



# INSIDER



December 2016

## ***PRESIDENT'S MESSAGE...***



Mary Fitz

I have a wonderful Thanksgiving, Christmas, and Hanukkah story to share with you in this December *Insider* - and it's a TRUE story. How serendipitous it should come to be told for the holiday season.

For several months I have been toying with the idea of writing to one of our former Scholars, Peter Ho. He is exceptional; every year since his graduation he has been sending us \$50.00 checks. This past year it was a \$1,000.00 check. This annual donation made me believe there was more to the story, so I wrote Peter a note and asked him to tell me about himself and about his experience as an ARCS Scholar. Here is his gracious reply:

*"Cancer immunotherapy has radically changed our definition of success in the treatment of such malignancies. By recruiting patients' immune systems to attack cancer cells, we can now achieve survival rates that last years rather than months. Cancer immunotherapy has been so successful that it was named Breakthrough of the Year in 2013 by Science magazine.*

*For the past several years, I have had the opportunity to work with world-renowned Steven Rosenberg, Chief of the Surgery Branch at the National Cancer Institute, trying to commercialize a T-cell therapy to treat metastatic melanoma. Tumors completely melt away in about one in four patients who receive this revolutionary cell therapy.*

*When I finished my Ph.D. over 15 years ago, I never would have imagined I would be doing what I do now. Back then, I wondered what I had done to deserve to be an ARCS scholar. I now realize that the ARCS award was not about past achievements but rather an investment in the future. It was about giving young scientists the ability to wholly focus on their research and lay down a solid foundation to eventually succeed and contribute to the field.*

*In 1975, my family emigrated to the U.S. from Vietnam; I was 4.5 years old and my mother was 5-months pregnant. Our first home was the barracks at Camp Pendleton. Eventually, with the help of others, our family was able to prosper and live the American dream. My mother passed*

*Continued on page 2*

## **ARCS ANNUAL MEETING**

**Tuesday, January 24, 2017 • 9:30 am - 1:30 pm**

**La Jolla Country Club, 7301 High Ave, La Jolla, CA 92037**



## ***PRESIDENT'S MESSAGE...*** Continued from Page 1

*the Bar exam and opened a family office to practice immigration law. My younger sister grew up, earned an M.B.A., and became an investment banker. I went on to earn a Ph.D. and later an M.B.A.*

*All along the way, there were so many that 'invested' in me. I will always be indebted to the church that sponsored our family, my kindergarten teacher who taught me English, and the ARCS Foundation for supporting my academic pursuits. In particular, the Dickinson and Fleet families have a very special place in my heart.*

*I take great pride now in being able to be a donor to the ARCS Foundation. It is the least I can do to repay those who helped me. Hopefully, I can contribute to the success of future scientists to come."*

Doesn't it make you proud to be a member of this organization that helps young people like Peter Ho fulfill their potential? Doesn't this story exemplify the power and joy of gift-giving? Who is truly blessed...the giver or the receiver? As I choke back the emotions of pride and affirmation for what we do, it is my hope the candles that light the path and illuminate our mission will be well tended and kept lit by those faithful to our vision. It is stories such as this that inspire us to continue our work. As Peter so succinctly put it, "It's about *investment in the future*." Each of us who brings her time, talents, and fortune to this Foundation keeps the ARCS Mission vibrant and vigorous.

Our Nominations Committee will soon be gearing up for the 2017-2018 slate of officers, with Joy Frye as chair. The adventure of being an ARCS volunteer is filled with successes, failings, sometimes boredom — but somehow heart-warming surprises such as Peter's story make it all worthwhile.

Join in the fun of doing something special and "*Investing in the Future*."

Wishing you all a Happy, Healthy, and Meaningful Holiday Season!

Mary Fitz, *President, San Diego Chapter*  
ARCS Foundation, Inc.

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## ***ARCS Foundation Awards \$435,228.00 to San Diego Scholars***

### **USD AWARD CHECK PRESENTATION**

On October 26, 2016, a beautiful autumn afternoon at the University of San Diego, several ARCS board members and four of the six current ARCS Scholars gathered in the stately office of USD President James. T. Harris for the annual fall check presentation. Following a gracious welcome by President Harris, everyone was invited to introduce themselves so that we could all become better acquainted. Afterwards, during a brief ceremony, checks were presented to President Harris on behalf of the chosen Scholars in the University of San Diego's Hahn School of Nursing and Health Science and the Shiley-Marcos School of Engineering. The Scholars expressed their appreciation and left with our good wishes for a very successful academic semester.

*Continued on page 3*



## ***ARCS Foundation Awards...*** Continued from Page 2



*Pictured, from left to right, are: James T. Harris, III, D.Ed, President, University of San Diego; Mary Fitz, President, ARCS, San Diego Chapter; Patricia Roth, PhD, Professor and Director, Hahn School of Nursing and Health Sciences; Deanna Johnston, Scholar, Hahn School of Nursing and Health Sciences; Monique Lineback, Scholar, Hahn School of Nursing and Health Sciences; Anthony Shao, Scholar, Shiley-Marcos School of Engineering; Joylene Aguirre, Scholar, Shiley-Marcos School of Engineering; Helga Moore, Vice President, Administration, ARCS, San Diego Chapter; Linda Johnson, USD Liaison, ARCS, San Diego Chapter; Priscilla Moxley, Vice President, University Relations, ARCS, San Diego Chapter; and Chell A. Roberts, PhD, Dean, Shiley-Marcos School of Engineering.*

### **UCSD AWARD CHECK PRESENTATION**

November 4th was a bright day all around: bright Scholars, a Chancellor merry and bright, with encouraging comments for the UCSD Scholars and praise for ARCS. The day gave bright, beautiful weather for the gathering at the Faculty Club at UCSD. Mary Fitz presented the oversized check for over a quarter of a million dollars for the 35 new and returning students to Chancellor Pradeep Khosla. Several faculty mentors also attended the reception this year and seemed delighted to be included and to learn more about ARCS. ARCS Co-President-elect Helga Moore, University Relations Vice President Priscilla Moxley, and UCSD liaison Suzanne Dixon also attended. The year seems off to a good start.

The San Diego chapter of the ARCS Foundation, Inc. has awarded a total of \$255,000 to 34 graduate students at the University of California San Diego. The annual fellowship awards recognize exceptional students who are pursuing research in the natural sciences, engineering and medicine.

"Graduate students bring fresh perspectives and challenge expectations to tackle some of our most pressing challenges, from energy to health care," said Chancellor Pradeep K. Khosla. "We are grateful to the ARCS Foundation for continued support of UC San Diego students."





## ARCS Foundation Awards... Continued from Page 3



*Representatives of the ARCS Foundation San Diego chapter joined Chancellor Khosla and fellowship recipients for a special check presentation ceremony. Photo by Erika Johnson/University Communications.*

Olga Botvinnik, a fifth year doctoral student studying bioinformatics, is among the 2016-17 ARCS Scholars. Botvinnik's research lies at the intersection of biology and computer science, harnessing the power of big data and analysis to study biological systems.

"We use computational tools to solve biological questions, from looking at differences in the brains of people with autism, to studying how motor neurons develop," she said. "It's an exciting field to be in right now."

With the fellowship, Botvinnik will be able to travel to conferences to present her work and network with other scientists in the field—an important step as she prepares to complete her dissertation.

In addition to the financial award, recognition as an ARCS Scholar gives students access to a network of talented researchers in academia and industry.

"I feel very proud and honored to be recognized as an ARCS Scholar," said Danielle Hagstrom, a graduate student in biology who has received the fellowship for the second year in a row.

Hagstrom's research focuses on understanding how common pesticides damage the developing brain. She studies freshwater planaria—a kind of flatworm—that have the ability to regrow a new head and brain. The process involves many of the same key mechanisms as human brain development, explained Hagstrom, allowing researchers to gain insights into how these chemicals affect important developmental events.

*Continued on page 5*



## **ARCS Foundation Awards...** Continued from Page 4

Support from the ARCS Foundation has enabled Hagstrom to focus on her research and take advantage of opportunities to enhance her education, including participating in national scientific conferences.

"I am so grateful for the networking opportunities that being a part of this great organization has provided," she said.

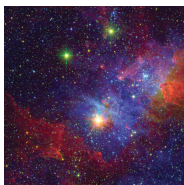
### **SDSU AWARD CHECK PRESENTATION**

On November 1, SDSU hosted President, Mary Fitz; Co-President-elect, Helga Moore; Vice President for University Relations, and University Liaison, Sally Thomas. SDSU President Elliot Hirshman; Dean of the College of Sciences, Stanley Maloy; Director of Development, Stacy Carota; and ten of the fourteen current ARCS scholars attended this year's check presentation and ceremony to mark the ARCS Foundation's 29th year of giving to the university. Scholars gave brief descriptions of the impressive research they are conducting in cutting-edge science.

Since 1988, the ARCS San Diego chapter has provided scholarships for SDSU students in the fields of natural sciences, bio-medicine and engineering. President Hirshman announced that over the past 29 years, ARCS has supported more than 88 SDSU students in the STEM fields with awards totaling more than \$2.8 million.







## TSRI News

It has been quite a challenging few years for The Scripps Research Institute (TSRI). As many of you are aware, National Institutes of Health (NIH) funding has steadily decreased, and philanthropy has not been able to make up the difference. Despite running a deficit, two recent developments give us reason to be very optimistic about the future of TSRI. First, a new executive team is now in place led by prominent chemist Peter Schulz, who was also the founder of the California Institute for Biological Research (Calibr). In October, these two nonprofit biomedical research institutions combined, providing the ability to move the basic scientific research done at TSRI into Calibr, whose expertise and infrastructure can accelerate drug development from discovery through early clinical trials.

“Ultimately, I believe this ‘bench-to-bedside’ model has the potential to become self-sustaining, with the value we create being reinvested back into research, education and additional clinical studies,” said Shultz, president of both organizations. “In two years, I think we’ll start to generate significant surpluses of cash that will allow us to grow—not only the resources we have to do science and drug discovery, but to build an endowment that’s probably going to be, over the next five to ten years, really significant.”

The second exciting development is that the NIH recently expanded a five-year funding award to TSRI from \$120 million to \$207 million as part of its national Precision Medicine Initiative Cohort Program. This program, now known as the “All of Us” research program, seeks to engage one million or more U.S. participants in a health and medical research effort aimed at improving the ability to prevent and treat disease based on individual differences in lifestyle, environment and genetics. This new award will focus on overseeing 350,000 direct volunteers who will join the research study directly rather than through a health care provider organization. In addition, the award funds the creation of a Participant Technologies Center focusing on mobile applications and parallel technology platforms to enroll, collect data and communicate with participants. Dr. Eric Topol, the 2013 ARCS Scientist of the Year, will lead this project.

### SCHOLARS

Thanks to increased ARCS funding, TSRI has added a new Scholar this year, bringing their total to seven. In addition to the five returning scholars we welcome new scholars Chris Cottrell and Michael Ledbetter. Chris received his B.S. at the U.S. Naval Academy and a M.S. at Johns Hopkins. He is currently working on his PhD. in biology. Michael received his B.S. at the University of Texas Austin, and he is working on his PhD. in biochemistry. ARCS Scholars certainly have impressive academic credentials, but what stands out even



*(Note: The photo is of four current ARCS TSRI scholars attending a dinner at ARCS member Barbara Doren's home. Left to right: Daisy Johnson, George Campbell, Danielle Grotjahn, Rigo Cintron-Colon.)*



## ***TSRI News...*** Continued from Page 6

more is what great individuals they are. Their outside interests run from rock climbing to stand-up comedy and members are encouraged to get involved in the "Getting to Know You" program. The majority of our Scholars are eager to participate. Take them out for a cup of coffee, invite them to dinner or accompany them on a hike--if you're in shape! They will enrich your world.

## ***Newest ARCS Member***



Please join us in welcoming **Barbara Starkey**, our newest ARCS member. Barbara is a world traveler, and she enjoys cooking and attending the theater. For 20 years she ran a cooking class (14 to 18 classes a year) called Cooking in America at the International Center at the University of California, San Diego, for the spouses of visiting physicians, postdocs and researchers. She graduated with a BA from California State University at Los Angeles and taught school. Barbara is a member of the La Jolla Village Garden Club, the La Jolla Garden Club, and the Garden Guide of San Diego County, and is head of her AAUW branch gourmet interest group. Some of her previous activities include Board of Directors and National Delegate of Girl Scouts San Diego-Imperial Council, president of her local chapter of AAUW, and president of both Oceanids (the faculty wives organization at UCSD) and Friends of International Center at UCSD. Her spouse is Robert Starkey, a retired Analytical Studies Officer in the Planning Office at UCSD. Welcome, Barbara!

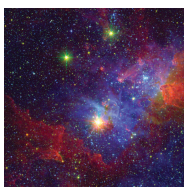
## ***RECAP: ARCS October 13 General Meeting***

On October 13, 2016, the San Diego Chapter of ARCS Foundation was held at La Jolla Country Club. Our new Scholars were invited to attend and were presented to the membership by University Relations Vice President Priscilla Moxley. President Mary Fitz gave an update about her recent attendance at the National Board Meeting in Dallas, Texas. Joy Kirsch, Vice President Fund Development, reported we have raised \$435,000 to support 61 Scholars for the 2016-17 year. Rachel Friedman, Director of Member Giving, gave an update as to the participation in the ARCS membership donation drive. At this time we have 71% participation, compared to last year's 79%.

*Continued on page 8*



***Scholars Anthony Shao and Joylene Aguirre (mechanical engineering students), and Priscilla Moxley.***



## ***ARCS October 13 General Meeting...***Continued from Page 7

She stressed the importance of full membership participation, an important factor when we go to request donations from other entities.

ARCS Scholar Alum Lisa Alvarez from the USD Hahn School of Nursing spoke about her research into heart failure and atrial fibrillation, factors which increase the risk of stroke. Lisa thanked ARCS for our financial assistance, noting that it gave her an opportunity to “focus on research and innovation, which is where it’s at!” Lisa has been invited to speak at the American Academy of Cardiology about her research and findings in this field.

We then heard a fascinating presentation by Dr. Ajit Varki, a physician-scientist who is Distinguished Professor of Medicine and Cellular and Molecular Medicine. Dr. Varki, who holds positions at UCSD and the Salk Institute, spoke on “The Implications of Anthropogeny for Medicine and Evolution.” Anthropogeny is the study of humans and how we evolved to be who we are today. We learned humans are 99% genetically related to the Great Apes, and that we are closer to apes than rats are to mice. Dr. Varki pointed out that for the first time ever, life expectancy may decrease in our species because of the increase of obesity and diabetes in our society.

The next General Meeting will be held January 24, 2017, at La Jolla Country Club.

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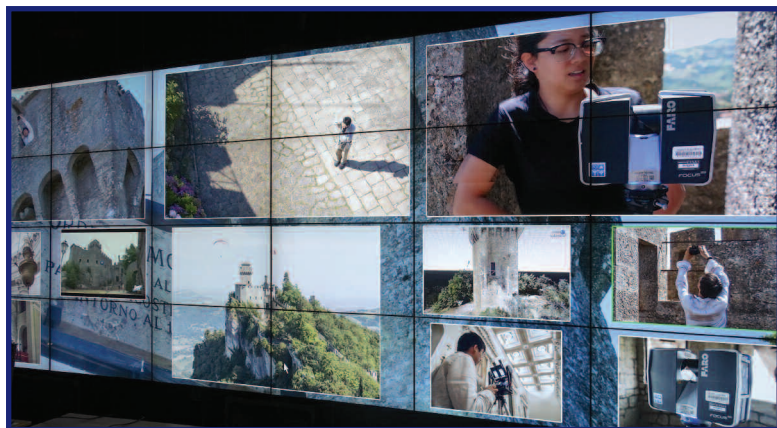
## ***ARCS Fall Field Trip – UCSD Jacobs School of Engineering***

When is the last time you traveled to Egypt, South America, or to a coral atoll? Have you ever seen robots that creep, crawl, jump, or inflate themselves? Are you familiar with the incredible sculptures on and about the UCSD campus? Do you dream of joining an archeological expedition using drones to uncover ancient secrets?

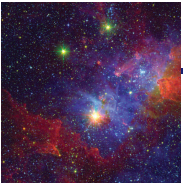
For two-dozen ARCS members and their guests, that day came on September 16, 2016, when we were enchanted, enthralled and exhilarated at our fall field trip to the UCSD Jacobs School of Engineering.

A huge thank you to Wil Burfitt, Executive Director of Development, and his delightful staff, who pulled

out all the stops to make our morning very special. We were given free parking spaces and escorted to a bountiful buffet breakfast. Dr. Pamela Cosman, Associate Dean of the Jacobs School, welcomed us and introduced us to the unique history and the many accomplishments of the department. She introduced Drs. Falko Kuester, Dominique Rissolo and Mike Tolley who shared the work of their graduate students, several of whom are ARCS awards recipients.







## ***ARCS Fall Field Trip...***Continued from Page 8

We split into two groups to better see and hear the presentations. We participated in the WAVE lab (Wide Angle Virtual Environment), donning special 3D glasses, which made us feel like we were actually at the various sites. At least eight students shared their particular application of the 3D capabilities, taking us literally around the world.



Then we traded places with the second group, who had experienced the “bioinspired robotics” first. Some of these robots are printed onto pieces of plastic and when activated, they fold themselves into their final shapes and become motorized and animated.

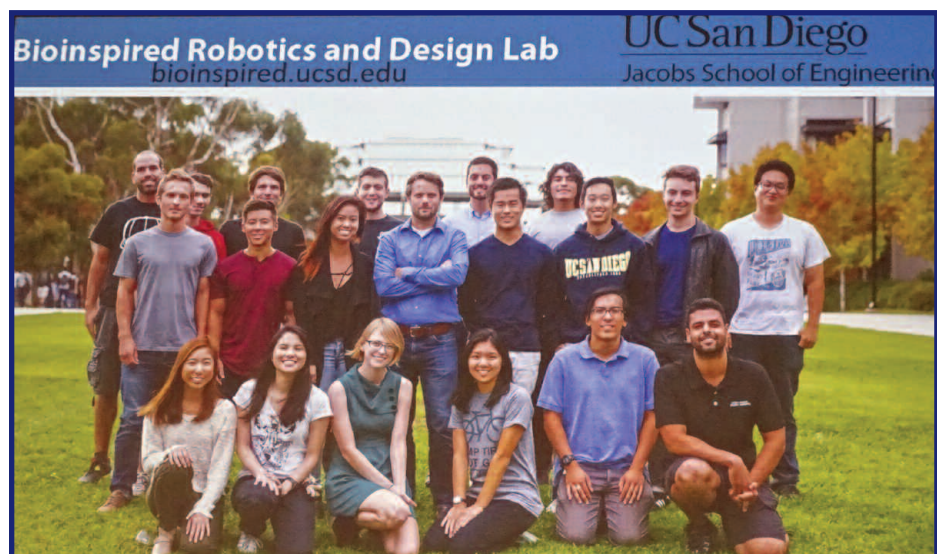
As we walked between the two venues, we had a chance to glimpse several of the remarkable pieces in the Stuart Collection, including a house perched on the pinnacle of the Structural Engineering building (“Fallen Star”). We also saw a gigantic teddy bear made of balanced boulders, and a 560-foot, mosaic winding path in the form of a serpent. You can see these and the other 15 pieces in the collection on a self-guided tour available as a free download for your phone.



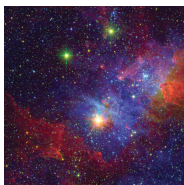


## ARCS Fall Field Trip...Continued from Page 9

When we reconvened in the conference center, we debriefed around lunch, sharing with many of the students and professors who were more than willing to answer our questions and hear our words of gratitude for a morning well spent. We all agreed that we will come back with friends to show them how the Jacobs School is preparing scientists of the future.







## ***ARCS Five-Star Scholar Picnic***

Many thanks to our University Relations Committee and Candace Kohl for another wonderful picnic at Candace's spectacular home. The weather, ocean view, home and garden setting, our gracious hostess and the hard work and wonderful food provided by the committee made October 16 a perfect day. Many thanks to Cindy Goodman for being in charge, with the help of Linda Johnson, Sally Thomas, Helga Moore, Alice Brown, Barbara Starkey, our new ARCS member, Tamia Strahan, Priscilla Moxley and Ruth Covell. Karen Bowden could not attend but contributed food. We also appreciate the paper goods donated by Suzanne Dixon-Hennessey. Josh Isaacs, ARCS assistant, joined us and was able to meet members and Scholars and learn more as to what ARCS is all about.

Taco People outdid themselves again in serving approximately 60 attendees. Twenty-nine Scholars and approximately 15 guests attended. TSRI had perfect attendance with all seven Scholars present, including two new Scholars who were just appointed days earlier. Approximately ten Scholars came from UCSD, seven from SDSU and a few from USD. It was a great way to start out the year for our Scholars!

**Priscilla Moxley**, *V.P. University Relations*

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## ***ARCS Holiday Party***

The ARCS Annual Holiday Party on December 12, 2016 was a huge success! Tom and Berit Durler opened their spectacular home, for a second time, for the event. The Durlers spent 11/2 days decorating their lovely home, including tying more than 200 red ribbons on every branch of their Christmas tree, and had their extensive collection of art and Christmas santas and angels on display. The evening was festive with over 65 people attending, dressed in bright holiday wear. Wood fires blazed in two fireplaces and numerous candles created a warm and magical warm atmosphere for all to enjoy.

Tom, who is a building contractor and a finish wood worker, built the home and made the furniture to go in it. It is patterned after Frank Lloyd Wright's Falling Waters House and no detail was spared. Tom opened his fabulous workshop for wood-working enthusiasts to view. The home is unique and those of you who missed the party really missed a special evening. Thank you, Berit, for offering your beautiful home to us!

The food was beautifully catered by Girard Gourmet; Francois' son, Jeff, oversaw the service, and a bartender was also included. The menu featured roast beef on mini buns, shrimp on cucumbers, a mashed potato bar, lobster bisque shooters, Thai chicken satay with peanut sauce, herbed baby lamb chops, roasted asparagus in prosciutto and a dessert bar. Many thanks to Laurie Roeder who was in charge of the hostesses and drinks, Sharon Arbelaez, who greeted guests, and Doris Ellsworth and Karen Bowden who helped select the menu.

**Joy Frye**, *Chairman, Holiday Party*





## Bright Stars



### BARBARA BRY

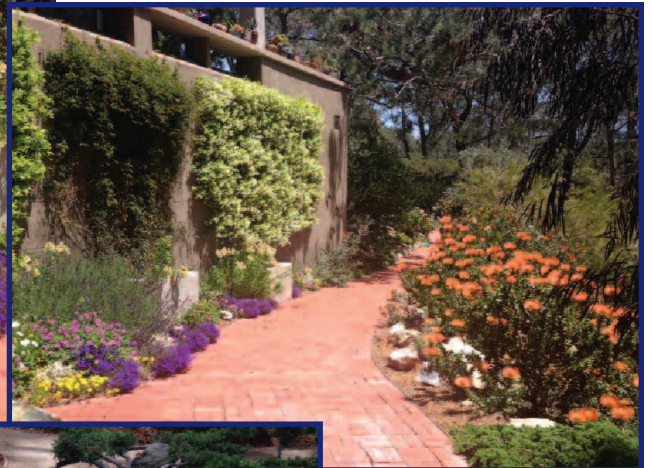


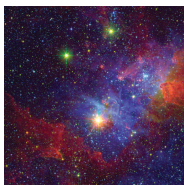
Congratulations to Barbara, on her election to the San Diego City Council! Barbara is the first high-tech entrepreneur to serve on the Council and is likely to bring exciting new expertise to City Hall and San Diego's innovative technology environment. She plans to hit the ground running and has said she will focus on a multitude of issues, including public safety, development, smart growth, small business and seniors. Barbara has not held public office before but has founded and led several start-ups and tech incubators, and has been involved in a variety of community issues since moving to La Jolla in 1981. Way to go, Barbara!



### CANDACE KOHL

In addition to living in a fabulous home, Candace has a lovely yard and garden. And, we're not the only ones who think so! In April, the Horticultural Society of San Diego included Candace's garden as one of nine in its garden tour. In December, Candace's garden will be featured in the San Diego Home and Garden Magazine. Here are some great views. Congratulations, Candace!





## ***Membership Committee Update***

The Membership Committee has terrific news: please welcome two dynamic new members: Ruth Covell and Barbara Starkey (read about Barbara in this issue). We are also recruiting several prospective members.

The Membership Committee asks each of you to continue making a serious effort to recruit new members – women who share our passion for supporting Scholars in science and technology. As you all know, our Scholars do amazing work and they are the future of our country. We all know women in the area who share the mission of ARCS. Think of your circle of friends and acquaintances who would enjoy ARCS activities and invite them to join us.

Our next general meeting is **Tuesday, January 24, 2017**. This is a perfect time to bring a guest to meet our members, hear an informative speaker, and meet some of our Scholars.

The Membership Committee is planning small, intimate, neighborhood meetings – coffees, teas, or cocktail hours– in various San Diego neighborhoods to introduce prospective members to ARCS. The first meeting was held last spring at President Mary Fitz's home. We encourage you to consider bringing a guest to a neighborhood gathering. Notices of upcoming meetings will be sent to you via email. If you are interested in hosting a neighborhood meeting, please contact Sharon Arbelaez, Vice President of Membership.

Should you need additional information regarding the prospective member process, please feel free to contact Bobbie Vandervoort or Ellen Moxham, Directors of New Members.

### ***LEGACY UPDATE:***

## ***Inheriting an IRA...Windfall or Tax Trap?***

*By Patti Fuller*

Did you know that when you designate a beneficiary for your IRA (other than a spouse), they will pay taxes at their own tax rate on the amount inherited? For example, on an IRA worth \$100,000, your heirs may lose as much as \$35,000 to the IRS. If your estate is large enough, they may lose additional amounts as high as 45% to estate taxes. That could be 70%-80% of the account!

Naming ARCS Foundation, San Diego Chapter, as a beneficiary of your IRA might be the solution. It will not affect required distribution during your lifetime, and allows you to put dollars that might otherwise be "taxed away" to good use. Talk to your tax advisor. You may actually be able to pass on more assets to your heirs by using your IRA to make a charitable gift.

If you would like to make a charitable gift of your retirement account, consider naming ARCS as a primary, secondary or contingent beneficiary. When you do, 100% of the unused balance becomes a charitable gift. You pay no tax on the donated amount and the asset is removed from your estate.

If you are married, consider naming ARCS as the second beneficiary, after your spouse.

Simply fill out the beneficiary designation form provided by the plan administrator of your 401(k), Keogh, pension plan, or traditional IRA, as follows:

**ARCS Foundation, Inc., San Diego Chapter**  
**Federal ID# 33-0164533 • Corporate No. 126772**

*If you would like to designate your planned gift to support a Scholar at a specific university in San Diego, contact Patty Fuller at (858) 336-8191 or [patty.fuller@roadrunner.com](mailto:patty.fuller@roadrunner.com) to ensure that your wishes are honored.*



## ***ARCS Foundation National***

MORE GOOD NEWS! The Governance Module has now been posted on PATS Learning Portal. This most recent addition to the Portal's library offers more than 75 resources on topics important to a Board member's governing responsibilities. The module includes the basics commonly associated with Governance – information on Bylaws, Standing Rules, Parliamentary Procedure, etc. but also has in-depth help on areas such as the legal responsibilities of Board members and the Board's appropriate oversight role in strategic planning, financial management of an organization, risk management, policy development, Board development and fundraising. We have also included a section listing all the current National ARCS Foundation Governing Documents and where they might be found.

The PATS Committee is excited to be able to offer you this fourth in a series of in-depth learning opportunities for you and your Chapter. We encourage you to share these materials with your Chapter leadership and members and to make use of them in designing your Board orientation.

We also urge you to review the many other resources available in the Development, Membership and Marketing/Communications pages. As always, please check the "What's New at PATS" section to see what individual resources might have been recently added. Feel free to share your feedback with us by clicking on the "Feedback/Comment" or "Suggest a Resource" buttons at the bottom of each page.

### ***Calendar of Events***

**BOARD MEETINGS:** Third Tuesday of the month at 11:30 at the UCSD Extension,  
6256 Greenwich Drive, La Jolla, CA 92037. NEXT MEETING: JANUARY 17, 2017

#### **SPECIAL EVENTS:**

**FIELD TRIP:** Friday, February 3, 2017; The Scripps Research Institute

**SCIENTIST OF THE YEAR DINNER:** April 28, 2017; Sheraton San Diego Hotel  
and Marina; 1380 Harbor Island Drive, San Diego, CA 92101

#### **GENERAL MEMBERSHIP MEETINGS:**

**ANNUAL MEETING:** January 24, 2017, 9:30 am - 1:30 pm; La Jolla Country Club,  
7301 High Ave, La Jolla, CA 92037