

I AM A WOMAN IN STEM



What's Going On?

Who's In Charge?

Undergraduates interested in pursuing their academic and professional careers in the sciences, technologies, engineering, mathematics and healthcare take the lead with #IAmAWomanInSTEM to find new avenues for success. Unlike many student support services or clubs, this initiative is constantly evolving and building networks that will change the cultures in STEM-related fields and embrace diversity and inclusion. This change by necessity must come from within—our students, faculty, staff, alumni/ae and colleagues in business and industry.

This initiative seeks innovative ways by which to build a community of women in STEM+H fields. Given that tradition and customs have so long excluded women and persons of color from the success rates in STEM-related majors, graduate programs and professional careers, we rely on student empowerment to resist any ready acceptance of this chilly climate here on campus and beyond.

The initiative's forward planning is led by a volunteer steering team which includes students, staff, faculty and community members. In addition, a UK student organization with officers who volunteered this year to serve has begun, and they seek new members to craft new projects to raise awareness of these issues.

We are Growing

#IAmAWomanInSTEM launched at the University of Kentucky in the winter of 2015 with funding from the American Association of University Women's Campus Action Project. In 2017 we were honored with a \$50,000 grant from the UK Women & Philanthropy to fund scholarships for undergraduate and graduate/professional students to create and sustain service projects within the initiative. Originally partnering with the Million Women Mentors KY chapter and the KY Girls STEM Collaborative, we are now also affiliated with the UK Center for Social Equality and Justice.

In Spring 2016 we started with 164 #IAmAWomanInSTEM Student Ambassadors from six University of Kentucky colleges - and 62 mentors from the University and local business. By December of 2017, the list of volunteer student ambassadors had risen to over 350 (in both the initiative and student organization rosters) from eleven colleges here at UK.

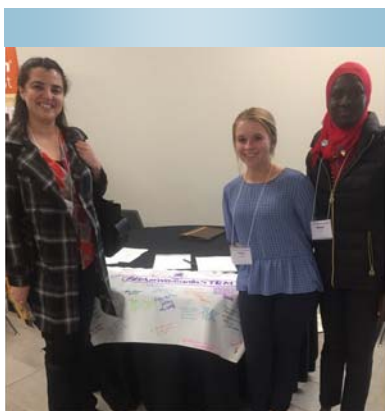


Inside this issue

Who Defines Success?	2
#IAAWIS Work in 2017	2
W&P Service Scholarships.....	3
Katie's Blog; STEM Groups	4
Space for Women in STEM.....	4
STEM Woman of the Week	5
#IAAWIS Student Organization ...	5

Goals

- Encourage female undergrads to persist in their STEM-related degrees (majors or minors) and career aspirations.
- Provide female undergrads with positive role models of women in STEM-related professions.
- Create discussion on issues facing women in STEM+H fields.
- Involve female undergrads in leadership and development of #IAmAWomanInSTEM.



#IAmAWomanInSTEM mentor Dr. Cata Vélez-Ortega (left to right) with ambassadors Kayla Kuhfeldt and Ndeye Thiaw at the Preparing Science Professionals Conference at UK, September 30th

Who Defines Success? You Do!

What's your definition of success? We want you to write about your experiences and tips for success as a student ambassador for #IAmAWomanInSTEM. This is an important part of taking a leadership role in the initiative

While much of the focus on STEM subjects is on acquiring hard skills like computer programming, mathematical analysis, or operation of lab tools, transferable skills in areas like creative and critical thinking, communication and collaboration are equally important. We all need graduates who are lifelong learners: people who are capable of pivoting and making major changes in whatever career field they choose.

Today, business and industry need to move at lightning speed, experimenting with new strategies to find adequate returns on investments. Being able to demonstrate how **YOU** get started and persevere despite difficulties and frustrations is a valuable quality.

We are at the nexus of innovation - #IAmAWomanInSTEM student ambassadors are challenged to serve as changemakers, committed to bring fresh thinking to the issues of diversity and inclusion in STEM. Even the smallest contributions for innovation matters.

A saying overheard at Apple:

"You don't need all the answers to get started on a problem."

K-Week, August 19, 2017

Information Session at White Hall Classroom Building with Heather Campbell, Kayla Kuhfeldt, Mollye Malone and Ndeye Thiaw with a great program intriguingly entitled: "#IAmAWomanInSTEM: I'm a Survivor!"

We are UK! Campus Ruckus at Johnson Center field - a table with information about women in STEM and games (with prizes donated by Heather Campbell).

These great opportunities for getting the word out garnered over 100 new student ambassadors!



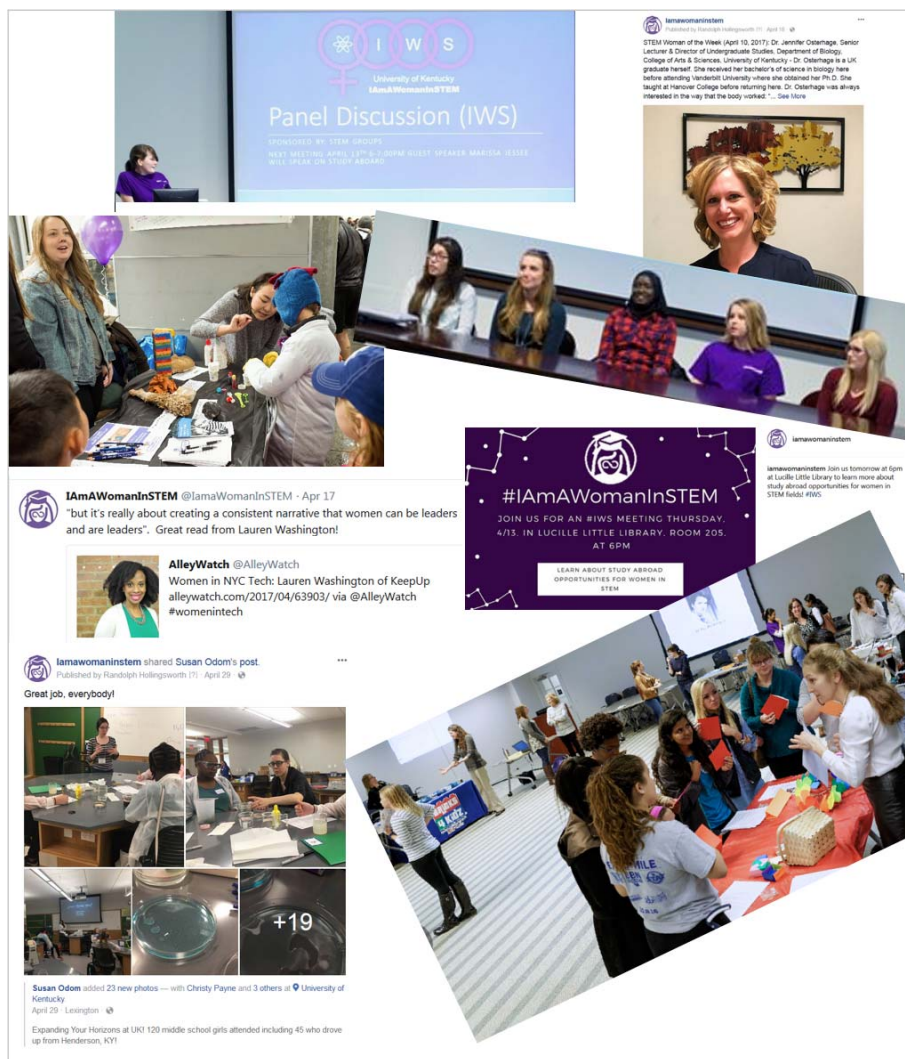
#IAmAWomanInSTEM Work in Fall 2017

The #IAmAWomanInSTEM student ambassadors were busy this fall. With a terrific series of events during K-Week, the semester kicked off with an astounding growth in numbers. We now have over 350 student ambassadors: 49% freshmen, 19% sophomores, 17% juniors, and 15% are seniors.

If you were looking, you'd find #IAmAWomanInSTEM student ambassadors taking on service activities in STEM-related events and reaching out as civic leaders at such events as:

- Kentucky Gender and Women's Studies Conference on September 16th
- Preparing Science Professionals professional development workshops and networking events with the UK Markey Cancer Center, the UK College of Medicine and in partnership with the American Society for Biochemistry and Molecular Biology, September 29-30th.
- Fayette County Public Schools' STEM Fair hosted by the Dunbar Girls in STEM Club on November 9th.
- GEMS (Girls in Engineering, Math and Science) outreach event with the College of Engineering and the Girl Scouts of Kentucky—workshops offered for girls in grades 4-12 (and the accompanying media campaign) on Saturday, November 11th.

And, we need to remember that taking the time out of busy schedules to pursue new avenues of opportunities are just as important as winning the rewards they offer. We congratulate China Grundy and Rebika Khanal who worked on submitting a proposal to the NCWIT AspireIT program and Tsage Douglas who submitted a proposal to the UK Diversity & Inclusion Funding Initiative.



Some scenes from Spring 2017 in the #IAmAWomanInSTEM initiative

Women & Philanthropy Service Scholarships

This fall eleven women were granted \$2,000 scholarships funded by the UK Women & Philanthropy Network. All the projects fell under specific themes and many of the awardees worked together in achieving their leadership projects.

- Boosting Student Organization Infrastructure to Increase Retention/Persistence: Heather Campbell (mechanical engineering), Taylor Ford (chemical engineering), Mollye Malone (biosystems engineering), and Ndeye Thiaw (biology)
- Increasing Opportunities for Student Ambassadors to Work Together for Outreach in Under-represented Communities: Tsage Douglas (public health)
- Increasing Social Media Presence and Connections Across Higher Ed Institutions and Business/Industry: Katie Kloska (chemistry), Kayla Kuhfeldt (biology), Julia Maier (biology), Hannah Thompson (biology)
- Finding Spaces on Campus for STEM+H Women to Feel Welcome, Network: Cameron Ginter (architecture)
- Continue to Research and Explore Findings Re: Gender and STEM in Higher Ed and Business: Amanda McCullough (4th year doctoral student in economics)

Spr 2018 Service Projects

So far, the UK Women & Philanthropy funds for Spring 2018 have been granted to the following #IAmAWomanInSTEM Service Scholars:

Kailee Barnes (human health sci)
"Being a Woman In STEM+H: Storytelling Events"

LaShay Byrd (biology)
"A Mentor to Guide You Through"

Heather Campbell (mech eng)
"STEM Groups, Next Phase"

Kelsey Campbell (neuroscience)
"Careers for STEM Women in Rural Kentucky"

Tsage Douglas (public health)
"Semper Crescente (Always Growing), Next Phase"

Taylor Ford (chemical engineering)
"FemSTEMpowerment, Next Phase"

Cameron Ginter (architecture)
"STEM Spaces, Next Phase"

Katie Kloska (chemistry)
"Autobiography Blog, Next Phase"

Kayla Kuhfeldt (biology)
"Social Media and Digital Art Outreach, Next Phase"

Mollye Malone (biosystems eng)
"Student organization outreach projects, Next Phase"

Hannah Thompson (biology)
"Stories of STEM, Next Phase for the WOW Campaign"

The steering team still seeks volunteers who will support the above projects with specified leadership roles. The UK Women & Philanthropy scholarship funds have not yet been fully expended.

Research data bust biggest myths about STEM jobs

Yes, there is a STEM pipeline problem—there are too many college majors that are divided by gender. This gap means men and women experience different early career paths that pay differently. Glassdoor ([glassdoor.com/research](https://www.glassdoor.com/research)) shows in a recent report that majors that lead to high-paying roles in tech and engineering are male-dominated while majors that lead to lower-paying jobs tend to be female-dominated. In other words, not all STEM majors are equal.

Glassdoor found that computer science & engineering is the highest paying major—with other engineering, information technology and nursing not far behind. Still within the top 25 highest-paying college majors, biotechnology or biochemistry majors' media base pay in the first five years are significantly lower.

US Bureau of Labor Statistics shows that by 2022, nearly three-quarters (71%) of STEM job growth will be in computer science, while only 3% will be in physical sciences. Computer occupations will become 57% of all available jobs, whether newly--created or available due to replacement.

Katie's Blog

Please take a moment to look at our website and the blog posts by Katie, Kloska one of our student ambassadors - she is writing about science and women in STEM fields and has taken an autobiographical approach that is very powerful.

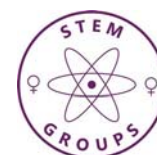
www.uky.edu/IAmAWomanInSTEM/blog

Katie writes: "By creating this blog, I hope to spread awareness of gender inequality in a refreshing and interactive way. I have found myself challenging the ways I thought before and journaling my thoughts on the STEM field and academia." Please share and use her blog posts to start conversations among your friends.



STEM Groups

#IAmAWomanInSTEM student ambassadors Heather Campbell (Mechanical Engineering major) and Kayla Kuhfedt (Biology major) are leading the organization of "STEM Groups." The goal is for undergraduate women with similar interests (same majors at UK or career choices) gather together for networking and studying. Due to the great turnout by our first- and second-year students for this kind of gathering, they are currently recruiting more leaders for the groups. If you are a junior or senior in a STEM-related major or minor and are interested in helping to organize small group sessions to empower and re-energize our future STEM graduates, please contact Heather at hrca227@g.uky.edu.



www.uky.edu/IAmAWomanInSTEM/Students/stem-groups

Space for Women in STEM at UK

Cameron Ginter (Architecture major) has been working on the development of a space here on the UK campus for #IAmAWomanInSTEM student ambassadors. As part of her work for her major's capstone project, she has researched the importance a dedicated area has in creating a meaningful and welcoming environment for promoting collaboration and empowerment for women in STEM+H fields. With support and guidance from her #IAmAWomanInSTEM mentor, a professional architect here in Lexington, she has put together a portfolio of design models that show a vast variety of spaces where we might study, interact or facilitate the production of new ideas.

Cameron will soon be calling for your help in deciding among the many different kinds of design models she has put together. Once a design model has been selected, she will begin fabrication in the design studio, and creating the construction documents that will need to be implemented for the space to be created here on campus. She writes: "Through the fabrication of physical spaces that contribute to inclusive spaces that target women, these locations would promote the importance of women's role on campus, validate their influence in STEM+H fields, and create spaces where women can gather and support one another."

It is exciting to know that Cameron's leadership work for #IAmAWomanInSTEM — designing for women—has value to her faculty and the leadership in the UK College of Design.

STEM Woman of the Week

The STEM “Woman of the Week” or WOW campaign was launched by Hannah Thompson (Biology major) in January 2017 with a spotlight on Dr. Kim Woodrum, the fabulous educator and scientist in the UK Department of Chemistry. Along with a short inspirational story and quotes from her subject, Hannah included a photo from the interview session. The picture and accompanying text were then published on the #IAmAWomanInSTEM social media—the full list of the WOW posts can be found here:

www.uky.edu/IAmAWomanInStem/Projects/WOW

The WOW campaign is growing this coming spring with the development of a separate website called “Stories of STEM” and a broader target population to showcase—coming from many different colleges and universities as well as from business and industry. As part of this expansion, Hannah ran a fundraising campaign that offered new t-shirts with the iconic Rosie the Riveter image (see detail at right).

Hannah is reaching out to several other postsecondary institutions to reach young women who are willing to take a leadership position as a Campus Representative. More information on this initiative to come!



Design of t-shirts sold as a fundraiser for new website for Stories of STEM campaign

*“Combat the fear of failure.”
- Yara Shahidi*

#IAmAWomanInSTEM’s Student Organization

Did you know that we have an official UK student organization? Over time, #IAmAWomanInSTEM will go beyond UK to include other institutions. So, join our new UK student organization devoted to just us at UK! As a perk, you will receive one of our new t-shirts—the design is based on the logo at the front of this newsletter.

You can sign up via the UK Org Sync portal found on the UK Student Involvement website. We have step-by-step directions on our website here:

www.uky.edu/IAmAWomanInSTEM/Students/Org

The UK student organization is led by #IAmAWomanInSTEM student ambassadors Ndeye Thiaw (president), Mollye Malone (vice-president) and Heather Campbell (STEM Groups organizer).

They meet once a month in different places across campus. Join the organization via OrgSync as a member so to get

updates and announcements.

If you are interested in an officer position, please contact Mollye Malone or Ndeye Thiaw. Officers are responsible for applying for funding, attending UK student organization orientations, managing events, and making sure the association is active and on the right track.

This fall, the officers led the planning and implementing of #IAmAWomanInSTEM gatherings. They started with the K-week orientation sessions but continued with planning other events also. One of the gatherings was a Halloween Party in October. Kayla Kuhlfieldt, the PR lead for the event chose not to include any pictures of the costumes that attendees wore. Dr. Randolph Hollingsworth, the student org advisor, chose not to attend so as not to be tempted by the candies that were promised—as with many of us from Kentucky, she’s working hard on controlling her genetic disposition toward diabetes!

Charlotte Kidd (Medical Lab Sci major) helps with getting the word out with one of our t-shirts Spr’16



#IAmAWomanInSTEM

This initiative asks students to think critically and solve problems that they discover through research and personal experience. Those who take on the challenge of building their own leadership profile in this initiative are demonstrating that they're adaptable to any situation.

This is a trait that will only become more important in an economy where the fields they enter will be disrupted and where many of the jobs they'll eventually hold don't even exist yet.

Join us in building the #IAmAWomanInSTEM initiative!

Are you a young woman working toward earning a degree that is reliant on mathematics, engineering, technologies or the sciences? What inspires you to keep pursuing your dreams? Join in the conversation!

- ⇒ Follow us on Twitter, Instagram, YouTube,, Tumblr or Facebook and add your voice to the creative works happening there.
- ⇒ Upload a picture of yourself as a creative force and a leader in sciences/ technologies and use the #IAmAWomanInSTEM hashtag and join in our communities.
- ⇒ Find a mentor in a STEM-related field and write about how that person has helped you to succeed in your goals – ask the person if you can share a photo and your story on our social media websites.

#IAmAWomanInSTEM

c/o Dr. Randolph Hollingsworth
112 Frazee Hall
University of Kentucky
Lexington, KY 40506-0032

Phone: 859-257-0047
@iamawomaninstem
iamawomaninstem@gmail.com
www.uky.edu/iamawomaninstem
google.com/+IamaWomanInSTEM
www.facebook.com/iamawomaninstem
twitter.com/IAmAWomanInSTEM
instagram.com/iamawomaninstem
iamawomaninstemuky.tumblr.com

