

ARCS

ARCS PITTSBURGH NEWSLETTER FALL 2023

Message from the Co-Presidents

Given that Linda's son recently married, we can't help but reflect on that exhilarating feeling of new beginnings. As we begin a new year for ARCS, we feel that same level of excitement!

We have several new board members who are bringing creative ideas and energy to our chapter. **Carol Goldberg** has enthusiastically stepped into our Program Chair. **Amy Arner** and **Vicky Gustoff** are teaming up for our Communications leadership. **Betsy Cwenar** is joining **Lacey Carroll** in our University Relations efforts. **Michelle Zorrilla** is working with our Scholars. **Julia Gleason** was elected as our Board Secretary. **Paula Zawadzki** has agreed to chair our Nominating Committee. A big welcome to our new board members! Thanks goes to all board members and all of you who have made our chapter twenty years strong and growing.

Our chapter added seventeen new members over the last year. The word must be getting out about our mission, the amazing group of scholars we support, and our dedicated members. We have already had one tour of the fabulous new UPMC Vision Institute that many of you were able to attend. Watch your email for other in person opportunities to appreciate the innovation and research happening in Pittsburgh.

This newsletter features our 20th Anniversary Celebration that took place on June 8th. Thank you all for attending and supporting this milestone in our chapter's history. The event successfully raised funding for almost three new scholars!

We would be remiss if we also didn't highlight that Beth Wainwright, one of Pittsburgh's founding members, is now the President of ARCS National. We have already seen how impactful her enthusiasm and leadership will be throughout all of our fifteen chapters as we implement our strategic plan.

We look forward to seeing you at an upcoming event. We welcome your comments and ideas to continue to improve ARCS Pittsburgh.

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Co-Presidents



“We have several new board members who are bringing creative ideas and energy to our chapter.”

ARCS Pittsburgh Twentieth Anniversary Celebration

The Pittsburgh chapter of ARCS was formed in 2003 through the vision and inspiration of **Jeanne Berdik**. Working with leadership at CMU and Pitt and recruiting a cohort of more than sixty founding and charter members, **Elisabeth Gilmore** was funded as our first scholar. Since then, we have supported more than 185 scholars through award and endowment funding totaling over \$3.5 million.

The Pittsburgh Golf Club was the beautiful venue for our gala anniversary event on June 8. We honored the past hearing from **Mark Nordenberg** (Chancellor Emeritus, University of Pittsburgh); **John Anderson** (President, National Academy of Engineering); **Jeanne VanBriesen**, PhD, PE (ARCS Alumni Hall of Fame); and **Elisabeth Gilmore**, PhD (ARCS Pittsburgh Alumna

of Distinction). We turned to the future by hearing from **Amy Burkert** (CMU Vice Provost for Education and Teaching Professor of Biological Sciences) and

Rebecca Doerge, PhD (CMU Dean, Mellon College of Science.)

More than one hundred guests joined us, including members from other ARCS chapters around the country. The evening was capped off with an entertaining live auction of the original painting "Oakland From Panther Hollow." **Cynthia Cooley**, an award-winning artist and longtime ARCS member,

donated the piece. ARCS Alumnus **Armen Arevian** purchased the painting.

Thanks to our Host Committee, Armen, and other contributors, our event raised enough money to award three new scholars! These will be designated as the ARCS Anniversary Scholars.



Anne Gormaley (left), Jenelle Collier (right)

(left to right) Anne Crawford, Elisabeth Gilmore, Linda Thier



Spotlight on Scholars—Carnegie Mellon University

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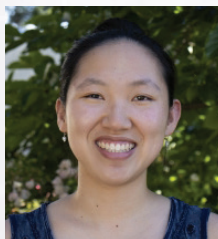
Taryn Imamura is now completing her third year in Mechanical Engineering at Carnegie Mellon University where she is also recipient of a National Science Fellowship and a GEM



Fellowship. The GEM Fellowship, a prestigious external fellowship, connects leading corporations, laboratories, universities, and research institutions to support and enable qualified

students from underrepresented communities to pursue graduate education in applied science and engineering. She graduated from Stanford in 2020 with a BS in Engineering Physics, focused on Electromechanical Systems Design. Thus far her research pursuits have yielded four publications in professional journals, serving as primary author in two of these.

Allison Wang is a second-year PhD student in Mathematical Sciences at CMU. Her interests lie in logic and set theory, particularly in descriptive set theory and its interactions with



combinatorics. She received a BS in Mathematics from Caltech in 2020 and a Masters degree in Mathematics from the University of Cambridge in 2021. As an undergrad at

CalTech, Allison was honored with the two top leadership prizes awarded each year to seniors: The Frederic W. Hinrichs, Jr., Memorial Award (for leadership contributions to the student body) and the George W. Housner Prize for Academic Excellence and Original Research. She has had three publications in professional mathematics journals thus far.

Scholar Update

The Pittsburgh Chapter is pleased to welcome the following new scholars:

William Ferguson

(The Fleischner – ARCS Pittsburgh Member Endowed Award)

Carnegie Mellon University, College of Engineering, Material Science and Engineering

Research Interest: Computational modeling of polymer systems

Hwei-Shin Harriman

(The Pittsburgh Chapter Award)

Carnegie Mellon University, School of Computer Science

Research Interest: Data visualization and data analysis focusing on improving visual communication in learning materials

Morgan Spatz

(The Pittsburgh Chapter Award)

University of Pittsburgh, Dietrich School of Arts and Sciences, Department of Geology and Environmental Science

Research Interest: Continental drifts in Taiwan and the subduction that created the islands in the region

Colin Shanmo Tang

(The ARCS Pittsburgh Scholar Endowment in Memory of Jack and Gen Esgar)

Carnegie Mellon University, Mellon College of Science, Mathematical Sciences

Research Interest: High dimensional probability distributions and complex geometry

Halah Winner

(The Dunn – Pittsburgh Chapter Award)

University of Pittsburgh, School of Medicine, Microbiology and Immunology

Research Interest: Understanding interactions between disease-causing organisms and immune responses

You will have the opportunity to meet with these five bright PhD students along with twenty-three returning scholars at the upcoming donor appreciation event on Monday, October 23rd, on CMU's campus. You should have received your invitation directly from CMU. Hope to see you there!

New Members

Eighteen new members joined our chapter before June 30th: **Elizabeth Cwenar, Aviva Diamond, Jillian Flatley, Lynda Flom, Lee Friday, Carol Goldberg, Gail Harger, Laura Heberton-Shlomchik, Stephanie Helman, Michelle Heusser, Elizabeth Hobbs, Terry Hurley, Debbi Linhart, Deanna Matthews, Rosemary Mendel, Ellen Pishko, Andrea Sajewski, and Elizabeth Schmidt.**

Welcome!

ARCS Featured in TEQ!

The Pittsburgh Technology Council recently published an article about our chapter in their magazine *TEQ*. You can read the article online at <https://www.pgtech.org/news-and-publications/teq-arcs-20>. Check it out!

ARCS Celebrates 20 Years of Supporting and Welcoming Scholars in Pittsburgh

Sheena Carroll
August 18, 2023

It started with a lunch meetup in 2002. This gathering launched the Pittsburgh chapter of ARCS (Achievement Rewards for College Scientists) Foundation, which is now celebrating two decades of impacting scientific research in the region. ARCS Foundation's mission is to advance science and technology in the United States by providing financial awards to academically outstanding students who are US citizens studying to complete degrees in science, engineering, math, technology and medical research.

"WOMEN LEADERSHIP AND, IN PARTICULAR, THE VOLUNTEER LEADERSHIP OF PITTSBURGH'S WOMEN, HAS CONTRIBUTED A GREAT DEAL TO THE PITTSBURGH COMMUNITY. AND THEY DON'T GET A LOT OF CELEBRATORY FEEDBACK BECAUSE THEY DON'T PUBLICIZE WHAT THEY DO."

Jeane Berdik was running the workforce education program for the Pittsburgh Technology Council and Catalyst Connection in the late 1990s when she first heard about the ARCS Foundation's interest in starting a Pittsburgh chapter in partnership with Carnegie Mellon University. Upon Berdik's retirement a few years later, she was ready to give the initiative a shot.

In late 2002, Berdik invited a small group of women to lunch to meet Dr. John Anderson, then Dean of Carnegie Mellon University's Carnegie Institute of Technology and Vicki Griffin, ARCS Foundation National Chair of New Chapter Development. And so, the Pittsburgh chapter was born, with 61 charter members – 21 founders, along with an additional 40 friends recruited over the next six months.

Fast forward to September 2004, when ARCS Pittsburgh funded its first scholar award, which was given to Elisabeth Gilmore. She received her Ph.D. in Engineering and Public Policy and Chemical Engineering at CMU and is now an Associate Professor in Environmental Engineering at Carleton University in Canada. Since its founding, ARCS Pittsburgh has made annual and endowed funding commitments in excess of \$3.8 million to 185 of the best and brightest doctoral STEM students at CMU, University of Pittsburgh and Penn State University.

This funding not only provides financial support for students' education, but also recognizes their academic achievements and potential. Moreover, since ARCS Pittsburgh's funding is unrestricted, it alleviates the students' financial burdens, and enables them to focus on their research and pursue groundbreaking discoveries without the limitations of funding constraints.

ARCS history begins in 1958, when a small, but ambitious group of women in Los Angeles grew alarmed about the United States falling behind in the space race against the Soviet Union.

"They took it upon themselves to express to a friend of theirs, who happened to be the president of Caltech at the time, about how they were extremely upset about this Sputnik thing," Berdik explained. "They asked him, 'What can we do about it?' He said, 'Get your friends together to support the best and brightest of American scholars, so that they complete their degrees and go on to enhance America's capacity for leadership and innovation in science and technology.' So that's what they did!"

"Since 1958, that group has grown to 15 chapters in cities and states across the country. It's still a comparatively small organization of approximately 1,300 members – a small women's STEM organization, led and managed by women volunteers."

Hot Off the Press

Donors who are interested in supporting particular areas of scientific, technological, or medical research may be able to direct their ARCS-Pittsburgh Endowed or Named Scholar Award commitment to scholars in selected areas of research. Contact **Jeanne Berdik** (jeanne.berdik@verizon.net or 412-443-5495) for more information.

Becky McGough: 2023 ARCS Light Recipient

For **Becky McGough** nursing was not just a job, but a calling, a career, and a passion. After earning her BSN from the University of Virginia's School of Nursing, Becky practiced as a registered nurse in Charlottesville, Virginia; Wilmington, Delaware; and Washington, D.C. before settling in Pittsburgh with her husband Tom and soon-to-be children Emily and Walt. There, she earned her Masters Degree in Nursing from the University of Pittsburgh and worked as a Family Nurse Practitioner for seventeen years, principally at a federally funded community health center serving the underserved and the under-insured. Shortly after joining the Pittsburgh Chapter of ARCS Becky recognized that the research driven PhD program at the University of Pittsburgh's School of Nursing could provide an excellent platform for ARCS scholars. She recruited the Pittsburgh Chapter's Board to successfully petition the National



Becky McGough

ARCS Foundation to establish that relationship. Becky and Tom then joined two other ARCS members in funding a named award to Pitt's first nursing scholar. They are currently funding a portion

of an endowed award. Meanwhile Becky has served the Pittsburgh Chapter diligently as Secretary of the Board, as Chair of its Nominating Committee, and as Co-Chair of its Membership Committee. She is proud of the opportunity ARCS has given its nursing scholars to showcase their research and to pursue both the science and the art of caring for patients.

UPMC Vision Institute Tour Recap

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The event was well attended, probably because this was one of the first in-person events we have had. The lovely table of hors d'oeuvres included egg rolls, bacon wrapped scallops, chicken satay, cookies, and cheese plus wine.

Heather Chronis Danek welcomed us, then **Dr. José-Alain Sahel** welcomed everyone, then we broke up into two groups for tours. Each floor of the building has specific departments. The first and second floors have outpatient services and a specialty



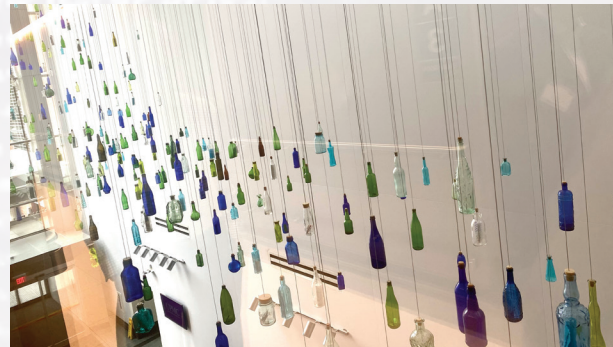
Dr. José-Alain Sahel
(Photo by Carol Schaaf Heppner)

clinic with eighty exam rooms. There are railings along the halls and signs in Braille. A sculpture of 538 bottles by **Kipp Kobayashi** hangs from the ceiling in the East Atrium. It is filled with paper messages from patients, staff, and the community. The sculpture refers to the glass industry in early Pittsburgh. We also passed two paintings by Lori Hepner called Decoding Light. Other floors have a surgery center, a rehab center, administrative offices, and labs. We saw the Urgent Eye Care Center which is open 24/7, a donor wall, and a compounding pharmacy available to the whole community (open 8:30 a.m. to 5:00 p.m.). The Uptown Cafe welcomes everyone and is open from 7:30 a.m. to 5:00 p.m. One interesting feature is that the surfaces of the floors change from hard tiles to softer tiles. The sound they make changes as one progresses, because people with limited vision depend on other senses as well. Much of the decor is black and white, which has the greatest contrast. There was a commissioned art competition so art

is important here, especially sensitive to people with limited vision.

Three graduate students were present and talked about their research. **Riley Arbuckle** from Michigan is studying retinitis pigmentosa. Kimia from Iran is studying the relation of gene therapy in DNA retina in Small Eyes Syndrome. **Gillian Williams** from Jamaica is studying myocilin, a glaucoma-associated protein, and how to circumvent the folding of proteins to prevent pressure from developing in the eye and creating glaucoma.

To top off the evening, **Lawton Snyder**, CEO of the Eye and Ear Foundation, gave us a tour of the two roof gardens. One is for staff socializing. The other is



Sculpture by Kipp Kobayashi
(Photo by Carol Schaaf Heppner)

dedicated to patients. It has multiple types of surfaces (pavement, stones, grass, and pebbles) so patients with limited visibility can practice walking.

The architectural firm HOK designed the building, which has five hundred thousand square feet. One of the features is an exterior suspended staircase that is enclosed in glass. It was inspired by the Pompidou in Paris and is the only one like it in Pennsylvania.

September Meet & Greet Recap

On September 13th the Membership Committee co-chairs, **Lynda Flom** and **Becky McGough**, hosted a Meet and Greet for all ARCS members and our ARCS scholars at Carnegie Mellon University and the University of Pittsburgh. The casual gathering was held at the 1st Tee Arnold Palmer Learning Center located in Schenley Park. It was a lovely late summer evening in the view from the second floor deck of the golf educational facility overlooking the Bob O'Connor Golf Course.

Twenty-five ARCS members, nine ARCS scholars, and four guests shared a cool beverage and Aladdin's Mediterranean food while mingling and getting to know each other better. A representative from the

learning center gave a brief overview about the mission of the 1st Tee Golf Program and the benefits it provides to young and seasoned golfers in the Pittsburgh community. Becky McGough spoke about how the sport of golf intersects with our scholars STEM educational curriculum.

All the scholars present had their names placed in a raffle basket and Pitt scholar **Camilla Garcia** won two tickets to the Pittsburgh Steelers vs. New England Patriots football game on Thursday, December 7th. It was a fun kickoff evening for the ARCS Pittsburgh Chapter and a special thanks goes out to 1st Tee community advocate, **Abigail Cook**, who connected our ARCS organization with the Arnold Palmer Learning Center.