

#### STEMCONNECTOR & MILLION WOMEN MENTORS / QUARTERLY NEWSLETTER / Q1 2023



Welcome to the new STEMconnector and Million Women Mentors quarterly newsletter. In this edition you will find a review of the recent notable and newsworthy member activities, key STEMconnector insight and research releases and things to look forward to in the second quarter of 2023.



# Bioindustrial Manufacturing - Made in the USA, ebook funded by BioMADE

STEMconnector's latest ebook, funded by BioMADE, explores how innovation in bioindustrial technologies is creating breakthrough products and technologies. The ebook highlights companies, opportunities for innovation, and the STEM pathways that are shaping bioindustrial manufacturing. Download the Ebook

# White House STEM Initiatives: A STEMconnector Brief

STEMconnector aims to support sustainable and impactful engagement with its partners to advance a robust and inclusive STEM-focused workforce. Download our latest resource to learn about two White House initiatives that enable employers, educators, and other key stakeholders in the STEM ecosystem to put a spotlight on their programs and encourage more students and educators to pursue STEM educations and ultimately persist in STEM careers.

- **YOU Belong in STEM** United State Department of Education
- STEMM Opportunity Alliance (SOA) Office of Science and Technology Policy and AAAS Download the the brief

# **RECENT RESOURCES**

#### **DEIA Insights Series**

These one-page reports\*
highlights notable
underrepresented groups in
STEM, provides statistical data
around challenges and gaps,
representations and standards,
students perceptions and
resources and organizations
that support these groups in
STEM fields.



Women in STEM / Black and African Americans in STEM



#### **State of STEM Report**

The state of the science, technology, engineering, and mathematics (STEM) workforce is evolving at an incredible speed, transforming the way workers prepare for jobs, as well as the way they experience employment. The past few years have brought unprecedented changes to

workforce development in STEM. The findings from State of STEM: Challenges and Opportunities underline the importance of sustained investment in STEM education, research, and workforce development. Full Report / Executive Summary

# **RECENT EVENTS**

MWM Webinar: Lights, Camera, Action! The Role of Story-Telling in Inspiring Female Students to Overcome Stereotypes and Pursue STEM Careers featuring Not the Science Type & The Power Chronicles. Lear more and watch the replay



# **RECENT EVENTS**

National Mentoring Month Webinar: High Impact Mentoring Programs



Learn more and watch the replay

STEMconnector Webinar: Knowing the Past Opens Doors to the Future



Learn more and watch the replay

MWM International Women's Day Webinar: How Million Women Mentors is Advancing & Embracing Equity Around the World



Learn more and watch the replay

Million Women Mentors: Critical Career Inflection Points: Lessons & Advice



Learn more and watch the replay

## **UPCOMING RESOURCES**

#### Diversity, Equity, Inclusion, and Accessibility (DEIA) in STEM: 2023

Building off of STEMconnector's The State of Diversity, Equity, and Inclusion (DEI) in STEM (2021), this updated report details recent struggles for sustainable DEIA strategies, illustrates DEIA challenges in STEM for K-12, postsecondary, and employment, provides resources for organizations to reference, and offers six research-based strategies for organizations looking to develop solutions to the diverse STEM talent crisis.

STEMconnector will host a virtual event where attendees will receive an in-depth look into DEIA Challenges and come away with an understanding of how to leverage this research report to drive impact in their respective organizations.

Register here



#### TRANSPORTATION EBOOK

STEMconnector's upcoming ebook "Transportation is STEM" is looking for contributors. In this ebook, we will explore Transportation as a STEM career field. We will discuss career opportunities and pathways, and highlight areas in need of attention.

Contact your client service representative for additional information on how to get involved!

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## **UPCOMING EVENTS**

# **STEM**connector K-12 Innovation Lab, Save the Date!

Join us May 10-11, in Los Angeles California for our next Innovation Lab.

During this event, we will engage members in an interactive workshop to showcase existing and explore new innovations that help advance students and expand opportunities in primary and secondary education, to close the gap into STEM careers.

Contact us to learn more.



#### MWM WII Presents: Diversity, Equity, Inclusion & Belonging in Insurance - An Open & Honest Dialogue, Virtual Event

In honor of Celebrate Diversity Month, Million Women Mentors is hosting a webinar, Diversity, Equity, Inclusion & Belonging in Insurance - An Open & Honest Dialogue to recognize and celebrate the diversity of the world we live in, and explore opportunities to increase diversity in the insurance industry.

Thought leaders and diversity, equity, inclusion and belonging (DEIB) experts from across the insurance industry will take a deep dive into the U.S. House Committee on Financial Services report, Diversity and Inclusion: Holding America's Largest Insurance Companies Accountable. Following a presentation of the findings, speakers will offer insights into the practical and high-impact steps organizations and individuals can take to meaningfully and positively impact DEIB in the insurance industry.

Register here

THE 2023 CALENDAR



#### MWM-WA Women in STEM Luncheon

Million Women Mentors Washington held their first Women in STEM Luncheon that took place on 12/2/22 at Washington State University Tri-Cities. Women in STEM across campus (students/faculty) were invited and enjoyed lunch together. The first lady of WSU (she's also Electrical Engineering faculty and a co-chair of the PNNL/WSU Advanced Grid Institute), Dr. Noel Schultz spoke alongside Jillian Caldwell, MWM-WA Chair, and WSU's Vice Chancellor for Academic & Student Affairs, Dr. Kate McAteer.

The event had 20 women attend, all of whom are interested in continuing these types of gatherings.



#### Inspiring Girls In Computer Science – A National Computer Science Education Week Event

In honor of National Computer
Science Education Week which is
Dec. 5 to 11, Girls Inc. of Chattanooga
hosted a special event to introduce
30+ girls to Science, Technology,
Engineering, and Math (STEM) and
Computer Science (CS) concepts.
The girls in grades first through eighth
from various schools in Hamilton
County were able to interact with
unique healthcare technology,
participate in a CS activity on
encryption and hear from special
guests.

Chattanooga-based Thinking Media CEO Sheila Boyington, who is a leader of Million Women Mentors, spoke to the girls about her experience as an engineer and then

## **MWM NEWS AND STATE EVENTS**

introduced the Learning Blade team to lessons on Information Security Analysts with an encryption activity highlighting the connection between computer science and healthcare. These lessons are available free to others by the Infosys Foundation USA – Pathfinders website.

Read more

#### MTSU doctoral student wins American Chemical Society award for promoting women in

STEM

MTSU Ph.D. student Nicole Gammons stimulates her mind with datadriven research as part of the Molecular Biosciences



doctoral program, but her passion is collaborating with, coordinating and mentoring young women in science, technology, engineering and math.

The Division of Professional Relations, or PROF, of the American Chemical Society recently recognized Gammons' influential outreach work with the Leadership Development Award.

"The selection committee was truly impressed with your achievements, leadership and impact on the chemical community," wrote the PROF selection committee chair Matt Grandbois to Gammons in her award letter.

The American Chemical Society, or ACS, is one of the largest scientific communities in the world with over 151,000 members across 140 countries. The PROF Division selects one leadership development winner a year from its large pool of member applicants who meet basic location and age requirements and — through an in-depth application process —

## **MWM NEWS** AND STATE EVENTS

demonstrate multiple leadership and volunteer experiences through activities, society or organization memberships, mentoring, academic achievements and awards, publications, presentations and more.

Gammons, a member of both the ACS and PROF, decided to apply for the award after Judith Iriarte-Gross, director of MTSU's Women in STEM (WISTEM) Center where Gammons volunteers, suggested it. Iriarte-Gross saw leadership potential in Gammons from their first meeting.

"She thinks outside of the box, is not afraid to ask questions and her suggestions make the WISTEM Center stronger for girls in STEM," Iriarte-Gross said. "Nicole is an amazing leader and winning this award is such an honor. Her work and this award show that mentoring does matter!"

Iriarte-Gross, who has been recognized with numerous awards for her yearslong advocacy of STEM careers to young girls and women, added that Gammons' win is cause for celebration for the campus community.

**Learn more** 



# Northeast Florida Regional STEM2 Hub: "Connect to the Field" with GIRLS in IT Event

National STEM Day! What a great day to host a group of smart, talented



young ladies from Andrew Jackson High School for a day of learning about careers! The day started with a visit to the top floor of Vystar Credit Union Headquarters where the students were greeted by Chief Information Officer, Lisa Cochran. The girls met a variety of tech professionals who helped them explore a variety of careers they could pursue across the many areas of information technology, including cybersecurity, data science, fintech, networking and cloud application. From there, in partnership with Vystar Credit Union and Auditmacs we were able to give each of the young ladies a refurbished laptop computer thanks to a generous donation from Monica Woo of WooWorks in memory of her father.

Next stop was the Jacksonville Iceman game at Vystar Veterans Memorial Arena. Not only did they get to catch the game, but they also got the opportunity to hear from a variety of Iceman employees about how data science is used in sports including data architects, data engineers, and quantitative analysts to name a few.



# MWM-KY's What Type of STEM Mentor Are You? STEM Mentor Style "personality quiz".

Motivated by the feedback of our students and directly inspired by "Workplace Mentoring in STEM:

A Guide to Developing Formal

Mentoring Programs," the goal (in the spirit of informal online personality quizzes) is to help our researchers understand their mentoring style through the 3 roles outlined in the report --Advisor, Coach, Sponsor-plus a 4th we saw specifically in our project: Reverse Mentor.

Take the quick for yourself!



# MWM-DE: Delaware Proclaims Women and Girls in STEM Day

Governor John Carney and Lt.
Governor Bethany Hall-Long signed a Proclamation, and the General
Assembly unanimously passed a
Concurrent Resolution declaring
March 24, 2023 as "Delaware Women and Girls in STEM Day". This was the third annual celebration of women and girls in science, technology, engineering, and math in the State of Delaware. This special event was initiated in 2021 by Jacqueline Means, "The STEM Queen" and Founder of the Wilmington Urban STEM Initiative.

To mark the occasion, Million Women Mentors - Delaware (MWM-DE) and Lt. Governor Hall-Long, National Honorary Co-Chair of MWM, announced this year's eleven Outstanding Delaware Women in STEM honorees. This annual recognition highlights the accomplishments, perseverance, brilliance, and tenacity of women in STEM, as well as illuminates scientific and technological career paths for Delaware girls.







#### Million Women Mentors South Carolina, STEM Education Month

Our theme for STEM Education Month, "Stories in STEM," is aimed at providing South Carolina's STEM ecosystem with the opportunity to share their story to empower others to pursue their dreams, and establish a sense of belonging no matter the intersection of their identity. You can share your own story by visiting our website.

#### **Upcoming events:**

- STEM Day at the Capitol (April 12th, 2023, at 10:00 AM) Tune in via Facebook at 10:00 am on April 12th for a virtual STEM celebration! Hear state. industry, and community leaders talk on the importance of STEM to South Carolina. Watch as South Carolina Council on **Competitiveness** recognizes the 2023 SC STEM Educator of the Year finalists. Celebrate schools that have been awarded funding for the Growing in **STEM Grants**, and more. Kinetic Derby Day featuring iMAGINE STEAM Festival
- On Saturday, April 22, 2023, the fourth annual Kinetic Derby Day will return to Meeting and State Streets. This year, we are excited to announce the return of the kinetic sculpture parade to kick off the day, followed by soapbox racing, and the obstacle course. The event is intended to inspire creative thinkers and help develop problem-solving skills to construct the ideas imagined. MWM-SC will have a booth at the event. where students will experience hands-on,

interactive science fun!

On April 28, from 9am to 12:30 pm, MWM-SC will be hosting a symposium to empower the next generation of STEM leaders. The program will feature Dr. Tom Peters, Executive Director, SC Coalition for Mathematics and Science, and Representative Sylleste Davis. During the event, young student leaders will have the opportunity to discuss projects of their choice that amplifies their experiences with STEM and how they are using it to guide their future. There will be breakouts featuring topics such as the importance of mental health, the transition and preparatory information from high school to college, as well the significance of developing girls to lead the next generations for STEM.

Stay up to date with everything MWM-SC by following them on twitter.



# Million Women Mentors Illinois Supporting Female-Led Programming Across the Prairie State

Throughout March, the MWM-IL
Steering Committee hosted several
events that provide access and
opportunity to young leaders in
Illinois, including sponsoring the
Chicago Women in STEM Symposium
on March 10. State Leader Jenny
Kopach, CEO of Science Olympiad
and President of the Science
Olympiad USA Foundation, spoke
at the event and highlighted the
new \$25,000 research grants open
to early career researchers on
Science Olympiad-linked campuses.
STEMconnector partnership lead





Amy Etten and Roger Antoniazzo from Abbott also attended. Jenny will be judging the mHUB Fourth Revolution Rising Star Awards for the best hardtech innovation in Illinois on March 23.

Each of our MWM-IL Steering Committee Members have events happening this month, including Laticia Holbert of ComEd, who hosted a CPS Skilled Trades Fair on March 2 and a CONSTRUCT panel discussion on careers on March 7. Nathalie Schmidt of the Illinois Agri-Women hosted the Women Changing the Face of Agriculture Conference on March 3 in Galesburg, where 300 girls and women in the field shared career development and scholarship opportunities. Becky Goldberg of the Illinois Science and Technology Coalition, along with her colleagues Jackie Navigato and Tanvi Dharap, will be hosting STEM Showcase competitions for high school students across the state in April, where they will present innovations developed with mentors from the business and tech community.





# ALLIANT ENERGY FOUNDATION: ALLIANT ENERGY LAUNCHES EPISODE 2: AKILAH AND THE POWER OF NATURE

As Akilah adjusts to a new school and new classmates, she has to choose a subject for a surprise science assignment. Over dinner, Akilah's dad plants an idea when he mentions Alliant Energy's One Million Trees project. When Akilah shares this with her lab partner Annalise, the idea grows roots.

As the two young scientists get to work, Akilah's old friend Dr. Nix returns to give them an up-close view of the ecosystem.

Will the girls' journey through the elements and our ecosystem inspire them to finish their project and improve the environment?

Read more





#### **Arlington ISD**

On February 23rd, 17 freshman young women from the Lamar High School Cybersecurity P-TECH attended the inaugural T-Mobile Cybersecurity & Technology Career Fest at the T-Mobile corporate headquarters in Frisco. These young women were introduced to cybersecurity and technology careers, and were encouraged to begin building their professional networks with female T-Mobile executives. Students enjoyed a mix of fun activities where they learned about a variety of careers in this exciting, fastgrowth industry. T-Mobile seniorlevel women employees spoke to our female students and showed

them what they can be so that they can see themselves in the world of technology careers. T-Mobile treated our students to lunch during which a panel of females answered questions, and provided T-Mobile "swag bags" to remind our students of their experiences. It was an inspirational day and our students' comments were, "I am so glad we got to go to this!"

Women make up only 24% of the cybersecurity industry. Minorities-Blacks, Hispanics, Latino-X, and Asians are only represented in the single digits. Unemployment is currently at zero percent in the cybersecurity industry. There are currently 500,000 unfilled cybersecurity jobs in the United States. Arlington ISD's CTE

department hopes to provide opportunities like this one to do our part in closing the race and gender gap, and to build our students so that they are ready to become part of the new generation of a diverse cybersecurity and technology pipeline.



# Micron hosts events at Global Headquarters in Boise, Idaho.

January and March 2023 – Micron hosted two unique Job Shadow events for over 200 students and educators. Micron professionals offer their time to mentor small groups of students. The mentors share about their education and career journey. while also taking the students on a tour of the Micron site, to their work areas when possible. The January event was focused on Technician and Skilled Trade Careers. The March event focused on Computing Careers. In addition to the small group tours, students experience a Career Panel Q&A, followed by a Post-Secondary Q&A. There's never a lack of questions from the students. Students traveled from all across southern Idaho, creating new networks among students and educators.

February – Micron hosted our Girls Going Tech program for 90 8th grade students that identify as female, nonbinary and gender-fluid. This event brings "you can't be what you can't see" to life. The students are mentored by Micron professionals that identify

as female and are allies to all gender identities. Small teams of students, with names related to semiconductor terms, participate in hands-on STEM activities related to engineering design and chemistry. Career speakers described their journey from when they were in 8th grade to their career at Micron. Students exit the day with a better understanding of STEM careers and new friends with a shared STEM experience.



3M is raising awareness around the opportunities available in the trades through Skilled, a new docuseries created to dispel misperceptions and showcase diverse and meaningful trade careers.

STEM and the skilled trades are foundational elements that cross markets and industries. They set any young person on a path toward fulfillment and success. However, today 85% of contractors report trouble finding skilled workers[1], and an estimated 546,000 new skilled tradespeople will be needed to meet demand in this year alone[2].

As part of its global commitment to create five million unique skilled trades and STEM learning experiences for underrepresented individuals by the end of 2025, 3M has launched a companion piece to its 2021 docuseries that celebrates diverse women in STEM, "Not the Science Type." 3M's second docuseries, "Skilled," premiered at an officially sanctioned event of the

2023 Sundance Film Festival. The film focuses on the skilled trades and addresses misperceptions that may be preventing more people from pursuing these vital careers. The series focuses on four individuals in the trades, including Paige Knowles, a 19-year-old plumber and author of the children's book "Plumber Paige," inspired by her own experiences. Paige represents what the future of skilled trades could look like. In the docuseries, Paige poignantly says, "It's okay to be different and it's important for girls at a younger age in school to consider something that they will actually like, and not just follow what everybody else says they should be doing."

To watch Paige's film and learn more about the docuseries.

## PepsiCo Ireland partners with I Wish to deliver a STEM event

PepsiCo Ireland is a long-term supporter of I Wish, which is a community committed to showcasing the power of Science, Technology, Engineering and Math to teenage girls. This year, I Wish offered the students and teachers a choice of an in-person event at the Royal Dublin Society or for those unable to travel and for overseas international audience members, a virtual experience.

PepsiCo IT and R&D teams took part in the STEM event on February 28th. The teams showcased a virtual reality headset, robots, mixing tank and sensory items which were representative of the work which is done in PepsiCo. In addition, a keynote speech was delivered by Global Research and Development Senior Manager, Olga Voitkova. Olga shared her career journey and discussed some of the challenges experienced. The insights shared in



this candid conversation was received well by the students.

Prior to the event, the PepsiCo team did an Instagram takeover on the I Wish Instagram account promoting PepsiCo Ireland's participation and highlighting STEM opportunities. They presented career profiles, "meet the grads" and "day in a life" videos and DE&I content, all portraying the career possibilities at PepsiCo.





# UC Davis: How one medical school became remarkably diverse — without considering race in admissions

The diversity of medical school classes has barely budged in recent decades, even with the ability to consider an applicant's race as one factor in admissions. Now, many medical school leaders fear a

looming U.S. Supreme Court decision to restrict or ban race-conscious admissions policies could lead to precipitous declines, imperiling efforts to fight the nation's stark racial and ethnic health disparities.

There's good reason for concern: In the nine states where affirmative action is already banned at public universities, medical school classes are notably less diverse. But one school in California — the state with the country's longest-standing ban on using race in admissions — has defied the odds. The University of California, Davis runs the country's most diverse medical school after Howard, a historically Black university, and Florida International, a Hispanic-serving research university.

#### UL Research Institutes, Xplorlabs Website: Same Trusted Science, Updated Design

The Xplorlabs website has a new look. Based on feedback from educators, the redesign of the Xplorlabs platform reflects the contemporary best practices in science and engineering education. The updated website aims to be easier for users to navigate. Educators and students can access Xplorlabs resources individually from the newly imagined resource library, or through engaging narrative pathways.

You may be familiar with the Xplorlabs modules: Fire Forensics, Portable Electrical Power, and Extraction to E-Waste. We've updated our language to refer to each of these not as modules, but as pathways. More than just a nominal shift that reflects the resources' guided structure, this change reflects a shift in the way we are constructing the pathways themselves. Our intention is for each pathway to open with an engaging real-world phenomenon that will spark an interest in students, who can then explore the science and engineering concepts through organized series of driving questions.

Click here to explore the new Xplorlabs website!

# LOCKHEED MARTIN SPACE: COLORADO GIRL SCOUTS AND LOCKHEED MARTIN ENGINEERS CELEBRATE WOMEN'S HISTORY MONTH



"We learned a lot about the different categories of aerospace science and engineering,"

said seventh grader Juliette Hoffman

A group of Colorado Girl Scouts joined engineers from Lockheed Martin to celebrate Women's History Month and learn more about STEM careers available to them.

The group met at Wings Over the Rockies Air and Space Museum in Denver. Engineers led the group of middle and high school students through some STEM activities.

The girls learned about cyber security, artificial intelligence, optics and space science. They even made their own rockets.

"I think that that was a really neat experience," Hoffman said.

The goal is to get girls excited about STEM opportunities. Read more

## Northwestern Mutual: Girls & STEM

In celebration of Women's History Month, Northwestern Mutual was a sponsor of the Girls & STEM event at Discovery World in Milwaukee. The event was a huge success with 2,000+ children and families in attendance. There were more than 20 organizations engaging the attendees in fun tech-themed activities to engage and inspire young girls to get involved in tech. Northwestern Mutual's 25 employee volunteers led activities with Sphero Robot programming, Code.org Dance Party and an Artificial Intelligence art activity. Learn more about the event and see it in action with this local TV coverage! FOX6

CBS58 Girls & STEM draws inquisitive minds at Discovery World

#### **EducationWorks Inc.**

EducationWorks OST students at Morris Elementary & Gideon Elementary in Philadelphia, PA, and Mastery Charter McGraw Elementary (Camden, NJ) have been busy! They've been exploring the causes and effects of air pollution, creating air pollution removal "machines," and even learning about DNA. Part of learning about DNA included reading up on the legacy of Henrietta Lacks. In 1951, doctors took the first human cells to be cultured in a lab from a malignant tumor found when Mrs. Lacks went to John Hopkins Hospital. Her cells have been used to study the human genome, learn more about how viruses work, and played a crucial role in developing polio and COVID-19 vaccines. Through robust OST programs and in-school support, EW advocates for and provides sustainable pathways for the growth and advancement of young girls and women to pursue, persist, and succeed in STEM careers.

#### Boys & Girls Club: Developing a Growth Mindset in and Out of School Program

The success of the Boys & Girls Club of Dundee Township relies upon the collaborative efforts of our community partners, including our elected officials, community colleges, school districts, park districts, businesses, social service and counseling agencies, service clubs and volunteers to help deliver on our mission to help our children become caring, productive and responsible citizens. Every member of our community ecosystem offers their

elements of support and contribution toward achieving this goal, based on their expertise and sphere of influence.

The purpose of this report is to present compelling findings relating to two key aspects of program impact BGCDT provides. The first is helping our kids to develop a growth mindset. The second is hands-on, project-based learning STEM programming to develop and maintain interest in future STEM careers, in either the technical or professional workforce.

Read more



# GET MORE OUT OF YOUR STEMCONNECTOR & MILLION WOMEN MENTORS MEMBERSHIP

# RESEARCH

White label research, consulting and analysis projects including environmental scans, workforce development and industry reports.





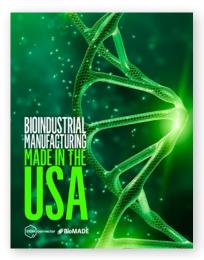




Engage STEMconnector to support strategic projects. Services include marketing, design, communications, strategy and project management to achieve desired outcomes.

# **GRANTS**

STEMconnector can serve as the system lead organization or subcontract management partner for federal, corporate and foundation grants.









Amplify your brand as a STEM employer of choice with engaging digital assets including microsites, ebooks, and social media.

# TECHNOLOGY

next generation STEM workforce as they pursue STEM pathways. Showcase your internships and entry level STEM careers on AtlasJobs interactive opportunity map.

Leverage a powerful mobile first technology platform to engage the



Custom content creation that engages audiences and enhances your brand awareness through the lens of DEI, STEM workforce development and creating equitable STEM pathways.



