CWIT UPDATE

Your Bi-Annual Digest of CWIT reflections and updates



SPRING 2020

February

22 CWIT/Cyber Scholar Selection Day

April

- 7 Spring Into Leadership
- 10 T-SITE/Cyber Interview Day

May

- CWIT Community Picnic
- 3 Senior Dessert & COEIT Celebration
- 21 Spring Commencement

Thank you to Lockheed Martin for providing scholarship funds, administered through CWIT to 12 Scholars and Affiliates for the 2019-2020 school year!



A LETTER FROM THE INTERIM DIRECTOR'S DESK

Dr. Carolyn Seaman

Hello CWIT Community!

Greetings from CWIT, where it has been a busy fall and winter! As usual, there are lots of things going on, so please read through and find out what we're up to.

I'd like to start by introducing you to Thea Robertson, who joined us in November as our new full-time Administrative Assistant. The CWIT staff is very excited to welcome Thea, who will be helping us all to make things run smoothly at CWIT, from financial management to event support to keeping us all organized to providing a consistent and welcoming presence at our front desk. We are especially grateful that we have been able to make this position full-time, which will make a huge difference in the effectiveness and efficiency of the Center.

Thea comes to us most recently from Morgan State University's Office of Undergraduate Admissions and Recruitment, where she was for three years. She was born and raised in Baltimore and earned her B.A. in English from McDaniel College in 2016. While attending McDaniel, she worked part-



time as an office clerk at Johns Hopkins' Center for Talented Youth's online science department and festivals.

She was also a summer research assistant for McDaniel College's Westminster Detective Library (https://wdl.mcdaniel.edu/), and her senior capstone was featured as the best of the Class of 2016 by the English department (https://www.youtube.com/watch? v=F3t8r3ZKT2o). She is currently pursuing her M.S. in Professional Writing at Towson University. Outside of work, Thea serves on the board for the local non-profit Center for Black Equity-Baltimore. She enjoys reading, listening to podcasts, and attending live music events like concerts and festivals. Welcome Thea!

Continued on next page

A LETTER FROM THE INTERIM DIRECTOR'S DESK

Dr. Carolyn Seaman

The fall also marked the end of CWIT's nearly year-long visioning and strategic planning activity, in which the staff, with input from a very wide variety of CWIT stakeholders, reflected on the mission, vision, values, and goals of the Center over the next three years. Please check out some of the products of this process at https://cwit.umbc.edu/mission-vision/. While our reason for being has not fundamentally changed, we have updated how we talk about our mission, and also chose some new emphases for the next years, including expanding the Affiliates program, a more intentional focus on intersectionality, increased K-12 outreach, and more efforts to partner with, and spread our message to, more people and units across campus.

A very happy, prosperous, and peaceful 2020 to all of you! Thank you for everything you do, in support of CWIT and in your efforts to make the world a more inclusive place. Until next time,

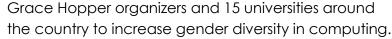
Carolyn Seaman

CWIT Interim Director

GRACE HOPPER CONFERNCE

Dr. Carolyn Seaman

Last October, a group of nine students representing CWIT (including CWIT, Cyber, T-SITE scholars and affiliates) traveled with CWIT Interim Director Carolyn Seaman to Orlando to attend the Grace Hopper Celebration of Women in Computing (https://ghc.anitab.org/). There, the students networked with the nearly 25,000 attendees, attended workshops on professional development and technical skills, handed out dozens of resumes to potential employers, heard inspirational and amazing speakers, danced, ate, and enjoyed the amazing Florida weather. The trip was funded by support from BRAID, an initiative of the











The CWIT Living Learning Community hosts monthly Family Dinners and the CWIT Resident Assistant collaborated with the CWIT Student Council members and the Big Wit and Peer Mentoring Leads to design fun events for students living on the LLC and older CWIT community members. Events on the LLC this fall semester included: Movie nights, Bubble Tea & Games, Cupcake Decorating Competition, Halloween Party, and more!

ALLIES IN CWIT Thomas Waters, Jr.

Greetings CWIT Family,

My name is Thomas Waters, Jr., and I had the immense pleasure of teaching the Allies 101 Practicum last semester. As you may know, Allies in CWIT is a course focused on being an active ally for marginalized groups in the computing and engineering fields. I instructed a group of twelve male-



identifying Cyber, CWIT Affiliate, and T-SITE Scholars, approximately split evenly between upperclassmen and new incoming students. Specific sessions included understanding intersectionality and microaggressions, unpacking media's role in perpetuating the negative image of women in computing, and promoting gender equality in STEM (science, technology, engineering, and math). We even enjoyed a class visit from the Dean of COEIT, Dr. Keith Bowman, when he joined us in discussion about increasing representation in hiring practices and shared personal experiences with having a marginalized identity.

Moreover, I am confident that the students had an enriching experience, and I am grateful for the transformative impact they had on me. We embraced Brave Space guidelines as we engaged in healthy dialogue. Participants were also challenged with weekly assignments (readings and/or videos), journal entries, and an end-of-semester culminating paper. My work and engagement with CWIT through Fall 2019 has undoubtedly reinforced my commitment to the advancement of underrepresented groups in STEM fields.

Cheers to a great 2020!

Thomas



BEST OF CWIT

The 2019 BEST of CWIT: Building Excellence through Scholarships in Technology: An Event For High School Girls Interested in Engineering & Technology, took place on October 18th. There were 184 people registered for the event, an increase from 148 from the 2018 event.

Thank you to the BEST of CWIT Planning

Committee: Aiswarya Boby, Ashley Amundsen, Catherine Wraback, Chelece Clark, Chelsea Mikal, Danielle Rhoten, Liz Emberger, Emilien Tchuosi, Jessi Barrow, Kavya Kavanakudy, Kelsey Chesnut, Maddy Selby, Olivia Bailey, Sianna Serio, Tateyana Reece and Zoee Leckron. This group of amazing volunteers meet consistently leading up to the event to promote and plan the sessions. Both parents and students were very impressed and very eager to learn more about CWIT!

TAPIA CONFERENCE Dr. Danyelle Ireland

In September 2019, a group of eight students representing CWIT (including CWIT, Cyber, T-SITE Scholars and Affiliates) traveled with CWIT Associate Director Danyelle Ireland and Assistant Director Kate O'Keefe to San Diego to attend the Richard A. Tapia Celebration of Diversity in Computing (http://tapiaconference.org/). As with the Grace Hopper Conference, this trip was



made possible through funds from the BRAID initiative. Our students, along with the nearly 1,900 attendees (representing 250 colleges/universities), were able to "celebrate the diversity that exists in computing; connect with others with common backgrounds, ethnicities, disabilities, and gender so as to create communities that extend beyond the conference; obtain advice from and make contacts with computing leaders in academia and industry; and be inspired by great presentations and conversations with leaders with common backgrounds." CWIT, the CSEE Department, and the IS Department together contributed financially as bronze level conference sponsors, which allowed us to represent UMBC at a booth during the exhibition sessions. The Tapia conference was a great opportunity for students and staff to make professional connections, hear stories from peers and experts, and get quality career advice.

FALL CAREER NETWORKING EVENT Cindy Greenwood

The annual Fall Career Networking event was held in the University Center Ballroom on Tuesday, October 8. Approximately 50 computing and engineering professionals, including 22 alumni of UMBC and/or CWIT programs, registered to attend and mingle with our students. Students included Scholars, Associates, Affiliates, and a few COEIT graduate students. Professionals included folks from PayPal, GE Healthcare,

Northrop Grumman, T. Rowe Price, NSA, JHU/APL, Collins Aerospace, and many more organizations. This event is always a great opportunity

for students to build their professional networks. We have even heard about students receiving internship and job offers after originally making connections at this event!







Above: Cyber 101 Participants

CYBER 101 Cindy Greenwood

In September, we welcomed 26 bright and enthusiastic high school senior and junior girls to UMBC for our annual overnight Cyber 101 program. Our dedicated student planning committee (Hannah Russell, Tim Lin, Jenna Ebersole, and Emily King) once again put together a great series of educational sessions on topics such as networks, cryptography, Linux, and more. Cyber Scholar alumna Lauren Loftus ('19, computer science) also facilitated a session. In addition to the cyber sessions, we had the opportunity this year to bring the girls to the Event Center for a glimpse into HackUMBC, which they all greatly enjoyed. When we received CWIT and Cyber Scholar applications from incoming freshmen this past January, we were excited to see some Cyber 101 attendees on our lists. We are hopeful that some of these girls are soon-to-be Retrievers!

ASSESSMENT & GRANTS Dr. Danyelle Ireland

The outcomes of CWIT's nearly year-long visioning and strategic planning activity, which produced our new mission and vision statements, also include an expanded list of strategic goals along with detailed objectives and clear indicators of success. To help mark our progress towards these goals and to support greater accountability to our stakeholders, we are developing a robust assessment plan and dashboard for presenting our results. Stay tuned for more information on how we are demonstrating the impact of our work!

We are continuing to implement our Post-Transfer Pathways Program for Computing and Engineering Majors project which is sponsored by the NSF. This project supports pre-and post-transfer advising as well as a special first year experience course for incoming transfer students in computing and engineering majors. It also supports a Transfer Learning Community for faculty and staff in computing and engineering at UMBC and six partner Maryland community colleges. All areas of this grant are progressing successfully.

We plan to submit at least two new research grant proposals in 2020, including funding to support future cohorts of T-SITE. Additionally, Jeanni Hines (UMBC graduate student in Sociology and Shriver Peaceworker) is working with CWIT as an educational research assistant, to further our COEIT climate research initiatives.

STUDENT LEADS Cindy Greenwood

Our Fall 2019 Student Leads are:

BigWIT/LilWIT Lead: Olivia Bailey

First Year Experience (FYE 101) Peers: Olivia Bailey, Courtney Cavin, and Nabi Kalokoh

Affiliates Peer Mentoring Leads: Jasmyn Frasier and Vivan Thena

sier and Vivan Zheng

K-12 Engagement Lead: Mariela Guardado-Martinelli

CWIT Student Council President: Carly Heiner

Cyber Leads: Tim Lin and Hannah Russell

Pictured from left to right: Mariela, Olivia, Courtney, Vivan, Colin, Carly

CWIT Living-Learning Community Resident Assistant: Colin Vieson



CYBER SCHOLARS & ASSOCIATES UPDATES

As of the 2019-2020 school year, we have the largest total number of Cyber Scholars & Associates in the program's history at 34 students. Many of these students are leaders both within our program and across campus. A few highlights of Cyber Scholar leadership and accomplishments from the fall include:

- Leaders in the Cyber Defense Club (Cyber Dawgs): Amina Mahmood and Jackie Schultz
- Leaders in the Information Systems Security Association (ISSA): Bianca Monge, Jackie Schultz, and Gabi Watson
- Winning team in Cyber Dawgs Cyber Defense Exercises: Matt Manzi (and team)
- Winning team in Northrop Grumman CyPi Engineering Competition: Jennifer Nguyen (and three T-SITE Scholar teammates)
- Lead positions within the CWIT community: Mariela Guardado-Martinelli, Tim Lin, Hannah Russell, and Colin Vieson

We also have many students working on research projects with faculty members and students involved in non-tech related activities such as Student Government Association, Model UN, Esports, League of Leg-

ends Club, Game Development Club, the Campus Dining Committee, varsity athletics, and much more. We are proud of our vibrant community of students and look forward to another semester of celebrating their successes this spring!







FACULTY MENTORING

Thank you to this year's faculty mentors for CWIT, Cyber, and T-SITE Scholars:

- Dr. Anupam Joshi
- Dr. Ben Johnson
- Dr. Carolyn Seaman
- Dr. Charles Nicholas
- Dr. Chris Marron
- Dr. Chuck LaBerge
- Dr. George Karabatis
- Dr. Karuna Joshi
- Dr. Lee Blaney
- Dr. Marc Olano
- Dr. Maria Sanchez
- Dr. Naghmeh Karimi
- Dr. Neha Raikar
- Dr. Sreedevi Sampath
- Dr. Susan Mitchell
- Dr. Tim Finin
- Dr. Vandana Janeja
- Ms. Jamie Gurganus

CWIT & CYBER AFFILIATES UPDATE

Our CWIT & Cyber Affiliates kicked off the semester well with our Welcome Back Ice Cream Social, which allowed students and faculty to introduce themselves and mingle, as well as with our retreat in September. During this day-long Saturday Affiliates Retreat, we discussed ways to get involved at UMBC, diversity and intersectionality, stress management,



networking, all in addition to building our team and having fun! At the end of the fall semester, we had 10 CWIT/Cyber Affiliates reach level of engagement 1 (attended at least three events focused on community building, academic success, and professional development), 13 affiliates reached level of engagement 2 (attended at least three events focused on community building, academic success, and professional development AND participated in some form of outreach), and two affiliates reach level of engagement 3 (attended at least 5 events focused on community building, academic success, and professional development AND participated in some form of outreach)! We look forward to adding on more events for our CWIT & Cyber Affiliates in the upcoming semesters!

STRESS BUSTER/AFFILIATES RECOGNITION Kate O'Keefe

Above: Pick Your Classes

Every semester, we host a Stress Buster Event to encourage students to take a break from studying for finals and to spend time with the CWIT community. This December was no exception! Our event was held on December 11th and was full of fun activities, including board games, coloring books and activities, card making, music, and food. We also recognized our 26 affiliates who had reached one of our levels of engagement during that semester!

IMPACT WORKSHOPS Kate O'Keefe

CWIT's Impact Workshop Series focuses on providing academic and professional skills that can be utilized throughout students' UMBC career, as well as beyond. During the Fall 2019 semester, CWIT held 7 workshops with a variety of



topics, including involvement and scholarship opportunities, salary negotiation, diversity issues in technology, gender microaggressions, stress management, and graduate school preparation. We look forward to hosting more workshops in the spring semester.

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T-SITE UPDATES Dr. Danyelle Ireland

The Transfer Scholars in IT and Engineering (T-SITE) are currently funded by a grant from the National Science Foundation S-STEM program (DUE- 1458343). The T-SITE program is focused on serving new transfer students from Maryland community colleges who are pursuing a bachelor's degree in one of four computing majors at UMBC (computer engineering, computer science, information systems, and business technology administration). In Fall 2019, eight new Scholars (T8 cohort) joined our community, bringing the total number of T-SITEs served by CWIT to 52. Thirty-nine percent of T-SITEs have been women and 62% underrepresented minorities. The average time to graduation for T-SITEs is three years after transferring to UMBC and ninety-seven percent of all T-SITE Scholars were retained in engineering or computing majors. T-SITE Scholars have completed internships with employers such as IBM, General Electric, Exelon, National Security Agency, Northrop Grumman, Noblis, HughesNet, M&T Bank, Skyline Technology Solutions. Additionally, T-SITEs have completed undergraduate research experiences at UMBC, the University of Pittsburgh, Worcester Polytechnic Institute, and University of Arizona.

STUDENT ACCOMPLISHMENTS

We asked students to tell us about their accomplishments from the fall semester and how their involvement in CWIT helped them. Here are some of their responses:

"I have received an offer from Qualcomm in San Diego, California, for an internship. I met with and heard about Qualcomm from the Grace Hopper Conference, which I could only attend through support from CWIT." -- Marian Singletary (C16)

"I am a recipient of the Navy ROTC 4-year scholarship, which also means I'll be commissioning as an officer in the Navy upon graduation. Through NROTC, I participated in a military excellence competition at Cornell, and have performed and commanded a few color guards. Being a member of the CWIT community has actively helped my organizational skills, in turn helping me be less stressed when managing both ROTC and my academics." -- Sabrina Rodriguez (C18)

"There have been a few things that I've been doing this semester that I am proud of. First, I've been able to serve as the secretary for Cyberdawgs, the UMBC Cyber Defense team. I am also an Event Coordinator for the Information Systems Council of Majors (ISCOM) and have had a wonderful time coordinating various events. Also, this semester I've accepted a job at Johns Hopkins University Applied Physics Laboratory (APL) doing cybersecurity work for after I graduate in the spring. CWIT has helped me with a few of these accomplishments. I got involved with Cyberdawgs based on recommendations from people on my first CWIT retreat when I first became a member of CWIT. I was also able to get my job at APL through connections I made at their Fall Networking event. Not only this, but CWIT has been a huge help in helping me build the skills to land these positions. I cannot thank CWIT enough!" -- Jackie Schultz (Y6)

STUDENT ACCOMPLISHMENTS

"My team won first place during the Northrop Grumman CyPi Engineering Competition this year. I interned at Northrop Grumman last summer, and will be returning next summer as well. This spring, I will be interning at Balti Virtual, a company that focuses on the creation of augmented and virtual reality. Without CWIT, I'm not sure if I would have the opportunities that I currently have. Being able to network with so many people while forming relationships, which boosted my confidence to push myself, allowed me to reach my current status. The community has given me more than I could have imagined, and with that I thank them dearly." -- Bobby King (T7)

CONGRATULATIONS TO OUR DECEMBER GRADUATES

Not Shown is CWIT Scholar Ren Brown



T-SITE Grads: Diana Bell (L) and
Xenia Baranova



Cyber Grads: Arif Abdul Kareem (L) and
Bianca Monge

ALUMNI UPDATES

- Mariya Smolkin Frates (C2) started a new job in September as a Product Owner at Mindgrub Technologies in Locust Point.
- **Shannon Donelan** (C11) received her Master's degree (M.S.) in Mechanical Engineering from the Ohio State University in Spring 2019, while working full time at GE Aviation in Cincinnati, OH. She also graduated from GE's Edison Engineering program and was promoted. She is currently a design engineer for military engine exhaust systems.
- **Holly Johnson** (C11) started a new job in October in the Netherlands as a Flight test and simulation engineer with an airborne wind company called Kitepower where we're working towards creating a commercial kite powered system for wind energy generation! It's a nice mix of computer simulation and hands on testing and I think I'll stay out in Europe for at least a few more years.

Have an idea for a feature for our next newsletter? Submit suggestions to Cindy Greenwood at cindyg@umbc.edu

Below: Several of this year's industry Mentors

Follow all of CWIT's adventures online!



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cwit.umbc.edu

CONNECTING WITH INDUSTRY PROFESSIONALS Dr. Danyelle Ireland

In Fall 2019, 27 industry professionals generously gave of their time to serve as mentors as part of our Industry Mentoring Program (IMP). This past cohort was particularly special as we had our largest ever group of Scholars in IMP -- 37! We are especially grateful to mentors who were available and willing to support more than one student this year. At the practicum sessions, mentors shared valuable information about their own career paths, lessons learned along the way, and practical tips for professional success in tech industries. Scholars benefited from career planning guidance throughout the semester in the practicum and the one-on-one support of their industry mentors.



CWIT STAFF

Dr. Carolyn Seamau <u>Interim</u> Director

Dr. Danyelle Ireland
Associate Director

Ms. Cindy Greenwood
Assistant Director

Ms. Erica D'Erame Assistant Director

Ms. Kate O'Keefe Assistant Director

Ms. Thea Robertson General Assistant

This year's IMP mentors were: Laiela Ahmad (T Rowe Price), Sharon Ball (Patterson H.S.), Lindsey Beaubien (Northrop Grumman), Zozscha Bomhardt (General Electric), Sherri Braxton (UMBC Division of Information Technology), Emily Brown (Johns Hopkins University APL), Rithy Chhay (Sentinel Solutions, LLC), Rachel Cohen (Johns Hopkins University APL), Tina Coleman (ClearEdge IT), Amber Croxford (Northrop Grumman), Donna Dodson (NIST), Claudette Dupont (BGE), Katie Hirsch (Zenimax), Lilian Johnson (NIST), Judith Johnson (OnyxPoint), Yatish Joshi (Cisco Systems Inc.), Joshua Klosterman (National Cybersecurity Center of Excellence / MITRE Corp), Luther Petry (T Rowe Price), Helen Phillips (Northrop Grumman), Michelle Schneck (Department of Defense), Matthew Seligman (Department of Defense), Heather Smith (Leidos), Tabitha Stalder (Department of Defense), Haley Sweeton (Leidos), Emily Toy (Leidos), Travis Ward (Northrop Grumman), and Gregory Wessel (Independent Consultant).

Special thanks to UMBC's Jen Spencer Heilman (Career Center), who led a presentation on how to respond to and negotiate a job offer, and Dr. April Householder (Undergraduate Academic Affairs), Michael Hunt (McNair Scholars Program), Peter DeCrescenzo (LSAMP) and Dr. Simon Stacey (Honors College) who presented a panel on undergraduate research, academic careers, and prestigious scholarships.

THANK YOU TO OUR

NORTHROP GRUMMAN

The Center for Women in Technology

LOCKHEED MARTIN

GENERAL DYNAMICSMission Systems