

TS¹² TECH SAVVY!

Tech Savvy Girls . . .
Absolutely, Amazingly, Authentically YOU!



Tapping into Our Technological Future. . .
Girls Exploring Science, Technology, Engineering, and Math

Featuring fun, exciting, hands-on workshops to inspire success and
career exploration for 6th to 9th & 10th to 12th grade girls
in Western New York.



SATURDAY, MARCH 18, 2017
8:30 AM TO 4:45 PM
SUNY BUFFALO NORTH CAMPUS
STUDENT UNION

www.originaltechsavvy.org
e-mail: AAUWTSWNY@cs.com
telephone: 716-559-3037

Individual registration deadline is Feb. 23.
Groups must register by Feb. 21.

Paper and Online Registration Methods available. For online form, see
<http://originaltechsavvy.org/>

SPONSORSHIP & SUPPORT



This conference is presented by
AAUW Buffalo Branch, Inc.*



The Buffalo Branch is grateful for significant funding from Praxair, Inc.



The Buffalo Branch proudly acknowledges the support of Baxter, and the School of
Engineering and Applied Sciences, University at Buffalo.

*Funding for this conference was provided by the AAUW Buffalo Branch, Inc. from proceeds from our
Annual Booksale.

Significant financial support for Tech Savvy was provided by our major sponsor for twelve years. . .
Praxair's Global Giving program.

The Buffalo Branch is grateful for the support of the School of Engineering and Applied Sciences, State
University of New York at Buffalo for supporting the welcome reception for our speaker and volunteers
and for the support of Baxter Healthcare.

You may register online—
or you may complete
this form via hand.
We strongly encourage
all to register online,
especially groups!
Online registrants will
be entered into a special
prize



There are 2 ways to provide information — online or via the form in this brochure.
We encourage online registrations—especially for groups!
Online registrants will be entered into a special prize drawing.

1. If submitting online, use this brochure to choose workshops.
2. Fill out form online at www.originaltechsavvy.org
Note: Each person (student or adult) should submit a separate form although they can be mailed together
with one check.
3. Submit the form using the Submit button. Then, Print the Summary Page.
4. Mail in the printed Summary page with parent/guardian signature and payment
immediately. This must be received within a week of your online registration

Everyone will receive a confirmation/ reminder card the week before the program.

One Tech Savvy! student
will win a new computer!



AAUW Buffalo Branch
P. O. Box 894
Cheekowaga, NY 14225-0894

6th – 9th Grade STUDENT WORKSHOPS (20 choices!)

Note about Allergy Alert: Many workshops, including those noted, may make products. Please utilize care and observe your allergy/health concerns in all workshops! Students are advised to bring any products home to parents before consuming.

Workshop 1 Engineer This!
Discover how your unique ideas could make you a great engineer, learn about the different fields of engineering, and see how quickly you can engineer a tower.
Dan Snitzer and Christina Pinzone, both Process Engineers at Praxair Inc.

Workshop 2 It Starts with the Sun
Sun → Biomass → Useful Materials!
Learn about biomass, a renewable source of energy. Learn about the role that the sun's energy plays in the production of valuable chemicals/polymers and how YOU as a chemical engineer in the future can contribute to this field!
Paschalis Alexandridis, Distinguished Professor, and Marina Tsanou, Associate Professor, both of the Department of Chemical and Biological Engineering, University at Buffalo

Workshop 3 Robotics that Fit YOUR Life!
In this workshop participants will do two activities: First, you'll work together to program a robot to solve an interesting problem. Then, you'll explore with computer science & engineering undergrads how computing touches the activities/hobbies/interests that YOU have!
Carl Alphonse, Dept of Computer Science and Engineering, University of Buffalo & Team

Workshop 4 Your Fav. Genes (not Jeans): Putting the Puzzle Together
Everyone has a favorite pair of jeans. Learn about genes in this fun chromosome identification exercise!
AnnaMarie Black, Ph.D., FACMG, Director, Clinical Cytogenetics Laboratory, Roswell Park Cancer Institute

Workshop 5 Beauty inside and Out!
Think cosmetics are simple? Think again! Those products that color, mask, and brighten all involve a lot of chemistry—and you'll learn this from a smart chemical engineer who knows girls' brains are as beautiful as their smiles! You just may be the creator of the next line in cosmetic WOW!

Workshop 6 Fix It: Repair Your Own Computer!
Got a computer that's on the fritz. In this workshop, you'll learn about critical parts of old electronics and how to fix and replace failed parts.
Sara Behdad, Assistant Professor and Lora Casuoto, Assistant Professor, both of Industrial & Systems Engineering, University at Buffalo

Workshop 7 Pharmacy Phun!
Pharmacists play an invaluable role in healthcare as medication-use experts - guiding the proper use of life-saving prescription medicines and helping patients get the best results from their medicines. This fun interactive workshop will show you how pharmacists' interactions with other healthcare professionals and patients truly save lives.
Jezica N. Isaac, Pharm.D., Director of Pharmacy Services

Workshop 8 Ice Cream, anyone?
It's pretty cold outside, but always a good time for ice cream! Learn about really cool things-- and the wonderful role temperature plays in creating a tasty treat!

Workshop 9 Gingerbread Geometry
Math skills are SWEET! As you construct your own "gingerbread" house, you'll learn a lot about how math makes all things come together in this architectural project! (Note: Allergy Alert)

Workshop 10 Candy Land
Chemical engineers process chemicals and make-- and improve-- just about everything around you. In this workshop, learn about what polymers are and how we use them in our everyday lives. We will also learn how to make gum drops, a polymer that you can eat! (Note: Allergy Alert)

Workshop 11 BFFs: P & T!
Tech Savvy Girls know the importance of good friends. Learn about the important "friendship" between pressure and temperature in this fun new workshop!
Uma Ramasubramanian, R&D Development Associate, Praxair, Inc.

Workshop 12 Forensic Meteorology: Weather Works!
Think you know all about meteorology? This it's just for the TV personalities? On-screen weather forecasting is an important role... but there is so much more... including forensic meteorology. You'll learn about this and more as you take a new look at meteorology--and you may find a new career just for YOU!
Judy Levan, Warning Coordination Meteorologist, Buffalo Office, National Weather Service

Workshop 13 I have good sense!
How does the brain gather information? Learn about the different sensory systems we use to gather information about the world around us.
Kathryn Medler, Assistant Professor of Biology, SUNY Buffalo

Workshop 14 Merrily We Float Along!
Learning how grease clogs develop--and can be prevented-- in sewers has never been so sweet! With the help of cookies and chocolate, you'll keep things floating along -- and learn about protecting a valuable public system.
Rosaleen B. Nogle, P.E., Associate Engineer & Chief of Sewer Maintenance, Buffalo Sewer Authority

Workshop 15 Say "Cheese"! The Science and Technology Behind a Healthy Smile
Learn about dentistry as a science and a profession in a fun and interactive presentation.
Dr. Elaine Hennie Magna, founder of the Future Dentists Mentoring Committee, and a team comprised of members of the Future Dentists Mentoring Committee

Workshop 16 Oooh, oooh, Zoo!
Do you love the zoo? We bet you do! Learn about zoological careers in this fun workshop led by our own local treasure, which happens to be the third oldest zoo in the country!
Led by a team from the Buffalo Zoo

Workshop 17 Model Rocketry
On May 25, 1961 President John F. Kennedy set the United States on a course to the moon that led to Neil Armstrong taking "one small step" in 1969. Since then, space exploration has overcome many challenges through the innovation, imagination and creativity of many great engineers. Your first step to becoming part of this wonderful world of exploration is understanding of how to achieve space travel. Your career possibilities are guaranteed to "take off" as you build a model rocket.
Team led by Eileen Scannell, Rockets to Robots in a Box

Workshop 18 Smart Design: Cars for the Future!
Wow, what a way to go-- go-go! Learn about how YOUR needs are factored into the design process--and how technology makes it easy for more people to get around safely and efficiently--and to do what might have seemed impossible!

Workshop 19 Soaring into the future
Ready to fly high? Your team will work together to design paper planes and fly them toward a target. Let's see the quality and accuracy of your team's design as you all reach high heights in STEM!
Laura Brown of the Baxter Healthcare Validation group, and team

Workshop 20 Wow! I can do THAT too?!"
So... tell us. In what careers are you interested? We bet there's a link to STEM. Come and find out what STEM jobs may be in YOUR future-- through new games & activities! Where will YOU fit into the workforce based upon your personal interests?
Kristy Lindner, Quality Engineer, and team, all from Baxter Healthcare

6th – 9th Grade STUDENT CONFERENCE SCHEDULE

8:30 - 9:30	Registration - Pickup T-Shirts & Light Breakfast (Students must wear T-shirts during the day!)
9:30	Welcome & Instructions
10:00	Tech Savvy Workshops, College Corner, & SAT Prep begin
1:00 - 1:45	Lunch & Networking Activity
2:00 - 3:00	Savvy Skills Workshops
3:15 - 5:00	Inspirational Address, Door Prizes & Computer Raffle & Turn in Evaluation Forms

THE COLLEGE CORNER EXPERIENCE Tech Savvy University & Do You Know?



Ready to go to college? It's not too early to plan!



Students will apply to Tech Savvy University & interview for acceptance! College students and representatives will be available for this activity. After the College Corner, students will ask themselves Do You Know, about famous women in science and technology fields. By successfully completing the College Corner application, students will earn a chance to win

... a new computer!

6th – 9th Grade SAVVY SKILLS WORKSHOPS!

Tech Savvy Girls are savvy enough to know that there are many things that they need to know. You are invited to build skills while learning from more fabulous, smart, savvy women! (Students do not need to choose a particular Savvy Skills workshop; these four workshops will be assigned, by age/grade.)

Advocacy — Talking about and standing up for what you believe in

Negotiating — Bargaining methods to achieve your goals

Critical Thinking — Processes to help make good decisions

Interviewing Skills — Getting ready for critical job discussions

Did you know??? Buffalo's Tech Savvy program is the flagship program.

ACTIVITIES FOR 10th - 12th GRADE STUDENTS

Tech Savvy Girls on a Roll...

Workshops to keep you on a roll to college!



10th - 12th Grade *On a Roll* CONFERENCE SCHEDULE

SPECIAL GUEST: BONNIE SEATON

For Students Wishing to Take SAT Prep

8:30 - 9:30 Registration - Pickup T-Shirts & Light Breakfast
(Students must wear T-shirts during the day!)

9:30 - 1:30 SAT Practice Exam

1:30 - 2:00 Lunch

2:00 - 3:00 Girls on a Roll Group Session

3:15 - 4:45 Inspirational Address, Door Prizes & Computer Raffle
Note: There are special prizes for 10-12 grade girls, including a tablet computer.
& Turn in Evaluation Forms

For Students NOT Taking SAT Prep

8:30 - 9:30 Registration - Pickup T-Shirts & Light Breakfast
(Students must wear T-shirts during the day!)

9:30 Welcome & Instructions

Opening Session You, Your Future, and STEM

10:00 - 1:00 Workshops

1:00 - 2:00 Lunch and Networking Activity

2:00 - 3:00 Girls on a Roll Group Session

3:15 - 4:45 Inspirational Address, Door Prizes & Computer Raffle
Note: There are special prizes for 10-12 grade girls, including a tablet computer.
& Turn in Evaluation Forms

ACTIVITIES FOR

PARENTS, TEACHERS, & INTERESTED ADULTS

(Adults do not have to attend in order for students to participate; however, adult session participation is highly encouraged.)



ADULT SESSION SCHEDULE

8:30 - 9:30 Registration - Pickup Tote bags

9:30 Welcome

10:00 - 10:30 Morning Refreshments & Resources

10:50 YOUR Challenge

10:45 - 11:00 Kickoff: Why Girls in STEM Matter!

11:00 - 12:00 The Importance of Authenticity:
A conversation with Buffalo native Bonnie Seaton

12:00 - 12:50 Lunch

Panel Discussion Led by Local Society of Women Engineers

1:00 - 2:00 Workshops: Choice (See Below****)

2:00 - 3:00 Capstone

3:15 - 4:45 Motivational Address, Door Prizes
& Turn in Evaluation Forms

Adult Session Highlights

This year's conference is all helping each girl to be her authentic self and find her place—and her impact—in STEM. Joining us again this year to further the conversation is Bonnie Seaton.

***ADULT WORKSHOP CHOICE...

Parents and teachers must indicate your order of preference:

- Choice A: Men and Women: Working together to Move the Needle for Women in STEM
- Choice B: Planning Ahead: Steps to Take Now to Be Academically & Financially Prepared for Your Girls' Journey into STEM

PAPER REGISTRATION FORM for Students and Adults

DETACH AND RETURN THIS PORTION ONLY...

RETAIN THE REST FOR YOUR RECORDS

Please detach this page and mail to the address below. You may also find this form online. Complete either by hand or online and mail to AAUW with \$5 fee.

NOTE: Parent/Guardian signature is required

If using this form, please print clearly. Include a check or money order for \$5 per attendee (each adult and each student) payable to "AAUW Buffalo Branch". Please do not send overnight mail, registered mail, or certified mail.

Mail to: AAUW Tech Savvy Attn: Registration

P.O. Box 894

Buffalo, NY 14225-0894

\$5 registration fee includes lite breakfast, lunch, conference materials, tote bag, book, and other gift items. All students will receive the TS12 t-shirt.

Registration is limited. Please register before **February 23, 2017**.

(Groups, please register before **February 21, 2017**.)

(Please use one form for each student. Adults with the same contact information may register with student, but registration on a separate form is preferred.)

Name (attending conference) _____

Student Part of Group? (If so, list Group Name): _____

If Student is in 10th - 12th Grades, please check here:

Name (attending conference) _____

Parent Interested Adult Teacher

Street/ PO Box _____

City _____, NY Zip _____

E-mail _____

Phone _____

School _____ Grade: _____

Do you plan to arrive at UB South Campus (Main and Bailey in Buffalo) & take shuttle to the North Campus?

Yes! I am taking the shuttle No, not taking the shuttle

Physically-disabled Accessibility and/or Dietary Needs: _____

Is/are student and/or adult a vegetarian? Yes No

How did you hear about Tech Savvy? _____

What career are you considering (if known)? _____

STUDENT: Have you attended Tech Savvy! previously? Yes No

STUDENT: T-SHIRT SIZE S M L XL XXL

T-shirt sizes are generic adult sizes and are not guaranteed.

6th - 9th Grade STUDENT WORKSHOP CHOICES (Enter workshop # 1 - 20)

1st 2nd 3rd 4th 5th

ADULT WORKSHOP CHOICE (Enter workshop A or B)

1st Choice

10th - 12th Graders: Will you take the SAT practice exam? Yes No

Students attending this conference must be mature enough to follow instructions and directions provided by signs and guides on campus. Students must attend all events and remain on campus from 8:00 a.m. until the conference ends at approximately 5:00 p.m. Note: A photographer may take pictures of conference attendees. These photos may be used on our website, in the news, or in other publications. By registering for this conference, you have given us permission to use and share your and/or your child's name and/or photos.

Please note that you may also receive limited information from AAUW regarding other programs that may be of interest and requesting your participation in surveys. AAUW may also pass along information to you about similar programs from local colleges/organizations, however, we will not share any of your personal contact information with others. Please check here if you do not want to receive this information.

I and/or my child will attend the AAUW Tech Savvy Conference at SUNY Buffalo. If my child is attending, I grant permission for her attendance. I give permission for myself and/or my child to receive emergency medical care, if needed, while at the conference. I understand that conference sponsors are not responsible and are not liable for loss of, damage to, or injury to any person, automobile, or any possessions while attending the conference. By taking the shuttle, I assume responsibility for my own and my child's safety.

Adult - Parent/Guardian Signature

SIGNATURE REQUIRED FOR ALL REGISTRATIONS

FREQUENTLY ASKED QUESTIONS

Who is AAUW?

The American Association of University Women advances equity for women and girls through advocacy, education, philanthropy and research. AAUW is partnering with Praxair, Baxter, UB's School of Engineering, and many others in Western New York to provide this opportunity.

Who is invited?

Girls in grades 6 to 9 are invited, plus those in grades 10 to 12 for the on a Roll program, which includes SAT prep and workshops. Adults are also invited. Students may already have an interest in science, math, or technology; or, this may be a great way to open up new possibilities for a student. Students should be interested in learning & ready to have fun for the day. There are also specially planned activities for parents, teachers, counselors, youth leaders, and other adults.

Important Safety Note: Attendees may not wander around campus; attendees are restricted solely to buildings where assigned Tech Savvy activities are in progress and must follow the directions of all volunteer staff and workshop leaders.

I'm a student. Why should I attend?

Math and science can be fun and interesting! This is a great chance to meet professionals-- many fabulous women-- who can share information on their careers.

Also, you'll meet other young women who share your desire to change the world! At the end of the day, you'll have knowledge and special prizes that will help you on your road to purpose!

I'm a student. How many workshops will I take?

Will I attend my favorite workshop?

You will participate in two (2) tech savvy workshops plus the College Corner activities. Write the **number** of your top **five (5)** choices. If your choices are full, we will place you in another exciting workshop. (We think all workshops may help you discover careers that you may not have considered before!) Be sure to indicate all choices and send your registration in before the due date. Last year, all students who gave five choices and who registered by the due date received workshops that they had selected.

Please note that students must attend workshops at the times assigned-- no switching. In order to be fair to all, it is not possible to accommodate entire groups in the same workshop at the same time. Requests for a specific workshop at the same time as a specific other attendee will not be honored. Remember, workshops are a great way to meet new friends!

In this year's College Corner, you'll get a chance to gain admission to Tech Savvy University. You'll also earn a raffle ticket for a chance to win a **free computer**. Most importantly, you will meet college representatives and learn what's needed to apply to college!

This year, you'll enjoy the Savvy Skills workshops, where you will have fun learning some skills like negotiating, presenting your opinion, interviewing, and critical thinking! Cool!

I'm a parent, grandparent, or guardian. Why should I attend?

We all know that women definitely can succeed in technology-related careers. However, society often sends messages of "pink careers," discouraging girls from math and science. The adult workshops will offer the chance to discuss these issues and provide practical information and resources on helping your child to be Tech Savvy! You'll leave the day with more tools to help your child succeed! (Please note that parents do not attend student workshops. Student workshops are designed to provide a learning opportunity for small groups.) There are also fabulous prizes for adults.

I'm a teacher, counselor, youth leader, or other interested adult.

Why should I attend?

You already know that it takes a village... Join us for the day. Besides the opportunity to discuss the issue with other professionals and parents, you'll leave with valuable research, new perspective, and resources to help you promote equitable education for all students. There are also fabulous prizes for adults.

I don't have transportation to UB's North Campus.

Shuttle service is provided by the University at Buffalo from the South Campus to the North Campus. (Also, parking is provided at both campuses.) Shuttles will leave the South Campus at 8:10 am and will return from the North Campus at approximately 4:45 PM. For planning purposes, please indicate on your registration if you plan to take the shuttle.

How do I register or get more information?

There are two ways to provide registration information. You may complete the registration form **on-line** www.originaltechsavvy.org. Alternately, you may register by completing form in this brochure, detach, and mail. Either way, you **must mail** in your online confirmation or the hand-completed form along with the \$5 fee to the address listed. If you register online, you must send the form and payment via mail **within one week** of your online registration or your registration will be cancelled.

Online registration is **preferred** in order to increase accuracy of information, and those who register online will be eligible for a special prize drawing.

Each year we reach capacity. The conference is limited to 800 participants; so please register early. For info before the week of the conference, please call AAUW and leave a voice mail at 559-3037. Calls will be returned as soon as possible. Please note that this is a voice mail system. We cannot return calls on the day before and day of the conference. Before the day of the conference, you can also email us at aauwtswny@cs.ub.edu. Also, check the website at www.originaltechsavvy.org to get more info.

What is the registration fee & when is the registration deadline?

The registration fee is \$5 and is non-refundable and non-transferable. A limited number of scholarships are available in cases of financial need. If financial need exists, please send a letter indicating the need for a scholarship along with your registration form. Registrations must be received for processing **before** the conference. The number of registrations often exceeds the number of students accepted, so register **early**. **Individuals must register by February 23. Groups of five or more must register by February 21.** Note: This brochure represents the program schedule, activities, and speakers as of the time of printing. The conference details may change without notice.

A SPECIAL MESSAGE FOR GIRLS...

*This year, Tech Savvy Girls can take a lesson from rainbows.
Each rainbow is unique--and amazing. And, so are Tech Savvy Girls!*

Tech Savvy girls know that careers in math and science are Absolutely A-OK for them.

*Tech Savvy girls are amazingly smart and confident...
They can achieve their dreams with hard work!*

Tech Savvy girls are A-OK too! They are authentically themselves. In fact, the uniqueness of each Tech Savvy girl helps her to solve problems and help others in ways that no one else can.

*Tech Savvy girls don't have to change themselves to be amazing! You already are!
In fact, the absolutely, amazing, authentic YOU will change the world!*

*So are YOU the absolutely, amazing, authentic you?
We bet you are! You're a Tech Savvy girl!*

MOTIVATIONAL KEYNOTE ADDRESS by Bo Young Lee Global Diversity & Inclusion Practice Leader Marsh International

Our 12th keynote speaker is Bo Young Lee. Bo has more than over 15 years of Diversity & Inclusion and organizational development experience, which means she is an expert at helping organizations to be "great" for everyone--and to make everyone feel included. Her work involves innovation, communication, education, collaboration--and people!

Bo holds an MBA from New York University Stern School of Business and a BBA magna cum laude from the University of Michigan Ross School of Business.

A mother herself, Bo loves to see girls thrive and to bring who they are to everything that they do! She is excited to join us at Tech Savvy--and we look forward to welcoming Bo.

DIRECTIONS, PARKING, & SHUTTLE

For those proceeding directly to the SUNY Buffalo NORTH Campus:
*If you are traveling on Route 33 (the Kensington Expressway), take Route 33 to I-90 East and proceed to I-290 West. Follow directions below for I-290**.*

*If you are traveling on I-190 South, follow I-190S to I-90 East and proceed to I-290 West. Follow directions below for I-290**.*

*If you are traveling on I-190 North, follow I-190N to I-290 East. Follow directions below for I-290**.*

****If you are traveling on the I-290 (Youngman Expressway), take exit 5B (Millersport Highway North). When you exit onto Millersport Highway, proceed through one traffic light, pass the Maple Road exit and continue to the next exit, Flint Road, to UB's North Campus. Once on campus, follow directions below noted by ***.**

*If you are traveling on the I-990, take Exit 1 (UB Exit). Once on campus, take a right onto the John James Audubon Parkway to Flint Road. Take a left onto Flint Road. Once on campus, follow directions below noted by ***.*

***** Once on campus, follow Flint to Augspurger; take left onto Augspurger. Go to Hadley; take right onto Hadley. Go to White Road; take right onto White Road. From White Road, take a right into the Fumas Parking Lot. (The Fumas Lot is just before White Road ends... If you reach Lee Road, you have just passed the Fumas Lot.) Proceed to the far side of the lot to park. The Student Union is just across the street from the parking lot.**

If arriving at the SUNY Buffalo SOUTH Campus and taking the Shuttle to the North Campus

UB's South Campus is located at the corner of Main Street (Route 5) and Bailey Avenue (Route 62). Please proceed to the Main/Bailey Lot. (Parking spaces are available at the Main/Bailey lot.) In order to ride the shuttle, please proceed to the **center** of the Main/Bailey Lot and convene in the shuttle shelter.

Please note that the shuttle will leave the Main/Bailey Lot at 8:10 am. You must be present at the shuttle shelter by 8:00 am in order to be transported to the North Campus.

Note: You must indicate on your registration form whether or not you plan to take the shuttle from the South Campus.

If no indication is made, we will assume that you will not take the shuttle and that you will arrive at the North Campus via your own transportation.

NFTA Service: The NFTA MetroRail provides service to the UB South Campus. There is an NFTA Metro Bus stop near the Main/Bailey Lot.

Parking on North Campus: We ask all attendees parking on the North Campus to park in Fumas Lot, near the Student Union. Disability parking is available at the Fumas Lot.