SDSA
San Diego Science Alliance
Newsletter

On the web at. . .
www.sdsa.org

May 2006 The San Diego Science Alliance is a 501(C)3 non-profit organization.

Botball-Robotics in San Diego

According to a young female 8th grade Botball participant, "Botball is cool!! Robots are awesome!! I want to become an engineer now!!" As wonderful as this seems, this statement is more deeply reflected in the manner with which this student works harder in class, has increased her science grade from a D to a B, and has generally improved her outlook on school. Botball has changed the way she looks towards the future and will continue to do so for many more students to come. How do we really know? I am a teacher—this young lady's teacher. I've seen it happen right before my eyes in students from all across the county and am seeing it happen once again in the bright eyes of a future engineer.

In 2000 Botball-Robotics first appeared on the scene in a handful of schools and organizations across San Diego. The **San Diego Science Alliance** (SDSA) was instrumental in creating a presence for educational robotics programs in San Diego and, in 2001, SDSA formally started to match schools and donors to support Botball Teams. This decision was made in part because of the student-centered nature of Botball, which expects that students design, build, and program their own robots. In that first year, six teams represented San Diego, and the numbers have grown ever since. This year, the Southern California Regional Tournament had 34 teams registered from more than 30 schools, with 23 of those teams coming directly from the San Diego area alone!

Paramount to the success and interest in educational robotics has been the very generous donations provided on behalf of companies such

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Patricia Winter Retires and New Executive Director Appointed

This month, for the first time in San Diego Science Alliance's history, a change in executive leadership took place. With the retirement of Patricia Winter, founding SDSA Executive Director, the board of directors took the opportunity to reflect on just how far SDSA has come in the last ten years. Under Patricia Winter's leadership, SDSA has grown to include more than 250 science and technology-related businesses, scientific professional societies, research institutes, museums, and other informal education organizations. All these resources are included in the SDSA Resource Catalog, which is distributed to more than 2,000 local teachers each year. SDSA's "Science Alert" e-mail list includes more than 2,500 registered teachers, and the SDSA web site (**www.sdsa.org**) contains timely and pertinent information tailored to meet the needs of today's science educators. SDSA's annual High Tech Fair event in March of this year introduced local companies to hundreds of San Diego junior high and high school students interested in mathematics, science, and technology.

Pat Winter, along with the board of directors and other volunteers, has, with passion and tenacity, improved science education in San Diego County. Pat's personal dedication to developing effective and creative programs for youth resulted in her starting numerous programs. One such program is the nationally recognized Better Education for

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In this issue. . .

The San Diego Science Alliance, the non-profit consortium of leaders from business, K–12 education, higher education, and scientific institutions in San Diego County, is committed to enhancing science literacy in K–12 education, by networking among organizations in the consortium, connecting needed resources with K–12 eductors, and initiating, conducting, and supporting K–12 science education programs for San Diego County students and teachers.

SDSA Letter From Our President

This past year was a very special year for the San Diego Science Alliance (SDSA). SDSA celebrated its 10-year anniversary with a charity golf tournament in June at the Maderas Golf Club and a Decade of Discovery 10th Anniversary Celebration at the Reuben H. Fleet Science Center in Balboa Park. Both events were well-attended and proved to be excellent venues to showcase the accomplishments of SDSA and spread the word about future opportunities to enhance science education for the youth of San Diego County.

While 2005 was a year of celebration, it also brought the news that one of our original founders, and the driving force behind the success of SDSA these past 10 years, announced her retirement. Patricia Winter has been the heart and soul of SDSA since its inception and, for those of us lucky enough to have worked with her on this mission, we will certainly miss her energy and dedication as our Executive Director and inspirational leader. SDSA is planning an opportunity to say farewell to Pat, so keep your eyes open for more about this on our web page at **www.sdsa.org**.

In the 4th quarter of 2005, SDSA started a search for a new Executive Director. After an extensive process of interviews, research, and discussions, I am happy to announce, on behalf of the SDSA Board of Directors, that Mickie Beyer has assumed the duties of Executive Director for the San Diego Science Alliance. Mickie has been "on the job" for a couple of months now and is totally engaged in moving our efforts forward to improve science education in San Diego County and expose more students to real life science experiences. As Mickie gets around to meeting everyone associated with SDSA, I am sure you will also see that we are very fortunate to have Mickie on our team.

From celebration of the past to planning and building for the future, SDSA has been very active this past year. I encourage all of you to help us spread the word about the good things happening within SDSA, and the opportunities that exist for greater achievement. The future growth and strength of San Diego, California, and the nation rely on new discoveries that can only be realized with highly skilled and educated scientists and engineers. We are dedicated to contributing to this success and hope that each of you will join us in our journey. Please visit our web site at **www.sdsa.org** to explore opportunities to get involved or make a contribution to help educate and prepare our students to meet tomorrow's challenges.

Gary Devan
Vice President
Enterprise Information Technology
Mission Federal Credit Union

MSSELI: Plans for the Future

MSSELI (Middle School Science Education Leadership Initiative) was developed by **San Diego City Schools** and the **San Diego County Office of Education**. Under the leadership of co-directors, Kim Bess and Nancy Taylor, MSSELI fellows will complete their final activity for this school year, a three-day professional development experience called Lesson Study.

During lesson study, teams of fellows prepare and team-teach a common lesson. After teaching the lesson to one group of students, members of the team reteach the lesson to a second group of students. Following the second lesson, teachers review student work to see if conceptual understanding has occurred. If teachers find gaps in student understanding, they design follow-up experiences to ensure students can successfully advance to the next lessons. Feedback from the MSSELI fellows about this professional development experience has been extremely positive. Fellows have found that it has helped them improve their lesson design and teaching skills.

Through the generosity of the **San Diego Foundation** and its donors and the **General Atomics Sciences Education Foundation**, the MSSELI project will begin a third year of activities starting with a Summer Institute that will be held during the last week of July at the County Office of Education. Participants will focus on analyzing instructional materials, developing skills to support effective instruction, improving assessment practices, and developing leadership skills.

MSSELI fellows come from throughout San Diego county—from Mt. Empire to Valley Center, San Dieguito to Poway. The project is designed for science teachers in middle school grades 6–8 and is modeled after the National Academy of Curriculum Leadership, developed by Biological Sciences Curriculum Study (BSCS) with support from the National Science Foundation.

BE WiSE in 2005: A Whirlwind Year-End Review

This year, the SDSA's BE WiSE (Better Education for Women in Science and Engineering) program hosted more alumnae events than ever before. More than 80 girls from 49 different San Diego county schools participated in a total of 11 alumnae events. Four girls were superstars and attended four workshops each!

Alumnae topics ranged from learning about genetically modified foods with **Marty Kempin** at **UCSD** to an overview of neurobiology by graduate students at the **Salk Institute**. Careers in veterinarian medicine were explored with **Nikos Gurfield** at the **San Diego County Animal Disease Diagnostic Laboratory**, while **Marnel Gibson** from the **City of San Diego** talked about a future in civil engineering. Alumnae toured the ***Tokamak*** at **General Atomics** to learn about fusion and hiked in Mission Trails Regional Park while finding out more about endangered species with **Allison Anderson** from the **U.S. Fish and Wildlife Service**.

The adventures did not end there. **Paul Zorner** opened the doors of **Diversa** to share information on biotechnology with BE WiSE girls, and **Jose Restrepo** led groups in building wooden structures to put on the big shake table at **UCSD** while exploring earthquake engineering. **Jacques Lord** taught about geology and environmental engineering, and **Peggy Wallace** of **Making Conversation** worked with the girls on leadership skills.

Recruitment of new girls into the BE WiSE program for Spring 2006 is well underway. This year we accepted 120

seventh and eighth grade girls into the program. The theme for 2006 is **Conservation of Local Plants and Animals**. Three overnights are planned: April 21 at the CRES (Conservation and Research for Endangered Species) Center at the **San Diego Wild Animal Park**, April 28 at the **San Diego Natural History Museum**, and May 12 at the Water Conservation Garden at **Cuyamaca College**.

Wow what a year! If you love what you do in science, we encourage you to become a volunteer and share your enthusiasm with the BE WiSE girls. Contact Patricia Winter for more information via e-mail at pat.winter@gat.com or by phone, 858-454-7622.

52nd Annual Greater San Diego Science and Engineering Fair

On March 29 the San Diego Science Alliance awarded Best of Exhibit prizes to two students participating in the 52nd Annual Greater San Diego Science and Engineering Fair. The winner in the junior division was Heather Barnes, an 8th grade student at Rhoades School, for her project "Effects of Arrhenius Accelerated Aging on O-Ring Integrity." The winner in the senior division was Rui Jin, a 9th grade student at Scripps Ranch High School, for his project "Smart Blinds." These students' projects were selected from more than 1300 exhibits and the students received a Best of Exhibit Certificate and a $100 cash prize.

The judges (**Ms. Heather Bowen**, Air Products and Chemicals; **Dr. Thomas Gaffney**, Air Products and Chemicals; **Ms. Rose Garner**, General Atomics; **Dr. Chris Smith**, UCSD Physics; **Ms. Hilde Van Den Bergh**, Miramar College Physics Department; and **Dr. Richard Warburg**, Foley and Lardner LLP;) and the San Diego Science Alliance congratulate all of the students and advisors who participated, and the two award winners for their outstanding exhibits.

Walk the Talk: Spotlight on a BE WiSE Alumnae Event

Being brilliant in science is not always enough to be a successful scientist. People skills matter. Knowing yourself is important. Being able to communicate effectively with the people around you can make a big difference, particularly in the college or scholarship interview. Making a great first impression is critical. And networking to assemble a team of advocates for your future is always a key to success. On February 4, 2006, Peggy Wallace of **Making Conversation** provided a three-hour seminar to eleven BE WiSE girls covering these topics, and more!

"I loved this workshop! I felt that it was very helpful to me in understanding my personality and showing me how to connect to people," an eighth grade participant shared.

Participants learned how body language affects impressions, and to walk with confidence; how to keep a conversation going with questions at the end of a statement; and how to present themselves to other people. One participant said, "I now understand the importance of confidence, and showing it."

Some of the commitments made by participants to enhance their communication skills included:

- ✔ "I will try to be more talkative with those who need it and more understanding of those different from me. Instead of focusing so much on what I need and I want out of the conversations, I will focus on what the (other) person wants more of the time."
- ✔ "The workshop gave me many tips for networking that I will use to benefit myself. I will consider modifying how I have conversations with people and to be less shy."
- ✔ "I will definitely use the information to help me with interviews and first impressions in the future."

"Peggy did a great job with the students. I also enjoyed the day, and was so glad she took the time to be with us," said Andrea Cook, BE WiSE Co-director. Erin Sweeney of Stantec volunteered at the event and added to the experience with real-life engineering examples.

Some of the teens that took the **Making Conversation** Confidence Quiz after the session showed considerably more confidence in themselves when compared to their Quiz results prior to the session. This event is one of many ways that SDSA's BE WiSE program is working to enhance the success of young women in science, technology, mathematics, and engineering.

Patricia Winter *(continued from page 1)*

Women in Science and Engineering (BE WiSE), which encourages young women to consider the science and engineering professions. Pat Winter has touched many lives and ignited new interest in science and mathematics for many youth in San Diego County. We are pleased she will be continuing to serve as a volunteer with SDSA and the BE WiSE program.

Leadership changes also present new opportunity. Mickie Beyer, SDSA's incoming Executive Director, has more than 20 years of experience managing nonprofit organizations. Mickie is off to a strong start, focusing on expanding the capacity and services of SDSA and setting an organizational course for the long term. While Pat left big shoes to fill, we are confident our new Executive Director can do just that and take SDSA to its next level of success in advancing K–12 science literacy. Please join us in welcoming Mickie Beyer to SDSA.

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2006 High Tech Fair

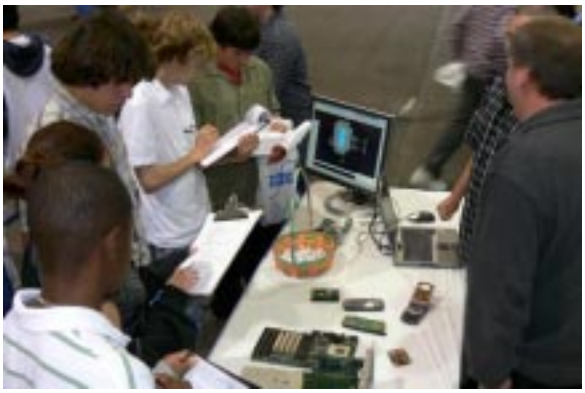
The Pat O'Brien Hall at the Del Mar Fairgrounds was the site for the San Diego Science Alliance Educational Technology Fair. More than 2,000 San Diego county high school and middle school students from 40 schools enjoyed 40 exhibits by local companies showcasing their technical products and scientific research. The High Tech Fair is in its ninth year and continues to be a favorite of students, educators, and exhibitors alike.

A student was overheard saying to her teacher, "I liked that it was a lot of advanced technology and that it was cool. There were demonstrations so that you could understand [things] better." Another student added, "I really liked how they told us stuff—the way they communicated and made us understand things. . ."

This year's High Tech Fair divided the exhibits into strands—BioTech, Telecommunications, Aerospace, Energy, Computer, and Electronics. Students enjoyed lively, interactive activities and also had the opportunity to ask exhibitors questions. Whether it was seeing and asking questions about pacemakers, defibrillators, stints, and other medical supplies at **Guidant's** booth, touching a live Gila monster and learning how its saliva is used to help fight diabetes at **Amylin Pharmaceuticals**' booth, or learning how to separate and purify proteins with gel electrophoresis and chromatography at the **Dow** exhibit, both students and exhibitors were engaged. **Solar Turbines** displayed a real-size model of their Saturn engine, and **AT&T** displayed a Tower Truck. Other exhibitors included **Air Products, Apple, BAE Systems, Biogen Idec, Cubic, Dow, Dynamic/Hardy Instruments, General Atomics , Johnson & Johnson, Kyocera, Lockheed, Neurocrine, Northrop Grumman**, and **Qualcomm**. Many local educational institutions and agencies were on hand to answer the students' questions about applying their science knowledge to future education and jobs.

San Diego Science Alliance board members and member companies brought the event together through close coordination by Co-Chairs **Cathy Akin**, Akin & Associates, and **Patricia Winter**, recently retired SDSA Executive Director. **Carol Danielson**, General Atomics, and **Carolyn Nielson**, Air Products, were critical in organizing the event. **Nancy Taylor**, San Diego County Office of Education, and **Kim Bess**, San Diego City Schools, coordinated school involvement and transportation, and compiled education support packets that were distributed to all participating teachers. **Elizabeth Basinet**, Barrett Resource Group, coordinated and managed media for the event.

The San Diego County Educational Technology Fair is made possible through partnerships between the San Diego Science Alliance, San Diego County Office of Education, San Diego City Schools, San Diego Science Educators Association, and the region's congressional representatives. Exhibitors, partners, and several organizations contributed to a transportation fund to help students attend the event. Highlights from this event can be found on the San Diego Science Alliance web site at **www.sdsa.org**.



Students Get Intense with Data

Data Intensive Science refers to a project of the Classroom of the Future Foundation to equip teachers with tools for conducting science experiments that involve collecting data. Students use laptop computers that come with special probes to measure all sorts of data—air temperature, heart rate, force, acceleration, pressure, pH of liquids, and so on.

Inspired by work at the Visualization Center at Scripps Institute of Oceanography and a challenge by Dr. Larry Smarr of CALIT2, the project engages students with realistic data collection, analysis, and presentation. The visualization of earthquake data at Scripps amazes people who might hear about earthquakes in the news but have a totally different reaction when they can see years of quakes from around the world shaking the tectonic plates in an animated image that runs only a few seconds. Dr. Smarr wondered what research would be like if students could collect data over the Internet for scientists to study widespread phenomenon. What if environmental data were being collected at every school in San Diego County during the Cedar fire in 2003?

Grants from **General Atomics Sciences Education Foundation** and **Amylin Pharmaceuticals** fund the Data Intensive Science project. Nancy Taylor, Science Coordinator, San Diego County Office of Education, coordinates the laptop computers and teacher training .

SDSA has a new Executive Director. Here is the contact information.

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Aircraft Carrier Museum

The San Diego Aircraft Carrier Museum/Midway has become one of San Diego's most successful new cultural ventures in many ways, including as a tremendously exciting technical and scientific learning "laboratory" for students in grades 4–8. Since the education program began aboard Midway in 2005, our exciting on-board science and mathematics labs and the *Live and Learn It* Overnight Program have served more than 20,000 school children and organized youth groups.

Midway's education programs are already proving their value to children, teachers, and parents. We believe that, over time, these programs will also provide great value to local San Diego businesses and corporations. The Midway offers:

- ✔ **On-Board** classes for grades 4–8 in science and mathematics: two-hour introductions to practical applications of mathematics and science, plus a post-instruction ship tour;
- ✔ ***No Child Left Ashore*** **Study Trip and Transportation Fund** which subsidizes classes and transportation for schools in which half of the students are on the free-lunch program;
- ✔ **Student Audio Tour**, an educational content-based audio script for grades 6–12 for tours of the ship independent of our professional instructors;
- ✔ The **Live It and Learn It Overnight Program** for youth groups that includes education-based activities in addition to a great "sleep-away" adventure;
- ✔ The **Bravo Zulu Award** for high school seniors who demonstrate leadership qualities to pursue technical or mechanical career training;
- ✔ Participation in San Diego City School's **Catch A Rising Star** Program, which rewards schools for academic achievement with study-trips to Midway.

Our goal is to give *every* child in San Diego county access to our Museum's spectacular "laboratory." We also want to help students learn about our nation's needs for skilled workers and the many careers they can pursue that will benefit them and the rest of our community.

Since January 2005, we have welcomed more than 20,000 school children aboard the Midway for educational experiences. But we need to do more. Our goal is to increase the number of students benefiting from our unique curriculum by 50%—10,000 more school children in 2006 than last year.

To meet that goal we seek to raise $100,000 for our ***No Child Left Ashore*** Scholarship Program that subsidizes both admission and transportation to the Midway. For more information about these programs or to support these activities, please contact Sidney Simon, Director of Development, or Sara Hanscom, Director of Education at the Midway Museum, 910 North Harbor Drive, San Diego 92101, 619-544-9600; ssimon@midway.org, or shanscom@midway.org.

Botball *(continued from page 1)*

as **Lockheed Martin**, **Cubic Corporation**, and **General Atomics**. Monetary support has also been provided from **the Kiss Institute for Practical Robotics (KIPR)**, which is the parent organization for Botball. Without this support many teams would be hard-pressed to fund-raise the $2300 registration fee. Teachers have expressed immense gratitude to these companies because the students are able to spend less time fund-raising and more time engineering and programming.

Ever since its inception, Botball has always taken an active stance in addressing one of our nations largest concerns—the lack of students pursuing careers in mathematics, science, and engineering. This year, Botball was awarded a special grant from the National Science Foundation (NSF) to encourage young ladies from across the country to take an active path toward becoming a scientist or engineer. Teams had to be composed exclusively of 7th grade students with an emphasis on encouraging as many female students as possible. Of the 35 nationally funded teams, five were San Diego regional teams.

One of the most difficult challenges that exists for education lies in the eternal question, "How do we motivate students?" Botball motivates students like nothing I have ever seen before. It inspires students to want to learn more about science, technology, and mathematics in meaningful ways. Parents are thrilled to have their children stay after school and/or meet on weekends to work on such things, rather than play video games or simply "hang out." Botball encourages students to analyze problems and synthesize information, some of the essential skills that are needed in our workforce today. In essence, Botball is one of those rare programs that is meeting the demands of so many aspects of our society. Robots are awesome indeed . . . Botball is cool!

CRES and Education: A Growing Partnership

Conservation and Research for Endangered Species (CRES) is the scientific research arm of the Zoological Society of San Diego. The Arnold and Mabel Beckman Center for Conservation Research officially opened November 6, 2004, and is located adjacent to the San Diego Zoo's Wild Animal Park. The mission of CRES is to generate, share, and apply scientific knowledge vital to the conservation of animals, plants, and habitats. Conservation of biological diversity is the theme that unites the work of CRES, and scientific innovation is the means by which CRES achieves its success.

CRES scientists have made a commitment to local, San Diego-based education efforts. Since the opening of the Beckman Center, staff has provided countless tours for school children, youth groups, and community members. Summer intern positions have connected university students with the conservation efforts of CRES. A collaborative partnership with High Tech High recently gave local high school students the ability to work alongside staff from the CRES genetics division. During 2005, CRES hosted two San Diego Science Alliance BE WiSE science overnights that brought together conservation researchers and science students and allowed them to share their knowledge and enthusiasm.

On April 21, CRES again supported a BE WiSE overnight for 7th and 8th grade girls that featured science workshops on wildlife tracking, cell and molecular genetics, botanical conservation, and reproductive physiology.

The need to engage students and teachers in conservation science has become an even greater priority. To respond to this need, CRES announced that Maggie Reinbold has joined the team as the first CRES Conservation Education Specialist. Her role began with the development and implementation of a Conservation Biology Summer Institute for high school science teachers.

Additionally, Maggie began equipping a Conservation Education Learning Laboratory that will provide teachers and students access to a wide range of laboratory techniques and conservation science activities. The creation of classroom lessons available to instructors online, new content for guided tours, teacher professional development opportunities, and more will soon fill Maggie's schedule.

CRES is more committed to education, both locally and globally, than ever before, and will continue to share its work with students, teachers, and the entire San Diego community. To learn more about CRES research and education endeavors, visit the CRES web site at **www.conservationandscience.org**.

SDSA 2006 Partnership Awards

In 1996 the San Diego Science Alliance first recognized teachers, administrators, businesses, and volunteers for exemplary partnering with the aim of enhancing and improving science education. This year's award winners, the 10th year of the SDSA Partnership Awards, make it possible to continue this tradition of recognition. The San Diego region is fortunate to be able to showcase these individuals, organizations, and businesses with such a strong commitment to science, engineering, and technology education. Harcourt School Publishers generously sponsored the Community and Partnership Award Event at Hubbs SeaWorld Research Institute on May 18.

Volunteer — **Diana Anderson, General Atomics Aeronautical Systems, Inc**; **Albert Castillo, Indyme Solutions, Inc.**; and **Jim Montgomery, Lockheed Martin**

Partner — **Science and Technology Working Group**, **The San Diego Foundation**

Teacher — **Kellie Marcarelli, Pershing Middle School**

Administrator — **Kim Bess, San Diego City Schools**; and **Nancy Taylor, San Diego County Office of Education**

Business — **Johnson & Johnson Pharmaceutical Research and Development**; **Northrop Grumman KIDS**; and **San Diego EcoCenter for Alternative Fuel**

Special Recognition — **Community Lab, Biogen Idec**

PISCES, Unexpected Results!

Partnerships Involving the Scientific Community in Elementary Schools (PISCES) has resulted in improved student achievement, higher levels of classroom science teaching time, greater enthusiasm for science among students and families, and divergent career paths for the university scientists involved. Over the course of the seven years of the program, 45 university graduate students in science—attending San Diego State University, the University of California, San Diego, and Cal State San Marcos—have served as the PISCES Science Corps in elementary classrooms throughout San Diego county. As fate would have it, these university students complete their degrees and move into career pathways and advanced degree work. Each and everyone of the PISCES Science Corps report that their involvement in PISCES has given them a boost in commitment to their plans for being a scientist! No wonder the K–5 PISCES students are performing well in science—they have great role models. No wonder teachers continue to utilize the resources of PISCES—they have been inspired by some of the best and the brightest young scientists.

Science in San Diego has changed forever as a result of PISCES. Former PISCES Science Corps are taking the lead in local science institutions, leveraging their expertise, talents, and commitment to improving the world through science. For instance Adrienne Marriott, former PISCES Program Manager, now leads environmental education efforts in the region as the California Regional Environmental Education Coordinator (SanDCREEC) at the **San Diego County Office of Education** while at the **Reuben H. Fleet Science Center**, former Science Corps, Debbie DeRoma, is now the Education Manager. Maggie Reinbold recently accepted the position of Education Coordinator at the **Center for Research in Endangered Species (CRES)** at the San Diego Wild Animal Park and is organizing the effort to recruit high school science teachers to attend the summer Conservation Biology Institute there. The **San Diego Natural History Museum** has benefited from Krista Mendelsohn's work as Ms. Frizzle in education programs.

Middle school and high school students in several local school districts are also fortunate to now have science teachers who served as PISCES Science Corps. These Science Corps members actually changed careers from bench science to teaching as a result of their involvement in PISCES; Julianne Browne, Shawna Peyton-Edwards, Christine Prowd, and Ale Blakeslee are each excited about the rewards of full-time science teaching.

Many of the university graduates of the PISCES Project are pursuing their interests in fields of science including doctoral programs at UC Berkeley, Johns Hopkins, dental school, and a Post Doc at UC Santa Cruz in Earth Science. Tina Trentijak works with a local geological consulting firm while Glen Kinoshita runs the scientific instrumentation at the South Pole NOAA research station. And there are many more stories to tell.

The **P**artnerships **I**nvolving the **S**cientific **C**ommunity in **E**lementary **S**chools project congratulates each and every one of these energetic scientists for reaching their first career objectives. We know (because they tell us frequently) that they continue to appreciate the experience they had as part of the project and share their enthusiasm for outreach to K–12 education in their work everyday. We look forward to the next generation of stories to tell as a result of the many unexpected results of the PISCES project in San Diego county. For more information on the PISCES Project, go to **www.sdsa.org/pisces**.

Expanding Your Horizons Conference

On May 6, 2006, girls in grades 6–10 attended the Expanding Your Horizons Conference at UCSD and experienced a day of science workshops.