



Presented by College of Coastal Georgia and Glynn County Schools

The Expanding Your Horizons Conference is an opportunity for young women grades 5 through 8 and their parents to learn about careers that involve mathematics and science. Come to the College of Coastal Georgia and meet women who are engineers, marine scientists, bankers, chemists, researchers, doctors and more! See for yourself how important mathematics and science classes are for pursuing these exciting careers!

What will I do? At the conference you will attend two hands-on workshops filled with great science, mathematics and engineering activities followed by lunch in the Student Center.

How much does it cost?

The \$5.00 registration fee includes a snack, lunch and an Expanding Your Horizons t-shirt.

NOTE: If you are a student at Altama Elem., Burroughs-Molette Elem., Glyndale Elem., Glynn Middle, Golden Isles Elem., Jane Macon Middle, Needwood Middle, RECA, Satilla Marsh Elem., or Sterling Elem. your \$5.00 registration fee will be paid by the school. St. Simons Elem. will have scholarships available as needed.

How do I register?

- Complete the registration form by selecting five choices from the workshop list.
- If your parents will attend the Adult Panel Discussion, please check that box.
- Register on-line at
<http://www.expandingyourhorizons.org/conferences/CoastalGeorgia/page1.php>
or mail your registration form and \$5.00 fee to Joan Boorman, 2301 Stonewall St., Brunswick, GA 31520 **Register your choices early! First come, first served!**

Conference Schedule Saturday, April 30, 2011

08:30 - 09:00	Registration and Careers Display
09:00 - 09:45	Welcome Dr. Valerie Hepburn, President College of Coastal Georgia (CCGA) Mr. Howard Mann, Superintendent Glynn County Schools
	Keynote Mary Beth Wester, Superintendent, Fort Frederica National Monument
09:45 - 09:55	Snack
10:00 - 10:50	Workshop 1 and Adult Panel Discussion
11:00 - 11:50	Workshop 2
12:00 - 12:30	Lunch
12:30 - 12:45	Hand in evaluations and receive T-shirts

10:00 – 10:50 Adult Panel Discussion,

Conference Center

The Adult Panel Session is an opportunity for parents to learn how they can promote the participation of their daughters in mathematics, science, allied health and engineering. The panelists will describe their own careers, including how the math and science classes they took in high school and college helped them get where they are today. The session will also include a question and answer period to allow further discussion of topics of interest.

For more information: boormanj@glynn.k12.ga.us 912- 222- 1109

Workshop Sessions

1. Bubbly Bakers (Room HS 310)

Ever wonder what makes bread rise or where all those holes in bread come from? Join us in the microbiology lab to see how yeast that are too small to be seen with the naked eye, make gas and acid when they eat sugars!

Jennifer Hatchel, Ph.D., Assistant Professor of Biology, CCGA

2. Career Options in Nursing (Room HS 211)

Learn how science and math are related to nursing. Hands-on activities will demonstrate the roles of nursing in a variety of patient care settings.

Diane Denton, RN MSN, Assistant Professor of Nursing, CCGA and Beverly Rowe, RN MSN Associate Professor of Nursing, CCGA

3. From Pine Stumps to Lipstick (Room SB 252)

Have you ever noticed the big plant at the end of the St. Simons Causeway with hundreds of pine stumps piled up? This place is called Pinova, and they do make unbelievable things from those pine stumps. We will start out with wood chips and work together to extract the special chemicals from them, and then we'll use these chemicals to see how sports drinks, chewing gum, and other everyday products are made!

Christy Stager, Pinova

4. Fun with Acids and Bases (Room HS 311)

Girls will act like real chemists. They will carry out a colorful experiment using chemical indicators and a pH meter to reveal which household chemicals are acids and which are bases then an activity that will allow the students to determine the percentage of acetic acid in different types of vinegar.

Dr. Andrea Wallace, Professor of Chemistry, CCGA

5. Global Positioning System Treasure Hunt! (Room SB 190A)

Learn about Geographic Information Systems (GIS) and Global Positioning Systems (GPS) and how they work. We will use the GPS to do geocaching, a GPS treasure hunt!

Robi Gray, Director 4-H Glynn County

6. Logically Correct Reasoning (Room SB 261)

This session uses puzzles to talk about the importance of logically correct reasoning in all kinds of endeavors, especially academic ones. Girls will look at puzzles involving correct and incorrect reasoning with the purpose of learning to tell the two apart.

Catherine Culver, PhD, Asst. Professor of Philosophy, CCGA

7. Looking Into Radiologic Science (Room HS 109/13)

Girls will view digital images and learn how they are used to diagnose health problems. Phantoms and radiographic items will be available for students to view as they learn about the profession of radiography.

Bonnie M. Tobias, Director of Radiologic Technology, CCGA

8. Monsters Inside Me (Room HS 308)

You will learn about the parasites that thrive in our community through actual case studies.

Robin Bradshaw, Instructor of Clinical Laboratory Science, CCGA

9. New in Brunswick; Air Evac Lifeteam (Alahama Room)

Air Evac Lifeteam will present hands on experiences for girls who may be interested in career fields in emergency medicine. Presenters are flight paramedics, nurses or pilots who fly critically ill or injured patients to the closest most appropriate medical facilities.

Charles Wilson, Air Evac Lifeteam

10. It's in Your Brain (Room SB 283C)

Did you wonder why some images are absolutely impossible to comprehend, why no matter how long you stare at them they refuse to make sense? In this session, girls will have the chance to encounter some amazing optical illusions and learn how the brain works hard to bring meaning to these tricky visual puzzles.

Carla Bluhm, Ph.D., Assistant Professor of Psychology, CCGA

11. Pathology Can Be Gross (Room HS 315)

Pathologists' Assistant, through some real life experiences. Representative sections of real human body parts/organs will be displayed showing the pathology of disease.

Michael Mazzotta, PA(ASCP) and Barbara Mazzotta, MT(ASCP)PA

12. Physics and Fun Everywhere! (Room 286)

Girls will investigate every day examples of gravity such as balancing. They will investigate the relationship of sound and waves and how waves are transmitted. Lastly the girls will learn the wonders of electric charge and magnetism.

Ntungwa Maasha, Ph.D. Professor of Physics, CCGA

13. Polymers Are Slimy (Room SB 250)

Nontoxic, washable and perfectly safe to handle slime that you will make for yourself! Learn the basics of polymers in a fun hands-on activity that you get to take home.

Leon Gardner, CCGA

14. Science and Math Can Be Fun! (SB 190B)

Learn how science and math apply their understanding of basic concepts to make their courses interesting. Students will be making candy as a creative means for demonstrating physical and/or chemical changes to substances. **Please note: Peanut butter is used in this activity!**

Sara Hartman, Instructor, CCGA

15. Sea Turtle Rescue 911 (Room SB 274)

We will present our most popular program for upper middle school children. Sea turtle rescue 911 allows children to work together to solve mock sea turtle injury cases. The plush sea turtle patients used in this program have a variety of injuries from boat strikes to issues with extreme cold. This program helps to show a unique career as well as promote critical thinking.

Teddy Ivey, Georgia Sea Turtle Center

16. Seeing Things? (Room HS 313)

How do our eyes detect light? Why can't we see underwater without goggles? How do we focus on objects far and near? How do glasses help some people see? Learn about all of this and more and we examine models and even a real eyeball to find answers to these questions.

James Carpenter, Asst. Professor Biology, CCGA

17. Underwater Problem Solving (AB 201)

Come and learn how NOAA, National Marine Sanctuaries System, explore underwater habitats and conduct research. You will build a ROV, Remotely Operated Vehicle, and use it to complete an underwater mission.

*Cathy J. Sakas, Education Coordinator for NOAA's Gray's Reef National Marine Sanctuary
Timothy A. Goodale, and Krista T. Goodale*

18. Wildlife Biology (SB 262)

Wildlife biologists can determine the number of animals in a large population by using a sampling technique. Girls will have the opportunity to learn the "mark-recapture" technique in this hands-on laboratory simulation.

Carolyn Belcher, Georgia Department of Natural Resources

**Wear comfortable shoes and clothes appropriate for the outdoors!
Workshops will be in classrooms and laboratories
across the CCGA campus. You will be walking outdoors
between sessions and many workshops involve outside activities.**

**Registration is limited to the first 300 students.
Register early! First come, first served!**

List at least 5 workshop numbers in order of interest.

1) _____ 2) _____ 3) _____ 4) _____ 5) _____ Adult Panel Discussion _____

Name _____

Address _____

School _____ Phone (____) _____

Circle your grade level: 5 6 7 8 T-shirt (adult sizing): XS S M L XL

Registration fee of \$5.00 includes; conference, snack, lunch and t-shirt

Make checks payable to: Glynn County Schools. Mail to Joan Boorman, 2301 Stonewall St., Brunswick, GA 31520

Medical/Photo Release

I give permission for my child to receive emergency medical treatment and care. I give my consent for the EYH Conference to use photos, videos, and/or audiotape that includes my child or me for the purpose of publicizing and promoting Expanding Your Horizons.

Parent/Guardian/Adult Signature