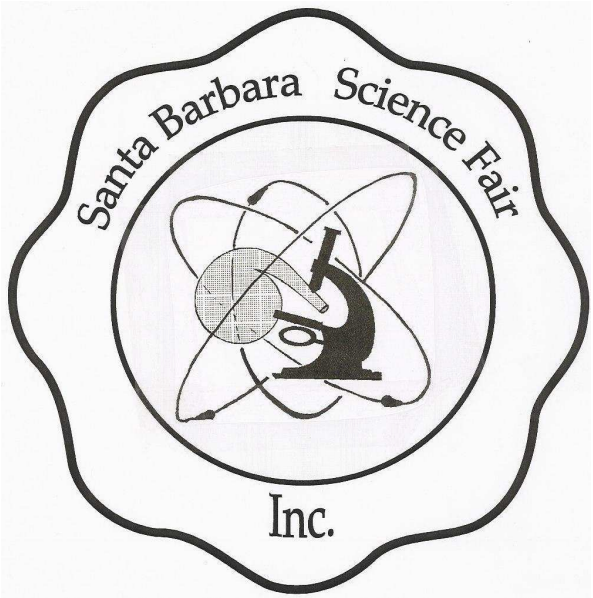
53rd Annual
Santa Barbara County Science Fair

Program and Catalogue of Exhibits



April 17-18, 2008

University of California, Santa Barbara

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Shawna McMahon & Corey Cox
National Center for Ecological Analysis & Synthesis
Santa Barbara Botanic Gardens
Santa Barbara Humanist Society
Santa Barbara Museum of Natural History
Santa Barbara Pharmacists Association
Will Winn Memorial Award
Rene & June Van Wingerden

Science Fair Planning Committee

Board Members

Shea Lovan	President & Judging Co-Chair	UC Santa Barbara
Shawna McMahon	Judging Co-Chair	UC Santa Barbara
Phil Estabrooks	Treasurer	Raytheon, Inc.
Laura Wilson	Fundraising	La Colina Junior High
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Committee Members

Danielle Bean	La Colina Junior High
Laurie Burkhardt	La Colina Junior High
Margaret Connors	National Center for Ecological Analysis & Synthesis
Sally Isaacson	Santa Barbara Botanic Gardens
Rose Koller	Santa Barbara County Education Office
Steve Keithley	Santa Barbara County Education Office
Dana Nakase	Marine Science Institute, UCSB
Richard Schapker	Science & Engineering Council of Santa Barbara, Inc.

Mentor Program

Dana Nakase	Mentor Program Coordinator	Marine Science Institute, UCSB
Dr. Claudia Gutierrez-Mazzotti	Education Programs Assistant	Materials Research Laboratory, UCSB

Expo Activities

Brian Goss	California Nanosystems Institute, UCSB

Student Welcome Guest Speaker

Shawna McMahon	UC Santa Barbara

Website and Database Management

Jim Woods	Marine Science Institute, UCSB

Schedule of Events

* All activities take place at Corwin Pavilion in University Center unless otherwise noted.

Thursday April 17, 2008 – Set-Up

6:00 to 8:00 PM	Student Check-In and Project Setup
	Register for Expo events

Friday April 18, 2008 – Science Fair

8:00 to 8:15 AM	Students Arrive at UCSB
8:15 to 8:45 AM	Student Welcome and Opening Ceremonies in "The Hub" (the downstairs food court in the University Center)
8:45 to 9:00 AM	Move to Corwin and prepare for judging
9:00 to 10:30 AM	Medals Judging
10:30 to 10:45 AM	~ Break ~
10:45 to 11:45 AM	Medals Judging
11:45 to 12:00 PM	~ Break and Wrap Up ~
12:00 to 12:30 PM	Lunch *Corwin Pavilion Courtyard*
12:30 to 1:15 PM	First Session: Expo Activities for All Participants *Corwin Pavilion Courtyard*
1:15 to 1:30 PM	Notification of Finalists
	Posted in Corwin Pavilion (Location TBA)
1:30 to 2:30 PM	Advanced Judging for Finalists
	Second Session of Expo Activities for Non-Finalists
2:30 to 3:15 PM	Third Session of Expo Activities for All Participants
3:15 to 4:00 PM	Fourth Session of Expo Activities for All Participants

Friday April 18, 2008 – Awards and Viewing

4:00 to 8:00 PM	Public Viewing of Projects
7:00 to 8:00 PM	Awards Ceremony
8:00 to 9:00 PM	Project Breakdown

Additional Information

Check-In and Set-up

- Short-term parking will be available in Lot 8 near Corwin Pavilion at UCSB during times designated for project drop-off and pick-up. Please see the science fair website for additional parking information.

Parking

- Parking is available in surrounding lots (Lot 3, 7 or 9) for $2 after 5 PM.
- You must buy a ticket from the Pay Station in each lot. Do not park in spaces marked "S or A Only."
- The passes issued by the Pay Station are not valid in these spaces, and you WILL get a ticket.
- **We suggest parking in Mesa Parking Structure on Friday evening.**

Judging

- Each student or team will be interviewed twice during the morning medals judging.
- Interviews will last between 10 and 15 minutes. Prepared presentations should not be longer than 10 minutes to allow time for questions.
- Judges will be using a score sheet to evaluate each project on its own merit. All participants earning adequate points will receive the corresponding medal. See the Guide for Students document for details and a sample score sheet.
- Bring reading material or other quiet activities for the time between interviews.
- Students must stay by their projects at all times during judging.

Lunch

- A selection of bagged lunches will be provided to the students.

Science Expo Activities

- Activities will include hands-on demonstrations and lab tours.
- Students are expected to be courteous when visiting labs and must remain with tour groups at all times.

Public Viewing and Project Breakdown

- Projects will be available for public viewing from 4:00 to 8:00 PM on Friday. Projects must remain up until the awards ceremony.
- Students may take their projects down after the awards ceremony. Any projects remaining in Corwin Pavilion after 9:00 may be thrown away.

Catalogue of Projects
Junior High

Junior Biological Division

Project Number	Project Title	School	Student(s)
101	Cat Pupil Dilation and the Affects of Light Color	Goleta Valley Junior High School	Andrea DeRogatis
102	Magical Mice	La Colina Junior High School	Kelsey Hyatt, Emma Champion
103	Snakes in the Wild	Goleta Valley Junior High School	Brian Schuh
104	DNA Analysis Vs. Hair Analysis: Should they be admissible in a court of law?	La Colina Junior High School	Chloe Warinner
105	The Effects of Ammonia on Different Plants	Santa Barbara Junior High	Sophia Spann
106	Windex on Plants: The Effects of Household Chemicals	Goleta Valley Junior High School	Connie Wang
107	Carnivore vs. Herbivore	La Colina Junior High School	Casey Venturelli
108	Light Vs Dark	La Colina Junior High School	Megan Zink
109	A Twinkle in Your Eye	La Colina Junior High School	Jaimie Mayner, Alana Petteway
110	Face Off: Developing and Evaluating Biometric Face Recognition	La Colina Junior High School	Jocelyn Flattery
111	Sunlight's Affect on Leaves	Goleta Valley Junior High School	Shari Howard
112	Plant Wars	La Colina Junior High School	Jessica Davis
113	Dog Test Taking: Working vs. Companion	Santa Barbara Junior High	Shana Bird

Junior Behavioral Division

Project Number	Project Title	School	Student(s)
201	Floral Beehavior	La Colina Junior High School	Katie Spieler, Claire Vander Heide
202	The Effect of Plants on Zebra Finch Feeding Habits	Santa Barbara Junior High	Savannah Stelzer
203	Sound Du Jour	Carpinteria Middle School	Kelsey Drain, Morgan Cook
204	Elementary School Laughter Levels	Goleta Valley Junior High School	Maddie Mathews
205	Color Theory: Does Color Affect our Appetite?	Goleta Valley Junior High School	Emma Rennick
206	Senses of Golf	Goleta Valley Junior High School	Connor Muench
207	Personality in Pencil	Goleta Valley Junior High School	Sepideh Parhami
208	Liar, Liar Eyes on Fire	La Colina Junior High School	Claire Patterson
209	Memory: Pictures vs. Words	Goleta Valley Junior High School	Bella Shraiman
210	Music Moves the Soul but does It Move You?	Jonata School	Marla Harvey
211	Does the Stroop Effect affect men or women more?	Jonata School	Cassidy Coleman
212	Color Recognition among 13-14 yr old students	Goleta Valley Junior High School	Shandeep Ahdi

213	Bird Intelligence	La Colina Junior High School	Renee Waters
214	Gender Differences in Short-Term Memory	Goleta Valley Junior High School	Laura Voyen
215	Eyewitness Accuracy	Santa Barbara Junior High	Olivia Fanaro
216	Testing Teaching Techniques on a Parrot	Goleta Valley Junior High School	Janine Wilson
217	Music and Charitable Giving	Goleta Valley Junior High School	Sophie D'Arcy
218	Does Personal Appearance Affect How People Treat You?	La Colina Junior High School	Christina Blair
219	Animal Intelligence: Are Small Dogs More Intelligent Than Large Dogs?	Santa Barbara Junior High	Sophie Sterling
220	Bees: What Attracts Them?	Goleta Valley Junior High School	Natalie Bowers
221	Spaced Out	Goleta Valley Junior High School	Mackenzie Spencer
222	What Affects An Illusion	Goleta Valley Junior High School	Cheryl Wilson

Junior Environmental Division

Project Number	Project Title	School	Student(s)
301	Can Blue Green Algae Blooms Be Reduced?	Goleta Valley Junior High School	Tyler Paras
302	A Greenhouse of Galloping Gases	Goleta Valley Junior High School	Amber Ray
303	Solution to Pollution	Carpinteria Middle School	Geneva French
304	Effectively Using Iron and Phytoplankton to Sequester Carbon	Goleta Valley Junior High School	Vy-Luan Huynh
305	Dangers of Global Warming	Jonata School	Jake Hopkins
306	Ashes Affecting Runoffs of Hills	Santa Barbara Junior High	Irvin Lazaro
307	The Greenhouse Effect	La Colina Junior High School	Annie Marroquin
308	The effect of adding vitamins, minerals, and iron on ethanol production	Marymount School	Anthony Granatelli

Junior Microbiological Division

Project Number	Project Title	School	Student(s)
401	Bacteria Criteria	Carpinteria Middle School	Lydia Han, Jessica Macias
402	Well-Water: Ways to Eliminate Iron Bacteria Infestations	Goleta Valley Junior High School	Hannah Giorgi
403	The Five Second Rule: Fact or Myth	Goleta Valley Junior High School	Bryce Anable
404	Smoking Mold	La Colina Junior High School	Will Lorenzen
405	Are You Safe From Bacteria At Your Favorite Beach	La Colina Junior High School	Gabriel Burdick

Junior Physical Sciences Division

Project Number	Project Title	School	Student(s)
501	Emerging Worlds	La Colina Junior High School	Sean Sullivan

502	Electric Generators	Carpinteria Middle School	Karina Jougla
503	Hot and Cold Solar Cells	Carpinteria Middle School	Johnathan Baird
504	Observing Cosmic Rays	Carpinteria Middle School	Katherine Delk
505	Surf Power!	La Colina Junior High School	Sean Handley
506	Which Materials Shield Radiation Best?	Goleta Valley Junior High School	Kyle Saunders
507	The Power of Colored Light	Jonata School	Anthony Angel, Carmine Ibarra
508	Iris Analysis: Monochrome or Contrast	Goleta Valley Junior High School	Yibing Zhang
509	The Soundpost: Why is it Called "The Soul of the Violin"	Goleta Valley Junior High School	Camille Miller
510	Thirsty Wood	La Colina Junior High School	Emma Sonsini, Erika Gutierrez
511	electrified Alcoho	Jonata School	Nick Miller, Chris Gil
512	Power of Waves	Goleta Valley Junior High School	Dylan Zukin
513	Oxygen Concentrations in Water as Found by Electrolysis	La Colina Junior High School	Sarah Alarid
514	4 Forces vs. Bridges	La Colina Junior High School	Gabe Klohe-Hicks
515	Harnessing the Power of the Wind	La Colina Junior High School	Waiman Meinhold
516	A Revolutionary Approach to Water Purification	La Colina Junior High School	Justin Morris
517	Recording Digital Data with Magnets	Olga Reed School	Christopher Browning
518	Magnets: Hot or Cold?	La Colina Junior High School	Brian Pinner
519	Light Curvature of a Binary Star	Goleta Valley Junior High School	April Gadsby
520	Building the Perfect Electric Motor	Santa Barbara Junior High	Connor Kerns
521	Changing Flow Rates to Find Leaks	Santa Barbara Junior High	Kelley Drechsler
522	Recording on a Wire	Santa Barbara Junior High	Elliott Kingston
523	The Physics of Juggling clubs	Goleta Valley Junior High School	Emily Thomson
524	The Speed of Hockey Shots	Santa Barbara Junior High	Robbie Gallivan

Junior Mechanical Division

Project Number	Project Title	School	Student(s)
601	Can a Little Fat go a Long Way in Pastries	Goleta Valley Junior High School	Phoebe Bradbury
602	How Strong Is A Noodle?	Goleta Valley Junior High School	Robert Kojima
603	Nanotubes: A Telescope to the Future	Goleta Valley Junior High School	Nikhil Shinday
604	AERODYNAMIC EFFICIENCY	Santa Barbara Christian School	Nicholas Vanhecke
605	Supercharged	La Colina Junior High School	Kyle Estabrooks
606	Stability of Rockets	Goleta Valley Junior High School	Nickolas Zurlinden
607	How Slippery A Slope?	La Colina Junior High School	Jake Wiener
608	How Aerodynamics Affect the Speed of a Solar Car	Goleta Valley Junior High School	Nicholas De Heras
609	Shapes of Parachutes and Descent Rates	Goleta Valley Junior High School	Ayla Nelson
610	The Circle of Light	Jonata School	Amanda Schrepel, Kelsey Reed
611	The Perfect Cast	La Colina Junior High School	Travis Tibbitts
612	Science In Baseball	Goleta Valley Junior High School	Tommy Ruvalcaba
613	A laser Through Liquid	Santa Barbara Junior High	Ben Reisman
614	Rocket Aerodynamics	Santa Barbara Junior High	Mackenzie Taylor

615	What's In Your Pool	Goleta Valley Junior High School	Sarah Eggers-Jamieson
616	Hot vs. Cold Wind	Carpinteria Middle School	Camyla Chahoud, Catriona Reddington
617	Driving Fuel Efficient	Santa Barbara Junior High	Dena Slaff
618	Fluid Friction Fury	La Colina Junior High School	Jeff Gau, Ben Teng
619	The Phisics of Cheating in Baseball	Santa Barbara Junior High	Tanner Wolf

Senior High

Senior Life Sciences Division

Project Number	Project Title	School	Student(s)
701	A preliminary investigation into the Spatial and Temporal Patterns of Red Sea Urchins and Kelp Bass	San Marcos High School	Kenneth Pessino
702	The affect of lipophilic chain lengths of different detergents on the amount of dissolution of oil i	San Marcos High School	Kelly McKay, Jenise Fretz
703	Microbes, Sea Squirts, and Oil Slicks	San Marcos High School	Sam Fearer, Keaton Hudson
704	Movements of the Notoacmea Scutum	San Marcos High School	Scott Messier, Spencer Taylor

Senior Physical Sciences Division

Project Number	Project Title	School	Student(s)
801	Does Altitude Affect the Quantity of Cosmic Rays Detected in a Cloud Chamber	San Marcos High School	Scott Hempy
802	Resonance	San Marcos High School	Eugene Wang, Zane Golas
803	Free Energy from the Environment	San Marcos High School	Jade Wentz Fitzgerald