

March 10-11, 2015



Synopsys Championship

Newsletter 2015



Welcome from Gary Robinson, President, Synopsys Outreach Foundation

Welcome to the 2015 Synopsys Championship, one of the most highly regarded regional science fairs in California. Some of the best young minds in Silicon Valley are here with us today. Some Synopsys Championship participants will advance to the state and international competitions. But that's secondary. What's important is that you did the hard work, overcame the inevitable obstacles in your research, and made it here to compete.

We promise you this will be an experience you'll remember and treasure for years to come.

Science projects are not just for future scientists. Research shows that project-based science fair activities increased student learning in science and in a wide range of 21st century skills such as critical thinking, communication and collaboration.

In addition to annually supporting students and teachers developing sci-

ence projects at more than 700 schools across California and Oregon, the nonprofit Synopsys Outreach Foundation considers it a great honor to have served as the major sponsor of The Synopsys Championship since 2000. This event, run mostly by volunteers, sets a standard for other science fairs across the state and country.

A science fair is one of life's more memorable experiences. We hope you'll enjoy the day.

Welcome from Bruce Kawanami, President, SCVSEFA

On behalf of the Santa Clara Valley Science and Engineering Fair Association and our valued sponsors and supporters, I would like to welcome you to the 2015 Synopsys Science and Technology Championship. Special thanks to the volunteers who work tirelessly year round in preparation for the Championship. Today's Fair is the first major event of our Championship season. I love the excitement and electric feeling as I walk through the project hall and listen to the super-prepared students explain their procedures and data analysis skills to our keenly observant judges.

And I'd like to extend a warm welcome to all the judges who are here today. You folks use your skills, passions, and ability to encourage our youth to come out of their shells and have a wonderful learning experience. When I ask students, "How were the judges?" I will typically get

an enthusiastic, "They were great! They are so friendly and helpful!" Your positive attitudes are caught by the students.

Our students enjoyed enormous success in last year's Broadcom MASTERS competition. The top 30 middle school students in the nation are selected as finalists and meet for a week in Washington, D.C. Three of these top students came through our Synopsys Championship! Holly Jackson and her project, "Sewing Science," won the top prize, the Samueli Foundation Award. See her article about her Broadcom MASTERS experiences on Page 5. Our other two finalists also won prestigious awards. The first place Mathematics Award went to 8th grader Rajiv Movva for his project on finding a natural remedy for type 2 diabetics. The Rising Stars Award went to 7th grader Raghav Ganesh for his project that used an interactive add-on for a white cane for the visually impaired. Our top 60

middle school projects are awarded application forms to enter this competition. If you receive one of these applications, be sure to enter as you may win a coveted Broadcom MASTERS award.

This is the 16th year that the Synopsys Outreach Foundation has been the major sponsor of our Fair, and we are very thankful for such committed partners. This partnership has benefited both groups, and we are very proud to be associated.

But of course, our main focus is on the students showcasing their talents. So students, this is your day. Be sure to put on your bragging shoes because this is the right group to hear about what you've done. Do not be shy about your accomplishments and speak confidently about what you have learned. The judges want to know what you know! Enjoy defending your project, meet new friends, and have a wonderful day in the process!

OUR MISSION IS TO AWAKEN MORE STUDENTS TO THE WONDER AND POWER OF SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM)

Intel International Science and Engineering Fair, May 11-16, 2014, Los Angeles, CA



The 11 Grand Prize Winners, Best of Competition, Intel ISEF Finalists, representing 10 projects from the Synopsys Championship were announced at the Championship Awards Ceremony on April 6, 2014. These Intel ISEF Finalists were selected to present their projects at Intel ISEF 2014, May 11-16, in Los Angeles, CA.

The Intel International Science and Engineering Fair (Intel ISEF) is the world's largest international pre-college science competition, providing an annual forum where more than 1,700 high school students from over 70 countries showcase their independent research and compete for ~\$5 million in awards.

The Santa Clara Valley Science and Engineering Fair Association (SCVSEFA) started its preparation for Intel ISEF 2014 in September 2013 by submitting application papers to Science Services Affiliation, requesting 10 project slots, which were approved; and then the initial planning began: room reservations, special needs of students, airline reservations, ground transportation, project board packaging and shipping. Every effort is made to insure that our participation in Intel ISEF is an exciting and rewarding experience, one that will be cherished as the students pursue life opportunities and challenges.

On May 11, 2014, the families of the students transferred their prized possessions, their children, to the SCVSEFA Chaperones. The Head Chaperone explained rules and responsibilities of the students and chaperones to the students and parents, and the check-in process began: airline tickets were distributed; project boards checked, rechecked, and packaged for shipment. Airport Security, boarding pass and luggage check-in were completed successfully; shipping arrangements made for the package contain-

ing projects boards to arrive in LA on the same flight. We arrived in LA, secured transportation from the Airport, and checked into our hotel at 3:00 PM. After everyone settled in their rooms, the Head Chaperone called a meeting to insure that accommodations were okay and to review requirements for participating in Intel ISEF 2014. This meeting was repeated each day to go over key events and symposia, food preferences, nightly check-in and team support. It was an excellent way to insure that everyone was on the same page, working together as a team. All then went to Registration and obtained the official documents needed to access the Exhibit Hall during the Fair. That evening we attended an icebreaker event with music and food for all Intel ISEF competitors from around the world. We were encouraged to trade pins and meet new friends.

On Monday morning, the project boards were delivered the Intel ISEF 2014 Exhibit Hall where they were reviewed by the Scientific Review and the Display & Safety committees. In the evening we attended the Opening Ceremony dinner and show, an enjoyable, inspirational and spectacular event.

On Tuesday, first thing, our team visited their projects in the Exhibit Hall to clear up any problems and prepare for scheduled and impromptu visits from the media, visiting dignitaries, and sponsors. Our team members presented their projects to the other team members and chaperones acting as judges. From this encounter, they incorporated helpful suggestions that were especially useful for those who were first-time presenters at Intel ISEF. In the afternoon the Excellence in Science and Technology Panel hosted a discussion between Nobel Prize winners followed by a Q/A period that encouraged participants to ask questions of the panelists. On Tuesday evening there was a fun-filled experience: the Intel ISEF Night at LA Live hosted all of the Intel ISEF participants and chaperones

(Registered Officials) at the LA Live Complex (Club Nokia, the Grammy Museum, Target Terrace, Tom's Urban, and Lucky Strikes). We had dinner at Tom's Urban.

Wednesday was the big day: 7:45 AM to 5:00 PM, finalists were at their projects in the Exhibit Hall for judging interviews. That evening was Intel Night at Universal Studios Hollywood with rides, food, and shopping opportunities.

All were required to be at their projects again on Thursday morning. Our team was treated to dinner in Old Town LA that evening, and after that we attended the Special Awards Ceremony where Special Award Organizations, academic institutions and government agencies presented awards. Our team won five Special Awards, including two four-year scholarships to Arizona State.

On Friday morning, the competitors were requested to be in attendance for the Grand Awards Ceremony, sponsored by Intel, where the winners from each category as well as the top overall winners were announced. The SCVSEFA team won seven Category Awards, including three \$1500 awards. In the afternoon our team tore down their projects and packaged them for shipment on the flight back to San Jose. While waiting for transportation from our hotel, the team was congratulated by former California Governor Grey Davis. He encouraged each member to make science and engineering a lifelong pursuit. During our evening flight home, the stewardess announced the names of our team members as winners of the Intel ISEF 2014, and the passengers joined in congratulating them with thunderous applause.



The Chaperones transferred back to the parents the responsibility of love and care of their children, and we all went home satisfied that our team performed well at the Intel ISEF 2014. We look forward to a future with unlimited possibilities for those interested in science, technology, engineering, and mathematics.

—Forrest Williams

What's Next? If your project was judged as a First, Second, Honorable Mention, or a Special Award winner, you will be invited to attend the Awards Ceremony on Sunday, March 29, 2015. Check out www.Science-fair.org after March 21 to see if you are a winner and to find out the details for this event. There will be two ceremonies: one for the middle school winners and one for high school winners. You'll receive your ribbon or medal, and you may also get a Special Award—or more than one! Or ... a spot at the California State Science Fair! Or ... an all-expense-paid trip to the Intel International Science and Engineering Fair—the Grand Prize!

The Winners' Circle



Every year, the SCVSEFA Board of Directors organizes the Winners' Circle event to honor current winners of the Synopsis Championship for their achievements. The Board recognizes that the best ambassadors for the Fair—and for science projects in general—are its past winners. The

Winners Circle event is a way of thanking these students for representing us at the state and international levels. The Winners' Circle 2014 event was held at Santa Clara County Office of Education on October 13 and was attended by teachers, friends, and families of more than 50 students who shared their success stories, highlights of their participation in the State Fair, the Broadcom MASTERS competition, and Intel ISEF and such benefits as "making new friends," "meeting other kids who were interested in science," "going to the White House," and "jumping on the trampoline."

Synopsis Championship Projects Continue CSSF Success



The California State Science Fair hosts 1000 students from over 400 schools. It is a fast-paced, two-day event, much like the Synopsis Championship, except that the award ceremony is thrown in, too!

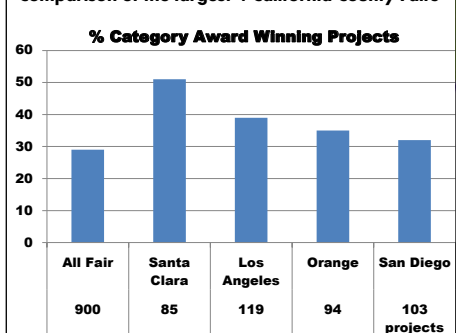
Eighty-five projects from Santa Clara County were judged, and once again we impressed the judges. In fact, our 8th grader, Holly Jackson and her proj-

ect on the strength of sewn seams came home with the top prize in the middle school category!

Monday is check-in and project setup—some of them right under the Space Shuttle Endeavour! In the evening we all gather to do some type of challenge activity and get instructions for judging day. Tuesday it is up and pack early to head over for judging. After judging we gather for the group shot—and it takes a great deal of gathering! Congratulations to all the CSSF participants—you make us proud!

—Heidi Black

Comparison of the largest 4 California County Fairs



All About Judging by Teresa Zarrin

Each year about 1,000 students attending schools in Santa Clara County demonstrate their research projects at the Synopsys Silicon Valley Science and Technology Championship. Judges are a critical part of the Fair, and its success depends on finding judges who are knowledgeable in their fields as well as good at interacting and communicating with middle- and high-school-aged participants. We are fortunate to live in the Silicon Valley where there is a wide variety of technology companies, medical facilities, educational institutions, professional societies, and individuals who generously give their time to support our Fair. There are two types of judges at the Fair: Category Judges and Special Award Judges.

One of the most important jobs that the SCVSEFA Board does each year is recruit over 400 qualified Category Award judges. These judges have direct interaction with the students, they encourage the students' interest in science and technology, and they convey appreciation for the students' accomplishments as they select projects to receive Category Awards. This interaction is an integral part of the Championship.

Category Awards judges judge all projects and select the students who receive the Category Awards that are given by the Santa Clara Valley Science & Engineering Fair Association (SCVSEFA). The judging criteria for awards are scientific thought/engineering goal, creative ability, thoroughness, skill and clarity. Category Awards are recommended

by each judging team and may include First Place, Second Place and Honorable Mention awards. Subsets of Category Judges select the students who will represent us at the CSSF and ISWEEEP and the Grand Prize winners who go on to Intel ISEF.

Special Awards Judges give awards that are sponsored by various professional organizations and companies. Special Awards may take many forms, including certificates, cash, trips, equipment, and internships. Criteria for the special awards are determined by the sponsoring organizations, and judging teams for these awards usually come from the sponsoring organizations.

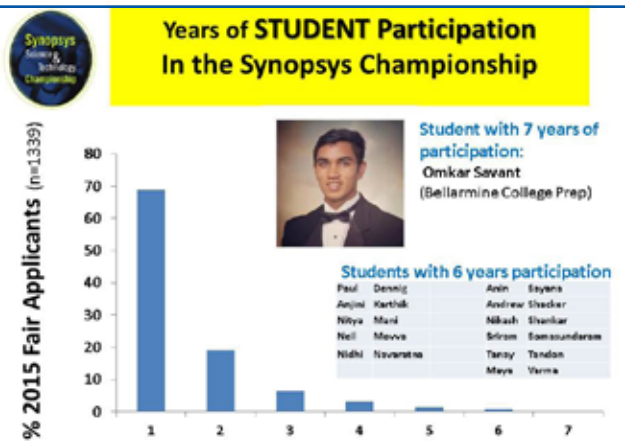
The SCVSEFA Board begins the process of recruiting judges by sending out an email to past judges. The Board maintains a database where judges enter their areas of expertise, their category and grade-level preferences, any conflicts of interest, and requests to be on teams with colleagues. A large percentage of the Fairs' judges return year after year because judges find the Fair to be a rewarding experience and an excellent way to support our community. Interacting with the participants and being involved with the exchange of ideas keeps them coming back for more! In addition to recruiting new and past judges, we contact professional societies, educational institutions, and people who have expressed interest in judging throughout year. Parents of fair participants and teachers are welcome to judge, but are not allowed to judge their children, close



friends, or students they mentor. All judges must have a college degree in science, medicine, engineering, computer science, math or a related field (exceptions may be made for related experience), and enjoy working with middle- and high-school students.

Once the judges are recruited, the Category Judging Committee spends a considerable amount of time placing judges on teams that match their expertise and preferences. Every judge is assigned to a group of two or more judges. Generally, each judging team views projects in the same grade and in related categories. However, at times teams are asked to judge across categories and grades because of small numbers of similar projects.

Judging is an excellent volunteer opportunity for those who wish to encourage students to pursue careers in these fields. There is a strong professional network in Silicon Valley, but we are always looking for more judges so don't hesitate to contact us at judging.science-fair.org if you, or someone you know, is interested in the rewarding experience of contributing to our Fair as a Category Judge!





Broadcom MASTERS is not your typical science fair. It is a six-day science, mentoring, and team-building extravaganza where one experiences the hard work, creativity and enjoyment of a life in the sciences. The contest consisted of a full-day science fair, two days of science challenges, career mentoring, monument tours, and much more.

I got to be part of it all with my project, "Sewing Science." I studied which type of lockstitch, a stitch made from two interlocked threads, was strongest: straight, stretch, zigzag, or three-point zigzag. I used nylon and polyester thread to stitch together identical swatches of cotton, denim, or nylon fabric. I tested 120 samples by pulling them apart with a machine that I engineered from an electric winch, a bathroom scale, and a slow-motion camera. I found polyester thread failed, as hypothesized, and that the straight stitch was strongest on average. My strongest sample, which was a four-inch wide piece of nylon fabric sewn with nylon thread in a straight stitch, broke at over 300 pounds!

Taking my project all the way to Broadcom provided me with my most memorable moments. Broadcom assigned team challenges, where teams of participants were presented with a science problem they needed to solve. We used the resources in the National Museum of Natural History to research a variety of scientific topics. One of my favorite challenges was the math challenge, during which we tried to decipher an ancient numbering system within an hour! One of the most exciting moments was when we were asked to dress up for a "photo-op at the Capitol" and then came to realize that we were going to meet the Presi-

dent of the United States. We met the CTO of the White House, Megan Smith, along with other prestigious White House science leaders and toured the Blue Room, Green Room, Red Room, East Room, and State Dining Room. Finally, President Obama arrived. He talked to us for about fifteen minutes and then shook all of our hands. After that, we watched him walk out to his helicopter, Marine 1, and fly away over the Washington Monument.

The number and quality of mentors is one of the unique aspects of Broadcom MASTERS. I talked with the National Program Director of the EPA, Dr. Tina Bahadori, who told me about her career in environmental protection. Dr. Dennis Glanzman, Program Chief of Theoretical and Computational Neuroscience at the NIH, also shared his work at NIH and his path to success. Henry Samueli, the founder and CTO of Broadcom, talked to us on many different occasions, giving us encouragement, support, and advice. These experiences at Broadcom opened up incredible opportunities for me. At the awards ceremony, I met Dr. Harry Partridge, the Chief Technologist of NASA Ames. When I returned to San Jose, he gave me a five-hour private tour of NASA Ames and introduced me to six different scientists. Because of his help, I have an internship this summer researching 3D materials at NASA Ames! One of the judges, Patrick Murphy from NASA, also put me in contact with Dr. Ian Clark, the principle investigator of the LDSD (Low-Density Supersonic Decelerator) at Jet Propulsion Laboratory (JPL). Dr. Clark invited me to a lecture at JPL on LDSDs and took me on a two-hour private tour of JPL, where I went in a satellite-assembly clean room and received a portion of a test parachute that had traveled 35 miles into earth's atmosphere!

The other students at the fair were all so supportive and kind. On top of that, they all had extremely advanced projects. Sixth grader, Raghav Ganesh, a local Bay Area resident and Synopsys alum, created a smart cane with sensors to give a blind person more information about the terrain around them. Another student, Rajiv Movva,

like me, an eighth grader from San Jose and the Synopsys Championship, studied the effect of flavonoids on blood sugar levels in type 2 diabetes patients.

I won the top prize of \$25,000 at Broadcom MASTERS. But I couldn't have accomplished this without the support and mentorship I received. I attended Old Orchard School in Campbell since I was four years old, and now I am a freshman at Notre Dame High School in San Jose. At these schools, I have been challenged to think creatively and critically and to always come forward with my point of view. These skills were invaluable at Broadcom.

When selecting my eighth-grade project, I took my hobby of sewing and thought about it from a scientific perspective. I thought the idea was unique and found there was little background data available. It was exciting to discover something new and learn about all its potential applications from space suits to inter-planetary parachutes, seat belts, and Ebola suits.

Lastly, I believe my success came from my hard work and curiosity. I'm a tenacious student and have always been diligent about my schoolwork. I am always eager to learn about new ideas and how the world works. Besides sewing, I also like to make candles and bath products. In addition to mixing Epsom salts and sodium lauryl sulfate, I have also mixed ideas, emotions, and words by writing a one-hundred-page science fiction novella that explores the concepts of free will and determinism. I have also played piano for eight years and learned to entwine meaning by just changing the emphasis of a note. My newfound passion, Lincoln-Douglas debate, has taught me to intellectually spar and think critically about the moral dilemmas that our society faces.

All the top junior high school finishers at Synopsys Championship will receive an invitation to apply to Broadcom MASTERS. I strongly encourage them to do so. The time, money, and energy Broadcom puts in yields a truly unique competition. The experience was unforgettable and has opened up all sorts of new and exciting opportunities for me. *—Holly Jackson*

Science Project Mentoring, Seven Years Later

Jane Frommer has been a judge for many years at the Synopsys Championship and Intel ISEF. In 2008 she mentored Synopsys Championship winner Justin To to advance to the Intel ISEF. That mentorship continues today. She was asked to write this article for the benefit of the SCVSEFA community and invited Justin to co-author it.

Science and data
to extend human
capability



Mentor Jane Frommer

He was assigned to me. A Synopsys Championship winner, he was due a mentor to prepare him for the Intel International Science and Engineering Fair. I didn't know him, nor had I seen his winning project. His project first struck me as familiar territory: Aerogels—lightweight porous dielectric silicates—were a class of materials in one of the research areas at my lab, the IBM Almaden Research Center. Next came the revelation—this was a high-school sophomore, thinking with the sophistication of a professional colleague. Thus began my mentoring relationship in 2008 with Justin To. It continues today.

The Synopsys Championships in 2009 and 2010 yielded more awards and more Intel ISEF mentoring opportunities for me. When the SCVSEFA organizers again asked me to mentor Justin, I countered that he should not feel constrained to stick with the same mentor. "He is requesting you," they replied.

We continued our mentoring relationship, through science fair display boards to college applications; through college acceptances and into Harvard; from research in the college chemistry department to a biotech internship off-campus; from time abroad in Europe to job interviews in the consulting sector. Certain threads ran through our conversations over the years, such as my fascination with Justin's wide range of enrichment activities from on-campus student leadership of the National Collegiate Research Conference to



off-campus improv comedy classes. I remained consistent in encouraging him to branch out, yet not lose sight of scientific principles, to stay open to opportunities from unlikely places.

Justin's undergraduate years as a chemistry major were in one of my favorite cities, Cambridge, Mass. Gladly, I met with him in his new territory, toured his spots on campus and enjoyed new restaurants in Kendall Square. Most gratifying was watching a science education evolve through Justin's experience. He has not taken a straight-and-narrow pathway in envisioning his future in science. A combination of chemistry and business held his interest since high school, despite my bias that business should not detract from the solidity of scientific content. He respectfully acknowledges my concern while continuing to grow and branch out.

It's 2015, and Justin is in his first year at McKinsey & Company, consulting in the pharma sector. Our relationship persists and evolves. Now we learn from each other. I learn about the demands of the marketplace and the quick pace of his work environment. He knows that in me he has a steadfast sounding board and a critical yet encouraging mentor who gets immense pleasure from his success.

Mentee Justin To

Originally, my mentor for Intel ISEF 2008 was meant to simply provide me with feedback for my abstract and poster presentation on the facile synthesis of aerogel. Of course, like anyone else who has interacted with her, I soon discovered that Dr. Frommer was a nonpareil mentor who had an infectious enthusiasm for the sciences. I did not place at ISEF that year, but my experience with Dr. Frommer had me knocking on ISEF's door again in 2009 and 2010, where I won fourth and first place in my division, respectively.

Dr. Frommer was assigned to be my mentor for ISEF 2009 and 2010 as well, but I also considered her to be my mentor in my non-science fair aspects

of life (although during those years, preparing for the science fair might as well have been my life). I turned to her while applying to college, seeking her advice on where and how I should apply. When I was dismayed by being deferred from MIT in their Early Action phase, I turned to her again for some perspective. "The world's a big place, the number of good colleges is large, and you will find yourself with plenty of choice for an exciting place to live the next four years of your life," she wrote—and was she right. When I was accepted into Harvard, she was the first person outside my family I told.

While on the East Coast for school, I still kept in contact with Dr. Frommer. We would meet for meals when she came back to visit her roots in Cambridge and when I came back to San Jose for the holidays. In my freshman year of college, she advised me on my selection of a chemistry laboratory to conduct undergraduate research. As my interests started to expand beyond research, Dr. Frommer introduced me to some of her colleagues in the biotech industry and consulting, igniting my dormant interest in the intersection between science and business.

My life has been a series of fortunate events. I was a first-generation college student, and the first student from my high school to be accepted into Harvard in its history. After graduating college, I was fortunate enough to obtain a competitive position in consulting (in pharmaceuticals, among other industries) at McKinsey & Company. Dr. Frommer's mentorship has been invaluable along the way. For this, I count being assigned to Dr. Frommer as a mentee in 2008 as one of my greatest fortunes.

New Mentor-Mentee Program to Benefit Your Science Research

In its fifth year, SCVSEFA is excited to see what started as a pilot program blossom into a full-fledged mentor-mentee program for our students. The goal of the program is to provide an opportunity for our students to work with experts in order to improve the quality and, hence, success of their science projects. In this program, students will select a scientist or an

engineer as a mentor and interact with him/ her online seeking guidance for their science research. We have been fortunate to have about forty dedicated mentors who have agreed to lend not only their expertise but also their time and support to our students. This program has attracted several middle- and high-school students who have gained a wealth of experience

interacting with our expert mentors. We at SCVSEFA look forward to continuing this mentorship program to provide a wonderful opportunity and positively impact the outcome of our students' science research. To learn more about our mentor-mentee program visit us at <https://science-fair.org/>

—Kavitha Jayachandran

Support Needed

The Santa Clara Valley Science and Engineering Fair Association needs your support to continue putting on the Championship. Although we get the majority of our funding from the Synopsys Outreach Foundation and the major donors listed, we are required by the IRS to receive at least one third of our funding from contributors who each give a donation

that is less than 2 percent of our total funding. Project registration fees and t-shirt sales do not count towards this one-third funding requirement. This is where you can help.

If you think the Synopsys Championship is a worthwhile event, please consider giving us a donation. We prefer checks written to directly to SCVSEFA, because 100 percent of the

donation goes towards the Championship, but, if you wish, you can donate electronically via our website through CommitChange or Paypal. All donations are fully tax deductible because we are a 501(c)3 non-profit, TID 94-6122043. Please send checks to: SCVSEFA, c/o Treasurer, PO Box 307, Los Altos, CA 94023-0307

—Larke Reeber

Special Awards and Sponsors of Special Awards

Al Foster Award
American Association for Laboratory Animal Science, Northern California branch
American Chemical Society, Santa Clara Valley Local Section
American Institute of Aeronautics and Astronautics (AIAA) Intelligent Systems Award
American Meteorological Society
American Psychological Association
American Society of Civil Engineers
American Vacuum Society, Northern CA Chapter
ASM International, A Society for Materials, Santa Clara Valley Chapter
Association for Computing Machinery, San Francisco Bay Area Professional Chapter
Association of Women Geoscientists, San Francisco Bay Area Chapter
Association for Women in Science, Palo Alto Chapter
Broadcom MASTERS
The Ann Burrell Award
California Association of Professional Scientists
California Society for Biomedical Research - Ron Orta Excellence in Biomedical Research Award
Dr. Paul X. Callahan in Memoriam

DuPont Industrial Biosciences
Fair Manager's Graphic Design Award
Hegland Award
I-SWEEEP
Inez M. Lechner Award
Institute of Electrical and Electronics Engineers (IEEE)
Intel Excellence in Computer Science Award
The Bruce Kawanami Engineering Award
MedImmune
Morgan Lewis
Mu Alpha Theta
NASA Ames Research Center
National Oceanic and Atmospheric Administration
Northern California Institute of Food Technologists (NCIFT)
Promethium Chapter of Iota Sigma Pi
Resource Area for Teaching (RAFT) Teacher Award
Ricoh Corporation
SAMPE—Society for the Advancement of Material and Process Engineering
San Jose State University College of Engineering
San Jose State University Student Affiliates of the American Chemical Society
Santa Clara County Biotech Education Partnership (SCCBEP)

Santa Clara Valley Science & Engineering Fair Association—Board of Directors Awards—High School
Santa Clara Valley Science & Engineering Fair Association—Board of Directors Awards—Middle School
Schonert Award
Society for In Vitro Biology
Society of Vacuum Coaters (SVC)
Society of Women Engineers
Stockholm Junior Water Prize
System Safety Society
TechLab Education
The Kerry Veenstra Awards
The ROD Women in Science Award
The Synopsys Outreach Foundation n+1 Prize
The Tech Museum of Innovation
Trimble Navigation, Ltd.
UCSF Center for Systems and Synthetic Biology Award
United States Air Force
United States Coast Guard Auxiliary
United States Metric Association
United States Navy and Marine Corps
U.S. Public Health Services Award
Varian Medical Systems
Whitney Education Foundation
Wireless Communications Alliance
Yale Science and Engineering Association Award
Zeidman Award

We gratefully acknowledge those who support the Synopsys Championship and thank those companies who support science education by allowing their employees time away from work to judge and volunteer at the Championship. And once again we would like to thank the Rambus Foundation for their very generous donation for the printing of this newsletter and Hassan Lashgari and his staff at Pine Press Inc., who have helped the SCVSEFA Board meet publishing deadlines since 1990. We also extend our sincere appreciation to Alpine Awards in Sunnyvale, who since 1988 have produced our ribbons and plaques. We also thank the participants, their parents, teachers, mentors, schools, and the Synopsys Championship's major sponsor, The Synopsys Outreach Foundation, for making the Synopsys Silicon Valley Science and Technology Championship the exceptional event that it is!



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District 10, Johnny Khamis, San Jose City Council
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District 8, Rose Herrera, San Jose City Council
Central Cash and Carry*
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DuPont Industrial Biosciences

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Sandi & Steve Yellenberg
Simon & Teresa Zarrin

* Gifts in kind



Volunteers make it happen for our students. You can join our volunteer corps when they return next year: click on "VOLUNTEERS" at www.science-fair.org. Always much needed and appreciated, volunteers make it possible for students' dreams to come true.

Non-affiliated 2014 Volunteers returning for 2015	41
Scientific Review Committee Volunteers	15
SCVSEFA Staff and Board Members volunteering at the Championship	32

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