

INSIDER

ARCS
ADVANCING
SCIENCE
IN AMERICA

January 2023

PRESIDENT'S MESSAGE...



Kathe Albrecht

Happy New Year! I hope that 2023 proves to be a great year for all our ARCS members, that it will allow time for peaceful reflection, joyful moments, and some time for travel and adventure.

Curious about what's been happening in our ARCS Chapter? The Winter 2023 *Insider* newsletter is full of great news, photos, and reports on recent events, newest members, Scholars and Scholar Alumni.

Our current Scholars excel even as they juggle research and lab time, conferences and publications, and other commitments (families! hobbies! community projects!). Read about UCSD medical student Alex Calac, who was awarded a RISE San Diego Culture Shifter Award. Alec's advocacy for Native American representation in medicine and other fields is commendable. He is already making a difference in the world. Learn also about ARCS Scholar and biomedical student Kellen Cavagnero who hosts a regular podcast on the topic of Immunology, with each episode covering a specific issue in the field that both professional and non-professional listeners can appreciate and learn from. Our Scholars are truly engaged with the world!

The *Insider* features our alumni, too. Eric Blackwood (ARCS Scholar 2018-19, SDSU) just received two awards from the International Society for Heart Research. Congratulations! Mya Breitbart (ARCS Scholar 2006, SDSU) was recently named Distinguished University Professor at the University of South Florida, College of Marine Sciences. Mya has not only garnered award after award from both within and outside her institution, but she is also known as a "second to none mentor" to her students and for the community at large. Our alumni continue to give back even as they pursue their own impressive careers. Find out more about these and other of our illustrious alumni.

The *Insider* will also catch you up on member activities. This issue includes photos and details about our fun Scholar Picnic, our Fall Meeting, our beautiful holiday soiree at the home of Barbara and Bill McColl, and our check-signing events at partner institutions UCSD and USD.

I would like to thank you for all you do for the ARCS organization in support of its

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PRESIDENT'S MESSAGE ...

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fundamental mission and our wonderful Scholars. Our four partner institutions are so grateful for ARCS support. From UCSD's many diverse programs, to USD's gem of a doctoral program in nursing, from SDSU's sciences and engineering programs to SR's cutting-edge research labs, ARCS is making a significant impact in science education in the San Diego area. Thank you to our members, friends, the wonderful foundations that support us on a continuing basis, and those new foundations and individuals to whom we reach out.

Kathe Albrecht, President

ARCS Foundation, San Diego Chapter

Please Welcome Our New San Diego Chapter Member



Lisa Perich

Lisa Perich was born in Montreal, Canada. She moved to Georgia when she was seven years old but returned to Montreal every summer. Lisa enjoyed athletics and played soccer and volleyball throughout high school. Hard work paid off and she received a scholarship to play for a college in Southern Georgia but later transferred to the University of Georgia. In 2001 she graduated from the university with a Bachelor of Science in Business Administration. Immediately after graduation, Lisa began her career in the hotel and hospitality industry. She then had aspirations to become a lawyer but deferred her enrollment to law school after receiving an opportunity to partner with an established real estate firm. Lisa became a realtor in 2004 and has worked in the industry for 18 years. In 2018, she attended Harvard University for continuing education and received a certification in Essential and Advanced Negotiation Skills.

Lisa is currently a member of Team Cairncross, which is a five-person national award-winning real estate team at Berkshire Hathaway HomeServices in La Jolla. They specialize in representing sellers and buyers in San Diego's coastal neighborhoods. Lisa is committed to providing outstanding service to all her clients, from first-time buyers to large-scale condominium developers.

Lisa is happily married to her husband, Trevor, and they have been together for twenty years. Their boy/girl twins are nine years old and will be completing their final year at Sunset View Elementary. As members of the San Diego Yacht Club, the Perich family enjoys time on the water and the Point Loma lifestyle.



Check Presentation at SDSU (December 9, 2022)



In early December, ARCS President, **Dr. Kathe Albrecht**, and University Relations VP, **Pat Judd**, were honored to present SDSU President, **Dr. Adela de la Torre**, with a \$110,000 check for this year's 11 truly remarkable ARCS Scholars. After two years on Zoom, we were thrilled to meet in person for this annual celebration.

SDSU dignitaries in attendance: **Dr. Bill Tong**, Vice-Provost, **Dr. Jeff Roberts**, Dean, and **Dr. Cathie Atkins**, Associate Dean (Emeritus).

Evening Celebrating Philanthropy (November 9, 2022)

In early November, San Diego State University hosted its annual Evening Celebrating Philanthropy at the newly constructed Snapdragon Stadium to honor the university's most generous donors with Presidential Medallions. Since the event was first held in 2012, more than 170 individuals and organizations have been recognized for their charitable contributions to SDSU, now totaling nearly \$600 million. ARCS San Diego is



one such organization that has been supporting SDSU since our chapter's founding in 1985. ARCS Members **Rachel Collins**, **Robin Luby**, and **Ann Siemens** (pictured right to left) attended the Celebrating Philanthropy event, sporting the Presidential Medallions, which had been awarded to ARCS San Diego back in 2012.



Holiday Party (December 4, 2022)

Barbara McColl, co-founder of ARCS San Diego, welcomed some 50 members and guests into her beautiful home, decorated in joyous color for the ARCS Holiday Party. It was a wonderful, relaxed party with plenty of room to move around to the food stations and lovely tables arranged on the patio for sitting and eating. The food was delicious and a nice variety. The waiters were most gracious in helping in any way they could, and there was no shortage of entertainment. Barbara had three large balls floating on the pool water, which, when she pushed a button, changed color! She had also hired a piano player, so, of course we had to sing a few Christmas carols before the night was over. What a perfect way to get into the holiday spirit!





Fall General Meeting (October 25, 2022)

ARCS Members and new Scholars arrived at the La Jolla Country Club (LJCC) for our fall meeting. It was so wonderful to see friends and catch up. The doors opened to table settings and centerpieces in glorious fall colors. Open seating worked beautifully with 49 members and our 13 new Scholars divided among the tables so members had a chance to really visit with them.



Our President, **Kathe Albrecht** was the M.C. She thanked **Barbara Doren** whose membership allowed us to use the LJCC and **Priscilla Moxley** and her committee for meeting arrangements. She then greeted us with news from the recent National



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Fall General Meeting (October 25, 2022) ...

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Meeting in Atlanta. **Ellen Moxham**, our ARCS Light, shared her experience of being honored with other "Lights" from different branches. **Pat Judd**, Chairperson University Relations, introduced the Liaisons from our 4 schools, UCSD, SDSU, USD and Scripps Research. They in turn introduced their Scholars. This was the highlight of the luncheon as each one gave a brief talk about their research projects. **Rachel Collins** from Fund Development reminded us about Annual Giving and how important it is to donate. **Catie Madani** was thanked for opening her lovely home for the Annual Scholar Picnic which is always a wonderful way to start off the school year.



A delicious cornucopia salad was served followed with a rich chocolate brownie topped with caramel sauce and ice cream for dessert.

Scholar Picnic (October 23, 2022)

The annual Scholar picnic was held once again at **Catie Madani's** beautiful home, providing a wonderful opportunity for ARCS members to mingle with Scholars, while enjoying the traditional tacos and a variety of desserts.



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Scholar Picnic (October 23, 2022) ...

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Rob Hanlon, CFA from Dowling & Yahnke, spoke to the Scholars about investment strategies, including how to invest in sustainable projects. Scholars peppered him with questions during the talk and afterwards demonstrating their interest. Thanks to our UR Committee for organizing this successful event and to **Holly Heaton** for snapping these photos!



Check Presentation at USD (October 10, 2022)



The University of San Diego check distribution was held on October 20th. We welcomed our two new USD scholars **Jennie Lee** and **Andrea Correia**, as well as our returning scholars **Patty Magdaluyo** and **Nicole Marcy**. President Harris joined Dean Georges and Dr. Connelly from the Hahn School of Nursing and Health Science to learn about each Scholar's area of research.



Left to right: President **James Harris III**, **Patty Magdaluyo**, **Catie Madani**, **Linda Johnson**, **Pat Judd**, **Jennie Lee**, **Carolyn Sharp**, **Nicole Marcy**, **Kathe Albrecht**, **Andrea Correia**, **Cynthia Connelly** (Research Chair), and **Jane Georges** (Dean of the School of Nursing).



Check Presentation at UCSD (October 5, 2022)

Great to be back in person again at UC San Diego for the annual check presentation after zooming for two years! ARCS members presented a check for \$260,000 to Executive Vice Chancellor **Dr. Elizabeth Simmons** who was reminded not to spend it all in one place. She responded that she knew 26 places to spend this award!

Dean **Jim Antony**, EVC **Elizabeth Simmons** and Assistant Dean **Tamara Schaps** and her team hosted ARCS members and 2021-22 and 2022-23 Scholars at the UCSD Faculty Club for this event. They rolled out the red carpet for all of us and were so appreciative of the ARCS program and our long-standing relationship and support of UCSD graduate students in STEM. We have 26 Scholars at UCSD this year, including eight new Scholars.

ARCS members in attendance: **Kathe Albrecht, Pat Judd, Holly Heaton** and **Elizabeth Taft**. ARCS Scholars in attendance: **Nishta Krishnan, Chiaki Santiago, Josh Mesfin, Kellen Cavagnero, Laura Becerra, Anela Akiona, Alec Calac, Minerva Contreras, Jervaughn Hunter, David McBride, Sankaran Ramanarayanan, Kyle Angle, and Krista Balto**.



Updates from ARCS Members



Congratulations to ARCS San Diego Members **June Chocheles** and **Cindy Goodman**, both named 2023 Women of Dedication by the Salvation Army Women's Auxiliary, who will be honored on April 21, 2023 for their volunteer service and commitment to the San Diego community!

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Updates from ARCS Members ...

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In early January, **Gayle Wilson**, Honorary Emeritus ARCS Member and former First Lady of California, sat down with **Maya Ajmera**, President & CEO of the Society for Science, to talk about her lifelong support of STEM education. Below is a link to an edited summary of their conversation.

Gayle's background in science has spanned many sectors including business, public service, and education. Her story is truly inspiring and offers insights to women who aspire to leadership positions in science and technology, and to service on boards of directors in their fields.

<https://www.societyforscience.org/blog/conversations-with-maya-gayle-wilson/>



It is with great sadness that we share the news of the passing of beloved long-term ARCS member **Elizabeth "B.J." (Betty Jo) Williams**.

B.J. was an important member of ARCS going back many, many years, and she was a dear friend to many members. In her 96 years of life, B.J. contributed to San Diego causes in significant ways, as President of the Board of Trustees of the San Diego Zoo, President of the Junior League, as member of the Sharp Healthcare Board, and as a member of Town and Gown, ARCS, the Wednesday Club, among many other organizations. B.J. will be remembered fondly in San Diego and also in Los Angeles, where she moved several years ago to be closer to family.

Highlights of B.J.'s long, lovely, and productive life are captured in her obituary which was published in the San Diego Union/Tribune. It is a wonderful tribute to a life well lived.

Link to her Obituary:

<https://www.legacy.com/us/obituaries/sandiegouniontribune/name/betty-williams-obituary?id=36808197>



Updates from ARCS Scholars & Scholar Alumni



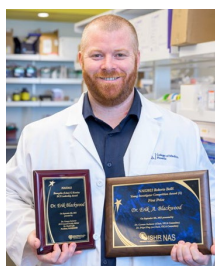
Rachel Diner, PhD, 2018-2019 ARCS Scholar at UCSD, accepted a position as Assistant Professor in the Department of Biological Sciences at the University of Memphis and will start her own lab in August.



Amanda Alker, PhD, 2021-2022 ARCS Scholar at SDSU, joined Ben Rubin's lab at UC Berkeley in January as a postdoctoral researcher. She will be working on developing microbial community editing techniques and applying them to new systems, such as plant-root microbiomes. (Note that Ben Rubin was also an ARCS Scholar at UCSD in 2016-2017.)



Kellen Cavagnero, 2022-2023 ARCS Scholar at UCSD, hosts a podcast about immunology for scientists and non-scientists alike. In each episode, Kellen reviews the latest high-impact original articles and discusses all things science with leading researchers in the field. The most recent episode was on "Inflammatory Bowel Disease and Proteomics." Here's the link: <https://soundcloud.com/kellen-cavagnero>



Erik Blackwood, PhD, 2018-2019 ARCS Scholar at SDSU, received not one, but two awards from the International Society for Heart Research for his work in cardiovascular research! He said the awards help him become closer to fulfilling his dream of mentoring future physicians. For more on the story, read here: <https://bit.ly/3SKS5F9>



In early October, we learned that **Alex Calac, 2022-2023 ARCS Scholar at UCSD**, was a 2022 RISE San Diego Culture Shifter Award Recipient. This award honors individuals who have shown dedication and action in shifting the culture of organizations and communities alike. It recognizes the effort of guiding groups to face a new challenge, disrupt outdated or harmful norms, and become more reflective and responsive to the needs of the communities they serve. Here is a short video of Alec's acceptance speech: https://youtu.be/S_b_PwzTbZE?t=3700



Updates from ARCS Scholars & Scholar Alumni ...

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Congratulations to **Mya Breitbart, PhD, 2006 ARCS Scholar at SDSU**, for being named Distinguished University Professor (DUP) at the University of South Florida College of Marine Science. The DUP award recognizes senior faculty members who have distinguished themselves as outstanding among their peers both within and outside USF. What sets Breitbart from the rest isn't the bulk of the Awards and Services section on her dossier, "she's known as a second-to-none mentor with a powerful trifecta that you certainly won't find on her CV: an uncanny salt-of-the-earth sense of humility, a passion for discovery that's as catchy as some of the viruses she studies, and a natural ability to make science accessible not only to the students she trains but to nonscientists, too." Read the full story here: <https://bit.ly/3eneYAk>

Scholar Alumni – Where Are They Now?

Cecilia Larrosa Wilson, MS, PhD (2007, SDSU) has a background in aerospace structural design, analysis, and testing with a focus on composite materials. She currently works on the Materials Engineer Staff at Lockheed Martin and her areas of expertise include mechanics of materials, failure analysis and Non-Destructive Evaluation (NDE/NDI) techniques of a variety of materials including metals, plastics and reinforced plastics. She specializes in composite failure mechanics, and composite manufacturing processes.



In 2002, Cecilia moved from Uruguay to the U.S. for her undergraduate work at SDSU and in 2007 she earned a \$5,000 ARCS Scholar award. Next, she moved on to Stanford University to pursue an MS degree in Aeronautics and Astronautics, followed by a PhD in the same field in 2013. Her area of study was in structural stress and fatigue analysis. She studied how structures like airplane wings break. Her advisor was Fu-Kuo Chang, who was working on this idea of giving structures a nervous system. Cecilia worked on sensors that can interpret what's going on inside of a structure. Sensors embedded in a wall, a roof or an airplane wing can monitor that structure's performance and detect cracking, fatigue and other types of damage. This technology allows the structure to tell us what it's feeling and why it's feeling that. These sensors combined with engineering models then relay this information, which indicates if a crack is forming and how fast it is growing. Cecilia now applies this work to power plants and wind turbines to ensure that they are working and performing well to provide power for residents in the areas they serve. In short, she is now applying the techniques and skills she learned for structural components to energy production.

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Scholar Alumni – Where Are They Now? ...

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Joie Garfunkle, PhD (2006-2009, Scripps Research) is Executive Director of Oncology Commercial Development at Merck with a breadth of experience across the pharmaceutical industry, ranging from preclinical R&D through product commercialization. She has proven to be a scientist with strong business development and financial acumen.



After earning her PhD in Organic Chemistry at Scripps Research in 2009, Dr. Garfunkle went on to become a Richard T. Clark Fellow for World Health at Merck. This program afforded her the opportunity to share her skill set and experience as a medicinal chemist with the Medicines for Malaria Venture (MMV). There she assisted not only in their ongoing malaria research projects, but also helped launch a new and exciting collaboration – the Pathogen Box – which is a program funded by the Bill and Melinda Gates Foundation. The Pathogen Box is a set of ~400 diverse, drug-like molecules which have activity against disease states of interest primarily in neglected disease areas. This screening enabled researchers free of charge, upon request, to catalyze novel drug discovery programs, benefit mechanism of action studies related to these targets, and enhance collaborations.

From 2013 onward, Dr. Garfunkle held increasingly important positions in Global Marketing at Merck, now focused primarily in the area of Oncology at the Merck headquarters and research campus in Kenilworth, New Jersey.

Lauren Ferrell, PE (2008, SDSU) is a project manager and civil engineer with over 13 years of professional experience. She has extensive engineering and management experience leading multi-discipline teams to complete preliminary, environmental, and final design for transportation and transit centered projects. In addition to completing challenging environmental and engineering projects, Lauren specializes in storm water industrial and construction compliance management.



Lauren is a San Diego native, who graduated from San Diego State University with her Bachelor's and Master's degrees in Civil Engineering. She received an ARCS Scholar award in 2008. She has served in a variety of leadership roles fostering industry engagement. She previously served as President-Elect of the American Society of Civil Engineers (ASCE) San Diego Section and former President of WTS (Women Advancing Transportation) San Diego County Chapter, as well as the recipient of the 2018 WTS International Member of the Year Award. Lauren also participates as a mentor for SDSU's Aztec Mentor Program that supports college students as they transition from academics to their professional career. She looks forward to continuing on the ASCE board and serving the local civil engineering community. In October 2021, Lauren was hired by the City of Carlsbad as Associate Engineer in the Public Works division.



ARCS Calendar of Events

FEBRUARY

- Tuesday, February 21 – Board Meeting

MARCH

- Tuesday, March 21 – Board Meeting

APRIL

- Tuesday, April 18 – Board Meeting
- Wednesday, April 12 – Field Trip to San Diego Botanic Garden