

## Message from the Presidents

We are pleased to welcome thirteen innovative scientists to our new class of scholars. They represent a wide range of research interests from engineering to medicine to robotics. Read about each of them on page 2. These scholars take the number of total scholars supported through our chapter to **197** representing **\$2,732,000** of financial support. Amazing! Come meet our new scholars as well as our second and third year scholars at our Donor Appreciation Event later this month.

We are also pleased to welcome some new members to our board. **Anne Houck** will be assisting **Becky McGough** with membership. **Rosemary Mendel** is bringing her experience and contacts to head our programs committee. **Leslie Dunn** is returning to the board to lead our scholar relations committee. We are always excited to have new board members to bring fresh ideas and energy to the organization. Thank you to the following board members who have rotated off: **Carol Goldberg**, **Michelle Zorrilla**, **Linda Burke**, and **Lynda Flom**. We appreciate your service and look forward to your continued engagement with ARCS.

We had the privilege of attending a dinner sponsored by the University of Pittsburgh to recognize the significant impact of the ARCS Pittsburgh endowment program that was initiated several years ago. In attendance were several ARCS scholars, Provost **Joseph McCarthy**, and other ARCS members and university representatives. **Emmanuel León Colón** (third year scholar in the Department of Microbiology and Immunology) shared with the group what his ARCS award meant to him. His personal story was touching and opened everyone's eyes to what a difference our awards make in the lives of brilliant, budding scientists.

Thank you all for your continued support of scientific research. We look forward to expressing our thanks to you personally at our Donor Appreciation Event on October 30th.

“Come meet our new scholars as well as our second and third year scholars at our Donor Appreciation Event later this month.”

### Anne Crawford & Linda Thier

Co-Presidents  
ARCS Foundation Pittsburgh





## ARCS Welcomes New Scholars

**WE ARE DELIGHTED** to welcome the following students as our new scholars for 2024–2025:

**Jacqueline Avila**

Pitt, Swanson School of Engineering, Bioengineering

**Guadalupe Bernal**

CMU, School of Computer Science, Robotics Institute

**Katrina Carr**

Pitt, School of Nursing

**Chris Choi**

CMU, Mellon College of Science, Physics

**Dennis Dole**

CMU, Mellon College of Science, Chemistry

**Adelle Holder**

Pitt, Swanson School of Engineering, Civil and Environmental Engineering

**Anna Iacocca**

CMU, College of Engineering, Biomedical Engineering

**Abigail Lustyik**

Pitt, School of Nursing, Doctor of Philosophy

**Claire Mock**

Pitt, Dietrich School of Arts and Sciences, Department of Geology and Environmental Science

**Ashley Steinberg**

CMU, Mellon College of Science, Chemistry

**Erin Walsh**

CMU, Mellon College of Science, Biological Sciences

**Lindsay Wilson**

UPMC Children’s Scholar, Pitt School of Medicine, Program in Microbiology and Immunology

**Jason Yeung**

Pitt, School of Medicine, Integrative Systems Biology

## ARCS Fall Tea

**ON SEPTEMBER 5<sup>TH</sup>** our Membership Committee hosted an ARCS tea to greet our newest members and hopefully recruit new members. **Susan Creighton** graciously hosted this event on her home’s beautiful outdoor patio. The weather was perfect while twenty people mixed and mingled. Eleven ARCS members, including two brand new members, five potential members, and four scholars attended.



*Emmanuel León Colón, Samantha Nance, Halah Winner, Pam Meadowcroft, Anne Gormaley, Margo Dermody (Photo by Susan Creighton)*

The scholars were the program and enjoyed speaking to the members about their research and about themselves. Current and prospective members could take informational folders and ARCS pamphlets home. The group was social and enjoyed the menu of the delicious cold melon soup, cucumber rounds, egg salad sandwiches, cake pops, and lemon bars for an authentic afternoon tea.

Thank you Susan and Tucker (Susan’s dog) for your hospitality!



*Susanne Wilkinson, Becky McGough, Ellen Pishko (Photo by Susan Creighton)*



## Recap of ARCS Tour of McGowan Institute for Regenerative Medicine

**A**RCS visited the **McGowan Institute for Regenerative Medicine** in May. After opening remarks by **Dr. Chandan Sen**, the institute's new director, we toured the labs of **Stephen Badylak, DVM, PhD, MD;**

**Deeptankar DeMazumder, MD, PhD; Parker Evans, PhD, MS; Amrita Sahu, PhD;** and **Kanhaiya Singh, PhD.** More information about the research in the labs we toured is available at [mirm-pitt.net](http://mirm-pitt.net).



*Russ Kemerer examining a sample  
(Photo courtesy of the McGowan Institute)*



*Dr. Chandan Sen, the institute's director  
(Photo courtesy of the McGowan Institute)*



*ARCS members and guests listening to an explanation  
(Photo courtesy of the McGowan Institute)*

*McGowan staff, Jay Thier, Charlotte Beukema, Henry Beukema, Dick Berdik, Jeanne Berdik  
(Photo courtesy of the McGowan Institute)*





## Update about Diabetes Research at UPMC Children’s Hospital

[Editor’s Note: Several years ago, ARCS toured Dr. Gittes’s lab at UPMC Children’s Hospital of Pittsburgh. He wrote this update in mid-June.]

I wanted to provide an update on my work related to diabetes. We have made some promising strides toward human trials with the gene therapy in my lab.

To date:

- We’ve decided, based on consistently positive results in monkeys, that we have the virus and gene sequence that we can move forward with for human gene therapy for both type 1 and type 2 diabetes.
- We continue to test the introduction of a brief course of immunosuppressants following the gene therapy procedure in monkeys to protect the newly created beta-like insulin cells produced via the treatment. In humans, we’ll likely need to administer a mild course of immunosuppression for approximately three months post-procedure for optimal success.
- In monkeys, the gene therapy treatment remains effective, with many monkeys achieving a 50% or greater reduction in insulin dependence and some showing essentially normal glucose tolerance tests.
- I continue to expect even better results in humans with type 1 diabetes (T1D), because humans with diabetes have significant numbers of insulin cells in place, while our diabetic monkeys have none. Additionally, the normal glucose tolerance tests achieved post-procedure could indicate better quality of life for patients, with more freedom to eat and drink normally without the worry of blood sugar instability.

“I continue to be really grateful for the amazing philanthropic generosity that has been provided in support of my research.”

- Representatives from GenPrex, our licensing partner, will visit the lab in the next month. I’d like to begin planning toxicology studies with them in preparation for the FDA approvals needed to start human clinical trials. Our team is looking forward to embarking on this next step.

I’m also heading to India this summer to conduct rigorous testing with a contract research organization based there for our chronic pancreatitis work. I’m happy to answer any questions about the project!

I previously shared that given our discoveries with the chemical pancreatectomy research, we’re considering the application of the technique as a potential strategy to address diabetes from an entirely different angle. Pancreas transplants are considered the gold standard treatment for T1D. However, physicians don’t usually recommend pancreas transplants given the high levels of lifelong immunosuppression needed post-surgery. We’ve found that the chemical pancreatectomy procedure we developed, performed on the cadaver pancreas before transplantation, removes over 99% of the non-insulin-producing tissue—significantly reducing the need for lifelong immunosuppressive medication! Our first monkey pancreas transplant using this technique will likely happen sometime in July. I look forward to sharing our results.

I continue to be really grateful for the amazing philanthropic generosity that has been provided in support of my research. The experimental work we perform in my lab is exorbitantly expensive and nowhere near covered by federal funding. We simply would not be where we are today without the support of our generous donors.

**George Gittes, MD**

## All ARCS Conference Recap

ARCS held its annual All ARCS Conference in Chicago in June. The theme was Celebrating the Past, Empowering the Future. The highlights included educational and inspirational sessions. **Dr. Judith Giordan** spoke about the future of STEM leadership. **Dr. Kristian Hammond** discussed artificial intelligence (AI). Janet Foutty spoke about the expectations of leaders today. **Cassa Hanon** led a leadership workshop. Attendees celebrated two anniversaries—the 65th anniversary of the founding of ARCS and the 45th anniversary of the Illinois Chapter. Several members from Pittsburgh attended the event.

Several members attended the recent All ARCS Conference in Chicago. Back row, left to right – **JoAnne Patross, Linda Burke, Carol Stockman, Kathy Testoni**; Front row, left to right – **Linda Thier, Anne Crawford, Sue Harter, Peggy Mooney, Beth Wainright**; Not pictured – **Pam Meadowcroft** (Photo courtesy of Anne Crawford)





## A Note from Jeanne

14

I absolutely love my close-to-the-seaside home on Cape Cod, my gardens, and life in the small town of Orleans. But every couple of months, I need to come home for immersion in the Steeler nation, a chance to spend time with dear friends, and a dose of Pittsburgh in general. These visits are always wonderful, but the most recent one was especially terrific.

On September 10th, Pitt Provost **Joe McCarthy** hosted a dinner in support of ARCS Pittsburgh's development efforts and specifically to reach out to ARCS members who might be interested in contributing an endowed scholar award at Pitt. It turned out to be a super evening. Joining the provost were Vice Provost for Graduate Studies **Amanda Godley**, several Pitt department heads, six ARCS scholars, and about twenty ARCS members/spouses. The provost and vice provost both spoke and thanked ARCS Pittsburgh for all we have done to strengthen research at Pitt and to advance American leadership in science. One of the scholars then delivered extremely powerful testimony about how his award not only was a life-saver financially (he actually seemed to credit us with helping him to meet and marry his wife!), but that it was of even more vital importance to his success because it meant that someone believed he could actually BE successful! Incredibly moving! One of our members recalled hearing from this same scholar at another event when he spoke eloquently,

from his heart, about the impact the award had on his challenging path to a PhD program. This member recalled a similar story told at last summer's ARCS anniversary dinner from a long-ago ARCS scholar who was instrumental in the founding of the Pittsburgh Chapter, **Dr. Jeanne Van Briesen**, as follows: "She too had challenges in her path to her PhD and the ARCS Award gave her the necessary self-confidence to pursue and complete her work. She said other awards were given **AFTER** she had successfully completed something. Whereas the ARCS award was looking to the future and saying, 'Yes, you CAN do it!' That she did and is still doing."

We are extremely grateful for all contributions to ARCS Pittsburgh, but the return on investment from endowed contributions can't be overstated. They are truly the gift that keeps on giving, providing perpetual support to strengthen our universities', our city's, and our country's leadership capacity in science, technology, and medical research. Global leadership in scientific research depends on having the best departments

in the best universities. Achieving that is **TOTALLY** dependent on having the best people doing the research. It's ARCS Foundation's focus on developing the best people that is the game changer.

### Chair ARCS Pittsburgh Fund Development

**Jeanne B. Berdik**

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### Stop the Presses/Breaking News

The dinner ended with one new full 2025 endowed award being pledged to Pitt, PLUS shortly thereafter, we received an offer of \$40,000 toward a SECOND endowed award.

### More Exciting News

As of September 21st, another member has stepped forward as a partner, bringing the total pledged on this new award to \$60,000. We need an additional partner or partners to make up the difference of \$40,000 payable in five annual installments beginning next spring. Please contact me if the possibility of being part of this exciting partnership interests you. Let's not leave these offers on the table!

## ARCS Board Meetings

All ARCS Pittsburgh members are welcome to attend our board meetings, which are held via Zoom. The meetings for the rest of 2024 are scheduled for Thursday, October 17th, and Thursday, November 21st, from noon until 1:30 p.m. Please contact Sarah Stallings at [pittsburgh@arcsfoundation.org](mailto:pittsburgh@arcsfoundation.org) to get the Zoom link to attend.

## Save the Date!

Our annual Donor Appreciation Event will be held at Pitt's University Club on Wednesday, October 30th, from 6:00 p.m. to 8:30 p.m. More details will be announced soon!