Dear ARCS Members,

It was a pleasure to see many of you in person at our recent 9/14 General Meeting and to greet others on Zoom. We have an exciting year ahead! This year we are honored to have 83 scholars at our seven partner universities, including our first cohort of scholars at new partner UC Merced. We were delighted to be able to meet Alauna Wheeler (via Zoom) at the General Meeting and hear about her research and what makes the ARCS award so meaningful to her. What she said, and what we hear time and again from scholars, is that not only are the monetary awards that we give students meaningful, but knowing that there is a group of women who believe in them and their research gives scholars confidence and motivation in their work. We look forward to hearing from many more of this year’s scholars at the upcoming Scholar Meet-and-Greets, site visits, and general meetings later this year.

There are so many moving parts to the work of ARCS Northern California Chapter and the year is just getting started. We are already planning an incredible celebration of this year’s scholars for April. Membership is also hard at work, meeting some amazing new potential members at the 9/14 General Meeting and creating an easy application process and orientation for new members. We are always looking for energetic, motivated women who might be interested in joining our organization. Each member can sponsor 1 new member and co-sponsor 1 new member every year (2 total). We invite you to think about your network and invite a potential new member to one of our upcoming events to introduce them to our organization.

There are so many ways to get involved in ARCS this year! If you are not already on a council or committee, we are happy to help you find one that would interest you. Please reach out to member engagement co-chairs Stacy Holland or Kendra Kramlich and they can help match your interests with all our work opportunities.

Finally, we are thrilled to have Carol Schimke, development director, on board and leading our development effort this year as we look to raise $1,300,500 in support of 2023-2024 scholar awards and chapter operations.
17, 2023 (save the date!) continuing with a combined Scholar Symposium Celebration format to not only celebrate the scholars, but also learn about more their research.

Our first Science Activities event of the year took place on Thursday 9/15 with a fascinating talk by Dr. Raja Guha Thakurta (see writeup below) and we look forward to more great science activities, both in person and on Zoom, later this year. Stay tuned!

Thank you for being part of ARCS Northern California. We are honored by your commitment to our organization and appreciate your time, energy and donations to support the work of our organization and this year’s scholars. Thank you for all you do for ARCS, and please reach out with ideas and suggestions. Our “doors” are always open!

-Katy Hope & Ellie Bingham

SAVE THE DATE for "science with a glass of wine"! Mark your calendars – April 17, 2023, 5:00pm, University Club of San Francisco – and join all of ARCS NCC to raise a glass to our scholars and universities and to learn about how their research addresses current societal challenges. We are continuing the model of the combined SAC and Symposium with roundtables that was successful last year while enjoying cocktails and elegant edibles buffet-style. This will be the BIG event of 2023!

SCIENCE PHILANTHROPY: MEMBER GIVING AT A GLANCE

The ARCS program year runs from July to June. There are times during these 12 months when you will hear from ARCS NCC about specific giving campaigns. By month, the campaigns planned for 2022-2023 are:

JULY: Membership dues. The opportunity to restate your commitment of time, talent and treasure to the mission of ARCS.

OCTOBER: Your ARCS Giving. The opportunity to reflect and decide on your own ARCS philanthropy for the year, including your Scholar Award Fund (SAF) gift or pledge and an invitation to underwrite the ARCS mission.

DECEMBER: Scholar Award Fund. The opportunity to make your SAF gift as part of your end-of-calendar-year giving. SAF gifts are welcomed at any time of year, but the end-of-year giving campaign is a celebratory reminder of the impact that your SAF gift makes in advancing science.

MARCH: The opportunity to purchase your tickets for and invite others to join you at the annual Scholar Symposium Celebration. This year it will be April 17, 5:00 – 8:00pm, at the University Club of San Francisco.

“Palindrome” Development Open Zoom Room. Have a fundraising idea or a corporate connection? Have a suggestion for involving Development with your Council? Wondering about including ARCS NCC in your estate plans? Are you confused about how your gifts to ARCS NCC are allocated? No question is off the table! Over the next 3 months, ARCS NCC Development Director Carol
**Calling All Members**

**Invite potential membership candidates to upcoming events!**

The strength of any organization lies in the quality of its membership. This is surely true of ARCS. Help us continue to grow and strengthen our organization and support science by sponsoring or co-sponsoring a new ARCS member this year. Now is the time to think about friends who would be good new members of our Chapter and invite them to our upcoming events. (See Calendar of Events at bottom of this newsletter.) *Intent to Propose* forms for potential membership candidates are available. We look forward to welcoming membership candidates to future events to learn more about our organization. If you have any questions about the membership process, please reach out to Gabby Kivitz, Membership VP, at gkivitz@yahoo.com.

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**Science Activities Kick-off**

On the evening of September 15, 2022 ARCS Northern California members were transported to the Earth’s solar system during a presentation by Dr. Raja Guha Thakurta, Professor/Astronomer & Department Chair of the Department of Astronomy & Astrophysics at UC Santa Cruz. Raja’s main research topic is galaxies – how they form and evolve into the dramatic structures we see today. He is also part of a research group that studies chemical enrichment and star formation history of galaxies using, among others, the 10-meter Keck telescopes, Subaru telescope, Canada-France-Hawaii telescope on the summit of Mauna Kea on the Big Island of Hawaii, the Lick Observatory telescopes on Mount Hamilton in California, and the Earth-orbiting Hubble Space Telescope and James Webb Space Telescope -- all of which are among the most advanced instruments in the world for celestial studies.

Raja’s presentation touched on the highlights from the group’s research on galaxies and in particular their ongoing research on the outer regions of the galaxy we live in, the Milky Way. He also talked about how the properties of the resolved populations of stars that make up these galaxies tell us a lot about the formation and complex evolutionary history of these galaxies. We also learned about how the motion of stars tells us about the dark matter content of galaxies and their cannibalism history. All this was illustrated by some of the latest and most amazing images from the James Webb Space Telescope, Hubble Space Telescope, and ground-based telescopes. Raja used photos of the same view of a piece of Milky Way and the Andromeda Galaxy sky from ground based, the Hubble Space Telescope and the James Webb Space Telescope to illustrate the increasing crispness of detail of...
Note: If you missed this fabulous presentation, look for the recording soon on our YouTube channel!

SCHOLAR SPOTLIGHT: ALAUNA WHEELER

Alauna is a fifth-year Ph.D. candidate at UC Merced and mother to a three-year-old (with #2 on the way). Her research interests include soft matter and self-assembly of biological systems. Her current projects include a study of the self-assembly of nanoparticles in a liquid crystal solvent undergoing a phase transition, self-assembly of the COVID viral particle, and the effect of e-cigarette chemical additives on lung surfactants. She also recently published a collaborative paper on the structure of electrosensory gels in cartilaginous fishes. She is the recipient of many honors and awards, including the 2020-2021 Outstanding Physics TA Award. Pre-Ph.D., Alauna spent three years as a rocket propulsion and testing engineer.

Her current outreach focuses on conducting hands-on science activities for elementary students using common household items. She is developing an accompanying YouTube channel so kids everywhere can do the activities at home with their adults. She is also a bargaining team member for the new UC Student Researcher’s Union, negotiating for more equitable working conditions.

Alauna grew up in northern Utah as one of five siblings. Her interest in science was sparked by an inspiring 5th-grade science teacher. Music is also part of her life – the piano, mandolin, and vibraphone. When time permits, Alauna enjoys small boat sailing, visiting national and state parks with family, and board games for 3-year-olds.

In her talk at the September General Meeting, Alauna noted that the last few years have been full of surprises – an unexpected pregnancy, health issues, the pandemic – that threw her off track and tested her resolve. Her ARCS award was a vote of confidence that came at a crucial time. “Having other people believe in me helps me believe in myself and keep going. Thank you!”

Bios and photos of all our terrific 2022-23 academic year ARCS Scholars are now up on our website. Click HERE to view!
Follow ARCS NCC on social media! Items are posted weekly on Facebook, Twitter, and Instagram, and at least monthly on LinkedIn. All of our Science Activities and Scholar events held over Zoom are recorded and posted to our YouTube channel, so if you’re unable to participate you always have the opportunity to catch up later.

YouTube: https://www.youtube.com/channel/UCrMA4oIIWDyTIyycT6csng
Facebook: https://www.facebook.com/ARCSFoundationNorthernCalifornia/
Twitter: https://twitter.com/ARCSNorthernCal
Instagram: https://www.instagram.com/arcsnortherncal/?hl=en
LinkedIn NCC Group: https://www.linkedin.com/groups/13651510/
LinkedIn National ARCS: https://www.linkedin.com/groups/3757538/

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PRELIMINARY CALENDAR SEPTEMBER 2022 - JUNE 2023

**Wed, Sept 7** - Board Meeting
**Wed, Sept 14** - General Membership Meeting
**Thurs, Sept 15** - Science Activities with Dr. Raja Guha Thakurta

**Wed, Oct 5** - Board Meeting
**Wed, Oct 19** - UC Merced campus visit, Scholar Meet-and-Greet
**Dates tbd** - Scholar Meet-and-Greets

**Wed, Nov 2** - Board Meeting
**Dates tbd** - Scholar Meet-and-Greets

**Wed, Dec 7** - Board Meeting
**Wed, Dec 14** - General Membership Meeting

**Wed, Jan 11** - Board Meeting
**Date tbd** - Galileo Circle Reception

**Wed, Feb 8** - Board Meeting
**Wed, Feb 15** - General Membership Meeting
**Dates tbd** - Site Visits to Stanford, UC Berkeley, UC Merced

**Wed, Mar 8** - Board Meeting

**Wed, Apr 5** - Board Meeting
**Mon, Apr 17** - Scholar Symposium Celebration

**Wed, May 10** - Board Meeting
**Wed, May 17** - Annual Membership Meeting

**Wed, June 14** - New/Old Board Meeting
It's being continually improved and updated and is an excellent source of information, inspiration and access for members and the community at large.