





# THE CENTER FOR WOMEN IN TECHNOLOGY AT UMBC

# update

**CYBER** Corner

O V.12 O FALL O 2015

# A Word From the Director

#### By Dr. Anne Spence

I am thrilled to be able to serve as the Interim Director for CWIT while Dr. Penny Rheingans is exploring Boston during her sabbatical at Northeastern University. I have been involved with CWIT for many years as both an advisory board member and a faculty mentor for Mechanical Engineering scholars. That all pales in comparison to serving in the interim director role. CWIT has such a broad reach that it is hard to believe that we have been around for less than 15 years.

In my time as interim director, I have made a couple of observations. The first is that we have a great staff. From Dr. Crystal Diaz -Espinoza and Cindy Greenwood who lead the CWIT and Cyber Scholars programs to Dr. Susan Martin who leads the T-SITE scholars program to Danielle Rozanski, our office administrator who keeps us all in line. All of these women are committed to growth of every scholar and affiliate who are a part of the CWIT organization.

My second observation is that we have amazing scholars. While I have been closely engaged with a few mechanical engineering scholars, I am so excited to see that there are so many talented scholars all over the College of Engineering and Information Technology. These scholars make be proud, every day, to be a part of CWIT. They are leaders in

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their courses, their departments, their dorms, and their professional societies.

This year, we begin the celebration of UMBC's 50th anniversary. In particular, we are looking forward to re-engaging with many of our alumni. We hope to develop some signature events that will occur at each Homecoming that will draw our scholar alumni back to campus to engage with our students. As our alumni numbers grow, we find there are more and more alumni who want to give back to the organization that prepared them so well for their careers.

We are also very excited about increasing the size of our Affiliates program. While we cannot grant a scholarship to every student, we hope to impact more students through our Living Learning Community, professional development workshops and mentoring programs. Our graduating seniors have indicated to me that it is the community piece of CWIT that helped them to succeed in our challenging majors. By bringing in more students through our Affiliates program, we hope to give even more students the sense of community that we have found to be integral to student success.

This has been a whirlwind for me this semester and I hope to slow down a bit in the spring to enjoy the beauty that is CWIT.

By Cindy Greenwood The Cyber Scholars Program, now in its third year, continues to evolve. In addition to our established activities, we added two new programs this fall, Cyber 101 and our Cyber Industry Event, both of which you can read about in this edition of the newsletter. Based on student feedback, we also added biweekly cyber workshops, which were student-led sessions on Friday afternoons. Attendees brought their laptops and learned new skills in areas including computer networks, shell coding, and digital forensics. We look forward to building these workshops further in the spring to include undergraduate and graduate student presenters as well as faculty and/or staff from campus and industry professionals. We also increased our participation in the Maryland Cyber Challenge (MDC3) this fall, entering six teams of Cyber Scholars & Affiliates, up from four last year. And, in continuing with the theme of growth, we have also developed our Cyber Associates, an idea that began last year and is being more fully piloted this year. Cyber Associates are incoming freshmen who, for a variety of reasons, are not in the Scholars Program, but want to benefit from the community and programs we offer and commit to the same level of involvement as our Scholars. his year, we have five Associates who are an important component of our community.





### Meet our Graduating Seniors!

Wafa Raja (Cyber Scholar) Information Systems **Future Plans:** Northrop Grumman

CWIT has provided me with a family on campus. Aside from professional development, coaching, learning opportunities, networking, industry exposure, I value love the most from CWIT. All scholars fall under one umbrella and since the day of the retreat, I feel like we never felt strangers. Walking on the campus is not the same when you become a scholar. The smiling faces of the scholars all over the campus made my day, almost every dav!

#### **Gurpreet Singh** (T-SITE Scholar)

Mechanical Engineering

#### **Ankush Rattan** (T-SITE Scholar) Information Systems

**Future Plans: Exelon** Corporation Being a T-SITE in the CWIT program helped me network with professionals in various organizations. This provided opportunities to ask about industry trends and even land a few interviews and offers for internships and jobs. CWIT also provided access to other

William Thompson (Cyber Scholar) Computer Science

students with similar career

goals and interests.

# **T-SITE** Update

By Dr. Susan Martin

Since the fall of 2012, CWIT has awarded 28 T-SITE scholarships of \$6,700 to transfer students from Marvland community colleges as part of an NSF S-TEM funded project (DUE-1154300). Five T-SITEs have graduated so far and seven more will graduate by spring 2016. Graduates have obtained employment with Whiting Turner Corporation, Carrier Corporation, Northrop Grumman, and ARGO Systems, and NSA. The average time to graduation at UMBC for T-SITEs continues to be three years. All 28 T-SITEs have been retained in engineering or computing majors. Eighty-five percent have already obtained internships or participated in undergraduate research. T-SITE scholars are a highly visible group and they have begun to influence the conversation about transfer student issues for engineering and computing majors. We have shared the knowledge gained from working with T-SITE scholars to inform the content of the post-transfer online curriculum on the STEM Transfer Initiative's website (a Gates Foundation funded project). The final nine scholars being served on this grant (T4) began



their studies in fall 2015.

Three more cohorts of T-SITEs will be selected for fall 2016-2018 (a total of 25 students majoring in computer science, computer engineering and information systems) as part of a new

S-STEM award (DUE- 1458343). Applications for the next T-SITE cohort beginning in fall 2016 are due on March 1, 2016. The online application and program information sheet are available on the CWIT website

Bv Dr. Susan Martin This fall twenty-four industry professionals generously gave of their time to serve as mentors as part of our Industry Mentoring Practicum (IMP). Each fall, CWIT, Cyber and T-SITE scholars enroll in a six session practicum that is offered in collaboration with UM-BC's Career Center. Approximately one third of this year's

mentors participated in these sessions - in addition to working with their assigned mentee. At the practicum sessions, mentors shared valuable information and priceless wisdom about their own career paths and lessons learned along the way. This year's mentors were from General Electric (Patrice Greenwood and Zoscha Bomhardt), GE Middle River Aircraft Systems (Julie Ellenberger), JHU Applied Physics Laboratory (Katherine Schulte and Allison Albin), Laureate Education (Jennifer Winborne), Maryland Public Television (Chad Hooker), McCormick & Company (Brenda Tharp), NIST (Donna Dodson), Nielsen (Mimi Goodman), Northrop Grumman (Susan Wilson, Donald Alcom, Phil Carlton, Joanne Serelis, Beverly Shomo, Helen Park), Praxis Engineering Technologies (Tarisa Holbrook), T. Rowe Price (Paula Fetterman, Luther Petry, Jeff Six, TJ O'Grady), Textron Systems (Hariklia Karagiannis) and UPS (Devi Sedig). This year, we also piloted online industry mentoring. Five T-SITE Scholars were matched with online mentors through MentorNet. T-SITEs were very satisfied with the mentors they could choose from through the MentorNet matching process and their overall experience. Based on the positive feedback from T-SITEs, MentorNet will be piloted this fall with CWIT Affiliates as a way to scale up and offer industry mentoring to more women in COEIT. Founded in 1997, Mentor-Net is a national nonprofit

dedicated to fostering a pervasive culture of mentoring women and minorities in science, technology, engineering and math (STEM) fields. Here's what some of our Scholars had to say about IMP:

The Industry Mentoring Practicum was one of the most beneficial things I have done this semester. My mentor gave me such great insight into how to pick a company that is right for me. She taught how to make



sure that I keep what is important in mind in the workplace so that I don't get lost in the system and to stay true to myself.-Bailey Rouk (Y3)

I think the most important thing I learned from IMP was that people know people. I had originally thought that because my mentor was in industry, I wouldn't be able to gain a lot because of my interest in graduate school. However, my mentor put me into contact with her friend who is pursuing her PhD, and I was able to talk to her to find out more about my current career choice. Along the way. I also developed a great relationship with my mentor and learned a lot about what the workforce is like should I ever decide to pursue it, which I am thankful for.-Elyse Hill (C12)

I really enjoyed being able to connect with my industry mentor this semester. I am now more confident about my ability to go work in industry and be a valued member of an engineering team.-Hannah Corcos (C12)

2015-2016 Industry Mentoring



## CWIT Living-Learning Community By Dr. Crystal Diaz-Espinoza The CWIT-LLC is in its sec-

ond year at Chesapeake Hall and currently houses 16 CWIT Affiliates, 13 returners and 17 Scholars. This year, programming included pumpkin painting, dinners, study parties and more. Our three engagement teams, made up of returning students, have been busy planning events for the younger students. These teams focus on academic (A-Team), social (Fun & Co.) and UMBC engagement (R-Connect). Additionally, all first year CWIT-LLC students enroll in the First Year Experience course to help them transition into their first year of college. We are hoping to expand the CWIT-LLC even further as we expand our CWIT Affiliates Program.

Being on the CWIT-LLC as a sophomore has been really neat. The floor is so connected this year and they all care so much about each other. They are never afraid to ask for help, especially from the sophomores. –Sami Turskey (Y2)

The CWIT-LLC has been critical to my success this first semester. The friendships that have grown on this floor have been amazing.- Alliana Warner (C14)

I made a lot of close friends (we even have our own website together) and learned that families \_\_\_\_\_ come in many forms. –Sarah Heiner (C14)

**BEST of CWIT** By Dr. Crystal Diaz-Espinoza

On October 23rd, CWIT hosted our 2nd annual BEST of CWIT recruiting event. We nearly doubled in size. Almost 80 prospective students representing about 55 different high schools attended BEST of CWIT. This event highlighted both the CWIT and Cyber Scholars Programs as well as the Affiliates program. Prospective families were able to participate in sessions to learn about the meaningful experiences our students are having with CWIT and also enjoy a dinner in the CWIT LLC! We hope that BEST of CWIT will continue to grow in popularity as we try to increase our visibility within the community!

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During BEST of CWIT, I presented a session on the under representation of women in the Engineering and IT professions. I really enjoyed listening to the students experiences in their high school classes. I was excited to see the girls forming friendships and connecting over their similar experiences.-Allison Lewis (C12)

I loved volunteering at BEST of CWIT! I enjoyed giving advice and sharing my experiences with the senior girls because I was in their shoes last year, scared and unsure about my future. I think all of the committee members really got across to the girls how truly supportive and welcoming the CWIT community is.-Emily Yu (C14)







## **CWIT NETWORKING**

By Cindy Greenwood

Fall Career Networking Event-Nearly 40 computing and engineering professionals from organizations including Northrop Grumman, the Johns Hopkins University Applied Physics Laboratory, National Security Agency, General Electric, and many more, joined us on October 20th for our annual Fall Career Networking Event. The purpose

of this event is to provide a supportive

space for CWIT, Cyber, and T-SITE Scholars, as well as CWIT and Cyber Affiliates, to practice their networking skills with industry professionals and to receive feedback about their strengths and areas for improve-

ment. Industry folks noted that some of their favorite things about the event were:

"Better understanding about the CWIT program"

"Gaining insight into what students are looking for in a career from an early perspective"

Thank you to everyone who gave their time to help our students with their professional development!

Cyber Industry Event - On November 17, Paula Fetterman of T. Rowe Price, Dr. Claudia Pearce of the National Security Agency, Rachel Schei of Northrop Grumman, Ed Sealing and Kevin Roberts of Sealing Technologies, Inc., and Colin Shea of Ventura Solutions, Inc. joined Cyber Scholars & Affiliates for a new event focused on students connecting with cyber industry professionals and learning about new topics in cyber. Students participated in three different 20-minute discussions of their choosing, with a different industry representative leading the discussion at each table. Topics included phishing and security awareness, smart data and data provenance, and embedded security, among others. We are so appreciative that many professionals at all stages in their careers continue to support our program and volunteer their time to help students prepare for their future careers.



Cyber 101

By Cindy Greenwood Because of our success with Bits & Bytes and BEST of CWIT, in September we piloted Cyber 101, an overnight program for high school girls interested in learning about cybersecurity. The program introduced

girls to cyber concepts and was led by current Cyber Scholars and Affiliates. The program had 68 applicants for 24 available spaces! All of the respondents to the post-event survey rated their enthusiasm for the field of computer science as excellent (72%) or good (28%) and nearly 90% rated their enthusiasm for cybersecurity just as highly. Approximately 78% rated their confidence about entering a computing major in college as excellent or good. Comments from attendees included:

"I really, really enjoyed getting to meet other girls interested in Computer

Science/Engineering because I don't get that opportunity elsewhere. I liked that we learned a lot of things; I really knew nothing about cybersecurity before this."

"I enjoyed the malware portion, because it was the most hands on, and the community of it, because I am not often surrounded by only other girls who enjoy science. It was a nice change."



## Grace Hopper Celebration

#### By Dr. Susan Martin

Thirty-one UMBC undergraduate students and nine faculty, staff, and postdocs attended the Grace Hopper Celebration of Women in Computing (GHC) in Houston this past October. GHC, produced by the Anita Borg Institute and presented in partnership with ACM, is the world's largest gathering of women technologists. This year the sold out event had over 11,000 participants. When asked about their experiences, UMBC attendees said the following:

"It is an amazing experience. I learned a lot, felt inspired about being a women in computer science and gained contacts and interview with many large companies. I felt inspired by attending and hearing all of the talks"

"I met amazing people there and made connections with inspirational women. I have also gotten advice and become more motivated in accomplishing my goals..and got amazing advice from older women



Men in CWIT

place, and social settings.

By Mito Diaz-Espinoza

and tips for the future in my career"

#### FALL 2015 HIGHLIGHTS

#### June:

12-13 Honors Orientation

#### July/August:

31-2 New Scholar Retreat 26 CWIT Ice Cream Social 31 CWIT Family Meeting

#### September:

- 14 Men in CWIT Meeting
- **17** Breakfast With Your Major
- 27 Cyber 101
- 28 Scholar Reception
- 28 Faculty Mentor Luncheon

#### **October:**

- 8 Peer Mentoring Kick-Off
- **12** Men in CWIT Meeting
- 13-16 Grace Hopper
- 23 BEST of CWIT
- 28 Pick your Classes
- **30** Women in Technology Networking Event

#### **November:**

**11** Men in CWIT Meeting

#### **December:**

- 2 **CWIT Family Meeting 17** Undergraduate
- Commencement

#### SAVE THE DATE!!

Feb 27 Scholar Selection Day

# Alumni Updates! Lindsay Cox (C1) was recently promoted to IT Service Director at Erickson Living.

Andrew Coates (Y1) got married and was promoted to senior engineer at Raytheon COI.

Victoria Lentz (Y1) married Orlando Villalonga, Jr. on September 25, 2015.

Marie Wager (C10)- The ad tech start-up that I was working for, TellApart, was acquired by Twitter for over half a billion dollars at the end of May! We are becoming more integrated with Twitter and helping to grow their revenue.

Amy Ciavolino (C8) left Etsy, where I've been since graduation. She just started a new job as the CTO

of a start up here in NYC called Union Station







I always enjoy learning how to be a better ally for minorities in STEM and what it means to live with privilege.-John Swank (C11)

This semester began an exciting evolution in ally development for the Men in CWIT. With leadership of Sophomore Jacob Riehl, the group explored

issues of identity, privilege and intersectionality. These concepts will be

further the CWIT mission. Next semester we seek to continue discussions

in these areas as well and explore practical application in classroom, work-

Men in CWIT has been engaging this year. Jacob has done a great job for having just taken over the leadership role. It is always engaging to have

discussions about masculinity and the role of it within the CWIT commu-

nity. The more we can learn about ourselves, the better advocates we can

the foundation for the groups approach to developing as better allies to

## Scholars Serving...

be for the community.-Austin Cole (Y2)

This semester, I was a youth mentor at Paul's Place in Baltimore City. I meet once a week with my fourth grade student, Ronshawn. We spend time working on his homework, reading novels, and playing educational games. It has been a great experience and I can't wait to go back next semester!-Megan Lynch (C12)

I have been participating in the Elizabeth Seton E-mentoring program, which I've really enjoyed so far. The students have lots of questions, and I like being able to discuss with them different ways they can prepare for college as a girl in STEM.-Grace Tarnosky (C13)

I volunteer every week for 3-4 hours at SWES. SWES (South West emergency Services) is a great place a short walk from campus that provides food, clothing, and rent money for people in Arbutus who need it. I love working there, because I always feel like I am making a difference in someone's life.-Caroline Kery (C13)







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