

## HOW TO REGISTER:

Registration fee: \$20.00 (includes lunch and t-shirt).

Registration online at [www.smwc.edu/eyh](http://www.smwc.edu/eyh) is preferred, or fill out the attached form and mail to the address provided by **October 26, 2012**.

A signed permission form must also accompany registration. You can download the form at [www.smwc.edu/eyh](http://www.smwc.edu/eyh) and mail it in with your registration.

Your registration will not be complete until the permission form and payment has been received.

### REGISTRATION FORM



(select one)

Registration for:  Student  Parent

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Parent's Email: \_\_\_\_\_

School Attending: \_\_\_\_\_

Grade: \_\_\_\_\_

T-shirt size: (select one)

Adult sizes:  SM.  MED.  LG.  XLG.

Did you attend last year's event?  YES  NO

Students: List three workshop choices in order of preference.

\_\_\_\_\_

\_\_\_\_\_

Please mail registration form, payment and signed permission form to:

Saint Mary-of-the-Woods College  
Anneliese Payne, Ph.D. • Hulman Hall  
1 St Mary of Woods Coll  
Saint Mary of the Woods, IN 47876-1099

(Please make checks payable to  
Saint Mary-of-the-Woods College)



## KEYNOTE SPEAKER:

**Margaret D. Lowman, Ph.D.** Director, Nature Research Center, North Carolina Museum of Natural Sciences. Research Professor, Physical and Mathematical Sciences, North Carolina State University.

Margaret Lowman, a.k.a. "Canopy Meg" has designed hot-air balloons and walkways for treetop exploration to solve mysteries in the world's forests, especially insect pests and ecosystem health. Her international network and passion for science have led her into leadership roles where she seeks best practices to solve environmental challenges.



### ATTENTION PARENTS AND TEACHERS:

A separate program for parents and adults will run concurrently with the girls workshops. Learn how you can encourage your daughters or students to remain interested in math and science. Learn how to motivate them to pursue their careers of interest. These sessions will help parents understand why they need to be supportive of young girls' choices and how to help them achieve their goals.

### PARENT WORKSHOP I:

**"IS IT TOO EARLY TO THINK ABOUT COLLEGE?"** In this workshop, we will talk about STEM careers and how your daughter can prepare academically for this college major. What can you do now to be prepared for the financial costs of higher education?

*Beth Terrell,*

*Vice President for Enrollment Management, SMWC*

### PARENT WORKSHOP II:

#### STEM CAREERS – THE FUTURE IS BRIGHT

Do you want your daughter to have a variety of career opportunities, high earning potential, and the chance to help others and contribute to society? STEM jobs are hot and they are here to stay.

*Susan J. Gresham '79,*

*Director, Career Development Center, SMWC*



**For additional information:**

Anneliese Payne, Ph.D.

812-535-5183 • [apayne@smwc.edu](mailto:apayne@smwc.edu)

# SAINT MARY-OF-THE-WOODS COLLEGE

*Presents the fifth annual*



motivating young women in science + mathematics

**Saturday,  
November 3, 2012**  
**9 a.m. - 3 p.m.**  
**Hulman Hall**  
**Saint Mary-of-the-Woods  
College**

**All girls in grades 6-8**

**Registration Deadline:  
October 26!**

## OK GIRLS, YOU CAN ADMIT IT. SCIENCE, MATH AND TECHNOLOGY ARE PRETTY COOL!

At the Expanding Your Horizons Conference, we'll show you how fun science, math and technology can really be!

Expanding Your Horizons in Science and Mathematics™ conferences nurture girls' interest in science and math courses to encourage them to consider careers in science, math, technology, and engineering.

The Conference is open to 6th, 7th, and 8th grade girls and their parents, teachers, or troop leaders. Each EYH conference features hands-on activities where girls participate in fun and challenging hands-on activities led by women mathematicians, scientists and engineers.

Through these exciting and interactive hands-on workshops, young women like you learn that studying math and science can be fun! By using local volunteers to lead workshops, you will meet with mathematicians, engineers and scientists who live and work in the Wabash Valley. They will show you how they use math and science in their careers, and may serve as possible mentors to you in the future.

### CONFERENCE SCHEDULE:

8:30-9:00 .....	Sign In
9:00-9:15 .....	Welcome & Introduction
9:15-9:45 .....	Keynote speaker
10:00-10:45 .....	Workshop I
11:00-11:45 .....	Workshop II
11:45-12:45 .....	Lunch
12:45-1:45 .....	Alpacas & Horses
2:00-2:30 .....	Science Demonstration Show
2:30-3:00 .....	Closing & Door Prizes

Conference is located in Hulman Hall on the beautiful campus of Saint Mary-of-the-Woods College. A map can be found at [www.smwc.edu/eyh](http://www.smwc.edu/eyh).

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## HANDS-ON WORKSHOPS

Choose your top three! Every effort will be made to consider your preferences.

### 1. TREASURES FROM THE RAIN FOREST CANOPY

What products do humans obtain from rain forests? Are they sustainable? And what is the future for these precious forests? Dr. "Canopy Meg" Lowman has spent 30 years working with shamans (medicine men), conservation programs, and indigenous villagers to create sustainable harvests of different rain forest products. Come and learn about all the amazing treasures that rain forests provide for us, how they are harvested, and discuss why these habitats are critical to the future of our planet. Different products will be displayed and some will be eaten.

*Margaret Lowman, Ph.D.*

### 2. LEARNING IS SWEET!

How does a liquid change into a solid? Does it absorb the cold or lose heat? You will answer these questions by changing milk into ice cream! You will make an individual serving of ice cream in baggies and make observations on phase changes of solids and liquids. A variety of toppings will be provided so you can enjoy your creations. Instructions will be provided so that you can recreate this activity at home.

*Diedra Adams, Science Teacher,  
West Vigo Middle School*

### 3. HEALTHY HORSE

Does a horse's heart sound similar to yours? You will learn how to listen to a horse's heart and from this, determine if it is under stress, calm, or excited. You will also learn to take the horse's temperature and respiration count. Come join in this hands-on learning experience evaluating the health of a horse. We will be going to the barn so please dress warm.

*Angie McMillin, Equine Adjunct Instructor and Operations/  
Stable Manager, SMWC*

### 4. WHEN "MEOW" OR "WOOF" MEANS "OUCH, THAT HURTS!"

How do doctors treat patients who can't tell them in words what is wrong? In this workshop find out what a typical day is like for a vet and have a chance to evaluate some furry patients.

*Nancy Schenck, D.V.M., Veterinarian, Petcare Animal Hospital*

### 5. DO YOU USE YOUR MONEY WISELY?

Do you know if you found the best deal shopping? How can your money work for you? You will learn if an outfit is a good deal. (Don't forget sales tax!). You will also learn about investing a small amount of money and see the returns you will receive in years to come.

*Beth Fajt, Ph.D. Adjunct Professor, SMWC*

### 6. WHAT SIZE IS MY ARM?

In this workshop, you will figure out hand/arm water displacement to see if both hands (dominant and non-dominant) are the same "size". If you happen to have a sports injury, how will a physical therapist determine how

much swelling there is in the injured limb? This is also your opportunity to meet an NCAA high jump champion.

*Elizabeth Evans, Electrical Engineering & Mathematics student at  
Rose-Hulman Institute of Technology and  
Diane Evans, Ph.D., Associate Professor of Mathematics*

### 7. WOULD YOU LIKE TO MEET ALICE?

Alice is an innovative 3D program that makes it easy to create animations or games. The Alice project provides tools and materials for a conceptual core of computational thinking, problem solving and computer programming. You will be able to learn to use the software and will be able to take Alice home with you to continue the fun.

*Deborah Gaff, Educational Liaison, Portal Resources  
for Indiana Science and Mathematics,  
Rose-Hulman Institute of Technology*

### 8. LOST TREASURES

Want to play electronic hide and seek? Learn about geocaching and look for a sweet cache at SMWC. Something is hidden; can you and your team find it? If so, you will find the mystery prize. Be sure to dress appropriately for the weather. We will do our treasure hunt outdoors.

*Lana Lytle, Associate Professor, Dept. of Business and C.I.S., SMWC*

### 9. SECRET, SECRET, I'VE GOT A SECRET!

Have you ever wanted to send your friend an important message but were worried someone else might see your message? Good news, you are not alone. Come to this workshop and learn several ways to encrypt messages and keep them secret.

*Leanne Holder, Ph.D. Assistant Professor of Mathematics, and Lori  
Hernandez Maxwell, student, Rose-Hulman Institute of Technology*

### 10. DO ALL GOATS HAVE HORNS?

Are you interested in animals, ever wished you lived on a farm, or are just plain curious about goats? Then come out to the ELM Pavilion where you can learn about these amazing creatures, hear about Project Olympia—a research study being done with dairy goats, meet a few members of the research herd, and find out the answer to the question—Do all goats have horns? This session will be outside, please wear appropriate clothes.

*Janette Seal, Pre-Professional Major, SMWC*

### 11. WATER WONDERS

How much water can a penny hold? Come explore the properties of water. What is surface tension? Learn about water adhesion, hydrophobic/hydrophilic, and osmosis. Have some fun with these experiments and share them with your family when you get home.

*Bridget Ireland '11, Science Teacher, North Vigo High School*

### 12. NATURIFIC!

Learn all about honeybees and their importance in agriculture and the natural world. Students will see the inside of a sample hive and even make their own lip balm using beeswax and other all natural ingredients.

*Candace Minster, Garden Manager and Fiber Projects  
Coordinator, White Violet Center for Eco-Justice*