

## CONFERENCE GOALS

- To increase the awareness of young women about career options in math and science
- To encourage young women to participate in high school math and science courses
- 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**  
**What Do Cartoons Have to Do with Math and Science?**  
Find out how art and technology come together in the making of your favorite computer-animated movies!  
Janet Berlin, Disney Animation
- 10:30am **Group A**  
**A-1 Solving a CheMystery (Chemistry)**  
Students will observe properties of four white powders and identify an unknown.  
Dr. Barbara Gonzalez, Dr. Kereen Monteyne, CSU Fullerton
- A-2 Beat of My Heart! (Biology)**  
Learn about exercise, how your body works, and what "getting in shape" means.  
Dr. Debra Lotstein, UCLA Medical Center
- A-3 Marine Biology in Our World (Biology)**  
The ocean is the largest single feature on our planet. We will look at how the ocean is important to us.  
Tara Treiber, Heal the Bay/Santa Monica Pier Aquarium
- A-4 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, LA DWP
- A-5 How Doctors Learn What They Need to Know (Health)**  
This workshop will provide some hands-on laboratory experience investigating how the heart works.  
Dr. Maria Garcia-Lloret, UCLA Medical Center
- A-6 CSI: Chemical Science Investigation (Chemistry)**  
Can chemistry help solve crimes? Students will investigate a crime scene.  
Dr. Tina Choe, LMU Chemistry Students, Loyola Marymount University
- A-7 What Is Computer Programming? (Engineering)**  
This workshop will demonstrate the essence of Computer Science.  
Dr. Wei Lin, Symantec

## PROGRAM – STUDENTS

- 10:30am **Group A**  
**A-8 Asphalt Cookies (Engineering)**  
What do civil engineering, asphalt paving, and a kitchen crockpot have in common?  
Dr. Barbara Marino, LMU Society of Women Engineers, Loyola Marymount University
- A-9 Nursing: An Exciting Career Option (Health)**  
What do nurses do? We will practice some clinical skills.  
Marsha Nickerson, MSMC
- A-10 Colder Than Ice! (Chemistry)**  
We will be exploring the weird things that can happen when things get really, really cold.  
Aviva Litovitz, Pardee RAND Graduate School
- 11:35am **LUNCH**
- 12:00pm **Group B**  
**B-1 Life Under the Microscope (Biology)**  
See how scientists investigate microscopically small life forms.  
Dr. Chandra Srinivasan, CSU Fullerton
- B-2 Forensic Biological Science (Biology)**  
A forensic scientist works at crime scenes, laboratories, and courtrooms.  
Learden Matthies, LA County Sheriff's Department
- B-3 Paws to Consider (Biology)**  
Learn what's involved in being a physician to the furry.  
Dr. Ilaria Brun del Re, UCLA
- B-4 Animal Locomotion (Physics)**  
Learn about how plankton and other animals move in the ocean!  
Tara Chklovski, Kara Christianson, Iridescent, Inc.
- B-5 How Doctors Learn What They Need to Know (Health)**  
This workshop will provide some hands-on laboratory experience investigating how the heart works.  
Dr. Maria Garcia-Lloret, UCLA Medical Center
- B-6 CSI: Chemical Science Investigation (Chemistry)**  
Can chemistry help solve crimes? Students will investigate a crime scene.  
Dr. Tina Choe, LMU Chemistry Students, Loyola Marymount University
- B-7 Bacteria Are Everywhere! (Biology)**  
Think that surface is really clean? Learn about bacteria from a microbiologist!  
Ruchi Shrivastava, UCLA
- B-8 Picasa and Digital Photos (Engineering)**  
This workshop will show how computer software can make photography easily accessible to more people.  
Susanna Leng, Google
- B-9 Dietetics: Healthy Food for Healthy People (Health)**  
What is a dietitian anyway? Learn all about how dietitians teach people about the importance of eating healthy foods.  
Lisa Calanni, Veterans Administration Los Angeles, CSU Northridge

## PROGRAM – STUDENTS

- 12:00pm **Group B**  
**B-10 You Scream, I Scream, We All Scream for Ice Cream (Chemistry)**  
Explore the wonderful world of chemistry through this exciting and delicious workshop!  
Dr. Dorothy Nguyen-Graff, CSU Northridge
- 1:00pm **Group C**  
**C-1 Animal Locomotion (Physics)**  
Learn about how plankton and other animals move in the ocean!  
Tara Chklovski, Kara Christianson, Iridescent, Inc.
- C-2 Microscopic Magnets (Physics)**  
How can we look at a single atom? Learn about magnetic forces and nano-scale microscopy.  
Sarah Olmstead, Pardee RAND Graduate School
- C-3 What Is a Medical Assistant? (Health)**  
Medical assistants perform various medical and laboratory procedures, work with patients and patient records, and handle bookkeeping.  
Geraldyn Patterson, Everest College
- C-4 Burst Into Statistics (Math)**  
Count without counting? See without seeing? Is it magic? No, it's statistics!  
Marika Suttrop, RAND
- C-5 Athletes and Doping (Biology)**  
Learn why athletes might take drugs and how science assists in investigating the use of drugs to enhance athletic performance.  
Sabrina Benchaar, Anti-Doping Research
- C-6 Great Women in Math (Math)**  
Engage in math activities related to the work of remarkable women mathematicians.  
Brittany Barnes, Lucy Orozco, Cinthia Vega, LMU Future Teachers, Loyola Marymount University
- C-7 What Is Physical Therapy? (Health)**  
Experience some of physical therapies practiced in this workshop.  
Sandesha Singh, Cindy Graham, REHABNET
- C-8 Picasa and Digital Photos (Engineering)**  
This workshop will show how computer software can make photography easily accessible to more people.  
Susanna Leng, Google
- C-9 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  
Lola Rahib, Momentum Biosciences
- C-10 Decoding DNA (Biology)**  
How does DNA encode genetic material? Can a few changes in your DNA change you into a chimpanzee?  
Dr. Adrienne Roeder, Caltech

## PROGRAM – STUDENTS

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**  
**What Do Cartoons Have to Do with Math and Science?**  
Find out how art and technology come together in the making of your favorite computer-animated movies!  
Janet Berlin, Disney Animation
- 10:30am **Group D**
- D-1 **Forensic Biological Science**  
A forensic scientist works at crime scenes, laboratories, and courtrooms. In this workshop, you'll perform one or more chemical tests for the presence of blood.  
Learden Matthes, LA County Sheriff's Department
- D-2 **Overcoming Math Anxiety**  
What is math anxiety? How do you protect yourself and your children from falling prey to it? This workshop will provide strategies to address these important questions.  
Dr. Maria-Grazia Ascenzi
- 11:30am **LUNCH**
- 12:00pm **Group E**
- E-1 **Microscopic Magnets**  
How can we look at a single atom? Learn about magnetic forces, nanoscale microscopy and how they make magnets and your computer hard drive work.  
Sarah Olmstead, Pardee RAND Graduate School
- E-2 **Engineering Magic**  
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, LA DWP
- 1:00pm **Group F**
- F-1 **Juice It Up!**  
Build your own citrus fruit-powered battery and learn about the power of chemistry!  
Dr. Barbara Belmont, American Research and Testing
- F-2 **Dietetics: Healthy Food for Healy People**  
An introduction to the emerging field of Nutrition and Dietetics.  
Lisa Calanni, Veterans Administration Los Angeles, CSU Northridge
- 2:00pm WRAP-UP AND DOOR PRIZES

## CONFERENCE PLANNERS

|                            |                   |
|----------------------------|-------------------|
| Rita Basta                 | Fran Manion       |
| Sharon Drummond            | Lindsay Millard   |
| Tina Esposito              | Tanya Mills       |
| Carol Fan                  | Lola Rahib        |
| Nicole Henderson-MacLennan | Lara Schmidt      |
| Kirsten Karlen             | Ruchi Shrivastava |
| Jan Link                   | Eleanor Siebert   |
| Elvira Loreda              | Lisa Tsimanis     |

## CONTRIBUTORS

### Contributors to National EYH Network

Google  
Seagate Technology

### Contributors to this EYH Conference

American Chemical Society, Southern California Section  
American Mathematical Society  
American Research and Testing  
American Statistical Association  
Braincake  
Engineer Your Life  
Institute for Operations Research and the Management Sciences  
Mathematical Association of America  
McGraw-Hill  
Mount St. Mary's College  
NBC  
RAND Corporation  
Santa Monica Rotary Club  
Society for Industrial and Applied Mathematics  
Starbucks Coffee  
St. Jude Medical, Inc.

Graphics courtesy of Expanding Your Horizons

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



Saturday, April 4, 2009  
Mount St. Mary's College  
Doheny Campus  
8:45 a.m. – 2:30 p.m.

Sponsored by  
Math Science Interchange  
a 501(c)(3) organization

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