



# expanding your horizons

motivating young women in science + mathematics  
+ technology



**This conference is supported by:**

Bellevue College

The Expanding Your Horizons Network

The Puget Sound Center for  
Teaching, Learning and Technology

and local branches of  
The American Association of University Women



## Conference for Middle School Girls

Grades 6 – 8

Saturday March 27, 2010

8:00 am – 11:50 am

Registration postmarked by March 20th, 2010

Bellevue College  
3000 Landerholm Circle SE, Bellevue, WA 98007



## Student Program

8:00 - 8:40	Registration, Cafeteria (Building C)
8:40 - 8:50	Orientation and Welcome
9:00 - 9:50	Workshop 1
10:00 - 10:50	Workshop 2
11:00 - 11:50	Workshop 3

## Adult Program

9:00 - 11:50 am Program for parents and other interested adults. Register for this program on the Registration Form. The cost is \$14 per adult. We are pleased to present the following forum:

**EDUCATION, LEADERSHIP AND PROFESSIONAL IDENTITY - Ensuring Parity for Our Daughters.** *Business Week* magazine recently reported that women now fill almost half of the nation's managerial positions. Unfortunately, women continue to earn approximately 25% less than their male counterparts. The data further suggest that the move to close the salary gap has slowed dramatically. What can concerned parents do now to ensure that their daughters receive fair and equitable treatment in their future places of employment? For the answer to this and other questions, please join our guest speakers as EYH 2010 explores the role of education and leadership in the development of women's professional identities.

Speakers: Anne Hammond-Meyer, Ph.D. is a licensed clinical psychologist in private practice who specializes in concerns relevant to women (including identity development and eating disorders); Jill Tarule, Ed.D. is a professor and former Dean of Education at the University of Vermont whose main interest is in educational leadership and policy development and is co-author of two books on the development of self and women's ways of knowing.

## How to Register

**Registration forms must be postmarked no later than March 20, 2010. REGISTER EARLY FOR BEST SELECTION.**

- 1) Complete one registration form (or photocopy of form) for each student or adult. Fee for each student or adult is \$14.00. Fee is non-refundable.
- 2) To have some classes with a friend, select the same workshops on your forms and **return the registration forms in the same envelope.**
- 3) Make checks payable to: **AAUW/EYH Middle School**
- 4) Enclose your check and registration form and mail to:  
**Expanding Your Horizons - EYH  
P.O. Box 1937  
Issaquah, WA 98027**
- 5) A confirmation e-mail will be sent to the parent's e-mail address (or a phone call if no e-mail is provided). Information provided will not be shared.
- 6) Limited space for walk-ins on day of event.

**Questions - E-mail: eyhbcc\_middleschool@hotmail.com**

For information on the High School EYH Program,  
please contact go\_girls\_eyh@hotmail.com

## Registration Form *(Please print clearly)*

Student Name \_\_\_\_\_  
Parent Name (if attending Adult Program) \_\_\_\_\_  
Parent E-mail (for e-mail confirmation) \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_  
School \_\_\_\_\_ Grade 6 7 8 (circle one)

Students will attend 3 workshops. Pick 3 choices from each of the 3 groups of workshops listed in this brochure and write the workshop numbers below:

	1 <sup>st</sup> Choice	2 <sup>nd</sup> Choice	3 <sup>rd</sup> Choice
<b>Group A (pick 3)</b>	_____	_____	_____
<b>Group B (pick 3)</b>	_____	_____	_____
<b>Group C (pick 3)</b>	_____	_____	_____

Conference space is limited. Workshops are assigned by date of receipt of registration forms; therefore, *we cannot guarantee your workshop choices.*  
Receive your workshop assignments on the day of the event.

## Fees

<input type="checkbox"/> Student	\$14.00	_____
<input type="checkbox"/> Adult	\$14.00	_____
<input type="checkbox"/> Scholarship – Fee waiver (Financial Assistance for Students only)		_____
<b>TOTAL</b>		_____

## Parent/Guardian Permission

I hereby give permission for my daughter to attend the **Expanding Your Horizons** Conference on March 27, 2010. I give permission for an adult conference organizer to seek emergency medical treatment for her if I cannot be contacted.

Signature \_\_\_\_\_

Contact on day of conference:

Name \_\_\_\_\_ Phone \_\_\_\_\_

Alternate \_\_\_\_\_ Phone \_\_\_\_\_

Check if photographs MAY NOT be used for publicity.

These activities are not sponsored nor endorsed by any School District or any of their schools. The School Districts assume no responsibility for the conduct during or safety of the activities. The School Districts shall be held harmless from any cause of action, claim, or petition filed in any court or administrative tribunal arising out of the distribution of these materials including attorney's fees and judgments or awards.

# Students: Choose Your Workshops!

You will attend three workshops. Pick your first, second and third choices from each group: Group A, Group B, and Group C. Then list your nine workshop choices by number on the Student Registration Form.

## Workshops - Group A (pick 3)

### A01 The Wild Animals You Don't See

Many animals live among us, but we don't see them. Wildlife live in urban and suburban areas as well as in the forest. Learn how to find the clues of who's been hanging around from animal signs and see many different tracks and furs of local wildlife. Julie Hopkins, Marine and Wildlife Biologist, Grizzly Bear Outreach Project

### A02 DNA Extravaganza!

Explore the blueprint of life - DNA! Create a DNA double helix by origami and discover how DNA fits inside cells. Extract strawberry DNA and take it home! Tracey Au, Fred Hutchinson Cancer Research Center, Molecular Biology Ph.D. Student

### A03 Piece of Mind

Ever wonder how your brain works as part of your nervous system? Discuss the functions of different lobes, explore reality-altering goggles, investigate individual learning styles, and get up-close-and-personal with a real human brain! Miranda Hayes and Science of Wheels staff, Pacific Science Center

### A04 It's a Greasy, Greasy World Out There

Will an oil leak melt plastic? Can oil eat paint? Can oil be environmentally friendly? Is it ever too cold or too hot for oil? Find out this and more. Kathryn Gehrett and Jean Ray, Fluids and Lubrication Technology, Boeing

### A05 Wings!

How do airplanes stay up in the air? Build and launch your own gliders. Explore the aerodynamics of airplane design and some of the things aeronautical engineers do. Peg Curtin, Aeronautical Engineer, Boeing Commercial Airplane Co.

### A06 Bridging the Gap

Working as a team, try basic bridge building techniques. Use popsicle sticks and glue to create and test your own simple bridge. Which bridge lasts longest? Strongest bridge wins a prize. Raquel Cundiff, Customer Engineer, and Stephanie Gardner, Airline Account Manager, Boeing

### A07 Solar Pow-Her!

## Workshops - Group B (pick 3)

### B01 ER Physician to the Furry

What is it like to do an emergency exam on a small animal, start IV fluids, give oxygen therapy and CPR? You will gown up for surgery. Is a career in small animal ER medicine for you? Tracei Holder, D.V.M., All Critters Animal Hospital

### B02 What's in Her Bag?

Learn about and handle the doctor's tools. Check your friend's ears, eyes, lungs and reflexes. Anne Bankson, M.D., Bellevue Clinic and Mandana Ahmadian, M.D., Bellevue Endocrinology Consultants

### B03 Listen Up!

View your own eardrum on video and feel what it is like to have a silicone impression taken of your ear. Hear how amazing advances in the field of Audiology improve lives through better communications. Shannon Christen, Au.D., Hearing Advancement Center

### B04 Hey, What's Going on in There?

Learn the answer as you place a filling in a molar and extract a tooth. Find out why removing plaque is so important for a healthy smile. Use the tools of the dentist and dental hygienist, so you will know exactly what is going on in your mouth. Donna Quinby, D.M.D., and Diane Pargeter, Dental Assistant, Eastside Pediatric Dental Group

### B05 Blood and Beyond

Discover how medical technologists help doctors diagnose diseases by drawing blood and performing chemistry analysis to discover sick cells. You will perform tests, explore the laboratory and study blood cells. Joni Hofmeister and Misty Carter, Medical Technologists, Evergreen Hospital Medical Center

### B06 Nursing: Where Science and Art Meet

Today's nurses must not only have strong technical knowledge and skills but also an uncanny sense of how to help patients make sense of their illness. Learn from incredible stories about the art of nursing and the technical skill of giving injections. Chitra Sharifian, B.S.N., R.N.C., M.N.C., Swedish Orthopedic Institute

### B07 Pet Tails

Ever wonder what is involved with a physical exam on a dog? Help with

## Workshops - Group C (pick 3)

### C01 Is Your Robot the Winner?

Build and play with robots while learning basic concepts of computer control and robotics. Teams will compete against each other. Renée DeVoursney, Software Developer, Blue Box Group

### C02 C:\Bugout

Test a real computer application to see if you can outsmart the developer. Become a software tester in our hands-on lab. Tara Freedman, Engineering Manager, Software Group, IBM

### C03 Carbonated Oceans: Will the Clams still be Happy?

How are you affected when the ocean is acidified? Is it really happening? Why? Find out what it is like to be on the front lines of the science of ocean acidification. Hear about the exciting life of oceanographers and government scientists. Simone Alin, Oceanographer, NOAA Pacific Marine Environmental Laboratory, and Nancy Williams, Research Scientist, UW Joint Institute for the Study of Ocean and Atmosphere

### C04 Wetlands Science

What are wetlands? What part do they play in the ecosystem? What part do YOU play in the wetlands ecosystem? Explore wetlands science, including a hands-on introduction to wetlands soils and plants. Marina Landis, Management and Program Analyst, Federal Aviation Administration

### C05 The Ultimate Green Career

Who takes care of the forest? Have you ever looked toward the mountains and asked if there will be any wild places left? Learn diverse views of sustainable management of forests, soil, water and wildlife and discover the ultimate green career. Julie Stangell, Forester, Hancock Forest Management, Lindsay Malone, Forester, Cascade Land Conservancy, and Alicia Sullivan, Forester, Weyerhaeuser

### C06 Architecture 101

Using architect's tools, you will design your dream house. A power point slide show will take you around the world to see homes of other cultures. Find out what it takes to become an architect. Peggy Heim, Architectural Designer, Schemata Workshop, and Emily Doe, Architectural Designer, Schact Aslani Architects

### **A07 Solar Pow-Her!**

Want to know more about solar energy? Find out how electricity is generated from the sun. Make your own solar-powered vehicle. Learn about the benefits and disadvantages of renewable energy resources. Tamaira Ross, Associate Technical Fellow-Aeronautical & Mechanical Engineer, Boeing, and Alaina Pizzo, Ph.D., Philips Health Care

### **A08 Zooarcheology**

What can animal bones found in archeological sites tell us about prehistoric humans? This exciting area of paleontology and archeology studies the evolution of animals in conjunction with humans. Kayla P. Wopschall, Ph.D. candidate, University of Washington

### **A09 Telling Time by the Stars**

Build a model of the Big Dipper and understand how we can tell time by its position in the night sky. Discuss our location in the universe and what Greek myths really tell us. Mary Krikorian, Chair, IEEE Aerospace Junior Conference

### **A10 Kerjillions of Stars**

Gaze up at the night sky and look behind the scenes at current astronomical discoveries. Find out how you can get involved in astronomy RIGHT NOW. Alice Enevoldsen, Planetarium Specialist, Pacific Science Center, and Mike Solontoi, Ph.D. candidate, University of Washington

### **A11 Shaping the Future of Airplanes**

Explore designs and materials of airplanes from the past on up to the future. Investigate the requirements for air worthiness and safety. Focus on composite materials like those used on the new Boeing 787. Chanda Sanders and Eva McGowan, Materials and Process Engineers, Boeing

### **A12 How Does Air Traffic Control Work?**

How do the more than 50,000 aircraft in the air everyday keep from colliding with each other? How does air traffic move into and out of an airport or across the country? Use interactive video to manipulate the speeds of aircraft to determine whether the aircraft will miss or hit. Karen Mitchell and Ivy Sylvain, Air Traffic Control Specialists, Federal Aviation Administration

### **B07 Pet Tails**

Ever wonder what is involved with a physical exam on a dog? Help with a hands-on exam. How would you diagnose and treat this case? What common diseases most affect our four-legged companions? Catherine Nowak, D.V.M., Sammamish Highlands Veterinary Clinic/Hospital

### **B08 The Science of Healing through the Art of Caring**

Experience some techniques used by physical therapists. P.T.s work with athletes, stroke and car accidents victims, those injured at work, children with disabilities, pregnant women, and many more. Help people achieve their goals and function better in their lives. Rachel Dillon, Physical Therapist, and Jen Bullard, AT-C, Peak Sport and Spine Physical Therapy

### **B09 Bugs and Fungus Among Us**

Get up close and personal with microscopic skin organisms. Learn how to recognize and diagnose diseases of the skin, hair and nails. Allison Hughes, M.D., Ph.D., Mercer Island Dermatology

### **B10 Pharmacy Beyond the Drug Store**

Learn about the many different things you can do with a degree in pharmacy! From compounding to teaching to prescribing medications, a degree in pharmacy can provide limitless opportunity. Rachel (Ricki) Schreffler, Pharm D., and Paige Goodwin, Pharm D., Evergreen Hospital

### **B11 Smell that Lavender!**

Naturopathic medicine uses herbal products like lavender, peppermint, and marshmallow. Smell, taste or touch fresh and dried herbs. Make bath salts, teas and oil infusions. Maura Scanian, N.D., L.Ap., Kirkland Natural Health

### **B12 A Game Plan for Good Nutrition**

Prepare food while focusing on easy basic nutrition and quick breakfasts and snacks for busy, active lives. Deborah Katz, Dietitian, UW Medical Neighborhood Clinic

Architectural Designer, Schemata Workshop, and Emily Doe, Architectural Designer, Schact Aslani Architects

### **C07 Fight Crime!**

How is order kept in the community and what tools are used to fight crime? An inside look at the equipment police use to fight crime. Sara Finkel, Police Officer, City of Bellevue

### **C08 Firefighting**

Do you have what it takes to become a firefighter? Try on firefighting clothing and equipment. Learn about career demands and rewards. Jenny Oltmann, Firefighter, Eastside Fire & Rescue

### **C09 Apps and Website Design**

How do you create a website or design a software application? What do software engineers do? What is a user interface (UI)? Work through some fun design problems and see how designers and software engineers create applications together. Lola Ball, Program Manager Lead, and Lisa Cherian, User Experience Design Lead, Microsoft

### **C10 Video Gaming is not Just a Boy's Game!**

Have you ever thought that video games were just for boys? Check out where the fun really happens . . . the video game and entertainment industry! It's not really just a boy's game. Sheridan Martin Small, Senior Strategist, Xbox, Microsoft

### **C11 Become an Accounting Detective**

There is more to being an auditor than adding and subtracting. Learn how being a good detective can lead to a successful career in auditing. Do fun exercises involving the current stock market. Alaina Grimstad, May Wu, and Janelle Meeker, C.P.A.s, Deloitte and Touche

### **C12 Pick Your Own Colors**

Ever want to design your own room, pick your own colors, and buy the perfect furniture and the coolest surround sound stereo? Experience how fun and challenging it can be to work with fabrics, colors, and furniture to turn an ugly space into something absolutely awesome. Lisa Mansfield, Facility Manager, Seattle Consolidated Office Building, Federal Aviation Administration