consultant with *Microsoft*.

Lindsay Beaubien (C3) recently changed jobs and is now a Cyber Database Architect with Northrop Grumman.

Krishna Sheth (C6) graduated from UMBC with her Masters in Information Systems in December 2011 and has recently started working full time as a Consultant at Booz Allen Hamilton.

Some of the ways CWIT & SITE Alumni have been involved in the CWIT Community over the past year include:

* Served as **Industry Mentors** for a junior or senior Scholar
* Meeting the new CWIT Scholars at the **CWIT Retreat** in August 2011
* Attended and spoke at the 10rh Anniversary **Scholars Reception** in October 2011
* Attended **CWIT Women in Technology Series** events as industry representatives
* Served on a panel, as waiting room hosts, or interviewers for **Scholar Selection Day** in March 2012
* Attended the **End of Year Picnic** in May 2012
* **Donated money** directly to CWIT through the UMBC Alumni Giving web site: www.umbc.edu/giving/give/
* Stayed in touch via the **CWIT @ UMBC Alumni Facebook group**

New T-SITE Transfer Scholars

Continued from front page

The first cohort of T-SITE Scholars from Maryland community colleges were selected in early May and will begin their studies at UMBC in fall 2012. This project leverages the CWIT program model and existing infrastructure to provide T-SITE Scholars with academic and professional support to be retained through graduation in engineering or IT major. The T-SITE Scholars will participate in the annual New Scholar Retreat in August and engage in a weekly seminar specifically designed to address the transition issues faced by transfer students in engineering and IT majors. In addition, T-SITE Scholars will be assigned a faculty mentor in their major and participate in peer and industry mentoring just like the CWIT Scholars. The T-SITE faculty mentors are: Dr. Taryn Bayles (Department of Chemical, Biochemical, and Environmental Engineering), Dr. Marie desJardins (Department of Computer Science and Electrical Engineering), Dr. Carolyn Seaman (Department of Information Systems), Dr. Gymama Slaughter (Department of Computer Science and Electrical Engineering), and Dr. Anne Spence (Department of Mechanical Engineering). Dr. Penny Rheingans, CWIT Director, is the Principal Investigator for the T-SITE project. For more information about the T-SITE grant and project team you can visit: http://goo.gl/uXTSG

Summer 2012 Internship and Research Plans

AAI:
Rebecca Baldwin (C8)

ARINC:
Tiffany Ernst (C10)

Booz Allen Hamilton:
Alex Markowski (C7)

Computer Sciences Corporation:
Katrina Chan (C9)

Department of Defense:
Emily Scheerer (C9)

Edgewood Chemical and Biological Center:
Samantha Celmer (C8)

GE Healthcare:
Annette Englehart (C9)

Google:
Michael Barrett (C8)
Morgan Madeira (C8)

Johns Hopkins University Applied Physics Lab:
Sabrina McConoughey (C9)
Katelyn Toy (C8)
Marie Wagner (C10)

Mindgrub:
Justin Ermer (C8)

NAVAIR:
Jennifer Guy (C8)

Northrup Grumman:
Christina Malliakos (C9)

SAIC:
Alec Pulianas (C9)
Rachel Sweeton (C8)

T. Rowe Price:
Shreya Mohan (C8)

UMBC Department of IT:
Karen Dickens (C9)
Clayonna Wheat (C10)

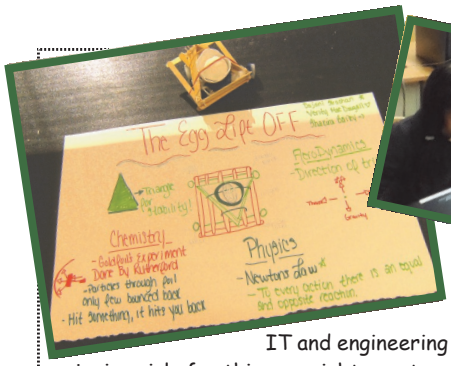
United States Geological Survey:
Courtney Melissari (C9)

United States Postal Service:
Armani Mason-Callaway (SITE)

University of Akron (REU):
Lilian Johnson (C8)

OF NOTE: The **CWIT Living Learning Community (LLC)** has been active this year in promoting activities that support women in technology majors and encouraging positive academic habits. To learn more about what the CWIT LLC has been up to this year, and plans for next year, visit: www.cwit.umbc.edu/living/

Spring Event Highlights



Bits & Bytes

In an effort to encourage more talented young women to enter the IT and engineering fields, CWIT hosted 28 high school junior girls for this overnight event, sponsored by *Northrop Grumman*. These high-achieving young students had opportunity to stay overnight in the CWIT LLC, compete in a design challenge, attend a college class, and learn more about what life is like as a college student. The program was entirely student-run by a student committee and volunteers. Read more: http://goo.gl/dT9ye

"The competition...made me more confident about aspects of the engineering field and my future potential. This program also made me able to visualize myself as an actual college student...the UMBC students were approachable and 'real' with us." -Bits & Bytes Participant

CWIT Showcase

Nine CWIT Scholars presented at this second-annual event that brought students in the CWIT Community together to share some of their meaningful out-of-the-classroom experiences. Presentation topics ranged from internships, research, and professional development. Read more of Emily Scheerer's (C9) article on the event in UMBC's *Retriever Weekly*: http://goo.gl/Tc4Fc

2nd Annual Spring into Leadership Event: "What's Your Story?"

This event was hosted on April 4, 2012 as a collaboration between the CWIT Affiliates Program, the CWIT Student Council, SWE, ASME, ISCOM and WISE Grads. Students in attendance were matched with industry professionals as conversation partners for the first part of the evening, which was followed by a keynote speaker and activity which demonstrated the importance of diversity in the workplace. Read more of Emily Scheerer's (C9) article on the event in UMBC's *Retriever Weekly*: http://goo.gl/2dcFz

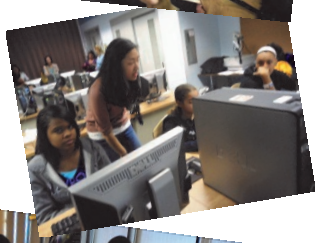
"[I learned] that there are many others (female STEM) like me and that those in industry are very supportive!" -Spring into Leadership participant, written on the evaluation

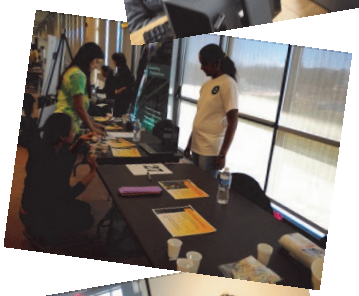
CWIT Pilots a First Year Success Seminar

Last fall, CWIT piloted a first-year success course for the seven freshman CWIT Scholars, taught by Katie Glasser, CWIT Assistant Director. The discussion-based course covered important first-year transition issues, such as study skills and time management, included a introduction to professional development, encouraged major & career exploration, and much more. Older CWIT Scholars developed lesson plans and taught some of the workshops. The pilot course was highly successful, and CWIT has collaborated with the Office of Undergraduate Education to make this course a one-credit FYE101 section that will be attached to a Math course in Fall 2012. The course will be required for all first-year members on the CWIT Living Learning Community and first-year CWIT Scholars. Contact kglasser@umbc.edu with any questions.

Student Organizations Update

Society of Women Engineers (SWE)





UMBC SWE has been really busy with engineering outreach events! We participated in **JHU APL's Girl Power** for the second year in a row, bringing back our Bernoulli's Principle demonstrations for hundreds of middle and high school aged girls. We also co-hosted a new event, **Let's Get Techy!**, an event that brings middle school students to campus for a day to see what college is like and do fun hands-on engineering and IT activities. This event was held twice and funded by the **ASME Diversity Action Grant which SWE, ASME, ISCOM, and CWIT SC applied for in Fall 2011**. We hope to hold this event again! Other outreach successes include helping with the UMBC booth at the **USA Science and Engineering Festival** and co-hosting the second annual **Spring into Leadership** event, a dynamic community and network building event with a great keynote speaker and networking activities. SWE also hosted its first social event, **tie-dying t-shirts**, and its first professional event, a **tour of the WR Grace plant** co-hosted with AIChE.

Announcing our new officers for the 2012-2013 Academic Year...
President: Abigail Williams (CBEE)
Vice President: Ebony Tongo (CBEE)
Secretary: Morgan Madeira (C8, CS)
Treasurer/Past President: Lilian Johnson (C8, CBEE)

CWIT Student Council

This year the Student Council's goal was to collaborate more with other technical organizations on events. With this approach and our community's participation, we were able to host a lot of great events. In early September, we hosted the third annual **C-What? Day**, which was conveniently scheduled right after the CWIT Affiliates Retreat. Then in October, we co-sponsored with ISCOM on a new event called, **Major Decisions**, designed to help underclassmen students understand the majors offered by the COEIT. Also in collaboration with ISCOM, we held our second **Holiday Party** in December and saw a lot of new faces. This Spring semester, we collaborated with ASME, SWE, and ISCOM, to host an outreach project called **Let's Get Techy!** for over 100 middle school students encouraging them to explore technical subjects. This event was made possible by a $3000 **ASME Diversity Action Grant** that the collaborating organizations applied for in late Fall. We hosted this event twice for two different middle schools; both events were a huge success. Also co-hosting with the same group of organizations, CWIT Student Council assisted on the planning committee of the **Spring into Leadership** event in early April. Most recently in May, we hosted the second **CWIT Spring Formal** this year in the Skylight Lounge. Huge thanks to the planning committee and everyone who helped make the event possible and just as, if not more fun, this year.

The CWIT Student Council would like to thank everyone for the continued support we received during the 2011-2012 year. We are very excited and look forward hosting more fun & educational events in this coming year!

Announcing our new officers for the 2012-2013 Academic Year...
President: Shreya Mohan (C8, IS)
Co-Vice President of Student Events: Alex Markowski (C7, CS)
Co-Vice President of Student Events: Tylynn Pettrey (C10, CBEE)
Treasurer: Chitra Gadwal (CWIT Affiliate, CS)
Secretary: Courtney Melissari (C9, IS)
Historian: Katrina Chan (C9, CS)
LLC Resident Assistant: Heidi Gray (CWIT Affiliate, CS)

Bragging Rights: Scholars' Awards & Accomplishments

Timothy Burke (SITE) received the Student *Leadership Award* from the Dept. of Computer Science and Electrical Engineering

Priyanka Bushana (C7), Rachel Davies (C7) and Terrence Dickerson (SITE) will be graduating with the UMBC Honors College Certificate.

Katrina Chan (C9) was offered a position within the Windows Server Group at UMBC DoIT for Fall 2012

Terrence Dickerson (SITE) received the *Outstanding Senior in Chemical Engineering Award* for the highest academic achievement of ChemE seniors.

Morgan Madeira (C8) received an undergraduate research award for 2011-12 and has been chosen as STEM Editor for the *UMBC Review*.

Morgan Madeira (C8) and **Alec Pulianas (C9)** presented research posters at UMBC's *Undergraduate Research and Creative Achievement Day (URCAD)* on April 25, 2012.

Sabrina McConoughey (C9) was elected President of the National Society of Collegiate Scholars (NSCS) for next year.

Alec Pulianas (C9) was accepted to present a poster about his "Access MT" research at the 2012 Grace Hopper Celebration of Women in Computing Convention in Baltimore, MD.

Emily Scheerer (C9) was a writer for UMBC's *Retriever Weekly* this year and has been chosen to be an Editor next year.

Shout Outs!

CWIT students send anonymous kudos, congrats, and encouragement to their fellow Scholars & Affiliates…

Many of the statements began with "I am proud of…

Priyanka Bushana (C7) for trying out for the Mid-Atlantic Rugby Football League's Women's All-Star team as the only collegiate player – and for being able to keep up with the other players!"

Michael Barrett (C8) for continuing at Google this summer!"

Samantha Celmer (C8) for participating in an outreach project where she presented to high school students about engineering and was able to convince three students to consider engineering as a major when they hadn't before."

Amy Ciavolino (C8) for going after what she wants and landing a super cool job in NYC with Etsy!"

Shreya Mohan (C8) for conducting research this semester and for receiving an internship with T. Rowe Price."

Katrina Chan (C9) for having a conversation partner through UMBC's ESOL Program."

Mallory Clites (C9) for being a Teaching Assistant for a Biology class this semester."

Annette Englehart (C9) for getting the Desk Manager position in Harbor!"

Courtney Melissari (C9) for being elected secretary of the CWIT Student Council."

Courtney Melissari (C9) for getting an internship in the research park!"

Alec Pulianas (C9) for starting his own radio show, the Prog Rock Block."

Alec Pulianas (C9) and **Emily Scheerer (C9)** being TAs next semester for Penny's new class!"

Tylynn Pettrey (C10) for becoming Vice President of the CWIT Student Council."

Clayonna Wheat (C10) for becoming a Resident Assistant in Erickson Hall next year!"

Shelby Coppolino (Affiliate) for being selected for a Co-Op position in Georgia next semester!"

"I am really proud of all the work that **Tiffany Ernst (C10)** has done for Relay for Life. She worked very hard to get CWIT, the UMBC student body, and her own friends involved, raised a lot of money, and stayed up all night at the event."

"I have been really impressed by **Lily Johnson's (C8)** work with SWE and her initiative to reach out to kids in the community. She is really working to fulfill the goals of the CWIT Scholarship program."

"I admire **Morgan Madeira's (C8)** dedication to school and her research. She works so hard."

"Hearty thanks to the fabulous 2012 Bits & Bytes Committee: **Michael Barrett (C8), Tiffany Ernst (C10), Leah Mason (C10), Angela Norton (C10), Juliette Sardin (Affiliate) and Emily Scheerer (C9).**"

"Much thanks to a wonderful experience with the 2012 Spring Into Leadership Committee: **Vanessa Aguinot (ASME), Tabitha Havercamp (ISCOM), Savita Moses (ISCOM), Chitra Gadwal (CWIT SC), Debra Girma (WISE Grads), Shelby Clarke and Lily Johnson (C8, SWE).**"

"To CWIT's fearless Scholars that took the time to present at the 2012 CWIT Showcase and opened the doors of opportunity for others in the CWIT community: **Samantha Celmer (C8), Amy Ciavolino (C8), Jessica Izumi (C9), Lily Johnson (C8), Morgan Madeira (C8), Shreya Mohan (C8), Alec Pulianas C9), Rachel Sweeton (C8) and Emily Scheerer (C9).**"

Thanks For Your Support!

SAIC. HARRIS LOCKHEED MARTIN BAE SYSTEMS NORTHROP GRUMMAN

By Dr. Susan Martin

CWIT Grant Activity

CWIT Staff Actively Collaborating on Computing Education Research

Over the past year CWIT has strategically collaborated on a number of research proposals that are related to the education and retention of women in engineering and IT fields. Over the past year, four projects have been funded that will contribute to improving computer science education in Maryland. Two **Google CS4HS** grants and a **CE21 Planning** grant from the National Science Foundation (NSF) are focused on improving high school computer science education. In 2011 UMBC hosted its first three-day summer **professional development workshop for high school teachers** at UMBC. The 2012 workshop will be held on August 5-8th. More information is available at: http://maple.cs.umbc.edu/cs4hs/. In March of 2012, a CE21 Planning Grant was awarded by the NSF (CNS-1160624) to Dr. Marie desJardins (Principal Investigator, Department of Computer Science and Electrical Engineering), Dr. Penny Rheingans (CWIT Director and Department of Computer Science and Electrical Engineering), and Dr. Susan Martin (CWIT Associate Director). This Project, *CE21-Maryland: Increasing High School Computer Science Expertise and Statewide Support for Computing Education*, **will gather data about the state of CS education in Maryland and build relationships among high-school teachers, community college and university faculty and state education administrators for long-term improvements**. The project will also identify best practices that will be the focus of a full research proposal that will be submitted in 2013. In early May, Dr. Penny Rheingans (Principal Investigator), Dr. Marie desJardins, Dr. Susan Martin, and Dr. Carolyn Seaman (Department of Information Systems) were notified by NSF that the project, ***TUES: Transforming the Freshman Experience of Computing Majors***, was also funded. This project synthesizes elements from first-year engineering courses, traditional introductory computing courses, the new Advanced Placement (AP) Computer Science Principles course to **create an innovative freshman computing course for computer science and information systems majors**. The course will utilize peer teaching fellows and peer mentors to deliver an overview of the discipline, build technical skills, provide a group design experience, and strengthen professional skills. One section of the course is being piloted and evaluated in the Fall of 2012 and two sections in Fall 2013. More information will be available about the project will be made available on the CE21-Maryland website later this summer.

This Issue:

Editor:
Katie Glasser

Contributors:
Becca Baldwin, Lilian Johnson, Susan Martin, Penny Rheingans, Emily Scheerer

Send newsletter submissions to kglasser@umbc.edu

CWIT Staff:
Dr. Penny Rheingans
Director

Dr. Susan Martin
Associate Director

Ms. Katie Glasser
Assistant Director

1000 Hilltop Circle, ITE452
Baltimore, MD 21250
410-455-2822
www.cwit.umbc.edu

The Center for Women in Technology

CWIT's Spring Calendar

January:
28th - Students volunteer with FIRST Lego League State Championships @ UMBC

February:
1st – CWIT Welcome Back Lunch & Cupcakes (open to everyone in COEIT)
6th – CWIT Family Meeting
15th – CWIT Affiliates Pizza Lunch
19th & 20th – Students volunteer with Bits & Bytes
27th – Freshman Cohort Meeting

March:
3rd – Scholar Selection Day
5th – Sophomore Cohort Mtg
12th – Junior Cohort Meeting
14th - CWIT Affiliates Pizza Lunch
26th – Senior Cohort Meeting

April:
2nd – CWIT Pick Your Classes Meeting
4th – 2nd Annual Spring Into Leadership Event: What's Your Story?
27th – CWIT Showcase
29th - SWE and CWIT students volunteer to host the UMBC booth at the USA Science and Engineering Festival in DC

May:
4th – CWIT & PWIT End of Year Picnic Fiesta!
14, 15, 16 & 17th – CWIT Study Breaks
21st - Undergraduate Commencement