

San Diego Science Alliance Turns 10—Let the Celebration Begin!

In 1995 a small group of San Diego business leaders, educators, and scientific institutions established a new nonprofit consortium. They called themselves the **San Diego Science Alliance (SDSA)**, and their mission was to advance scientific literacy in K–12 education in San Diego County through various partnerships, projects, and collaborative networking programs. The founding members were committed to the creation and support of new science education programs, and nearly ten years after its formation the mission of SDSA remains unchanged.

Since that historic event, SDSA has grown to include more than 250 science and technology-related businesses, scientific professional societies, research institutes, military agencies, museums, and other informal education organizations. SDSA's resource catalog is distributed to more than 2,000 local teachers each year (with even more using the online version), and more than 250 businesses and organizations are represented. Over the past eight years, SDSA's High Tech Fair has introduced more than 400 local companies to approximately 16,000 San Diego junior high and high school students interested in mathematics, science and technology. SDSA's "Science Alert" e-mail distribution list includes more than 1,900 registered teachers, and the newly redesigned SDSA web site (www.sdsa.org) contains a

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SDSA would like to thank the following sponsors for their generous support of our 2005 10th Anniversary celebration:

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San Diego Science Alliance 2005 Golf Classic

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As the San Diego Science Alliance embarks on its 10th Anniversary year-long celebration, it is only fitting that a few exceptional events be offered for SDSA members, supporters, and educators to commemorate a decade of excellence serving the San Diego science community. In addition to the Decade of Discovery anniversary dinner, SDSA will also be hosting its inaugural 2005 Golf Classic on Tuesday, June 21. The tournament will be played at San Diego's premier public golf facility—Maderas Golf

Club in Poway. Since its inception, Maderas Golf Club has been consistently rated one of California's most scenic and extraordinary golf courses. From the outstanding practice facilities to the magnificent Italian-style villa clubhouse, this Troon Golf facility promises to provide a golf and entertainment experience like no other. The Johnny Miller & Robert Muir Graves layout takes golfers through dramatic natural rock features and sweeping elevation

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SDSA Letter From Our President

by Gary Devan, Mission Federal Credit Union

Welcome to a new year of opportunities for the San Diego Science Alliance. 2005 is a special year for SDSA since we are celebrating our 10-Year Anniversary. Keep an eye on our web site (www.sdsa.org) for announcements and information regarding unique events we are planning to commemorate the past 10 years and supercharge our efforts for the next 10 years. There is more about our 10-Year Anniversary elsewhere in this newsletter.

As we end 2004 and start 2005, I would like to acknowledge the return of Mark Shults of SBC Corporation and the addition of Richard Warburg, a partner at the law firm of Foley & Lardner, LLP. Mark Shults served on the Board in the late 1990s, was

transferred out of town, then recently returned and rejoined SDSA. Richard Warburg has been very active on legal issues within the chemistry, biology, computers, and mechanics industries. Both Mark and Richard are welcome additions to an already strong Board of Directors that represents the educational community, science and technology business sectors, and service organizations.

2005 is shaping up to be a very ambitious year for SDSA. To achieve our goal of increasing exposure for students and teachers to scientists and the business community, SDSA needs volunteers and financial resources. While many people actively participate in SDSA activities, we are always

seeking additional help to extend our reach further. Please take a moment to review our programs on our web site (www.sdsa.org) and call (858-454-7622) or e-mail (pat.winter@gat.com) Patricia Winter, Executive Director and heart of the San Diego Science Alliance, to discuss any opportunity to participate or contribute.

With continued state budget cuts, concerns over science curriculum in California schools, and the national reliance on foreign scientific resources, the San Diego Science Alliance is working hard to find solutions to these problems. The journey is long, and we look forward to many successes in 2005. Please join us in our pursuit.

The PISCES Project Is Charged Up about Electric Vehicle Loan

At the January 2005 PISCES (Partnerships Involving the Scientific Community in Elementary Schools) Project meeting, elementary teachers and Science Corps partners were busy building program ideas to take the new PISCES EV (Electric Vehicle) on the road to partnership schools. Plans were made to inform students and families at Family Science Nights (funding from **Merck Research Laboratories San Diego** and **Boston Scientific**) about the benefits of alternative fuel vehicles. If carbon dioxide emissions continue at the current rate, scientists predict that the average global temperature will increase by up to six degrees over the next century. While this doesn't sound like much, it is enough to cause severe weather damage, rising sea levels, and disruption of water resources. So what can be done to prevent this grim scenario? The answer starts with education, and the PISCES Project is taking a lead in this endeavor. The project's efforts to educate students, teachers, and community members about global climate change were given a major boost when it was awarded the use of an electric vehicle. Thanks to the EV Loan Program, sponsored by the California Air Resources Board, PISCES will get to experience the benefits of an electric powered Toyota RAV 4, and the opportunity to include the vehicle in educational outreach.

The vehicle is scheduled to travel to elementary schools and enhance current environmental science units such as Ecosystems, Environments, and Solar Energy. Students in these classrooms will develop an understanding into how individual choices can minimize negative impacts on the

environment. PISCES also plans to use the vehicle to help students envision the real life applications of physical science kits, including Magnetism and Electricity and Electric Circuits. Finally, the vehicle will make appearances at Family Science Nights, where visitors will learn more about the technology of electric vehicles and the benefits of alternative fuels. Hands-on activities will be used to help visitors understand the mechanics of the electric engine and the deleterious effects of traditional gas-powered transportation.

Check out the program on the PISCES web site at www.sdsa.org/pisces.



High Tech Fair 2005

Today, more than 2500 San Diego 7th through 12th grade students from 41 schools are exploring more than 60 exhibits of local technology companies, universities, and other educational organizations at the 8th Annual High Tech Fair. The High Tech Fair, held at the Del Mar Fairgrounds, is sponsored by the **San Diego Science Alliance, San Diego City Schools, the San Diego County Office of Education, and Congressional Representatives Cunningham, Davis, Filner, Hunter, and Issa.**

The exhibitors are demonstrating their products' technologies and other applications of science in an interactive manner that appeals to the students' curiosity. The goal is to interest the students in learning more about science by seeing the real life application of what they are learning in the classroom. The arrival of the students is staggered throughout the day to ensure that everyone can fully enjoy the exhibits. Many have assignments from their teachers to enhance their experience. And the students aren't the only ones to enjoy this event— exhibitors enthusiastically commented on how much they enjoy seeing the students eyes light up with understanding of what they are seeing and experiencing.

Many new features of the Fair make it even more educational this year. There is a balance of organizations from many sectors, such as BioTech/Pharmaceuticals,

Computers/Software, Telecommunications/Satellite Communications, Energy/Environment, Electronics/Engineering, Aerospace/Transportation, and Semiconductor/High Tech. Students from three area Information Technology Academies in San Diego are exhibiting examples of their IT education.

Special thanks to some companies who went above and beyond to help make the day a success. **Merck Research Laboratories San Diego** hosted the continental breakfast and lunch for the exhibitors. **ENCAD** again graciously printed the large posters which recognize the exhibitors, schools, etc. Liz Basinet, **Barrett Resources**, yet again did an outstanding job of getting the word to the press. Kim Bess, **San Diego City Schools**, and Nancy Taylor, **San Diego County Office of Education**, served as education liaisons. Thank you also to their staff for all their efforts, especially the management of the busses on the day of the High Tech Fair.

Event Co-Chairs Cathy Akin, Jim Ritchey, and Patricia Winter were pleased with the excellent support of the San Diego technology and education community. They wish to thank the efforts and support they received from Carolyn Neilsen of **Air Products** and Carol Danielson of **General Atomics**. They are already planning the 2006 Fair!

BE WiSE Botball

2005 marks the first season that alumnae of the BE WiSE (Better Education for Women in Science and Engineering) program have entered their own all-female team in the annual Botball competition. Eight 8th grade students representing five schools will work as a team to design, build, and program a "bot" that will compete in the 2005 Southern California tournament. The team leader is Adrienne Marriott, who has previously led a San Diego County Office of Education Botball team, and the team mentors are Mr. Vinzant and Mr. Oudah, both BE Wise Alumnae Fathers.

Botball is a nationwide program where teams of middle

and high school students design and build their own robot using a kit containing Legos, motors, sensors (light, pressure, etc) and accessories, and then program their "bot" using modified C computer coding (more info at www.botball.org). The goal of each "bot" is to perform the best in the head-to-head challenge at the regional competition. For this year's competition, the theme is "domestic robots"—"bots" will "cleanup" their rooms, sort trash and recyclables, and put toys in a "yard," all of which represent different point values. The public is welcome to come and check out the Southern California regional competition on March 19, 2005 from 8 A.M. to 6 P.M. at USD in San Diego.

Golf Tournament *(continued from page 1)*

changes, while offering some of the most spectacular views and superb playing conditions available anywhere.

The cost is only \$250 per player (\$1,000 per foursome), and the entry fee includes lunch, practice balls, green fee, cart fee, on-course contests, tee prizes, dinner, awards ceremony, silent auction, and much, much more.

The format will be a 4-player modified scramble, so don't worry if your game doesn't resemble Tiger's. This event promises to be a great day of networking and fun; but playing spots are limited, so reserve your foursome today. Dinner-only tickets are also available for those non-golfers who want to come out and support a great cause—K-12 science education in San

Diego County. Reservations and more information about this terrific event can be found at www.sdsa.org. Just click on the "2005 Golf Classic" link and away you go. We thank you for your support and look forward to seeing everyone at Maderas on Tuesday, June 21.

BE WiSE and the Greater San Diego Science and Engineering Fair

The 2004/2005 school year saw an exciting expansion of the BE WiSE (Better Education for Women in Science and Engineering) program that included preparing eight young women from five schools for the Greater San Diego Science and Engineering Fair (GSDSEF). These young women consisted of BE WiSE Alumnae who attend schools where science fair projects were not emphasized.

With three BE WiSE steering committee members acting as “stand-in” teachers, these girls were assisted in choosing a project topic, carrying out research, and designing and performing an experimental plan. The goal was to get them to the final screening and judging with a chance to be approved for the GSDSEF.

With topics ranging from engineering and antibiotic resistance studies to biodiversity and human behavior, the hardest task went to Patricia Winter, Executive Director, who connected each student with a mentor. These mentors—women who work in the field of study related to the students’ science projects—included scientists from **BiogenIdec, Diversa, Isis Pharmaceuticals, Salk Institute, and SDSU**. They all provided invaluable assistance.

This program offered students an opportunity they may



Hilde van den Bergh, “stand-in” teacher with Julie Gantz, BE Wise Alumna

not otherwise have had. Not only was it a great learning experience for everyone involved, it was also a lot of fun. The girls were exposed to women who worked in different fields of science and to the scientific process. The mentors were able to share their enthusiasm for their profession and the “stand-in” teachers learned more about the science fair process. The experience will not soon be forgotten.



Angela Villanueva with Hilde van den Bergh, “stand-in” teacher



Julie Gantz working on her Science and Engineering Fair project with her e-mail mentor, Dr. Norrie Robbins

10th Anniversary (continued from page 1)

myriad of information and available resources tailored to meet the needs of today’s science educators. Other innovative SDSA programs include BE WiSE and the PISCES project.

How do we commemorate this incredible milestone? We have a few wonderful events that we are positive you will enjoy. We begin with the **first annual SDSA Golf Tournament** in June at the beautiful Maderas Golf Club in Poway. This will be a very special day AND night with lunch, tee prizes contests, dinner, and silent auction prizes. Details will follow shortly but if you are interested, please contact Mark Shults or Patricia Winter (pat.winter@gat.com) since space will undoubtedly be limited. Get your foursomes together now or just sign up and we will match you up with some fabulous people and maybe, if you are fortunate, some good golfers, as well.

The **Decade of Discovery Anniversary Dinner** is scheduled for Thursday, October 27 at the world famous Reuben H. Fleet Space and Science Center in Balboa Park. In the grand tradition of SDSA, we will be offering another unique opportunity for San Diego business leaders and educators to come together for a night of celebration and networking. An enthusiastic and dedicated group of current and past board members are busily at work to ensure that this is a memorable night. Special guests and lots of surprises will make this an evening to remember.

We have a lot to celebrate and we encourage your participation to ensure our party is a success. Mark your calendars and look for invitations and information which will be forwarded to you shortly.

Please join us to celebrate a wonderful organization’s tenth anniversary and take part in something really special.

Project Lead the Way

Project Lead The Way, PLTW (www.pltw.org), is a national program that promotes and supports the teaching of pre-engineering and technology in grades K–12. Its primary goal is to increase the nation's technology workforce by creating dynamic partnerships with our nation's schools to prepare an increasing and more diverse group of students who will be successful in engineering and engineering technology programs. The College of Engineering at San Diego State University is the State Affiliate Institute for PLTW (www.engineering.sdsu.edu/PLTW) and is responsible for the growth of the program in California. Currently there are 38 middle and high schools offering the program within the state, with 18 of those being in San Diego County.

The program consists of a sequence of project-based courses that are intended to expose students to the various areas of engineering and technology and to prepare them for the rigors of a two- or four-year college program in the field. The basic topics currently covered include engineering graphics and design, robotics and automation, elec-

tronics, engineering physics and principles, and civil engineering. A course in biotechnology will be soon added to the curriculum along with a program for aerospace technology that will have a component for grades 3 through 6. Students who have gone through the program acquire an understanding of what engineering is and what the career opportunities are.

The Affiliate Institute has partnered with the San Diego Science Alliance, through programs such as the Robo Expo, the High Tech Fair, and INScience, to aid in promoting the program and to give students, who have had their interest stimulated by the various SDSA programs, an avenue for college preparation. This year, the Affiliate Institute is also sponsoring a regional competition for the national West Point Bridge Builder contest. In this event, students use bridge design software to create a highway bridge that is the most cost-effective for the given constraints.

For more information, contact Bruce Westermo, Director, PLTW Affiliate Institute, westermo@engineering.sdsu.edu.

Weatherfest Great Success in San Diego

At the San Diego Convention Center on January 9, kindergartners to middle school students crowded six deep around a scientist from Mount Washington, Vermont, to wait their chance to use an "air cannon" and make a tornado in a bottle. At one table, students met an Air Force meteorologist from the Pentagon; at another, meteorologists answered questions about hurricanes and tsunamis, and about becoming a meteorologist or oceanographer. Research companies showed high tech programs, a teacher boiled water using ice, TV weathercasters announced door prizes. This was Weatherfest—a free science and career fair—a K–12 outreach program of the American Meteorological Society (AMS).

Patricia Winter and SDSA played a pivotal role in Weatherfest's success. Weatherfest precedes the Annual Meeting of the AMS, which convenes in a different city each year; thus, the program is an unknown in each city it

visits. SDSA helped to get the word throughout San Diego County's education community. SDSA offered information and access to teachers and teacher organizations, and suggested local scientists who would be interested in participating as exhibitors or contributors. Weatherfest was posted on SDSA's web site, and local host program chair Virginia Bigler-Engler was invited to participate and bring Weatherfest flyers to SDSA's October 2004 event. Weatherfest comprised more than 60 exhibits and hands-on activities. With a record number of local presenters and twice the preceding year's turnout, this—the Fourth Annual Weatherfest—was the most successful yet.

Major sponsors besides AMS include the National Oceanographic and Atmospheric Administration (NOAA), SAIC, and Silicon Graphics (SGI). The 2006 Weatherfest will precede the 86th AMS Annual Meeting in Atlanta, Georgia.

Changes Ahead —Professional Development Opportunities

Interested in new ideas, innovations in teaching, and inspiration? The SDSA Professional Development link on the web site has all the up-to-date information on science professional development offerings in the region. Many San Diego area science teachers take advantage of honing content and teaching skills through professional

development. SDSA has centralized access to most offerings that are available. Summer and year-round professional development workshops, seminars, tours, and institutes are archived in a calendar format. Visit the web site at www.sdsa.org.

Middle School Science—It's the Right Time!

The middle school years are critical times for engaging students in science learning. There is also a great need to develop instructional expertise in middle school science programs to address these critical times for students. San Diego County is fortunate to have resources to develop middle school science teacher leaders. The Middle School Science Education Leadership Initiative (MSSELI) is about to begin its second year with "room to grow!" This program is an initiative of the Science and Technology Working Group of the San Diego Foundation. Its partners include **San Diego City Schools**, the **San Diego County Office of Education**, and the **San Diego Science Alliance**.

MSSELI is pleased to have received its second consecutive annual grant of \$150,000 from the **Pfizer Foundation**. With word of this second year contribution, the teachers and students who will benefit from MSSELI want to express a special thank you to the Pfizer Foundation and the supporters at **Pfizer La Jolla**. This second year's grant of \$150,000 will fund the ongoing leadership program and will allow the recruitment of a second cohort of leadership fellows.

Personnel from the Pfizer Foundation visited with the project directors in the fall and then invited MSSELI to submit a proposal for second-year support. This kind of partnership support demonstrates a unique commitment to improving the quality of science instruction through a teacher-centered professional learning community.

Another well-recognized community partner in science education, the **General Atomics Sciences Foundation**, has granted MSSELI \$20,000 to provide the instructional materials that the MSSELI teacher leaders will use. This support is not only greatly appreciated but helps to accomplish a key goal of MSSELI: having grade-alike teachers plan common units of instruction while utilizing the same research-based instructional materials.

Currently, there are seventeen Year-One MSSELI fellows located throughout San Diego County. These energetic middle school teacher-leaders are implementing exemplary curricula in their classrooms. The curricula—Constructing Ideas in Physics (CIPS) in grade eight, Science and Life Issues (SALI) in grade seven, and Issues and Earth Science (IAES) in grade six—was developed in partnership with the National Science Foundation and has proven to be highly motivating for teachers and students. The common experience of using a common curriculum provides the opportunity for MSSELI fellows to participate in a lesson study project.

During lesson study, teachers plan a lesson in common, teach the lesson together, review the experience, refine the lesson, and teach the refined lesson to another group of students. The major focus of the process is to review student work and student assessments while analyzing lesson objectives. There is a powerful professional discussion that occurs during a lesson study experience; this dialogue builds a professional learning community. This reflection-on-practice is intended to contribute to both instructional improvements and leadership development. MSSELI fellows participated in a lesson study experience in early November at two school sites and all fellows

reflected that the experience provided them with meaningful insights into the teaching and learning of middle school students. A second round of lesson study will take place in March with partners from the scientific community participating. The project plans to videotape lesson study sessions for even deeper analysis of the teaching and student learning.

The MSSELI program is building a professional learning community that any single school district or site would find difficult to achieve. By bringing together the knowledge and expertise of highly motivated middle school science teachers with the interest and support of the community, San Diego's middle school students will receive the best opportunities for science learning—just what they need—at just the right time!

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Taking Advantage of SDSA's Web Site

by Zamaria Rocio, Horace Mann Middle School

What do California Condors, robotics, probe ware, wetlands, and xeriscape gardening have in common? These were just a few of the topics that teachers throughout San Diego county could have learned about these past several months.

As a science teacher, I have taken advantage of the opportunities I have found on the San Diego Science Alliance's web site (www.sdsa.org). These opportunities have included lectures from leading scientists, special events, science equipment training, and short- and long-term workshops. The web site also has up-to-date announcements and, most importantly, accurate contact information. There have been times when I had to contact the coordinator of an announced workshop to ask questions about it, and, because of the contact information on the web site, I was able to quickly find the information about the person I needed to talk to.

It is from the SDSA's announcement page that I have found some of the best deals for teachers in San Diego. For example, for more than five years Point Loma Nazarene University has offered an eight-session lecture series, Perspective on Science (POS), for one unit of academic credit. Each lecture event involves refreshments before the leading researcher's presentation, then a sit-down dinner,

followed by a question and answer period. During the three-course dinner, participants can exchange ideas with the colleagues that are sitting at the same table. I cannot think of a better way to spend my Tuesday night. By the way, did I tell you that all of this only costs \$50? What a deal!

Sometimes the benefits are not apparent by just reading SDSA's announcement. One example would be the recent advertisement for Weatherfest . This free, public event was sponsored by the American Meteorological Society at the San Diego Convention Center and I went because the price was right. While I was there, I mentioned I was a science teacher and was able to get class sets of many the following: posters from NASA, weather booklets from the Navy, stress relief toys from SGI, lesson plans from General Atomic, tsunami booklets and kites from NOAA, and 3D glasses from NCAR. Quite a few of these items will be used as rewards for my students. I also learned quite a bit from the companies that were there and made some valuable contacts. Needless to say, I was not expecting all of this.

Thank you, SDSA, for giving teachers a web site with limitless opportunities. I look forward to my next learning experience.

The Reality of Robotics

What flies, floats, moves on ground and underground, engages in tedious tasks without errors of fatigue, and has demonstrated secondary learning abilities? Robots!

A small group of learners, composed of teachers interested in what students can learn about engineering and some engineers interested in how they can help students learn more about engineering had the pleasure of participating in an after school Robotics in San Diego course arranged by the SDSA Robotics Committee. Visits to **Neurosciences Institute, Diversa, Northrop Grumman, SPAWAR, and Merck Research Laboratories San Diego** proved to be incredibly informative and interesting.

Each of the five presentations, which took place between November and February, followed a similar format. The host company welcomed participants in a conference room or boardroom and made a presentation about that company's mission. Each host then provided participants with information that outlined the nature of the product, the science at the foundation of the product, and how the application of robotics enhanced that product. The educators and engineers involved in the Robotics in San Diego course learned about private sector basic

research involving robotics in discovery and invention and government funded applied research in which robotics was part of the problem-solving process. Participants were thrilled when encouraged to go "hands-on" at several of the presentations.

At the end of most workdays, the least likely thing one wants to do is travel across the county to sit in a lecture. However, with hosts so welcoming and so enthusiastic about sharing what they do, and with subject matter so incredibly interesting and relevant, all participants were energized and enlightened. Questions from participants were happily and thoroughly answered and discussions were lively. Exchanges between the participants were extremely valuable. The only lingering question about the Robotics in San Diego course was, "Why aren't there more participants?"

Thank you to **Neurosciences Institute, Diversa, Northrop Grumman, SPAWAR, and Merck Research Laboratories San Diego** for their time, hospitality, and knowledge. If the Robotics in San Diego course is made available again, do not hesitate to participate.

Robotics and Student Showcase at the San Diego County Fair

New this year! The San Diego County Fair will offer Robotic competitions and demonstrations by students in schools throughout the County.

Robotics One day Contests

On June 11 the San Diego County Fair will offer a team competition for the snap together robots (Lego and Botball). Teams will compete in "Sumo," where two robots face off in the 4-foot "Sumo Circle," and the "Power Push Race," which consists of robots pushing four soda cans out of the 4-foot circle in the fastest time. There will be awards for 1st, 2nd, and 3rd place teams, with all teams receiving participation ribbons and pins. Teams can participate in one or both events. There will be a grand prize for the overall winning team for those who choose to participate in both events.

On June 18 the Fair will offer a team competition for First Robotics. These teams will participate in demonstrations and scrimmages, and points will be given for successfully completing each event. There will be awards for 1st, 2nd, and 3rd place teams, with all teams receiving participation ribbons and pins. Teams can participate in one or both events.

Robotics Run of the Fair Contests

The Student Showcase that is on display for the run of the Fair includes two Robotics Divisions in the competition handbook for student teams. There will be awards for 1st, 2nd, 3rd, Special, and Best of Show. The registration deadline is May 6, 2005.

Other Student Showcase Events

The Student Showcase is also providing space for interested schools to bring students to participate in "One

Day Demonstrations" in the Exhibit area.

There are more than 60 areas in the Student Showcase for students in San Diego County Schools to exhibit a variety of projects such as art, photography, drafting, and electronic media. Last year 4800 student entered 6400 projects in this Student Exhibit. Each student that enters a project will receive a free pass to the fair. There is a place for everyone!! Join the FUN.

The Fair runs from June 10 to July 5, 2005, and this year's San Diego County Fair theme is "Summer Cinema." Additional information is available on the fair web site starting the first week in April 2005. For more information on the Student Showcase, contact Neil Bruington at nbruington@cox.net.

See you at the San Diego County Fair

SDSA to Present Awards at the Greater San Diego Science and Engineering Fair

The San Diego Science Alliance will be giving Junior and Senior division awards at the 51st Annual Greater San Diego Science and Engineering Fair (www.gsdsef.org).

This is the seventh year that SDSA will present awards. The judging will be conducted on Wednesday, March 16, 2005, and the top exhibitor from the Junior and Senior divisions will each receive a \$100 award. Tom Gaffney, Air

Products and Chemicals, Inc., will be taking over organization of the judging from Todd Talashek of CP Kelko. SDSA thanks Todd for his time and excellence in coordinating the judging for many years. Persons interested in judging future Fairs can contact Tom Gaffney at 760-603-2272.



Mark your calendars and take part in SDSA's 10th Anniversary Celebrations

- ◆ 2005 Golf Classic, Tuesday, June 21, Maderas Golf Club, Poway
- ◆ Decade of Discovery Anniversary Dinner, Thursday, October 27, Reuben H. Fleet Space and Science Center in Balboa Park

Check the SDSA web site (www.sdsa.org) for additional information.