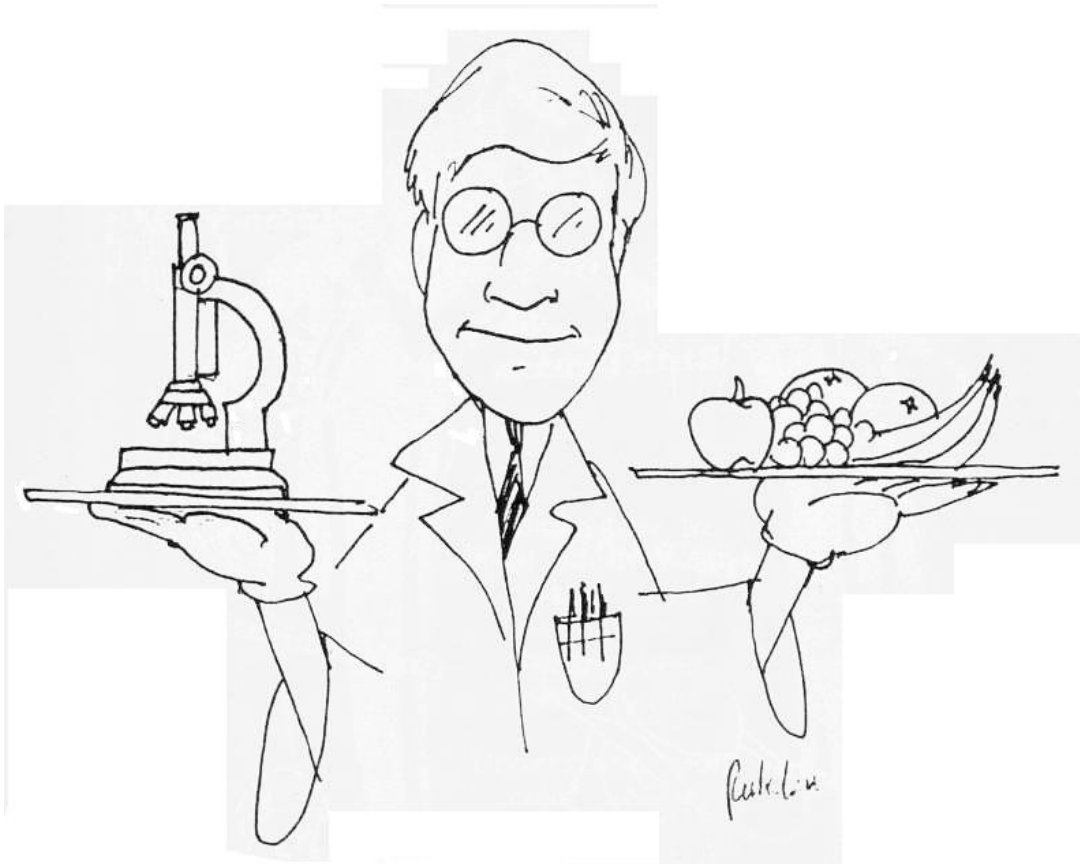


# *A Taste of Science*

*A Conference for Science Educators*



*Sponsored by*

**Gold Coast Science Network**

**Oxnard College**

**November 15, 2008**

**Welcome to**  
*A Taste of Science*

**Sponsored by**



**Gold Coast Science Network**

**A group of professionals that are dedicated to  
improving the quality of science education**

<http://www.goldcoastscience.org>

**Co-sponsored by**

**Oxnard College**

and the

**California Science Teachers Association**

## **Gold Coast Science Network Conference Committee:**

Michael Abram, Oxnard College

**Debbie Bereki, Science Consultant and GCSN President**

Nathan Inouye, Adolfo Camarillo High School

Mary Maranville, Ventura County Resource Conservation District

Richard Moore, James Monroe High School and GCSN Board

John Romero, Minerals Management Service

David Sweet, National Weather Service

Brad Swopes, Royal High School and GCSN Board

## **Volunteers:**

Estelle Ichino

Adolfo Camarillo Students

Oxnard College Students

## **Co-Sponsors:**

Oxnard College

California Science Teachers Association

## **Supporting Donors:**

Peet's Tea and Coffee

Acorn Naturalist

## **Special Acknowledgements:**

All Presenters for donating their time and efforts in order to raise the level of local science education.

All Exhibitors for donations to the raffle and whose registration funds make this conference possible.

Gold Coast Science Network Conference Committee and Volunteers for the great work that makes this conference a reality.

## **UCSB Extension Conference Credit:**

One unit of quarter credit is available through UCSB Extension. To obtain this unit, you need to attend sessions for the entire day and do a one-page evaluation of the conference. For more information and to sign up for this credit, please visit the registration area before 11:00AM.

## A Message From Your Gold Coast Science Network President



Welcome! Thank you for attending Gold Coast Science Network's sixth annual conference, *A Taste of Science*. A dedicated conference committee has spent many hours planning this conference for you. We hope that you find this event a wonderful experience. This conference offers opportunities to hear speakers, attend workshops, and visit exhibitors. Most importantly, the conference provides an opportunity for you to network with other science educators from the Ventura, Santa Barbara, Los Angeles, and Kern Counties.

Gold Coast Science Network has been in existence since 1993 and has been supported by the hard work of volunteers. Throughout the years we have held several events such as lesson share-a-thons, field trips, star parties, and sleepovers at the Santa Barbara Zoo. On September 29, 2001, gold Coast Science network held the *2001: A Channel Island Odyssey* conference. It was so well received that the board decided to continue having conferences every eighteen months. For the last year, the conference committee has been busy planning *A Taste of Science*.

I would like to thank the many people that made this conference possible including the conference committee, Oxnard College, California Science Teachers Association, volunteers, keynote speakers, presenters, exhibitors, and you for attending.

Our next Gold Coast Science Network conference will be *Growing with Science* on April 24, 2010. This will be my last conference as President. I am ready to take on the position as Past President. We are looking for dedicated people to get involved with planning this upcoming conference and someone willing to take my position. If you are interested in working with a great group of people, please let one of the committee members know. In the mean time, please let others know about our wonderful conference.

Debbie Bereki

# Conference Schedule

<b>Registration and Continental Breakfast</b>	8:00 – 8:20 AM
<b>Welcome</b> <i>Debbie Bereki, President GCSN</i> <i>Floyd Martin, Oxnard College Dean</i>	8:20 – 8:30 AM
<b>Keynote Speaker (LS-8)</b> “The Science of Cooking” <i>Dr. Tom Neuhaus, Cal Poly University, San Luis Obispo</i>	8:30 – 9:30 AM
<b>Session One</b>	9:40 – 10:35 AM
<b>Exhibitor Visitation Break</b>	10:35 – 11:10 AM
<b>Session Two</b>	11:10 – 12:05 AM
<b>Lunch</b>	12:05 – 12:40 PM
<b>Session Three</b>	12:40 – 1:35 PM
<b>Session Four</b>	1:45 – 2:40 PM
<b>Keynote Speaker (LS-8)</b> “Curious, Crazy, Culinary Concoctions” <i>Dave Hanley, Highland High School and</i> <i>Dr. Ron Hughes, CSU Bakersfield</i>	2:50 – 3:50 PM
<b>Door Prizes and Closing Remarks</b> To enter, you must be present and deposit raffle tickets in collection box.	3:50 – 4:15 PM

# Keynote Speakers

Keynote speaker presentations will be in LS-8

## **8:30-9:30 “The Science of Cooking”**

Dr. Tom Neuhaus, Department of Food Science and Technology  
Cal Poly University at San Luis Obispo

Dr. Neuhaus began his culinary explorations as a student. After a term project reading and translating a hundred-year-old French culinary science textbook, his passion for *haute cuisine* was ignited. In 1969, his enthusiasm brought him work as a cook’s assistant at the Hôtel-des-Bains in Aix-Les-Bains, France. Tom food preparation career advanced to distinguished restaurants, the founding of Sweetish Hill Bakery, and seven years of writing food columns. Tom developed food and beverage software, earned a Masters in Food Science from the University of Maryland, and a Doctorate in Sensory Psychology from Cornell University. In 2000, Dr. Neuhaus developed the country’s only chocolate–production course in a university, *Cal Poly Chocolates*. Dr. Neuhaus is the co-founder and president of Sweet Earth Organic Chocolates, Inc. In 2006, Dr. Neuhaus established Project Hope and Fairness [www.projecthopeandfairness.org](http://www.projecthopeandfairness.org) a non-profit NGO dedicated to helping West African cocoa farmers. Dr. Neuhaus is bringing this passion to us today in his presentation on the science of cooking.

## **2:50-3:50 “Curious, Crazy, Culinary Concoctions”**

Dave Hanley, Science Department, Highland High School  
Ron Hughes, Department of Education, C S U, Bakersfield

Dave Hanley and Dr. Ron Hughes have been doing a traveling science show throughout the state of California for 12 years. They have entertained thousands of teachers and students with wacky science demonstrations, explosions, and discrepant events. Dr. Hughes is particularly interested in using discrepant events to help students develop an understanding of science concepts. Currently, Dr. Hughes is the director of the credential program at California State University, Bakersfield. Dave Hanley has contributed to science education in various capacities, including over one-hundred workshops for teachers and students. Presently, he teaches Biology at Highland High School and serves on the board of the Buena Vista Museum of Natural History in Bakersfield. Dave Hanley and Dr. Ron Hughes come to entertain us today as they address science through the kitchen arts.

## ***Session One 9:40 to 10:35***

### **Providing Meaning to the Periodic Table**

**LS-15**

David Phillips

CSU Channel Islands

Participants will do two, easy to replicate activities that build meaning and retention into the Periodic Table of the Elements.

**3-8****P****Audience Participation**

### **Standards in a Bottle in an Ocean of Science**

**LS-14**

Deanna Ochoa

Conejo Valley Neighborhood for Learning

Come learn how to encourage children to interact with their environment through the utilization of the scientific method in a hands on environment.

**K-3****P/S/IS****Audience Participation**

### **Managing the High School Laboratory Classroom**

**LS-13**

Gail Turner-Graham

El Camino Real High School

Attendees will participate in an enzyme lab. Following the lab there will be a discussion on differentiation strategies on managing labs.

**9-12****L/S****Audience Participation**

### **Why are Weather Maps so Difficult to Read?**

**LS-11**

Jodye Selco

Cal Poly Pomona

Composite weather maps are deconstructed, contour maps are converted into 3-D representations, and the different series of information are presented separately.

**5-13+****E/S/IS****Audience participation**

### **National Geographic: JASON Resilient Planet**

**LS-4**

Kim Castagna

Carpinteria Middle School

JASON: Resilient Planet-Ecology in Marine Sanctuaries and Chesapeake Bay. Learn the many connections to our local area. Learn how to access JASON for your own classroom.

**4-8****L/I****Audience Participation**

### **Air-Sea Interaction**

**LS-6**

Don and Olga Schuteis

Ontario High School

Experience an activity that demonstrates the constant energy and matter transfer across the air-sea interface and the resultant sky conditions. Transparency masters provided.

**5-13+****L/P/E/S/I****Audience Participation**

### **Integrating Language Arts and Math into Science**

**LS-2**

Nancy Escamilla

E.P. Foster Elementary School

With engaging science activities and connections to previous learning improve academic proficiency for English learners and all students by integrating language arts and math.

**4-6****P/T/I/ELL/M****Audience Participation**

**L** Life Science  
**I** Integrated

**P** Physical Science  
**S** Standards

**E** Earth Science  
**IS** Instructional Strategies

**T** Technology  
**M** Mathematics

**Cause and Effect in Culinary Science****LS-8**

Tom Neuhaus

Cal Poly University, SLO

This workshop looks at three reactions that impact the texture, color, or flavor of food: formation of gluten, caramelization of sugar, crystallization of beta crystals in chocolate.

**6-13+****Food Science****Demonstration****Intersession Break****10:35 to 11:10**

**Take time between Session One and Two  
to visit with the exhibitors!**

***Special Double Session 9:40 to 11:30***  
***(includes Session One and Two)***

**How was the Grand Canyon Formed?****LS-10**

Ali Widmar

Retired Teacher

Use a stream-table to model how water can change the shape of the Earth through erosion and the deposition of sediments.

**4-6****E****Audience Participation****MESSENGER – Welcome to the Solar System****LS-7**

Sharon Freeburn Resource Center Director/NASA MESSENGER Educator Fellow

Learn to incorporate NASA's MESSENGER program materials into your classroom's study of the Solar System.

**3-8****E/S****Audience participation****Double Session Attendees Break****11:30 to 12:05**

**Take time to visit with  
the exhibitors before lunch!**

## *Session Two 11:10 to 12:05*

### **Safety in the Science Classroom**

**LS-15**

Norb Longtin

Fisher Science Education

This workshop will focus on safety awareness in the science classroom. Participants will also receive free handouts to use in their labs immediately.

**4-12****IS****Lecture/Discussion**

### **Think Globally, Act Locally**

**LS-14**

Debbie Maulhardt

Christa McAuliffe Elementary School

A community service project where students educate themselves, then educate their family on how to save the world, one light bulb at a time.

**2-6****P/E/T/I/ELL/IS****Demonstration**

### **Supermarket Chemical Reactions in Ziploc Bags**

**LS-11**

Jodye Selco

Cal Poly Pomona

An economical experiment that allows students to develop questions, design experiments, find answers to their own questions and discover indicators of chemical changes.

**5-13+****P/ELL/IS****Audience Participation**

### **Scientific Ways of Knowing: What the Sciences Have in Common**

**LS-13**

Paul Narguizian

CSU, Los Angeles

The discussion on how the ways of knowing in science can provide educators with a significant opportunity to link the various disciplines of science.

**6-13+****L/IS****Lecture/Discussion**

### **Dispelling the Myth of the Level Sea**

**LS-6**

Don and Olga Schuteis

Ontario High School

Discover an activity that demonstrates how the ocean surface mimics the ocean bottom using data acquired by the TOPEX/Poseidon altimeter. Transparency masters provided.

**8-13+****E****Audience Participation**

### **Channel Watch**

**LS-4**

Kathy Harbaugh

Santa Barbara Museum of Natural History

Teachers perform water quality tests and develop an understanding of what each tests means to the health of creeks within a watershed.

**4-6****L/E****Audience Participation**

### **Earth Science Materials That Really Rock!**

**LS-2**

Mike Twilling

Lab-Aids

Feel like finding quality science activities is an uphill battle? Turn it into a downhill experience on erosion and deposition with this engaging activity from Lab-Aids.

**6-8****E****Audience Participation**

**L** Life Science  
**I** Integrated

**P** Physical Science  
**S** Standards

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**IS** Instructional Strategies

**T** Technology  
**M** Mathematics

**Cooking for the Future – Gut Stew Burritos/Draw and Eat****LS-8**

David Hanley

Highland High School District, BVMNH

While students draw beef organs on the screen, we can cook heart, stomach, kidney, and also, honey whole wheat bread.

**4-12****L/I/ELL/IS****Demonstration****Lunch Break****12:05 to 12:40**

**As you enjoy your lunch be sure  
to visit the exhibitors and take time  
to network with your colleagues!**

***Session Three 12:40 to 1:35*****Exploring Plate Tectonics with Real Earth Data****LS-2**

William Prothero

UC Santa Barbara

This workshop will be an introduction to learning plate tectonics with data software and how to use it in the classroom. Free CD ROM.

**6-13+****E/IS****Demonstration****People and the Planet****LS-4**

Cynthia McDermott

Antioch University, Los Angeles

Discover innovative, hands-on activities that examine the connections between human population growth, resource consumption and sustainable ecosystems. Free CD-ROM.

**7-12****ES****Audience Participation****Authentic Assessment Through Podcasting****LS-13**

Jill Lace

Limerick Ave. Elementary

Participants will learn how to create a podcast, using Garageband, while integrating life science standards. This is an introduction to a free program voice thread.

**4-5****L/T/ELL****Demonstration**

**L** Life Science  
**I** Integrated

**P** Physical Science  
**S** Standards

**E** Earth Science  
**IS** Instructional Strategies

**T** Technology  
**M** Mathematics

**Having Fun With Light****LS-8**

Larry Glenn

Retired LAUSD

Have fun learning different ways to teach the electromagnetic spectrum, using spectrum analysis, a corner mirror, and various light toys.

**6-9****P****Demonstration****Astronomy in the Classroom****LS-7**

Samantha Thompson

Santa Barbara Museum of Natural History

Learn activities and fun ways to introduce astronomy concepts beginning in the classroom.

**4-8****P/E****Demonstration****Wind-Driven Ocean Circulation****LS-6**

Don and Olga Schulteis

Ontario High School

Presents a student classroom activity that investigates surface currents building to a global perspective of ocean gyre circulations.

**9-12****E****Audience Participation**

## *Special Double Session 12:40 to 2:30 (includes Session Three and Four)*

**First Robotics: Changing American Culture****LS-15**

Nancy McIntyre

Chaminade College Prep.

Hands on workshop featuring Lego, Vex, FTC and FRC robots. Participants will be able to build, program, and operate robots. CAD and animation demonstration.

**6-12****P/T/IS****Audience Participation****Solar Science Camp****LS-14**

Debbie Maulhardt

Christa McAuliffe Elementary School

This 5-day interdisciplinary unit is perfect for the end of the year. Students investigate the science behind solar oven, then they construct one.

**2-6****P/E/T/I/ELL/IS****Audience Participation****Hands-on, Minds-on Periodic Table****LS-11**

Jodye Selco

Cal Poly Pomona

Use models to learn what happens at the atomic level during a chemical change, become an expert at chemical writing, and discover how the periodic table is organized.

**5-13+****P/ELL/IS****Audience Participation**

## **Remember to turn in your evaluation forms!**

**L** Life Science**P** Physical Science**E** Earth Science**T** Technology**I** Integrated**S** Standards**IS** Instructional Strategies**M** Mathematics

## ***Session Four 1:45 to 2:40***

### **Shallow-Water Ocean Waves**

**LS-6**

Don and Olga Schulteis

Ontario High School

Simulated advance of surface waves toward the shore is used to investigate changes in wave characteristics that eventually lead to breakers and surf.

**9-13+****E****Audience Participation**

### **INvestigate the OUTside with CalAlive**

**LS-4**

Gianna Vargas

Rancho Santa Ana Botanic Garden

The CalAlive! Habitats study project engages students in outdoor field investigations that connect

**4-9****L/E/T****Audience Participation**

### **Munchin' Crunchin Earth science**

**LS -2**

Kim Castagna

Carpinteria Middle School

Learn a way to teach Earth science concepts through children's taste buds. Visually demonstrate earth's processes in a fun and enjoyable way.

**4-9****E****Audience Participation**

### **California Climate Change and Variability**

**LS-10**

LaDochy

CSU, Los Angeles

Teachers will be provided with datasets that can be used in the classroom to explore climate change and variability in southern California. Free CD ROM.

### **Enabling 21<sup>st</sup> Century Education**

**LS-13**

Brett Sackett

PASCO Scientific

Deliver authentic 21<sup>st</sup> Century science experiences by combining standards-based content and relevant professional development with innovations in modern, electronic measurement.

**5-12****E/ELL****Demonstration**

### **The Island Fox – Connecting Students to Local Ecosystems**

**LS-7**

Keri Dearborn

Friends of the Island Fox, Inc.

Discover the Island fox, a local endangered species, whose survival is dependent upon local community awareness and action.

**3-6****L****Lecture/Discussion**

## **Afternoon Keynote Speakers**

**2:50-3:50**

**Be entertained by Dave Hanley and Ron Hughes**

**Raffle follows immediately afterwards.**

**L** Life Science**P** Physical Science**E** Earth Science**T** Technology**I** Integrated**S** Standards**IS** Instructional Strategies**M** Mathematics

## Commercial Exhibitors

<p style="text-align: center;"><b><i>Be Sure to Visit the Exhibitors!</i></b></p>	<p><b>Ed-Tex/Lerner Classroom/ Educational Strategies Plus</b> Valerie Tholl 15235 Brand Blvd. Ste. A-107 Mission Hills, CA 913145 phone: (818) 898-3340 fax: (818) 898-3342 edtexexhibits@aol.com</p>
<p><b>Fisher Science Education</b> Norb Longtin 3940-7 Broad Street #105 San Luis Obispo, CA 93401 phone: (213) 278-4053 fax: (213) 596-8556 norb.longtin@thermofisher.com</p>	<p><b>Foss-Delta</b> Dean Taylor 2716 S. Old Stage Rd. Mt. Shasta, CA 96067 phone: (530) 925-0227 dtaylor@delta-edu.com</p>
<p><b>Lab-aids, Inc</b> Mike Twilling 17 Colt Ct. Ronkonkoma, NY 11779 phone: (631) 737-1133 ext. 124 fax: (631) 737-1286 Emocera@lab-aids.com</p>	<p><b>Lakeshore Learning Materials</b> Fernando Madrigal 2695 E. Dominguez St. Carson, CA 90895 phone: (310) 537-8600 fax: (310) 632-8314</p>
<p><b>National Geographic School Publishing/JASON</b> Kurt Graf PO Box 1298 Sierra Madre, CA 91025 phone: (626) 403-1772 fax: (626) 403-1871 kmgraf@aol.com</p>	<p><b>Pasco Scientific</b> Brett Sackett 10101 Foothills Blvd. Roseville, CA 95747 phone: (800) 772-8700 fax: (916) 786-8905 most@pasco</p>
<p><b>Pearson Prentice Hall</b> Kim Koerber 23262 Strathern St. West Hills, CA 91304 phone: (818) 416-9943 fax: (818) 302-1471 kimberly.koerber@pearson.com</p>	<p><b>Rancho Santa Ana Botanic Garden</b> Lorrae Fuentes 1500 N College Ave. Claremont, CA 91711 phone: (909) 625-8767 ext. 243 fax: (909) 626-7670 lorrae.fuentes@cgu.edu</p>

**Exhibitors: Thank you for supporting us and contributing raffle prizes!**

## **Nonprofit Exhibitors**

<p><b>California Wildlife Foundation</b>          Project Wild, Project Learning Tree,          Project Wet          Bobbie Winn          1807 13<sup>th</sup> St. Ste. 104          Sacramento, CA 95811          phone: (916) 322-8974          fax: (916) 322-8989          bwinn@dfg.ca.gov</p>	<p><b>Channel Islands National Park          Channel Islands National Marine          Sanctuary</b>          Carol Peterson          1901 Spinnaker Dr.          Ventura, CA 93001          phone: (805) 658-5735          fax: (805) 658-5799          carol_Peterson@nps.gov</p>
<p><b>Friends of the Island Fox</b>          Pat Meyer          3760 Groves Place          Somis, CA 93066          phone: (805) 386-0386          fax: (805) 386-4030          pat@islandfox.org</p>	<p><b>Minerals Management Service</b>          John Romero          770 Paseo Camarillo,          Camarillo, CA 93010          phone: (805) 389-7533          fax: (805) 389-7505          john.romero@mms.gov</p>
<p><b>National Weather Service</b>          David Sweet          520 N. Elevar St          Oxnard, CA 93030          phone: (805) 988-6620          fax: (805) 988-6631          david.sweet@noaa.gov</p>	<p><b>Resource Conservation District</b>          Mary Maranville          3380 Somis Rd.          Somis, CA 93066          phone: (805) 746-0606          mary.Maranville@vcrd.org</p>
<p><b>Santa Barbara County Air          Pollution Control District</b>          Allison King          260 N. San Antonio Rd. Ste. A          Santa Barbara, CA 93110          phone:(805) 961-8800          fax: (805) 961-8801          king@sbcapcd.org</p>	<p><b>Santa Barbara Museum of          Natural History</b>          Judy Keim          2559 Puesta del Sol          Santa Barbara, CA 93105          phone: (805) 682-4711 ext. 108          fax: (805) 569-3170          jkpedpad@aol.com</p>
<p><b>Santa Barbara Zoo</b>          Katie Holder          500 Ninos Dr.          Santa Barbara, CA 93103          phone: (805) 962-5339 ext. 46          fax: (805) 560-9889          kholder@sbzoo.org</p>	<p><b>The Endeavour Center</b>          Moksha Badarayan          P.O. Box 5090          Vandenberg AFB, CA 93437          phone: (805) 734-1747          fax: (888) 808-0280          director@endeavours.org</p>

**Exhibitors: Thank you for supporting us and contributing raffle prizes!**

# Map of LS Facility Oxnard College

