

INSIDER



January 2022

PRESIDENT'S MESSAGE...



Holly Heaton

Happy New Year! I am usually a big resolutions person. But not this year! Instead I am focusing on two words, **hope and resilience**.

Hope because I am ever-optimistic that our lives will soon be back to normal, or should I say a new normal. Although, a physician friend recently suggested I spend some time learning the Greek alphabet! Please, no pi for me!

I know we all got our hopes up in the latter part of 2021 as we thought COVID was behind us. But, no, Omicron came along and we all had to reset, and yes, to use a very over-used word, pivot again. I am very hopeful that sometime in 2022 we can start meeting again in person. But, for the time being we are again in zoom-land.

And that brings me to **resilience**. What a wonderful characteristic to have in all aspects of life! As we enter the third year of COVID, I marvel at the resilience of the world, in general, and of our organization in particular. We have met remotely for two years now with only a few in-person events: our Just For Fun event in August and our Holiday Party in December. Those were both wonderful events, made even more special because we were together and we were able to meet some of our new members for the first time!

We have participated in fascinating field trips with speakers and places that would not have been possible as in-person events! We are planning our third virtual SOY with a Nobel Laureate, no less, and raising more money for our Scholars than ever before. We have forged stronger relationships with National and other chapters and are improving our chapter as we go. Finally, we have in some ways become a closer group by keeping our membership involved and connected and by recruiting fabulous new members who are excited to join and learn more about ARCS and our Scholars. And, of course, our Scholars continue to impress us with their intellects, creativity, and accomplishments/successes—and to think they are earning their PhDs and changing the world during a pandemic. Now, that's resilience!

Holly Heaton, President
ARCS Foundation, San Diego Chapter



Please Welcome our New San Diego Chapter Members



Kelly Hartshorn

The daughter of a diplomat, **Kelly Hartshorn** grew up overseas as a “3rd culture” kid. In addition to Washington DC, she lived in Costa Rica, the Philippines, Mexico, Bolivia and Argentina, where she graduated from Lincoln High School. Kelly went on to earn a B.S. in Earth Science/Geology from MIT.

Kelly spent the next 36 years working for Chevron in the oil and gas business, where she met her husband Peter, also a geologist. Initially in technical roles and then in management roles, she lived in Danville and Lafayette (CA), Bolivia, Colombia, Venezuela, Angola and Brazil.

Chevron’s commitment to social corporate responsibility gave Kelly the opportunity to sponsor and participate in many excellent community programs, especially while living overseas. Doctors without Borders, Operation Smile, AIDs and Malaria education and awareness campaigns, support for small business owners and for women business owners were some of the highlights. Kelly retired in 2015 from Venezuela as Managing Director of Chevron’s Latin America Business Unit.

Initially in Miami, and now in Solana Beach, California with Peter, Kelly has had the opportunity for dedicated time to achieving key post-retirement health and fitness goals. It has also been a privilege to participate in local volunteer activities, including CASA, where she tutored high school students from underprivileged homes in math and other homework assignments.

Pandemic and grandchildren brought on a hiatus to volunteering outside the home, in exchange for nearly full-time daycare that ended earlier this year. With her two grown sons in North Park (San Diego) and Venice (LA), and two grandchildren (Theo (2) and Frances (3 months)), life is full indeed.

Kelly is looking forward to being a part of the ARCS organization, with its important mission and the amazing scholars it supports.



Sue Hylton

Sue Hylton hails from a northern Virginia suburb, close to Washington D.C., and is grateful to have been introduced to ARCS by her wonderful friends Sharon Arbelaez and Kathe Albrecht. An interesting note; Kathe and Sue lived very close to each other in the same town in Virginia for many years, without making each other’s acquaintance, and subsequently ended up meeting in La Jolla!

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While living in D.C., Sue founded and built two companies, an assisted living company named Partners in Assisted Living (PALS) and a commercial and residential cleaning company named Clean Sweep. Prior to starting her businesses, she worked as a Social Worker for Children's Services, providing case management for foster children and their families, and as a teacher. While education and social work were Sue's original fields of study and work, she found the world of business also suited her interests and skills, while providing the income level needed as single parent to her children Tim and Mary.

Both in California and in her previous residences of New York, Ohio and Virginia, Sue has served in fundraising, volunteer management, mentoring and board membership for various philanthropic, political and civic organizations, including the American Heart Association, Catholic Charities, Assistance in Motherhood (AIM), Just in Time for Foster Youth, Promises to Kids, St.Germains Children's Charity, Colony Hill Homeowners Association and Fr. Joe's Villages.

Sue loves living in sunny Southern California, and spends her free time enjoying the beach, her friends and her grown daughter Mary, who also moved out here in 2014, as well as her adorable grand dog Daphne! She also travels as extensively, throughout the East Coast where she has family and friends, and a home in Virginia, and to as many international destinations as possible.

She looks forward to getting to know and work with everyone in the ARCS family!



Cathie Atkins

Cathie Atkins is a proud alumna of San Diego State University where she earned both a BA in Psychology and an MS in Clinical Psychology. She earned her Ph.D. degree in 1981 in Social and Personality Psychology from the University of California, Riverside. As a behavioral scientist with many interests, Cathie focused her research efforts on the application of social learning theory to issues in health care, disease prevention, health promotion and behavioral/social epidemiology.

After completing her degree, she was appointed to a research position as an adjunct professor in the Department of Pediatrics at the University of California, San Diego and also served as a lecturer in Psychology at SDSU. She has participated in the development and execution of many successful National Institutes of Health grant applications and is an author on over 40 publications in peer-reviewed journals.

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In 1988, Cathie joined the SDSU faculty in the College of Health and Human Services where she was promoted through the ranks to Professor in the Graduate School of Public Health (1993). In 1993, Cathie was lured back to her roots in the College of Sciences to serve as the Assistant Dean for Student Affairs, Professor of Psychology and later, Associate Chair of Psychology. Cathie has been honored with numerous teaching and advising awards. In 2001 she was appointed as the Associate Dean in the College of Sciences (COS).

From 2004-2010, Cathie held a joint appointment in the Division of Undergraduate Studies (COS/DUS) where she directed the People, Information and Communication Technologies (PICT) faculty development program supported by the Qualcomm Institute for Innovation and Educational Success. Her background in psychology and her love of teaching continues to be relevant for helping faculty integrate principles of learning and cutting-edge teaching technologies to re-design their courses to address 21st century student learning.

From 2012-2013 Cathie participate in the Western Association of Schools and Colleges (WASC) Assessment Leadership Academy Certificate program and she has served as a WASC reviewer for both Capacity and Preparatory Review (CPR) and WASC Educational Effectiveness Reviews (EER) for a numerous colleges and universities that are accredited by WASC.

Cathie has had a long-standing commitment to the development of diverse and under-represented student talent. She is a recognized leader in developing programs to promote academic excellence among students who come from underrepresented and educationally disadvantaged backgrounds facilitating their ability to continue their education in STEM focused doctoral training programs. She helped to establish an office for Under-represented Student Programs (Center for the Advancement of Students in Academia-CASA) and has authored or participated in writing many training grants promoting underrepresented and disadvantaged students. At the national level she has served as a study section member for reviews as site visit/panel reviewer for many diversity focused student training grant applications. Since 1989 Cathie has been the PI and Director of the National Institutes of Health (NIH) funded undergraduate Maximizing Access to Research Careers (MARC) training grant at SDSU. For the last 20 years, she has actively participated in the review and selection of students for the SDSU ARCS scholars' program. After over 35 years at SDSU, Cathie retired in August of 2021 and now serves half time as a special consultant to the College of Sciences where she is facilitating the development of programs for the SDSU Global Campus.



Updates from ARCS Members



Britt Zeller hosted a tea & coffee gathering on October 13th at her lovely Coronado home. Attending were: **Jan Shaw, Andy Correnti, Carolyn Elledge, Mary Ann McCauley, Sally Finch.**

Congratulations to **Tanya Schierling** for being named a finalist in the Leaders in Law Awards for 2021 by the San Diego Business Journal on November 1st! The awards recognize the important role general counsel plays in the success of a business and highlight accomplishments of leading lawyers within the San Diego business community.

Tanya is Partner Attorney at Solomon Ward Seidenwurm & Smith in San Diego. She represents a wide range of clients, from large public corporations to small start-up companies to individuals, with the wisdom forged from significant trial and arbitration experience.



Major kudos to **Dr. Kathe Hicks Albrecht** on her recent book on steampunk art! In addition to serving as our President-Elect, Kathe serves on the National Advisory Board of the National Museum of Women in the Arts and holds a Presidential appointment to the National Council of the National Endowment for the Humanities.

She served as visual resources curator at American University for twenty-five years. As President of the Visual Resources Association (VRA), she helped establish a related educational foundation, and then served on the VRA Foundation Board of

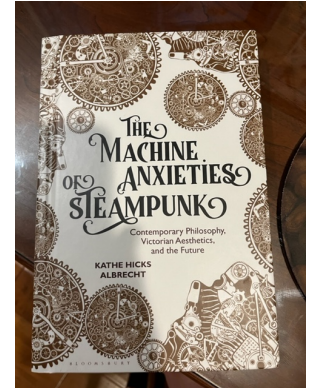


Updates from ARCS Members...

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Directors. Kathe has also represented educators on the Digital Future Coalition, the National Initiative for a Networked Cultural Heritage (NINCH), and the Conference of Fair Use (CONFU), convened by the Commerce Department to establish protocols for fair use of materials in the digital age.

Kathe holds a doctorate from the Institute for Doctoral Studies in the Visual Arts (IDSVA), where she was awarded the Ted Coons Dissertation Prize, BA (Art History) from UCLA and MA (Art History) from American University.



Catie Madani hosted a truly spectacular farewell lunch in honor of **Lois Kenneally**, who is moving to Aiken, South Carolina in January. We are sad to lose such a valued member of ARCS; however, we hope that Lois will remain in touch via Zoom for our virtual events. Thank you, Lois, for your years of service and support of ARCS! You will be deeply missed!

Here is Lois' new home address: 270 Magnolia Lake Road, Aiken, SC 29803.



Virtual Field Trip: COVID's Toll on Taste and Smell (November 18, 2021)

One of the many mysteries surrounding COVID-19 is the peculiar side effect of patients losing their sense of taste and smell. In the medical field, it's called anosmia. A less publicized side effect that follows many COVID-19 patients is parosmia which is when scents and flavors become distorted, e.g., lemons may taste like sewage! There's been relatively little research into anosmia and parosmia, which until the recent pandemic have been exceptionally rare. That's left the thousands of patients experiencing these symptoms feeling confused, isolated and hopeless.

To learn more about what's being done for sufferers and what they can do for themselves, ARCS San Diego invited **Dr. Carol Yan**, a renowned rhinologist at UC San



Dr. Carol Yan



Julie Carty

Diego Health, and one of her patients, **Julie Carty**, to discuss the latest research and treatments for this debilitating disorder.

For those who missed this insightful presentation, you can find the video recording [HERE](#):

youtube.com/watch?v=3EHMArG4Evs

SDSU Check Presentation (November 17, 2021)

On Wednesday, November 17, SDSU President **Dr. Adela de la Torre** was presented with a ceremonial \$110,000 check by **Pat Judd**, VP of University Relations at ARCS San Diego. These funds will support 11 exceptional graduate students in STEM at SDSU in 2021-2022. As you can see, everyone in attendance – Scholars, ARCS members, SDSU dignitaries - was “all smiles” having returned to the traditional in-person celebration after two years of social distancing due to the pandemic.





LJI Graduate Students Win Prestigious ARCS San Diego Awards (November 10, 2021)

UC San Diego graduate students **Gabriel Antonio Ascui Gac** and **Sonya Haupt** of La Jolla Institute for Immunology (LJI) have been named 2021-22 ARCS Scholars by ARCS San Diego. The award recognizes their research achievements and comes with \$10,000 in funding to support their careers. This is the first year that graduate students from LJI have been named ARCS Scholars.



Gabriel Ascui



Sonya Haupt

"Training the next generation of scientists to study immunology and human health is a core part of the La Jolla Institute mission," says LJI President and CEO Erica Ollmann Saphire, Ph.D. "We are delighted to partner with ARCS to advance discovery and opportunity."

Read the full article [HERE](#):

<https://bit.ly/3DXyx5b>

USD Check Presentation (October 21, 2021)

Pat Judd, Catie Madani, Ellen Moxham, and Holly Heaton attended the USD check presentation on Oct. 21, 2021 at President Harris' office. **Carolyn Sharp** also met us on her way to meet with her GTKY (Getting to Know You) Scholar **Ann Lawani**. We also met **Julie Cowan Novak**, a USD graduate (PhD) who joined us for the event. There was an upbeat vibe as our four Scholars told us about their research and interests, and we heard comments from **President Harris, Dean Jane Georges, Cynthia Connolly** and **Carol Scimone**.





Fall General Meeting (October 18, 2021)

The Fall General Meeting is a particular favorite for ARCS members, because much of it is devoted to meeting our new Scholars. Given the ongoing pandemic, we had no choice but to hold the meeting via Zoom, but that did not dampen the enthusiasm and excitement among those who attended. This year we were delighted to hear from 32 new Scholars (SDSU-7; Scripps Research-5; UCSD-18; USD-2), each of whom provided short personal vignettes about their current research and what they do for fun outside of work. As always, we were so impressed by their many accomplishments, their desire to



Welcome
FALL MEETING
OCTOBER 18, 2021

give back to society, and their balanced approach to a healthy life. We look forward to getting to know them better during the year ahead.

For those who missed the meeting, you can still view the Scholar presentations [HERE](#):

youtube.com/watch?v=uaaZlrEDWr8

Updates from ARCS Scholars



Alisha Ukani (2021-2022 ARCS Scholar, UC San Diego) - "*Locked-In during Lock-Down: Undergraduate Life on the Internet in a Pandemic*" is the subject of a recent paper by 2021-2022 ARCS Scholar Alisha Ukani, a PhD student at UC San Diego and member of the SysNet Group.

Alisha presented her paper at the 2021 ACM Internet Measurement Conference held on Nov 2-4 as a Virtual Event. She also presented the main takeaways in this short video: youtube.com/watch?v=deptybp2nnQ



Hailee Perrett (2021-2022 ARCS Scholar, Scripps Research) – As part of their mission to inspire and educate, Scripps Research created a video series designed to break down complex topics for science enthusiasts everywhere. Hailee Perrett contributed the graphics to five such videos, each 2 minutes in length, that answer big questions about the coronavirus. Here's the [LINK: scripps.edu/covid-19/science-simplified/](https://scripps.edu/covid-19/science-simplified/)

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Max Hopkins (2021-2022 ARCS Scholar, UC San Diego) - Max Hopkins, a first year ARCS Scholar, had a paper accepted to the Symposium on Discrete Algorithms (SODA 2022) days before he received notice of being selected as an ARCS Scholar. His work was 2 years in the making. SODA is an academic conference in the fields of algorithm design and discrete mathematics. It is considered to be one of the top conferences for research in algorithms.



Nicole Mlynaryk (2019-2021 ARCS Scholar, UC San Diego) - Academic scientists rely on grants to fund their research, and the largest funder of biomedical research is the U.S. National Institutes of Health (NIH). Unfortunately, many of the racial inequities in academic science have trickled their way into this grant funding process. As it stands, applications from African-American or Black scientists are less likely to be funded by federal funding agencies than applications submitted by white scientists.

In this latest episode of N Equals One podcast, Nicole speaks with Dr. **Michael Taffe**, a Professor of Psychiatry at UC San Diego, about the complex root causes of this disparity and what scientists and institutes can do to address it. Here's the [LINK: https://bit.ly/3isAgeI](https://bit.ly/3isAgeI)



Anthony Milin (2019-2021 ARCS Scholar, Scripps Research) - Dr. Anthony Milin started working at Vertex Pharmaceuticals in August as a Fellow finding novel ways to target rare diseases as well as developing non opioid therapeutics. He's loving his job and reported the following in November: "I'm in boot camps from leaders at Vertex that are teaching me the whole drug discovery pipeline as well as pursuing my own research. It's been a great experience being connected to the top members of the company and a well-rounded program. I'm quickly assuming more responsibility within the company as the weeks pass."

Scholar Alumni - Where Are They Now?

Roshan Kumar, PhD (1998-2000, Scripps Research) - Roshan Kumar is a Senior Director of Discovery Biology & External Innovation (US) at HiFiBiO Therapeutics based in Cambridge, Massachusetts, where he is leading the global efforts to identify novel drug targets for the company's internal pipeline. He brings more than 15 years' experience in the study of complex biological systems. HiFiBiO Therapeutics' strong global footprint features cutting-edge laboratories on three continents, in Cambridge MA, Paris, Shanghai and Hong Kong.



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Scholar Alumni – Where Are They Now?...

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Dr. Kumar's previous research was focused on the study of transcriptional regulatory networks in mammalian systems, and on understanding how cellular heterogeneity influences fate decisions in individual pluripotent stem cells. Dr. Kumar received his PhD in Biochemistry from the Scripps Research Institute and Bachelor's degrees in Chemistry and Biology from the California Institute of Technology. His postdoctoral studies were performed at the Whitehead Institute for Biological Research at MIT and the Wyss Institute for Biologically Inspired Engineering at Harvard Medical School.

Charles E. Kinney, MS, PhD (2008-2009, UC San Diego)

is a controls engineer at ASML, one of the world's leading manufacturers of chip-making equipment. Previously, he was at General Atomics, an American energy and defense corporation headquartered in San Diego, and prior to that he was a Staff Algorithms Engineer at Cymer LLC. Cymer is an independently operated business within ASML that develops, manufactures and services deep-ultraviolet (DUV) light sources. Charles was also a member/manager of Precision Control Solutions LLC.



Charles received his Ph.D. degree in Mechanical Engineering at the University of California, San Diego in 2009. He received his M.S. in mechanical engineering in 2003 from the University of Idaho in Moscow, Idaho. His area of research is the identification and robust/adaptive control of systems with time-varying or unknown disturbances. Some applications of his research include active noise control, structural vibration suppression, tape drive servo control, and robotics.

Specialties: System Identification; Control System Design and Implementation; Robust Control; Adaptive Control; Active Noise Control; Servo Control Systems.

Julianna Fessenden-Rahn, PhD (1997-1998, UC San

Diego/SIO) - Julianna's career path was inspired early on by her mother, who had a strong interest in the sciences and who encouraged her to strive for lofty goals. That she did, in spades! Dr. Fessenden is currently the Deputy Division Leader for Earth and Environmental Sciences at Los Alamos National Laboratory (LANL), where she co-leads 250 scientists in many key areas of research, including paleoclimate, nuclear forensics, and carbon sequestration.



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Scholar Alumni – Where Are They Now?...

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Dr. Fessenden has worked at LANL for over 19 years, assuming increasingly responsible positions over time. She began as a Postdoctoral Research Associate back in 2002, working on various climate-related issues such as drought cycles, extreme weather attribution, and coal tailing remediation. Climate science is not what immediately comes to mind in relation to LANL since it is historically linked with the nuclear weapons program. It was there that the first atomic bomb was tested during World War II's Manhattan Project. While the maintenance and monitoring of nuclear weaponry is still a key focus of research at LANL, the lab has expanded into a variety of other scientific research areas, including climate change and renewable energy sources.

It is no surprise that Dr. Fessenden found her professional “home” at LANL, given her early introduction to climate change research. She earned a PhD from Scripps Institution of Oceanography at UC San Diego in Geological and Earth Sciences/Geosciences in 1999, and her thesis focused on light stable isotopes of CO₂ and tracking the carbon cycling of this gas with the terrestrial environment. It was while doing this research that Dr. Fessenden received an ARCS award from the San Diego chapter of ARCS. She continued her climate change research in 2001 with Dr. James Randerson at Caltech, focusing on Arctic CO₂ emissions from fire-impacted forests, before joining Los Alamos National Laboratory in 2002, where she remains to this day.

In 2009, Dr. Fessenden was awarded a LANL Star Award for her work in nuclear forensics and carbon sequestration, as well as her leadership, workforce development, and outreach. She has authored over 40 scientific publications and holds one US patent for the apparatus and method for monitoring gas having stable isotopes.

ARCS Calendar of Events

January

- Tuesday, Jan 18 – Board Meeting
- Monday, Jan 31 – Member General Meeting: ARCS Light Award

February

- Tuesday, Feb 15 – Board Meeting
- Wednesday, Feb 23 – Virtual Field Trip: Ani Patel on “Music and the Brain” (3-4 pm PST)

March

- Tuesday, Mar 15 – Board Meeting
- TBD – Field Trip
- TBD – Scholar Picnic