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# INSIDER

ARCS ADVANCING SCIENCE IN AMERICA®

June 2024

## PRESIDENT'S MESSAGE...



Kathe Albrecht

**S**ummer is finally upon us, after a few weeks of our typical 'June gloom.' It is warm and beautiful in San Diego and now the Summer issue of the *Insider* newsletter is here. In the following pages you will find all the latest and greatest news and photos from recent ARCS-SD activities, information about members, Scholars, and Scholar Alumni. I know you will enjoy it!

On a personal note, the end of June also marks the end of my two-year tenure as Chapter President. Wow, the time flew by! Leading this organization has been an incredible experience and I thank you for trusting me in this role. I believe that the president's job is to gather a strong team together to work toward a common goal. You are all important members of that team and I thank you for your efforts. Our great chapter reflects the old adage, originally coined by Aristotle, that "the whole is greater than the sum of its parts." Quite simply—and this is not the example Aristotle used!—you can lay out all the parts to an automobile, but it is not a car until all those parts are put together correctly, intentionally, and with great care. We as a team of ARCS-SD members have pulled all the disparate 'parts' together and successfully steered this organization smoothly and properly through the year. As a strong team we have kept our membership happy and growing, our fundraising healthy and expanding, our Scholars engaged and excited to do great things, and our academic partners enthusiastic about their continued alliance with our chapter. Thanks to all of you for those achievements!

This past year we completed our first round of formal Site Visits. We continued our trend of record-breaking fundraising. And, although we welcomed fewer new members, with our banner increase in membership during the previous two years, it was time to engage our current members as we strengthened retention through improved communication and participation. We saw big attendance numbers at all our in-person events. Our Just for Fun Party last summer, held at the lovely Coronado home of **Carolyn Elledge-Baker**, was delightful and drew a large crowd. The December Holiday Party, hosted by **Margaret and Daniel Dudas** at their home in La Jolla, was an elegant and festive gathering, full of new

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

members and old, guests, and spouses. Our many field trips, and our general meetings have been well attended, providing time for our members to gather with friends and bring along guests to get to know ARCS-SD. Our June General Meeting was a celebratory event as we closed out an ARCS year full of accomplishments, successes, and fun! Sixty-four attendees gathered at Tom Ham's Lighthouse, with its gorgeous views over the water, to hear from scientist, **Margaret McFall-Ngai**, who intrigued us with her discussion of the revolution of biology studies, and where we are today in terms of research on the microbiome. What a great way to close out the year.

As is often the case, the highlight of the year was the Scientist of the Year celebration. It was record-breaking for an in-person SOY, netting over \$136,000 for our Scholar Fund. The Conrad Prebys Center for Performing Arts provided an elegant backdrop once again for an evening celebrating our wonderful Scholars, our Scientist of the Year, **Dr. Terry Sejnowski**, and our esteemed alumni. Dr. Sejnowski's remarks on Artificial Intelligence were thought-provoking and insightful. Our 200 or so guests bubbled with enthusiasm about the event. Congratulations to the SOY Committee, led by chair **Ingrid Benirschke-Perkins**, and to all of our members and friends who contributed to the evening's success.

As I come to the end of my term as President, I would like to thank the 2023-2024 ARCS Chapter Board of Directors. What a great team! I couldn't have done this without them, and I am so grateful for their help, advice, and ideas throughout the year. The Board this year included **Leslie Bruce** (VP Meetings, Field Trips, Social Events and President-Elect), **Gwynn Thomas** (VP Administration), **Rachel Collins** (Interim VP Finance), **Kristin Boyd** (VP Fund Development), **Ingrid Benirschke-Perkins** (VP Marketing and Communications), **Laurie Roeder** (VP Membership), **Catie Madani** (VP University Relations), **Tami Strachan** (Recording Secretary), **Carol Young** (Parliamentarian), **Marla Shepard** (Member-at-Large), and **Jayne Lindberg** (Member-at-Large). Thank you for a great year!

Again, and as always, thanks to all our members for your continued commitment to the chapter. Remember, it is renewal season, so please take a moment to renew your membership if you haven't already done so.

Enjoy the *Insider*!

Kathe Albrecht, President  
ARCS Foundation, San Diego Chapter





## New Member Profile



**Grace Miller Valencia** is a San Diego native and has resided here most of her life. She retired from UCSD after 44 years of progressively responsible positions, all in healthcare continuing education, focused on course design, development and implementation mainly in areas of post-baccalaureate premedical programming, nursing, and clinical trials. Starting her healthcare education career at UCSD Medical Center where she ultimately became Director of Staff Education and Development, she was then recruited to UCSD Extension in 1994 to initiate and lead the Healthcare Education Department until retiring in 2019.

She holds a bachelor's degree from Scripps College, a master's in history from UCSB, a master's in education from SDSU and returned to school to study for and obtain a Doctorate in Educational Leadership (EdD) from UCSD and CSUSM, graduating (at age 68) in 2015. Her dissertation focused on adults returning to school for graduate degrees after the age of 60. She enjoys reading, music, films and traveling, and is especially appreciative of Leslie Bruce who proposed and encouraged her to join ARCS.

## Updates from ARCS Members

On a beautiful sunny afternoon in May, members of the Membership Committee gathered together at The Britannia Tearooms to celebrate their intrepid leader, **Laurie Roeder**. The building – formerly the Country Waffles restaurant – stands at 2323 Midway Drive, near Liberty Station, and offers themed teas on select weekdays. The business is owned by British expat **Selina Stockley**, who has been running Shakespeare's Corner Shoppe & Afternoon Tea on India Street for 20 years.



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## ***Updates from ARCS Members... Continued from Page 3***

With the main dining room reflecting an English country garden, Harry Potter bathrooms, Mary Poppins inspired gift shop and a Mad Hatter's party room, it was a delightful setting in which to pay tribute to Laurie's dedication to ARCS and its members. Her cheerful and encouraging phone calls and emails throughout the year are always warmly received and appreciated. Her hard work and hands-on approach to any task before her is invaluable. Thank you, Laurie; we salute you!



## ***Scientist of the Year Celebration (April 27, 2024)***

It doesn't get any better than this! Simply put, the 2024 Scientist of the Year (SOY) Celebration knocked it out of the park!

For starters, we were all thrilled with the return of the Scholar poster sessions, which took place during the opening reception. Attendees were treated to a wonderful array of research posters presented by our Scholars in the JAI, while enjoying delicious hors d'oeuvres and cocktails from Giuseppe Fine Catering, served in the Wu Tsai Courtyard. It was an ideal opportunity to meet with the Scholars and learn more about their research projects.



Viewing research posters presented by our Scholars in the JAI.

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## Scientist of the Year Celebration

(April 27, 2024)... Continued from Page 4



Welcoming attendees in the Wu Tsai Courtyard.

Soon it was time to move into the Baker-Baum Concert Hall for the main program, where our intrepid leader, **Kathe Albrecht**, welcomed the audience. We then enjoyed the traditional Scholar processional, accompanied by **Kevin Yturralde** on the trumpet, followed by a video collage introducing this year's Scholars and a short presentation by Scholar alumnus **Dr. Randall Kelley**, also via video. Next it was time for our SOY's keynote speech. ARCS member and SOY chair **Ingrid Benirschke-Perkins** had the honor of introducing **Dr. Terry Sejnowski** and took the time to describe the SOY selection criteria and why Dr. Sejnowski was such a clear choice for the SOY distinction.



Scholars were recognized with a trumpeted processional and video collage.

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## Scientist of the Year Celebration (April 27, 2024)

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Dr. Sejnowski proceeded to deliver an engaging and insightful account of the perils and promise of AI technology. Not surprisingly, many hands were raised with questions following his talk. Finally, it was time to move back into the courtyard for some dessert and conversation with our members, Scholars, friends, and our SOY.

Heartfelt kudos to the SOY Committee for organizing such an inspiring and successful event!



Scientist of the Year, **Dr. Terry Sejnowski**.



Presenting **Dr. Sejnowski** with an artful gift, *The Flaming Brain*.

In addition to Ingrid as chair, committee members included **Kathe Albrecht, Barbara Bry, Rachel Collins, Doris Ellsworth, Holly Heaton, Lisa Perich, Laurie Roeder, Marla Shepard, Gwynn Thomas, Pam Werner**, and of course, our master of technical support, **Rob Healey**.

Thanks also to **Gordon Perkins** and **Michael Roeder** for snapping these record shots of the event!

Note that the event recording is now permanently archived on our YouTube Channel and can be accessed by clicking [HERE](https://youtu.be/lPtH3TNB_OY). ([https://youtu.be/lPtH3TNB\\_OY](https://youtu.be/lPtH3TNB_OY))



## Updates from ARCS Scholars & Scholar Alumni

Scripps Research awarded doctoral degrees to 59 graduate students during the 32nd commencement, held by the institute's Skaggs Graduate School of Chemical and Biological Sciences on Friday, May 17, 2024. It was the largest graduating class in the history of the program, which soon will have 950 alumni. Among this year's graduates were five former ARCS Scholars: **Nathalia Gazaniga, Hailee Perrett, Caroline Stanton, Nelson Wu, and Leonard Yoon**. Representing ARCS at the ceremony were **Kathe Albrecht, Tami Strachan, Kelly Hartshorn, and Leslie Bruce**.



Nathalia Gazaniga



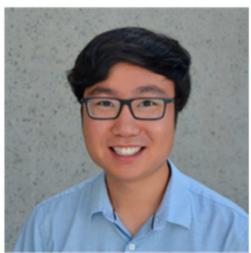
Hailee Perrett



Caroline Stanton



Nelson Wu



Leonard Yoon



**Brett Garabedian (2023-2024 ARCS Scholar at Scripps Research)** shared the exciting news in late May that a company he recently founded – NeoTac Therapeutics - took first place in the regional Nucleate Accelerator Program's "Demo Day". As a result, he received the "Alnylam Scientific Excellence Award" and the "JLABS Golden Ticket" award, which includes one year of free lab space at Johnson & Johnson's JLABS facility in Torrey Pines (~\$65,000 value). Kudos, Brett!



**George Vourlitis, PhD (1994-1996, SDSU)**, biologist at California State University San Marcos, will be doing research in central Brazil this summer. As reported in the May 26 issue of the *SD Union-Tribune*, there's a war of sorts playing out at Chapada dos Guimarães National Park, a world of towering waterfalls and handsome savannas in central Brazil.

An emerging forest is starting to subsume the savannas, which are famous for their biodiversity. Vourlitis will help park rangers explore whether small, controlled fires can preserve the savannas without destroying too many trees.

"Forests are fantastic at storing carbon that would otherwise go into the atmosphere and contribute to climate change," Vourlitis said. "The question is, Can we find a fire of the right intensity to do the things we want?"

Note that Dr. Vourlitis is featured in this issue's "Scholar Alumni - Where Are They Now?" section on the next page.



## Scholar Alumni - Where Are They Now?

**Lori Eggert, PhD (2000, UCSD)** is currently Professor Emerita in the Division of Biological Sciences at the University of Missouri–Columbia. She joined the faculty in 2005 and has been director of graduate studies as well as an advisor to organizations such as the Wildlife Conservation Society and the International Union for Conservation of Nature.

The Eggert lab uses genetic and genomic methods to address basic and applied questions in ecology, evolution, and conservation biology.



At the historical level, studies in her lab use molecular data to determine the patterns of diversity within and among closely related species. By mapping those patterns onto the geographic distribution of species, she seeks to understand the relative roles of evolutionary processes such as geographic isolation, gene flow, natural selection, and genetic drift on patterns of speciation. Current projects include a study of the taxonomic distinctiveness and distribution of species and subspecies of smallmouth bass in the central interior highlands of the United States.

At the contemporary level, landscape genetic studies in her lab use molecular data to understand the role of environmental variables on the current distribution of and diversity within species. Current projects include a study of population sizes, sex ratios, and connectivity of Asian elephants in Laos. Her research has involved a wide variety of taxa, including mammals, amphibians, birds, and fish, focusing primarily on species of conservation concern.

Previously, Dr. Eggert had been a research and postdoctoral associate at the Smithsonian Institution National Museum of Natural History in Washington, DC. Dr. Eggert was a member of the National Research Council's Committee on the Review of the Bureau of Land Management Wild Horse and Burro Management Program from 2011 to 2013. She received her BS in biology from UC San Diego, her MS in ecology from San Diego State University, and her PhD in biology from UC San Diego in 2001.

**George Vourlitis, PhD (1994-1996, SDSU)** is currently Professor of Biology at California State University San Marcos (CSUSM). He joined the faculty in 1998 after earning his PhD in Ecology from the University of California, Davis and San Diego State University.

Dr. Vourlitis' research focuses on quantifying mass (CO<sub>2</sub>, H<sub>2</sub>O vapor, and other trace-gases) and energy exchange of terrestrial ecosystems, and how these exchanges are influenced by global change. Utilizing measurement techniques, mathematical modeling, and remotely sensed data, Vourlitis investigates



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## Scholar Alumni - Where Are They Now?...

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spatial and temporal variations in trace-gas and energy fluxes in ecosystems such as the Alaskan Arctic, southern California chaparral, and Brazilian transitional tropical forests. His work has been published in journals including *Global Change Biology*, *Science of the Total Environment*, and *Journal of Geophysical Research-Biogeosciences*.

Dr. Vourlitis directs the Terrestrial Ecosystems Research Lab (TERL) at CSUSM, which studies and evaluates the effects of human activities, including land use and land cover change, atmospheric pollution and climate change on the structure and function of terrestrial ecosystems. TERL research provides data that can help reduce the negative impact of human activities, and offers research and training opportunities for students.

Most recently, Dr. Vourlitis was awarded a US Department of Agriculture grant to train students to study hop genetics and soil ecology in San Diego County. In Fall 2023, he conducted the first phase of a two-semester class. The course's first cohort ran semester-long experiments in a controlled greenhouse setting where they grew ten varieties of hops. Undergraduate and graduate students from a variety of disciplines are currently evaluating soil microbial diversity, soil fungal diversity, growth rates and viral afflictions. They are also investigating the genetic differences between hop varieties and why the same varietals exhibit different aromas and flavors when grown in different regions (i.e., unlocking the *terroir* of hops).

**Jay Chiang, PhD (1998-2000, Scripps Research)** joined Caltech's Seed Fund (CSF) Executive Committee in 2022, as Entrepreneur in Residence in Life Sciences. CSF is an internal venture fund that was launched to support the commercialization of Caltech technologies. Its purpose is to supply pre-seed and seed capital to help promising new Caltech companies bring products and services to market. Dr. Chiang's extensive experience in global pharmaceutical product commercialization make him a valued member of CSF's Executive Committee.



From 2012-2022, Dr. Chiang worked at Amgen, where he served in many different capacities, including Commercial Strategy and Innovation Lead, Commercial Digital Capabilities Lead, Director of Global Marketing, Direct of Corporate Strategy.

From 2005-2012, Dr. Chiang served as Associate Principal at McKinsey & Company, one of the oldest American management consulting firms that offers professional services to corporations, governments, and other organizations. Dr. Chiang worked on topics ranging from partnership strategy, brand strategies, product launch, R&D strategy, R&D transformation, portfolio optimization, and strategic planning.



## Scholar Alumni - Where Are They Now?...

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From 2000-2005, Dr. Chiang served as Senior Director of Discovery and Product Development at Senomyx, an American biotechnology company that developed food additives.

From 1999-2000, Dr. Chiang served as Director of Automated Chemistry at Lexicon, where he built and managed research groups responsible for the synthesis and delivery of chemical libraries.

From 1994-1996, he served as Staff Scientist at ArQule, one of the first companies to focus on the chemistry aspect of drug discovery.

**IMPORTANT NOTE:** Dr. Chiang was the first graduate student to receive an ARCS award at Scripps Research back in 1998, while working on his PhD in Chemistry in Professor K. Barry Sharpless' lab. Sharpless is a two-time Nobel laureate in Chemistry (2001 and 2022).

### ARCS Calendar of Events

#### JULY

- Tuesday, July 16 – New Board Retreat  
(La Jolla Beach and Tennis Club)

#### AUGUST

- Sunday, August 18 – Just For Fun Party (Elizabeth Taft's home)
- Tuesday, August 20 – Board Meeting (via Zoom)

#### SEPTEMBER

- Tuesday, Sept 17 – Board Meeting (via Zoom)
- Thursday, Sept 19 – Field Trip To Scripps Institution of Oceanography