

PROGRAM – STUDENTS

- 1:00pm **Group C (Continued)**
C-09 **Scream for Ice Cream! (Chemistry)**
Explore the wonderful world of chemistry through this exciting and delicious workshop!
Kayla Kaiser & CSUN Chemistry Students
- C-10 **Lego Robotics (Engineering)**
Groups of 2-3 students will work on their own individual robotic sets to complete a simple robot using the latest Lego Mindstorms technology.
Rebecca Kovach, LIFT Enrichment
- 2:00pm **WRAP-UP and DOOR PRIZES**
- Adult Workshops**
- 10:30am **Girls – Boxed In or Unstoppable?**
D-01 Learn about the status of women and girls in our state and our county. The presentation will focus on issues such as education, employment/earnings, poverty and health.
Dr. Eleanor Siebert, MSMU
- 11:30am **LUNCH**
- 12:00pm **College Admissions and Financial Aid**
E-01 Learn about women who did calculations back before there were hardware computers and why girls do/don't choose to pursue science/math, etc
Maryann Nguyen, MSMU Admissions
- 1:00pm **Learning and Memory**
F-01 During this workshop, we will take a tour of the brain and the neuroscience concepts behind learning and memory. A particular focus will be given to how these process change as we develop and age, and what can be done to keep your memory sharp.
Jennifer Chotner, MSMUBiological Sciences
- 2:00pm **WRAP-UP and DOOR PRIZES**

CONFERENCE PLANNERS

Katie Bresee
Sharon Drummond
Elvira Loreda
Fran Manion
Eleanor Siebert

CONTRIBUTORS

Contributors to National EYH Network
Google
Seagate Technology

Contributors to Los Angeles EYH Conference
American Chemical Society, Southern California Section
The Sheri and Les Biller Family Foundation
Gilmore Liquid Air Company
Mount St. Mary's University
RAND Corporation

Graphics courtesy of Expanding Your Horizons

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DIRECTIONS TO MOUNT SAINT MARY'S UNIVERSITY

Address: 12001 Chalon Road, Los Angeles, CA 90049

Find directions at:

<http://www.msmu.edu/about-msmu/maps-and-directions.aspx>

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

The 36th Annual
Science, Mathematics, and Engineering
Conference for Young Women
(Grades 5 – 8)
Parents, Counselors, Teachers



Saturday, March 14, 2015
Mount Saint Mary's University
Chalon Campus
8:45 a.m. – 2:30 p.m.

Sponsored by
Math/Science Interchange
A 501(c)(3) organization

www.ExpandingYourHorizonsLA.org

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 Saint Mary's University,
Chalon Campus (Administrative Lawn)

9:30am KEYNOTE ADDRESS

Engineers are Everywhere and Do Everything!!!

What do engineers do?? Hear about this first-hand!! They design, create, explore and innovate. They receive education and training in many different fields and work in many different environments.

LTC Jenny Janas, U.S. Army Research Fellow

10:30am Group A

A-01 Chilly as Ice! (Chemistry)

Students will freeze flowers and make their own slime, ice cream, and touchable bubbles by learning about and relating to the nature of science and its behavior.

Dr. Sylvine Deprele & Andrea Perez, MSMU Chemistry and WISH Students

A-02 How Doctors Learn What They Need to Know (Health)

This workshop will provide some hands-on laboratory experience investigating how the heart works.

Dr. Erin Goodwin, Park LaBrea Veterinary Care

A-03 Math Doesn't Need to be So Hard! (Math)

How to approach math effectively? What is math anxiety? And how do you learn to deal with it? In this workshop learn strategies to address these important questions.

Dr. Maria-Grazia Ascenzi, UCLA Dept Orthopaedic Surgery

A-04 CSI Criminal Science (Chemistry)

Students will practice several chemical analysis techniques to learn about crime scene investigation.

Dr. Nicole Bouvier-Brown & Gabriela Gavilanes
LMU Chemistry

A-05 Mysteries Uncovered with Tree Rings (Science)

Students will use dendrochronology (counting of annual tree-rings) to answer questions about past environmental changes.

Abbie Tingstead, Policy Analyst, RAND

A-06 Nursing – A Career Option (Health)

The workshop discuss opportunities in the nursing profession, what it takes to become a Registered Nurse and hands on time to perform basic clinical skills.

Marsha Nickerson, MSMU Nursing Program

A-07 What Makes a Mouse a Mouse? (Genetics)

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, Pancreatic Cancer Network

PROGRAM – STUDENTS

10:30am Group A

A-08 Alice in Programland (Computer)

You will use the software "Storytelling Alice" to create your own short animated movie in three dimensions.

Elvira Loreda, RAND

A-09 Scream for Ice Cream! (Chemistry)

Explore the wonderful world of chemistry through this exciting and delicious workshop!

Kayla Kaiser, CSUN Chemistry & Biochemistry

A-10 Reacting with Chemistry (Chemistry)

Participate in several fun experiments that demonstrate the power of chemical reactions, using safe, every-day ingredients.

Lara Schmidt, RAND Associate Director

11:30am LUNCH

12:00pm Group B

B-01 Chilly as Ice! (Chemistry)

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Dr. Sylvine Deprele & Andrea Perez, MSMU Chemistry and WISH Students

B-02 How Doctors Learn What They Need to Know (Health)

This workshop will provide some hands-on laboratory experience investigating how the heart works.

Dr. Erin Goodwin, Park LaBrea Veterinary Care

B-03 Paws to Consider (Chemistry)

Learn what's involved in being a physician to the furry.

Dr. Reshma Bijlani, Animal Wellness Center

B-04 Mouse House (Engineering)

Discover the building principles used to make sure your mouse house can survive the forces of nature..

Christie Fu, ARCADIS

B-05 CSI Criminal Science (Chemistry)

Students will practice several chemical analysis techniques to learn about crime scene investigation.

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Nicole Henderson-MacLennan, UCLA
Lola Rahib, Pancreatic Cancer Network

B-08 Cosmetic Chemistry (Chemistry)

We will be making our own lip balms using different components and smells. We will also be analyzing the components of some popular lipstick brands to investigate the colors that they are made of, proving that red isn't always simply red.

Amanda Evans, CSUF Chemistry

PROGRAM – STUDENTS

12:00pm Group B (Continued)

B-09 Toothpick Fish (Biology)

Learn about the impact of environment on genetics by mating fish in a "gummy fish pond".

Kathryn Lee & Traci Blois, AWIS

B-10 Lego Robotics (Engineering)

Groups of 2-3 students will work on their own individual robotic sets to complete a simple robot using the latest Lego Mindstorms technology.

Rebecca Kovach, LIFT Enrichment

1:00pm Group C

C-01 Patterns + Women = Figures for Math (Math)

Mathematics is really about patterns, not just numbers. You will explore mathematical ways of thinking and hear about women mathematicians.

Esmeralda Cardenas, USC & Assurance Learning
Leslie Koffi, LMU Mathematics

Dr. Jackie Dewar, LMU Mathematics

C-02 Paws to Consider (Chemistry)

Learn what's involved in being a physician to the furry.

Dr. Reshma Bijlani, Animal Wellness Center

C-03 Mouse House (Engineering)

Discover the building principles used to make sure your mouse house can survive the forces of nature..

Christie Fu, ARCADIS

C-04 Colorful Math (Math)

Learn how mathematics answers a question about coloring maps so that they make sense in the most efficient way.

Fran Manion, SMC Mathematics

C-05 Alice in Programland (Computer)

You will use the software "Storytelling Alice" to create your own short animated movie in three dimensions.

Elvira Loreda, RAND

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Amanda Evans, CSUF Chemistry

C-07 Toothpick Fish (Biology)

Learn about the impact of environment on genetics by mating fish in a "gummy fish pond".

Kathryn Lee & Traci Blois, AWIS

C-08 Fruits & Veggies Chemistry (Chemistry)

Foods like fruits and vegetables contain so many nutrients, which are known to be good to our body. Today we will learn how to extract nutrients from fruits and vegetables and how to analyze nutrients using technique called chromatography.

Yumei Lin, Yumei Consulting, Inc.