

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

Take Back the Beach!

Learn how scientists and interested volunteers work to make our oceans and beaches safe, healthy and clean.
Sarah Abramson, Heal the Bay

10:30am Group A

A-1 How Doctors Learn What They Need to Know! (Health)

This workshop will provide some hands-on laboratory experience investigating how the heart works.
Dr. Erica Lin, UCLA Medical Center

A-2 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 MacLennan, UCLA Medical Center
Lola Rahib, UCLA Medical Center

Hands On Chemistry! (Chemistry)

A-3 Learn about basic chemical principles by performing a number of interesting experiments.

WISH Club, Mount St. Mary's College
Dr. Deniz Cizmeciyan, Mount St. Mary's College
Kathryn Schaefer, Mount St. Mary's College

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 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

A-6 "Sit, Rover!" The Care and Training of Animals (Biology)

How do animal trainers motivate dogs, seals, and dolphins to perform tricks? Find out why it's important for animals to learn to behave.

Perri Leung, Aquarium of the Pacific

PROGRAM – STUDENTS

10:30am Group A

A-7 The Real Life CSI (Math)

Take a look behind the scenes and see how real crime investigators use science in helping to solve crimes.
Jennifer Kapala, Santa Monica Police Department

A-8 Flying High!!! (Physics)

Design, build and test-fly your own airplane! Learn what aeronautics engineering is all about!
Tara Chklovski, CEO Iridescent, Inc.

A-9 Paws to Consider (Biology)

Learn what it's like to be a physician to the furry.
Dr. Zaheda Khan, Advanced Critical Care and Internal Medicine

A-10 Physical Therapy – Hands in Motion (Health)

Learn about a health care specialty involved with evaluating, diagnosing, and treating disorders of the musculoskeletal system.
Dr. Debbie Diaz, Mount St. Mary's College
Dr. Julia Chang, Mount St. Mary's College

11:35am LUNCH

12:25pm Group B

B-1 How Doctors Learn What They Need to Know! (Health)

This workshop will provide some hands-on laboratory experience investigating how the heart works.
Dr. Erica Lin, UCLA Medical Center

B-2 Life Under the Microscope (Biology)

See how scientists investigate microscopically small life forms.
Dr. Chandra Srinivasan, CSU Fullerton

B-3 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
Dr. Erika Camacho, Loyola Marymount University

B-4 The Four Color Problem (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, RAND Corporation

B-5 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

B-6 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
Dr. Kereen Monteyne, CSU Fullerton

PROGRAM – STUDENTS

12:25pm Group B

B-7 Explore Space Above with Adventures Below (Physics)

Exploring earth's space environment is challenging. In this workshop we will explore some of the basic physics used in space science, look at real satellite instruments, and hear about what happens when "things go wrong".
Dr. Rebecca Bishop, The Aerospace Corporation

B-8 Fish Necropsy??? (Biology)

Why do scientists care what fish have for dinner? This workshop will help you discover answers to this question.
Tara Treiber, Santa Monica Pier Aquarium

B-9 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
Simone Taylor, Los Angeles DWP

1:30pm Group C

C-1 Web Design (Engineering)

Learn how to make an effective and attractive webpage!
Mary O'Halloran, Rand Corporation

C-2 Investigating Cauliflower DNA (Biology)

Did you know that cauliflower, broccoli, and kale have all been developed from the same wild plant? We will analyze the DNA from cauliflower to see what makes it a cauliflower instead of its wild relatives.
Dr. Adrienne Roeder, Caltech
Dr. Elissa Hallem, Caltech

C-3 Florence Nightingale Today (Health)

What do nurses do? Find out about the challenges of nursing in the 21st Century!
Gloria Lopez, Santa Monica College Nursing

C-4 It's About Time! (Physics)

Learn how civilizations, past and present, have kept track of time. Build and calibrate several different types of clocks including clocks that are powered by sand, water and sunlight.

Dr. Lara Schmidt, Rand Corporation

C-5 When Antibiotics DON'T Work!! (Health)

Pharmacists are part of the medical profession participating in AWARE, the Alliance Working for Antibiotic Resistance Education. Find out what they are doing!

Amanda Lamer, Cedars-Sinai Medical Center

C-6 Kitchen Chemistry: Fun with Food! (Chemistry)

Investigate some of the chemical properties of food as you experiment with oobleck, ice cream and cabbage.
Dr. Joy Goto, City of Hope

C-7 Explore Space Above with Adventures Below (Physics)

Exploring earth's space environment is challenging. In this workshop we will explore some of the basic physics used in space science, look at real satellite instruments, and hear about what happens when "things go wrong".
Dr. Rebecca Bishop, The Aerospace Corporation

PROGRAM – STUDENTS

- 1:30pm **Group C**
C-8 **Art? Or Science (Biology)**
Learn why Japanese fisherman painted their fish.
Tara Treiber, Santa Monica Pier Aquarium
- C-9 **How Do Trees Save Our Water? (Biology)**
Investigate how trees help to maintain the quantity and quality of our water supply.
Jane Curren, UCLA
- 2:30pm **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**
Take Back the Beach!
Learn how scientists and interested volunteers work to make our oceans and beaches safe, healthy and clean.
Sarah Abramson, Heal the Bay
- 10:30am **Group D**
D-1 **Getting There – The Road to College**
As parents, you play an important role in helping your daughter prepare for college. Learn about some of the decisions that influence her future.
Sonali Perera, Mount St. Mary's College
- D-2 **Investing 101: For Women**
Mystified by the world of finance but anxious to invest? Learn different ways to make your money grow for college expenses or retirement.
Roxana Solarzano, LPL Financial Services
- 11:35am **LUNCH**
- 12:25pm **Group E**
E-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
- E-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
- 1:30pm **Group F**
F-1 **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, Los Angeles DWP
Simone Taylor, Los Angeles DWP
- F-2 **Life Under the Microscope**
See how scientists investigate microscopically small life forms.
Dr. Chandra Srinivasan, CSU Fullerton

PROGRAM – PARENTS AND TEACHERS

2:30pm **Wrap-Up and Door Prizes**

CONFERENCE PLANNERS

Rita Basta, BVM	Nicole MacLennan
Sue Bienkowski	Fran Manion
Sharon Drummond	Nancy Nicosia
Carol Fan	Susan Paddock
Jan Link, BVM	Lara Schmidt
Elvira Loreda	Lisa Shugarman
	Eleanor Siebert

CONTRIBUTORS

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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.

Opportunities for Women

EXPANDING YOUR HORIZONS



The 28th Annual
Science, Mathematics and Engineering
Conference for Young Women
(Grades 5 – 8)
Parents, Counselors, Teachers

Saturday, March 17, 2007
Mount St. Mary's College
Doheny Campus
8:45a.m. – 3:00p.m.

Sponsored by
Math/Science Interchange
Math/Science Network

www.ExpandingYourHorizonsLA.org