

## CONFERENCE GOALS

- To increase the interest of female students in mathematics and science
- To explore the specific opportunities for women in math- and science-related fields
- To provide students an opportunity to meet and form personal contacts with women working in traditionally male occupations
- To foster awareness of the qualifications necessary for careers in math- and science-related fields

## PROGRAM - STUDENTS

- 8:45am REGISTRATION**  
Mount St. Mary's College, Doheny Campus, BLDG 4.  
Bring your confirmation postcard.
- 9:30am KEYNOTE ADDRESS**  
**Meet the Bug Lady!**  
Dr. Sue describes the world of entomology—the study of insects and arthropods. Visit the animals in her traveling arthropod zoo!
- 10:30am Group A**
- A-1 CSI: Santa Monica (Math)**  
Use the tools and techniques of actual crime scene investigators to help solve a case and capture a criminal.  
Jennifer Kapala, Santa Monica Police Department
- A-2 Solving a Chemystery (Chemistry)**  
Students will observe properties of four white powders and identify an unknown. This activity relates to the nature of science and the type of problems that analytical and forensic chemists solve.  
Dr. Barbara Gonzalez, CSU Fullerton
- A-3 Hurricane? Earthquake? Can Your House Stand It? (Engineering)**  
Discover strategies that engineers and builders use to make sure buildings can survive weather and other challenges.  
Student Chapter, Society of Women Engineers  
Loyola Marymount University
- A-4 Asphalt Cookies (Engineering)**  
What do civil engineering, asphalt paving and a kitchen crock-pot have in common? Come to this workshop to learn the answer.  
Student Chapter, Society of Women Engineers  
Loyola Marymount University
- A-5 Physical Therapy – Hands in Motion (Health)**  
Learn about a health care specialty involved with evaluating, diagnosing, and treating disorders of the musculoskeletal system.  
Dr. Julia Chang, Mount St. Mary's College
- A-6 How Doctors Learn What They Need to Know! (Health)**  
This workshop will provide some hands-on laboratory experience investigating how the heart works.  
Dr. Erina Lin, UCLA Medical Center
- A-7 Nutrition: Looks Can Be Deceiving!**  
Students will learn about good nutrition and how hard it can be to estimate portion sizes and calories.  
Debbie Iwamoto, LAUSD

## PROGRAM – STUDENTS

- 10:30am Group A**
- A-8 Brain Connection: How Are Structure and Function Connected? (Biology)**  
Students will learn about neuroscience by examining models of the brain; performing simple sensory and motor experiments; and dissecting a brain.  
Dr. Priscilla MacRae, Pepperdine University
- A-9 Easter Egg Chemistry (Chemistry)**  
Learn about basic principles of Easter egg coloring!  
Dr. Eleanor Siebert, Mount St. Mary's College  
Women in Science House, Mount St. Mary's College
- A-10 Isolating DNA: What Makes a Mouse a Mouse? (Biology)**  
DNA holds the instructions that turn a group of cells into a mouse. Learn how scientists isolate and work with DNA.  
Nicole Henderson-MacLennan, UCLA Medical Center  
Lola Rahib, UCLA Medical Center
- 11:35am LUNCH**
- 12:00pm Group B**
- B-1 OT: On the Road to Independence! (Health)**  
Find out how occupational therapists improve the lives of people who have been affected by accidents, injuries and other events that impact their ability to perform various physical activities.  
Elisa Mars, REHABNET Outpatient Center
- B-2 Tantalizing Tessellations (Math)**  
Did you know that there are only 17 types of wallpaper designs? Learn how to make your own designs using the mathematical concepts of symmetry and tiling.  
Dr. Sharon Clarke, Pepperdine University
- B-3 Burst Your Way Into Statistics (Math)**  
Count without counting? See without seeing? Is it magic? No, it's statistics! We will use Starburst candy to demonstrate how useful (and yummy) statistics can be.  
Marika Suttrop, RAND Corporation
- B-4 Flying High!!! (Physics)**  
Design, build and test-fly your own airplane! Learn what aeronautics engineering is all about!  
Tara Chklovski, Iridescent, Inc.
- B-5 Engineering Magic! (Engineering)**  
Did you ever wonder how bridges stay up, supported by just a few poles? Discover the secrets engineers use to make this happen!  
Evelyn Cortez-Davis, Los Angeles DWP
- B-6 How Doctors Learn What They Need to Know! (Health)**  
This workshop will provide some hands-on laboratory experience investigating how the heart works.  
Dr. Erina Lin, UCLA Medical Center
- B-7 Marine Biology in Our World (Biology)**  
The ocean is the largest single feature on our planet. Find out more about what marine biologists are doing to study the ocean.  
Tara Treiber, Santa Monica Aquarium

## PROGRAM – STUDENTS

- 12:00pm Group B**
- B-8 Brain Connection: How Are Structure and Function Connected? (Biology)**  
Students will learn about neuroscience by examining models of the brain; performing simple sensory and motor experiments; and dissecting a brain.  
Dr. Priscilla MacRae, Pepperdine University
- B-9 Beat of My Heart! (Biology)**  
Learn more about exercise, how your body works, and what "getting in shape" means. Which athletes are in the best shape?  
Dr. Debra Lotstein, UCLA Medical Center  
Amy Sudhinaraset, UCLA Medical Center
- B-10 The Four Color Theorem (Math)**  
Use mathematics to decide the smallest number of colors you need to color any map so that regions sharing a side are different colors.  
Leah Caldarone, UCLA Anderson School of Business
- 1:00pm Group C**
- C-1 Music and Physics—the Sounds You Hear**  
Participants will build a working speaker using simple materials.  
Dr. Alma Zook, Pomona College
- C-2 Tantalizing Tessellations (Math)**  
Did you know that there are only 17 types of wallpaper designs? Learn how to make your own designs using the mathematical concepts of symmetry and tiling.  
Dr. Sharon Clarke, Pepperdine University
- C-3 Great Women of Mathematics (Math)**  
Learn about the lives of remarkable women mathematicians and engage in math activities related to the work they did.  
Dr. Jackie Dewar, Loyola Marymount University  
Loyola Marymount University Math Students
- C-4 Flying High!!! (Physics)**  
Design, build and test-fly your own airplane! Learn what aeronautics engineering is all about!  
Tara Chklovski, Iridescent, Inc.
- C-5 Engineering Magic! (Engineering)**  
Did you ever wonder how bridges stay up, supported by just a few poles? Discover the secrets engineers use to make this happen!  
Evelyn Cortez-Davis, Los Angeles DWP
- C-6 PAs = Healthcare Professionals (Health)**  
A physician's assistant, while not a doctor, provides many health care services. Learn about possibilities in this modern healthcare profession.  
Martha Cerda, US Health Works
- C-7 Marine Biology in Our World (Biology)**  
The ocean is the largest single feature on our planet. Find out more about what marine biologists are doing to study the ocean.  
Tara Treiber, Santa Monica Aquarium

## PROGRAM – STUDENTS

- 1:00pm **Group C**  
C-8 **Using “Picasa” to Make Photo Albums (Engineering)**  
Software engineers create real products for everyday use, making our lives simpler and easier. This workshop will show how computer software can make photography easily accessible to more people.  
Susanna Leng, Google
- C-9 **Decoding DNA (Biology)**  
How does DNA encode genetic material? What happens if there are changes or mutations in DNA? Can a few changes in your DNA change you into a chimpanzee?  
Dr. Adrienne Roeder, Caltech
- C-10 **The Four Color Theorem (Math)**  
Use mathematics to decide the smallest number of colors you need to color any map so that regions sharing a side are different colors.  
Leah Caldarone, UCLA Anderson School of Business
- 2:00pm **WRAP-UP AND DOOR PRIZES**

## PROGRAM – PARENTS AND TEACHERS

- 8:45am **REGISTRATION**  
Mount St. Mary's College, Doheny Campus, BLDG 4.  
Bring your confirmation postcard.
- 9:30am **KEYNOTE ADDRESS**  
**Meet the Bug Lady!**  
Dr. Sue describes the world of entomology—the study of insects and arthropods. Visit the animals in her traveling arthropod zoo!
- 10:30am **Group D**  
D-1 **College Financial Aid and Scholarships – How to Cash In**  
Find out about the “ins” and “outs” of the financial aid and scholarship game for parents anticipating college expenses.  
LaRoyce Dodd, Mount St. Mary's College
- D-2 **Discover the California Science Center**  
Learn about the opportunities available to students at the California Science Center.  
Anna Gaiter, California Science Center
- 11:35am **LUNCH**
- 12:00pm **Group E**  
E-1 **CSI: Santa Monica**  
Use the tools and techniques of actual crime scene investigators to help solve a case and capture a criminal.  
Jennifer Kapala, Santa Monica Police Department
- E-2 **Juice It Up!**  
Build your own citrus-fruit powered battery, and learn a little bit about the power of chemistry in everyday life.  
Dr. Barbara Belmont, American Research and Testing

## PROGRAM – PARENTS AND TEACHERS

- 1:00pm **Group F**  
F-1 **How to Help Your Child with Her Homework Without Doing It for Her**  
Learn strategies for assisting with math homework. Teachers can use this as a resource for working with parents.  
Ann Carroll, Santa Monica College
- F-2 **My Space? Your Space? Whose Space?**  
*Myspace.com* is advertised as “a place for friends.” Learn about what your daughter might or might not find there.  
Shannon Shank, Mount St. Mary's College

## 2:00pm WRAP-UP AND DOOR PRIZES

## CONFERENCE PLANNERS

Rita Basta, BVM	Fran Manion
Sue Bienkowski	Nancy Nicosia
Sharon Drummond	Susan Paddock
Carol Fan	Lola Rahib
Nicole Henderson-	Lara Schmidt
MacLennan	Lisa Shugarman
Jan Link, BVM	Ruchi Shrivastava
Elvira Loredo	Eleanor Siebert

## CONTRIBUTORS

Contributors to National EYH Network  
Google  
Seagate Technology

Contributors to this EYH Conference  
American Chemical Society, So. Cal. Section  
Mount St. Mary's College  
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## DIRECTIONS TO MOUNT ST. MARY'S COLLEGE

Address: 10 Chester Place, Los Angeles, CA 90007

From the 110 Freeway –  
Exit at Adams, go west for ½ mile, right on St. James Place, and right on St. James Park. The campus entrance is straight ahead.

From the 10 Freeway –  
Exit at Hoover, go south for ¾ mile, turn left on Adams, then left on St. James Place and right on St. James Park. The campus entrance is straight ahead.

For additional information on directions to the conference, contact the Public Relations Office at Mount St. Mary's College, 213-477-2506.

The 29<sup>th</sup> Annual  
Science, Mathematics and Engineering  
Conference for Young Women  
(Grades 5 – 8)  
Parents, Counselors, Teachers



Saturday, March 22, 2008  
Mount St. Mary's College  
Doheny Campus  
8:45 a.m. – 3:00 p.m.

Sponsored by  
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