

## Message from the Presidents

Anne's usual way of starting the new year is to reflect on the past year and then start visualizing her ideal "new year" and planning a course of action. Her reflection this year has taken a different path. The release of the movie **A Complete Unknown** based on Bob Dylan's life, and seeing the ads promoting the upcoming Academy Awards—where it has been nominated for numerous awards, including best picture—has taken her back to thinking about the 1960s. Now we can see where you might be wondering where this string of ideas is going. For Anne, the sixties solidified her **commitment to serve through volunteerism** whether at the local library, hospital, or registering people to receive the first oral polio vaccine. Dylan's song "**The Times They Are A-Changin'**" seems to be playing on a continual loop in her head. Her reflections are now focused on how critical it is for us to find resilience, and to develop a course of action that helps us to keep a positive mindset, to manage frustration and fear, and, most importantly, one that supports accepting practical adjustments (aka changes).

Now the tune "The Times They Are A-Changin'" is also true for our ARCS chapter. Last year found us supporting twenty-five scholars, welcoming several new members, and facing challenges in engaging members in committee and program activities. For us to continue playing a role in **supporting the next generation of STEM leaders** through our scholars, it is essential for us to focus on **attracting new members and fostering a willingness to serve** within ARCS Pittsburgh Chapter. In the coming weeks, you will receive a member survey, which we hope will provide insight into what changes are needed to better serve our members.

Each semester our chapter verifies that our scholars are still eligible for their awards. In our correspondence about this for the spring semester, Heidi Donovan, PhD program director at Pitt's School of Nursing, said, "We are so appreciative of ARCS support for these exceptional women, nurses, scientists, and future leaders as they pursue their PhDs in the School of Nursing." Comments like this remind us that because times are changing so rapidly, **our support of scientific research** is even more important.

“ Last year found us supporting twenty-five scholars, welcoming several new members, and facing challenges in engaging members in committee and program activities. ”

### Anne Crawford & Linda Thier

Co-Presidents  
ARCS Foundation Pittsburgh



## Donor Appreciation Recap

On October 30th the University of Pittsburgh hosted the Pittsburgh Chapter for our annual donor appreciation event at the University Club. After time for members, scholars, guests, and university faculty and staff to snack on hors d'oeuvres while socializing, Co-President **Anne Crawford** began the evening's program. Our featured speaker was **Adam Leibovich**, PhD, the University of

Pittsburgh's Bettye J. and Ralph E. Bailey Dean, Kenneth P. Dietrich School of Arts and Sciences, College of General Studies.

As always, the highlight of the evening was hearing from our scholars. Third year scholars

**Sam Nance**, Carnegie Mellon University, and **Giannina Ramirez**, University of Pittsburgh, described their research. Additionally, each scholar shared a fun fact about themselves. The last speaker was **Beth Wainwright**, national president of ARCS Foundation.



*Chapter Co-President Anne Crawford addressing the attendees (Photo courtesy of the University of Pittsburgh)*



*Dean Adam Leibovich sharing his remarks (Photo courtesy of the University of Pittsburgh)*



*Third-year scholar Sam Nance describing her research (Photo courtesy of the University of Pittsburgh)*



*Third-year scholar Giannina Ramirez describing her research (Photo courtesy of the University of Pittsburgh)*

*Mixing and mingling at the Donor Appreciation (Photo courtesy of the University of Pittsburgh)*



## A Note from Jeanne: Bad Timing

14

Okay, so before you say anything, I am well aware that you have not yet finished paying for all the Christmas and holiday gifts, the festivities, the food, the dinners out, or the Nutcracker tickets. I feel your pain! Hopefully, your holiday was terrific and worth both the effort and the cost. Not to repeat myself too much, but even in this personal life experience, it really is all about the return on investment. Is it worth it? Standing on my grandmotherly platform, I can give you a resounding “yes”!

A similar equation comes into play regarding our support of ARCS Pittsburgh and our scholars. How much do we value the importance of advanced scientific research in this country? What is it worth to have innovation that may result in life-changing discoveries? Is our support of American technological infrastructure, systems, and products in order to ensure our independence as a nation a sound and valuable investment?

I think you all would agree that producing the ideal outcome—whether it’s a cake, a car, a microchip, or a vaccine—depends on the quality of the raw materials or ingredients plus the skill of the person doing the assembling. In scientific research, our ARCS Scholars are BOTH the raw materials AND the skilled technicians—a double whammy! The best equipped lab in the world will produce NOTHING without having the best people there.

So, as you start the new year, one full of promise and hope, I ask you to think about making an investment in the future of American scientific research and innovation. What would it be worth

for you to know that a scholar you supported would discover a life-saving drug or a cure for Alzheimer’s or make a similar breakthrough in engineering or computer science—even if that miracle happened fifty years from now?

We don’t always have the opportunity to touch the future and impact the quality of life for future generations. Supporting scientific research by supporting an ARCS Scholar does this. Endowing an ARCS Scholar Award lets you do that in spades—and we make it as easy as possible for you to do so. Contributions to create a \$100,000 Endowed Award that

will support scholars FOREVER may be spread over five years and may be made in partnership with up to nine additional people with a minimum commitment of \$2,000 per year. Endowments sponsored by one to four donors have naming

rights. In addition, the Pittsburgh Chapter provides a match of \$15,000 for every endowment.

This is a rare opportunity to leave a legacy of immeasurable impact! Please contact me if you would like to chat about the possibility of touching the future in this way.

Oh—just so you know, and I hope as a possible further incentive, we already have a possible commitment of \$35,000 toward our next \$100,000 goal. You could get us there!

Always grateful,

**Jeanne B. Berdik**

**Chair, Pittsburgh Fund Development**

[jbberdik@gmail.com](mailto:jbberdik@gmail.com)

412-443-5495

“In scientific research, our ARCS Scholars are BOTH the raw materials AND the skilled technicians—a double whammy!”

## Getting to Know Our New Members

**Taryn Imamura** is a scholar alumni who is continuing her work in the Mechanical Engineering Nanotechnology Department at CMU. Taryn’s research interest is the development of a hybrid top-down, bottom-up manufacturing process for micro swimmers using DNA origami.

**Shelia Collins** is an organizational grief consultant, speaker, and author. Her latest book is *The Art of Grieving*. **Pam Meadowcroft** introduced Shelia to ARCS.

**Anu Reddy** is familiar with research at CMU through her husband, **Raj Reddy**, the founding director of the Robotics Institute. She was introduced to ARCS by her friend and neighbor **Becky McGough**.

**Susanne Wilkinson** was introduced to ARCS through members of ARCS who intersected with her participation on the Women’s Committee of the Carnegie Museum of Art and while volunteering as a docent to the Carnegie Museum of Art, the Frick Art and Historical Center, and the Duquesne Club.

## Calling All Members!

The Nominating Committee, working with our co-presidents and board, is reaching out to all members to request your involvement with ARCS. All levels of participation are encouraged and welcomed. If you want to serve on a committee, take a leadership role, greet people at an event, or host or help with a one-off event, please contact me. We need help at all levels of commitment and support.

**“Being active in our chapter is a great way to make new friends with other members, our scholars, and faculty and staff at our universities.”**

In particular we need help with our growing use of technology—our website, databases, Slack, and other tools. Our current team of **Vicky Guscoff**, communications co-chair, and **Sarah Stallings**, our administrative assistant, has been busy, but more work needs to be done. We thank Vicky and Sarah for their continued commitment, and we would welcome more support.

Being active in our chapter is a great way to make new friends with other members, our scholars, and faculty and staff at our universities.

Shifting out of the COVID years, thankfully, this is an exciting time for ARCS Pittsburgh. The Nominating Committee wants to foster and build a culture of community, inclusion, support, and successorship. Please consider getting involved.

We need YOU! Thank you for your consideration. Please contact me at any time.

**Paula Zawadzki**

**Chair, Nominating Committee**

pazawadzki@comcast.net

412-759-5125

## Narbey Doctoral Defense

**Lauren Narbey, CNM, PhD**, recently successfully defended her dissertation entitled “Patterns of Breastfeeding Among Individuals with Opioid Use Disorder and Integration of Lactation Support into Perinatal Recovery Programs Across the United States.” Her clinical practice as a midwife and research interests have focused on optimizing care for individuals with perinatal opioid use disorder. She will continue this work as a postdoctoral associate with **Dr. Elizabeth Krans** at the University of Pittsburgh School of Medicine. Lauren will spearhead multiple projects on factors complicating recovery for pregnant and postpartum individuals with opioid use disorder.

Lauren extended an invitation to attend her PhD defense; I was pleased to accept for two special reasons. First, it was important to represent ARCS Pittsburgh Chapter in this important occasion. Second, after serving more than ten years on the Sojourner House and Sojourner MOMS Boards of Directors, I know first-hand the biases and misconceptions around mothers in recovery. Lauren’s defense presentation provided the factors that were negatively impacting these mothers from even trying breastfeeding while showing data supporting these mothers being able to safely breast feed their newborns.

### Anne Crawford



*Lauren Narbey and her family  
(Photo courtesy of Lauren Narbey)*

## Moving ARCS Forward

14

**W**hen I accepted the job as president of ARCS Foundation in June 2023, didn't I know what to expect. What a challenging, busy, and rewarding nineteen months this has been for me! The theme for my acceptance speech was "Stick with people who bring out the magic in you." I have, and there is a lot of magic within the women of ARCS!

For the past twenty years I have been active in various levels at ARCS National. One of the greatest joys for me is the incredible women I have met who are passionate about the mission of supporting scientific research—women who willingly give of their time and talent to further our efforts. I am particularly grateful to the members of our Pittsburgh Chapter who have stepped forward to serve in various national leadership roles during my term: **Amy Arner, Linda Burke, Lacey Carroll, Anne Crawford, Sharon Feng, Vicky Guscoff, Sue Harter, Debbi Linhart, Pam Meadowcroft, Joanna Slusarewicz, Carol Stockman, Kathy Testoni, Linda Thier, Missy Unkovic, Jeanne VanBriesen, and Anoo Verghis.** Their counsel and vision have been a comfort and stimulus to me.

In addition, others from our chapter are participating in our National Collaboration Networks which bring together members from all chapters who are working on similar issues. These include **Jeanne Berdik, Betsy Cwenar, Leslie Dunn, Anne Houck, Becky McGough, and Rosemary Mendel.** I can't thank them enough for sharing the "Pittsburgh perspective" with others.

ARCS National is always welcoming new women to the national level of service. National recently sent out a skills and interest survey to connect with those who are interested. Fill it out electronically or send me an email, and I will forward your information. We need you!

During my term as national president, I have challenged our national leadership to think of how we can embrace change and leverage our success of sixty-five years to have an even greater IMPACT on scientific research in the United States. What does organizational evolution mean for ARCS Foundation? What do we want to look like when we grow up? I don't have the answers. I am simply asking all members of ARCS Foundation Chapters to think broadly

and be creative and visionary to ensure we have a growing and sustainable organization for the next sixty-five years.

Join me in sending a shout out to **Anne Crawford** and **Linda Thier** who, as chapter co-presidents for the past three years, have been great stewards of our chapter. Also, to you, our Pittsburgh Chapter members, thank each of you for your support of our chapter, our mission, and our scholars.

**Beth Wainwright**  
**National President, ARCS Foundation, Inc.**  
Founding Member, ARCS Pittsburgh Chapter  
[president.national@arcsfoundation.org](mailto:president.national@arcsfoundation.org)



### Save the Date for Our Scholar Showcase

Thursday, May 8th

Latin American Cultural Center

Learn about our Third Year Scholars' Research

### Save the Date for a Tour

Thursday, March 13th

Center for Aviation Technology & Training, Wilkinsburg



Did you know our chapter has a program through which members can give unused **tickets for cultural and sports events** to our scholars? If you have

tickets that will go unused, please let Scholar Relations Chair **Leslie Dunn** know. You can reach her via email at [dunnlo@gmail.com](mailto:dunnlo@gmail.com) or by texting 412-760-1022. The Scholar Relations Committee has come up with a way to get any tickets to students.

## Spotlight on Scholars

### Lindsay Wilson

#### University of Pittsburgh

School of Medicine, Microbiology, and Immunology



Lindsay studies Rift Valley fever virus (RVFV), which is a mosquito-borne virus endemic to Africa and the Middle East. This virus can cause severe disease in children as well as adults and is especially prevalent

in agricultural communities. Severe disease can manifest as encephalitis, hemorrhagic fever, hepatitis, and/or retinitis. She's interested in understanding the host factors that cause these different disease manifestations. As researchers better understand the host genetics that alter disease progression, they will learn more about potential therapeutic targets for treating Rift Valley fever and improve their ability to screen for risk factors of severe disease.

She and her spouse welcomed their first child in August 2024. They enjoy spending time with him and their three dogs. Lindsay loves being active and enjoys hockey, pickleball, and hiking. She is always seeking out new sporting opportunities. Since moving to Pittsburgh, she has also embraced home ownership, learning new projects like woodworking, gardening, and other creative artistic endeavors to contribute to their home. Lindsay also loves to sing and plays a variety of instruments.

### Chris Choi

#### Carnegie Mellon University

McWilliams Center for Cosmology & Astrophysics



Chris's research focuses on how to use the theory of gravitational waves to explore and constrain theoretical cosmology models, like alternatives to general relativity such as massive gravity. He also utilizes

multi-messenger astronomical data, particularly that of pulsar timing arrays, to gain information about the gravitational wave background, and potentially explain it with new theories of cosmology and gravity. Recently his group used a time-dependent model

of massive gravity, specifically one known as the minimal theory of massive gravity, to explain the stochastic gravitational wave background NANOGrav detected in their fifteen-year dataset. The source of the gravitational wave background may be partially due to some exotic cosmological origin, because the astrophysical explanation (supermassive black holes and neutron stars colliding) falls short of completely explaining the background. Chris is also interested in the ways gravitational waves can be altered by free-streaming neutrinos, something he investigated with his group years ago. They explored the possibility of establishing a particular damping amplitude and comparing the results with previous work. Currently he is working on constraining the Hubble parameter with the time-dependent minimal theory of massive gravity and potentially addressing the sigma-8 tension in cosmology with such a theory. He hopes the study of gravitational waves and these alternative theories can help bring us closer to figuring out the long-elusive Theory of Everything and understanding the nature of the graviton.

He enjoys reading hard sci-fi novels and short stories, such as those by Greg Egan, Liu Cixin, Neal Stephenson, and Issac Asimov. Chris also enjoys speculative fiction, especially Ted Chiang and C. M. Kösemen. His favorite novel is *Diaspora* by Greg Egan, a must-read for anyone who calls themselves a theoretical physicist or a pure mathematician. He also enjoys recreational cycling. Chris has a road bike that he loves to ride around when he wants to unwind from all the research and courses. His longest ride so far is about fifty-one miles, but he hopes to do an imperial century soon. He also loves listening to music, especially prog rock and prog metal. Chris really enjoys retro prog rock from Sweden, with bands such as Moon Safari, A.C.T., Kaipa, Karmakanic, The Flower Kings, and Brighteye Brison. He has a particular interest in long songs known as "epics." He is also a competitive speedcuber with a focus on FTO (Face-Turning Octahedron). Chris achieved and still holds the world record in the event, with a time of 9.27 seconds. He has been active in the community, spreading the word about this wonderfully fun puzzle. He hopes to help make it an official event. His first semester as a graduate student was substantially different to his undergrad time, which he is grateful for since he has been at CMU for five years.

## ARCS Scholar Awards for 2025

14

**T**HE ARCS FOUNDATION PITTSBURGH CHAPTER takes great pride in announcing the Scholar Awards for the year 2025. These prestigious awards are granted to exceptionally talented and dedicated students who have demonstrated outstanding academic prowess and are committed to advancing scientific research.

### Carnegie Mellon University

For 2025, Carnegie Mellon University will receive four ARCS Scholar Awards. CMU

is renowned for its cutting-edge research and innovation in various fields, including computer science, engineering, and robotics. The students selected for these awards exemplify excellence in their respective disciplines and are expected to contribute significantly to the scientific community.

### University of Pittsburgh

The University of Pittsburgh will be honored with six ARCS Scholar Awards for 2025. Pitt has a strong legacy of fostering scientific discovery and interdisciplinary research, particularly in the health sciences, engineering, and environmental studies. The scholars chosen for these awards have shown exceptional promise and dedication to their research endeavors.

### Endowment Program

Due to the success of the ARCS Endowment Program, eight out of the ten awards will be funded by endowments. The Endowment Program has been instrumental in securing financial stability and sustainability for the ARCS Scholar Awards, ensuring that deserving students receive the necessary

support to pursue their academic and research goals. Endowments play a crucial role in maintaining the continuity and growth of the ARCS Scholar

Awards. They provide a reliable source of funding that allows the foundation to expand its reach and support more students each year. By funding eight of the ten awards through endowments, ARCS can continue to nurture the next generation of scientists and innovators.

The ARCS Scholar Awards are more than just financial grants; they are a testament to the hard work, dedication, and potential of the students who receive them. These awards recognize the scholars' contributions to their fields and encourage them to continue striving for excellence.

“These prestigious awards are granted to exceptionally talented and dedicated students who have demonstrated outstanding academic prowess and are committed to advancing scientific research.”