

## PROGRAM – STUDENTS

- 1:00pm** **Group C (Continued)**
- C-11** **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
- C-13** **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.
- C-15** **Brain Demos! (Biology)**  
We will use hands-on stations to explore human brain anatomy, brain evolution, neurons and synapses and brain plasticity.  
Martina DeSalvo, UCLA Neurosciences
- C-16** **Gummy Fish Genetics (Biology)**  
Learn about the impact of environment on genetics by mating fish in a "gummy fish pond".  
Helen Vuong & Sarah Madsen, AWIS
- C-17** **Juice It Up! (Chemistry)**  
Build your own citrus powered battery in this hands-on workshop and learn a little bit about the power of chemistry in everyday life.  
Barbara Belmont, American Research & Testing
- Adult Workshops**
- 10:30am** **D-01** **Learning and Memory**  
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, MSMU Biological Sciences
- 11:30am** **LUNCH**
- 12:00pm** **D-02** **College Admissions and Financial Aid**  
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** **D-03** **Girls – Boxed In or Unstoppable?**  
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
- 2:00pm** **WRAP-UP and DOOR PRIZES**

## CONFERENCE PLANNERS

Katie Bresee  
Sharon Drummond  
Elvira Loredo  
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 Saint Mary's University  
RAND Corporation

Graphics courtesy of Expanding Your Horizons

Layout courtesy of Classic Software

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



**Saturday, April 30, 2016**  
**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](http://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

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### 8:45am REGISTRATION

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

### 9:30am Follow Your Dreams!

The Expanding Your Horizons Conference aims to encourage you to reach high when you think about your future and to believe that you have the power to do whatever you set your mind to. Our keynote speaker will talk about how she did this and how you can too!!

Karissa Price-Rico, Ph.D.  
Intel-GE Care Innovations

### 10:30am Group A

#### A-01 Chilling Science! (Chemistry)

Students will freeze flowers, create smoky bubbles, extract DNA, make their own slime and dipping dots while relating it all to the nature of science and its behavior.

Dr. Sylvine Deprele & Danica-May Manalo  
MSMU Chemistry and WISH Students

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

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

Dr. Erin Goodwin, Dr. Y's Animal Hospital

#### A-03 Scream for Ice Cream! (Chemistry)

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

Kayla Kaiser, CSUN Chemistry & Biochemistry

#### A-04 From Despising to Loving and Using Math in Science and Medicine (Math)

How to approach math effectively? What is math anxiety? And how do you learn to deal with it? How do I use Math in real life (a career)? In this workshop learn strategies to address these important questions.

Dr. Maria-Grazia Ascenzi, Orthopedic Surgery UCLA

#### A-06 Everyone is an Inventor! (Mechanical Engineering)

Introduction with videos followed by cool hands-on projects demos such as music box, robot, drones, pinballs that are powered by Microduino.

Bin Feng & Bruce Liu, Microduino

#### A-07 What Makes a Strawberry a Strawberry? (Genetics)

DNA holds the instructions that turn a group of cells into a strawberry. Learn how scientists isolate and work with DNA. Nicole Henderson-MacLennan, UCLA  
Lola Rahib, Pancreatic Cancer Network

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### 10:30am Group A

#### A-10 Nursing – A Career Option (Medicine)

The workshop will be about 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-12 What is Physical Therapy? (Medicine)

Learn about the field of physical therapy and experience some of the therapies practiced in this workshop.

Sandesh Singh & Cindy Graham, SMI Physical Therapy

#### A-14 Electrifying Fashion (Electricity)

Who says a girl can't be both smart and beautiful? In this workshop, we explore where science and fashion intersect. We will leverage electrical circuits to craft our own custom bling wear.

Kay Cloud & Heather Prichett, Disney Animation

#### A-17 Juice It Up! (Chemistry)

Build your own citrus powered battery in this hands-on workshop and learn a little bit about the power of chemistry in everyday life.

Barbara Belmont, American Research & Testing

#### A-18 Mouse House (Engineering)

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

Christie Fu, ARCADIS

### 11:30am LUNCH

### 12:00pm Group B

#### B-01 Chilling Science! (Chemistry)

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

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

Kayla Kaiser, CSUN Chemistry & Biochemistry

#### B-05 Paws to Consider (Medicine)

Learn what's involved in being a physician to the furry and watch a veterinarian do a physical examination of a dog

Dr. Reshma Bijlani, Animal Wellness Center

#### B-07 Becoming a Brainiac about the Brain (Biology)

Come to this workshop to learn how your amazing brain works!

Amira Brown-Ridgle, Charles Drew University

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

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Bin Feng, Microduino

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#### C-09 Alice in Programland (Computer)

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

Elvira Loreda, RAND