



I

INSIDER



October 2023

PRESIDENT'S MESSAGE...



Kathe Albrecht

Our ARCS Chapter is off to a great start to the year. With the cooler weather and shorter days of fall upon us, board members and other volunteers are busy planning exciting events for our members, Scholars, and the community. I know you are eager to open up the Fall issue of the *Insider* newsletter. As always, the issue is full of news and photos from recent activities, reports on events, and information on our newest members, Scholars, and Scholar Alumni.

Included in this issue is a brief review (and great photos!) of our lovely Just For Fun Summer Party at the home of **Carolyn Elledge-Baker**. Also highlighted is our education-packed field trip to the UCSD "Shake Table." This is an incredible feat of engineering helping monitor and understand impacts of earthquakes. Scientists, engineers, and developers from all over the world come to the Shake Table to conduct experiments to help keep the population as safe as possible from devastating earthquakes. Read about our visit on the following pages.

We always feature news of our current Scholars and Scholar Alums and this issue is no exception. Learn about research, conference involvement, and awards from ARCS Scholars **Josh Mesfin**, **Austin Carter**, and **Lileth Astete Vasquez**. They continue to learn through their research and are already contributing to their scientific fields. And read about our Scholar Alums as they forge paths in their respective fields. From new academic positions to involvement in innovative cancer initiatives to Top Doctor awards in dermatology, our Alums continue to excel and make an impact. We also highlight our newest ARCS chapter members. In this issue we profile **Dr. Martha G. Dennis**, **Jillian Gaskins**, and **Danielle James**. Welcome to the Chapter!

In closing, I remind you that the Fall General Meeting is coming up on October 24 at the La Jolla Country Club. Watch for that invitation and register now. Also, look for your invitation to our Fall Field Trip on November 2 to SIO's Sally Ride Vessel. And of course, we will close out the year with our Holiday Party set for Saturday, December 3, at the home of **Dan and Margaret Dudas**. As always, thank you all for your continued commitment to the chapter. I look forward to another fun and successful year and I will see you at the General Meeting. Enjoy the *Insider*!

Kathe Albrecht, President
ARCS Foundation, San Diego Chapter



Please Welcome Our New San Diego Chapter Members



Dr. Martha G. Dennis is Principal at Gordian Knot, an advisory firm to emerging technology businesses in San Diego. Formerly she was a Venture Partner with Windward Ventures, a firm that invested in early-stage Southern California technology companies. Previously, Martha was Co-founder and President and CEO of WaveWare Communications, Inc., which sold software for wireless handheld connectivity. Prior to that Martha co-founded Pacific Communications Sciences, Inc., a San Diego wireless communications equipment company that was acquired by Cirrus Logic. Earlier Martha led software development at Linkabit Corp. as Assistant Vice President. She served as Chairman of the Board of Netsapiens, Inc. which was acquired by Crexendo in June 2021. In addition, she served as Director of SpaceMicro which was acquired by Voyager Space Holdings in December 2021. She currently serves as a Director of MundoVal (NASDAQ: MUNDX).

In the not-for-profit sector Martha serves on the Dean's Council of Advisors of the UCSD Jacobs School of Engineering and former Chair. She also on the Advisory Board of CALIT2 and the Chairmen's Roundtable. She has been Chair or President of several boards and commissions including La Jolla Music Society, the Reuben H. Fleet Science Center, the Bishop's School, The Charter One Hundred, Athena, the City of San Diego Science & Technology Commission and the San Diego Telecommunications Industry association. She is also an Emerita Board Member of Harvey Mudd College, of the Dean's Advisory Council of the UCSD Rady School of Management and of inewsource. In addition, she has been a trustee of the Tech Coast Angels, the San Diego Museum of Art, the San Diego Regional Chamber of Commerce, the San Diego Foundation, the San Diego Regional Economic Development Corporation and the YMCA of San Diego County.

Martha holds a doctorate from Harvard University and a bachelor's degree from Smith College. She was the recipient of an Athena "Pinnacle Award" for Technology, a "Women Who Mean Business" award, recognition as an American Heart Association "Legendary Woman of the Heart", recognition as a "Woman of Dedication" from the Salvation Army, a "Cool Woman" award from the Girl Scouts and a Founder's Medal from the UCSD Rady School of Management. She is also a member of Sigma Xi, the San Diego Rotary Club 33, the Wednesday Club, and the International Women's Forum.

Martha is currently most passionate about entrepreneurial programs and music.



Please Welcome Our New San Diego Chapter Members

Continued from Page 2



Jillian Gaskins

Jillian Gaskins was raised in Charleston, South Carolina. As a Master of Business Administration graduate from Oxford University, Jillian has earned an emphasis in international negotiations from IÉSEG School of Management in France and an emphasis on global leadership from the Pantheon Institute of Italy.

Jillian has worked as an international government official in economic development. Her background in planning, designing, and implementing economic development strategies burgeoned her position as a key liaison between public and private sectors.

Jillian has also served as the Finance and Technology Program Manager for Electric Gas Industries Association (EGIA). She managed all active OPTIMUS partnerships from lenders to distributors for the nonprofit in the US and Canada. As the primary contact for the financing platform, she collaborated with business development, technology, sales, and strategic partners on all integration and marketing projects.

Jillian is a passionate speaker and continues to focus on leaving a positive impact on the planet. She is currently expanding her professional network in international business after moving to Carlsbad, California.

In her leisure time, Jillian enjoys team obstacle races, water sports, and regular book club discussions.



Danielle James

Danielle James is a native San Diegan and currently resides in San Pasqual Valley with her husband and two young children and her border collie named Panda. Danielle holds a Master's degree in Psychology and Animal Behavior and Conservation. As a Researcher at the San Diego Zoo Wildlife Alliance, she currently studies the maternal behavior of polar bears. Danielle is also the manager of her family's foundation. The Zuest Family Foundation is committed to global preservation of land, water and wildlife for current and future

generations by supporting research, conservation and education. Growing up raising sheep has instilled Danielle's love for animals and conserving the environment. Her mother taught her the art of spinning and weaving, which is a trade she hopes to pass on to her children. You can learn more about the wool making process at the Zuest Wool Shed at the Safari Park. In addition to creative arts, Danielle enjoys dancing, traveling, and all things outdoors. She is thankful Ann Siemens introduced her to ARCS and is excited to join the next generation of ARCS members.



Field Trip to UCSD Shake Table (August 31, 2023)

On a beautiful Thursday morning in August, seventeen of our members went on a field trip to the Englekirk Structural Engineering Center at UC San Diego, better known as the "UCSD Shake Table"!



Our hosts and tour guides were **Koorosh Lotfizadeh, PhD** and Director of the Center; **Abdullah Hamid**, R&D Engineer and Site Supervisor; and **Robert Beckley**, IT specialist and photographer. We toured the facility for two hours. The site is a multi-acre area east of I-15, that has the feel of a military or high-security facility. We donned hard-hats, were reminded to watch out for rattle snakes and learned more about engineering than many of us thought possible!

The UC San Diego shake table/earthquake simulator is the largest outdoor shake table in the world and is unique and iconic. Visitors come from around the world to see and watch it, study its data and learn.

The Table was designed in 2001-2002 by UCSD engineers in collaboration with MTS Systems Corp. and the Center opened in 2004. The Center tests the structural and nonstructural effects of natural disasters including earthquakes, hurricanes, tornadoes and other disasters. The goal is to advance science and practices surrounding natural hazards and educate future generations of engineers and other scientists. The Center also promotes student learning and opportunities to make STEM more accessible to students.



Field Trip to UCSD Shake Table (August 31, 2023)... Continued from Page 4



The Center has various academic partners and also commercial partners. Part of its funding comes from the National Science Foundation (NSF).

The Table is undoubtedly the premiere focus of the Center but the Center also has one of the country's largest facilities for testing soil structure reactions to earthquakes and other disasters.

Our thanks to **Sue Kalish** for her diligence in working with UCSD and the Center and scheduling our trip. **Jayne Lindberg** also deserves kudos for finding the best lunch spot in the Poway-RB area and simplifying the ordering and payment processes. Thank you to both of you and also to **Leslie Bruce** for her leadership! We appreciate all of you!

Submitted by Holly Heaton
September 2, 2023

Just for Fun Party (August 27, 2023)

Our thanks to President **Kathe Albrecht** for the following reminiscence of the Just for Fun Party: It was a beautiful summer afternoon on Coronado Island as ARCS members and guests gathered in the bucolic garden of **Carolyn Elledge-Baker**'s stately home overlooking the Pacific Ocean. It felt like a step back in time to an era of elegant garden parties and lazy Sunday afternoons. We were greeted upon entry to the garden with the sweet sounds of an acoustic guitar wafting over the breezes. An abundant buffet of appetizers and a hosted bar beckoned us as scrumptious plates of Chef's tastings were tray-passed to guests. The short ribs, salmon, and other delicacies were absolutely delicious. With the tables set up on the lawn, guests were able to mingle freely and settle comfortably in small groups. Carolyn, a gracious and elegant hostess, greeted guests from a chaise lounge as she is recovering (beautifully) from a recent leg injury. We all enjoyed spending time with Carolyn, hearing about the historic home and the time she has enjoyed

Continued on Page 6



Just for Fun Party (August 27, 2023)...

Continued from Page 5

there over the past many years. Nearly 60 members and guests were in attendance and, at the end of the reception, guests lingered, clearly unwilling to leave our leisurely conversations and the special ambiance of the afternoon. It was a splendid celebration of summer's end, captured in these photos taken by **Laurie Roeder**, our VP of Membership.





Updates from ARCS Members

ARCS Member **Bobbie Vandervoort** made an amazing discovery recently: She is related to a Scholar alumnus from our chapter!!

Several months ago at a small family gathering, Bobbie happened to mention to her son-in-law, **Callum Eastwood**, that she is a member of ARCS San Diego. She couldn't believe his response. Turns out that Callum's brother, **Craig Eastwood**, was an ARCS Scholar in 2001-2002 at UC San Diego, while earning his PhD in Applied Mechanics & Engineering Science. Bobbie did not get to meet Craig back in 2002, because she was a member of ARCS Chicago (now ARCS Illinois) at the time. It was not until 2007 that she joined our chapter, when she and her husband, Richard, retired to San Diego.

In any event, Bobbie is thrilled to have this special connection to one of our Scholar alum. Craig is now a research scientist at Lawrence Livermore National Laboratory and lives in Danville, CA... just up the road from Pleasanton, where Bobbie and Richard now reside. What a small world!



In early July, ARCS Member **Tanya Schierling** was named managing partner at Solomon Ward Seidenwurm & Smith, LLP law firm in San Diego!



Tanya has been practicing law for more than 25 years, including 20 years with Solomon Ward, holding various leadership roles including serving four years as Litigation Department chair. Her expertise includes extensive litigation and transactional experience handling domestic and international distribution and franchising, a broad spectrum of business litigation, including partnership, corporate and real estate disputes and employment counseling and litigation including labor code, wage, discrimination and harassment claims and investigations.

Congratulations, Tanya! We are so proud of your accomplishments! 🥂🥂❤️



Updates from ARCS Scholars & Scholar Alumni



Josh Mesfin (2022-2023 ARCS Scholar at UCSD) was one of five graduate students at UC San Diego, who was selected as a 2024 Siebel Scholar. The Siebel Scholars program recognizes the most talented students in the world's leading graduate schools of business, computer science, bioengineering and energy science. They are selected based on outstanding academic performance and leadership, and each receives a \$35,000 award toward their final year of study. Josh is a bioengineering PhD candidate in the Christman lab, where he is evaluating the mechanism and efficacy of natural and synthetic biomaterials for myocardial infarction treatment. He also advocates for other underrepresented minorities wanting to pursue STEM research. You can read the full story here: <https://today.ucsd.edu/story/students-integrating-engineering-in-medicine-honored-as-siebel-scholars>



Austin Carter (2022-2023 ARCS Scholar at UCSD/SIO) became an overnight TikTok sensation thanks to a spooky video that he created while drilling an ice core sample in Antarctica. The 33-second clip received 21 million views. "That's twice the number of people who live in Michigan, my home state," said Carter, who edited the video on his phone while curled up in a sleeping bag in a wind-whipped tent. You can read the full story here: <https://www.sandiegouniontribune.com/news/science/story/2023-09-16/ice-video-tiktok-carter-antarctica>



Lilith Astete Vasquez (2022-2023 ARCS Scholar at SDSU) was the lead author of a recent *Scientific Reports* paper, which demonstrated the scientific benefits of low-water toilets she designed. Lilith is currently in the process of patenting a low-water, mixing device that can be retrofitted into existing rural septic systems. Once patented, she plans to install some in national parks and in mobile hygiene trailers operated by ThinkDignity, a local non-profit organization that serves San Diego's homeless population. You can read the full story AND watch a short video here:

https://newscenter.sdsu.edu/sdsu_newscenter/news_story.aspx?sid=79286



Dr. Megan Jennings (2011-2012 ARCS Scholar at SDSU) is the principal investigator of CNNCTS (The Collaborative of Native Nations for Climate Transformation & Stewardship), an alliance that was recently established to help tribal communities build climate resilience in Southern California. You can read the full story here:

https://newscenter.sdsu.edu/sdsu_newscenter/news_story.aspx?sid=79293



Updates from ARCS Scholars & Scholar Alumni... Continued from Page 8



Minerva "Mini" Contreras (2022-2023 ARCS Scholar at UCSD) was excited to report that she will be a keynote speaker at the annual meeting of the National Science Teachers Association in Kansas City, October 25-28. Mini will share her inspirational journey to science and how she has learned to connect with science learners both in and beyond the classroom through the power of story. Brava, Mini!!



Garrett Lindsey (2022-2023 ARCS Scholar at Scripps Research) was thrilled to announce that he will be attending the Cancer Grand Challenges Future Leaders Conference this fall in Lisbon, Portugal. Founded by the two largest funders of cancer research in the world – Cancer Research UK and the National Cancer Institute in the U.S. – Cancer Grand Challenges supports a global community of diverse, world-class research teams to come together, think differently and take on some of cancer's toughest challenges. Garrett is looking forward to connecting with people outside of the chemical biology field to see how his work could potentially serve a bigger purpose in the fight against cancer.

Scholar Alumni - Where Are They Now?

Andrew Hanson, MS, PhD (1993, SDSU) earned a BS at Montana State, an MS from San Diego State, and a PhD in Geological & Environmental Studies from Stanford University. It was while pursuing his MS at SDSU that he received an ARCS Award.

After a brief stint working in the petroleum industry in Houston, Dr. Hanson was hired at the University of Nevada, Las Vegas (UNLV) in 2000 as an assistant professor in the Department of Geoscience. His research focus was on sedimentary basins and the petroleum resources they contain, which took him to China, Mexico, Spain, and Portugal for fieldwork. His professional knowledge benefited his students when he taught undergraduate and graduate courses in petroleum geology, field geology, and petroleum geochemistry. Dr. Hanson was tenured and promoted to associate professor in 2006. He published dozens of research articles, book chapters, abstracts, and other scientific publications, many of them with his students.





Scholar Alumni - Where Are They Now?...

Continued from Page 9

Dr. Hanson joined the UNLV Honors College as the associate dean in 2013, became the acting dean in 2018, before becoming the permanent dean in 2020. Throughout his tenure, he focused on administrative aspects of running the Honors College, helping recruit faculty to teach classes in the Honors College, advising and teaching University Honors students, overseeing Honors programs, helping students to attain nationally competitive awards, and collaborating on assessment, curriculum development and other Honors College priorities. Dr. Hanson retired from UNLV this past summer after more than 22 years of service to the UNLV community.

Jonathan McDunn, PhD (2001-2003, Scripps Research) is the Executive Director of the External Control Arm (ECA) Program and Business Development at Project Data Sphere, an independent initiative of the CEO Roundtable on Cancer focused on fighting cancer through open-access data sharing and oncology-focused research program initiatives.



The ECA program is a collaborative effort of clinicians, trialists, biostatisticians, and data scientists to use existing clinical data to accelerate and strengthen evidence generation in clinical development. Dr. McDunn is also the scientific and technical lead for strategic alliances and business development. In this capacity, he scouts and evaluates collaborative opportunities with new and existing partners.

Before joining PDS in 2020, Dr. McDunn built a startup company, Clinical Sensors. There he secured \$4M in NIH SBIR funding, drove the R&D program, and orchestrated its acquisition. Prior to Clinical Sensors, Dr. McDunn launched two products for Metabolon, "clinical (GSP) biomarkers as a service" and a multianalyte assay for prostate cancer risk assessment. At the beginning of his career, he worked in product development at Incyte Genomics.

Dr. McDunn has held faculty positions at UNC-Chapel Hill (Biomedical Engineering) and Washington University in St. Louis (Anesthesiology). He was a postdoctoral fellow in surgical critical care at Washington University in St. Louis; and received in PhD in inflammation biology from The Scripps Research Institute and BS in chemistry from the California Institute of Technology. He has published over 50 peer-reviewed manuscripts and was part of the team that developed the foundational IP for Accuronix.

Continued on Page 11



Scholar Alumni - Where Are They Now?...

Continued from Page 10

Amy Kobalter, MD, FAAD (1991-1992, UCSD) is a dermatologist in San Rafael, CA with over 30 years of experience in the medical field. She graduated from the UCSD School of Medicine in 1992 and is currently affiliated with the MarinHealth Medical Center, where she specializes in complex skin conditions and skin cancer. She is passionate about providing the most comprehensive care for her patients through meticulous examination and thoughtful treatment. Dr. Kobalter has been consistently awarded Marin's Top Doctor Award.



Dr. Kobalter lives in Marin, where she enjoys spending time with her family, pursuing artistic endeavors, and taking her dogs on walks.

ARCS Calendar of Events

OCTOBER

- Tuesday, October 24 – Member General Meeting
(La Jolla Country Club)

NOVEMBER

- Thursday, November 2 – Field trip to Sally Ride Research Vessel
(docked in Point Loma)
- Tuesday, November 21 – Board Meeting (via Zoom)

DECEMBER

- Sunday, December 3 – Holiday Party (home of
Margaret & Dan Dudas)

JANUARY

- Tuesday, January 16 – Board Meeting (via Zoom)
- Tuesday, January 23 – Member General Meeting
(La Jolla Country Club)