### **Message from the Co-Presidents**

We have loved leading this dedicated group of over 100 women philanthropists as they help to strengthen science and technology in America. As an all-volunteer organization, ARCS Pittsburgh relies solely on the passion and commitment of its members to achieve our goals, and they always deliver. This year was no different—we funded 31 scholars, we learned about topics as varied as green buildings and the

science of restoring rare frescos (in Pittsburgh!), and we had a great time at our social events.

In the face of shrinking federal funding for scientific research, the fifteen ARCS chapters across the county maintain their staunch commitment to raise unrestricted dollars to support the next generation of breakthroughs that can change the world for the better.

We can't wait for the next year, and will strive for even more funding, more learning and more fun!

### Yours in ARCS,

Pamela Meadowcroft and Kathy Testoni

### **Mission and History**

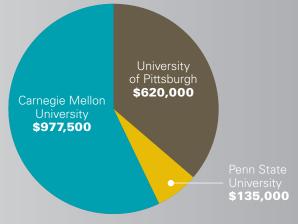
ARCS (Achievement Rewards for College Scientists) Foundation advances science and technology in the United States by providing financial awards to academically outstanding U.S. citizens completing degrees in science, engineering, and medical research.

**The Pittsburgh Chapter** began in November 2002, with 15 women committed to the mission. An initial relationship was established with Carnegie Mellon University College of Engineering. In 2007, a partnership was established with the University of Pittsburgh first with the School of Medicine and then the Bioengineering Department within the Swanson School of Engineering. Support for both schools has since expanded into other areas with great success.

The honor of an ARCS Award is very important, and the scholars love the interaction, friendship and connection to Pittsburgh that come with it.

**Alberta M. Sbragia, PhD** *Vice Provost for Graduate Studies*University of Pittsburgh

Amount committed through fiscal year 2019-2020 for scholar awards by university: **\$1,732,500** 





### 2016-2017 Donors

ARCS Foundation-Pittsburgh greatly appreciates the generosity of all our donors. The following listing reflects support in 2016-2017.

# ARCS NAMED AWARD DONORS

Many individuals, foundations and corporations contributed full or partial funding to sponsor a three-year \$15,000 Named Award for a scholar.

#### **FULL SCHOLAR AWARDS**

Alicia Avery and
Virgil D. Gligor
Chapter Award in honor
of Jeanne Berdik
Chapter Award in honor of
Jerry and Maureen Cohon
Susan and Roy Dorrance
Sheila and Milton Fine through
The Fine Foundation
Leslie and Hans Fleischner
Lockheed Martin Corporation
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Catharine and John Ryan in
honor of Jeanne Berdik

#### **HALF AWARDS**

Jeanne and Dick Berdik Linda and Timothy Burke, Jr. Ann Fromm and Bill Payne Susan and Michael Harter Becky and Tom McGough Susan and Chris Pappas Missy and John Unkovic

### **THIRD AWARDS**

Karen Auclair Charlotte and Henry Beukema Sue and Mark Breedlove Leslie Dunn Kate Freed and Jack Brice Carol and Richard Heppner Sarah and Craig Jones Jennifer and James Martin Pamela Meadowcroft and James G. Holland Margaret V. Ragni, MD and Fredrick L. Porkolab, MD Millie and Gary Ryan Carol and Paul Stockman Thea and Dick Stover Kathleen M. and Louis Testoni Elizabeth T. Wainwright Janet Wood Maureen Young

## SUMMA CUM LAUDE DONORS (\$1,500+)

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### Scholar Alumnae Members

Emily Elliott Jeanne VanBriesen

#### **Scholar Celebration**

Special thanks to Highmark Blue Cross Blue Shield for their sponsorship of the 2017 Scholar Celebration.

### The road from Rotator Cuff Research to a Job

**Matt Miller**'s new work is vital. Just after receiving his PhD in bioengineering at Pitt, he accepted a job teaching Physics to a new generation of high school students.

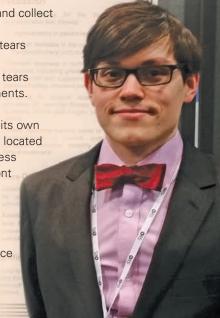
"I discovered that I liked the teaching part of my PhD work even more than the research part," said Matt, who just moved to Nashua, New Hampshire. "And I liked Worcester Academy because they focus on active, hands-on learning, which students need to learn for college."

During five years at Pitt in Dr. Rich Debski's lab, Matt researched rotator cuff shoulder injuries and which ones would rip further. Their approach was three-pronged:

- Study patients with rotator cuff injuries and collect data from before and after PT.
- Manipulate cadaver tissue to see which tears would grow.
- Create computer models to predict how tears would increase, based on those experiments.

They learned which tear would do well on its own and which required PT. They learned that if located in the center of the tendon, the tear was less likely to grow, but if located toward the front edge, it had a greater risk of growing.

"ARCS money helped me so much," Matt said. "It allowed me to go to conferences that accepted my abstracts. One conference focused on 'active teaching,' which really helped me determine my future."



### **Total number of students supported since 2002**

Carnegie Mellon University

University of Pittsburgh

**♦♦♦♦♦♦♦** 

Penn State University



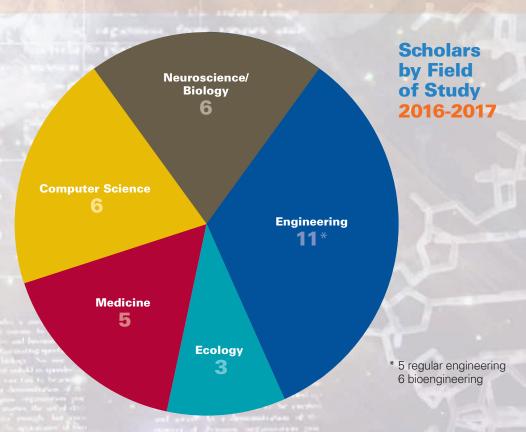
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Total 113

The ARCS Award is both a recruiting tool for top students and a reward for those who earn it.

### **Bob Frederking**

Associate Dean for Doctoral Programs, School of Computer Science Carnegie Mellon University



# Peer Presents: A Learning Tool? A Gift? Or Both

"We've built a peer feedback system," said **Amy Shannon**, third year ARCS scholar at CMU, "a web page that uses a Facebook-like system for interactive learning." Called Peer Presents, it allows a student talking to other students about his or her work to receive live feedback for later review. The presenter can even list questions for the listeners to guide that feedback.

"The students in the audience are using computers anyway," said Amy. "It's better to have them actively engaged in the presenter's work than doing something else. The presenters were

already using index cards, so the digital system makes that part easier, too. Even the task of reading student handwriting is gone."

Born in Tennessee, Amy grew up in Montgomery, Alabama, where her parents still live, and did her undergraduate work at Emory University in Atlanta. "ARCS money helped me visit my parents, and my fiancé in med school at the University of Kentucky," Amy said.

In addition to Peer Presents, Amy plays ultimate frisbee and produces an annual student play. This year, Lucky Stiff relates the story of a man who dies, leaving directions in his will that his nephew take his dead body on a grand adventure. On stage, the adventure unfolds.

When she finishes her PhD, Amy hopes to become a faculty member herself.



### OFFICERS AND BOARD OF DIRECTORS 2016-2017

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Membership in ARCS is a unique opportunity to invest in future American leadership in science and technology. In addition, ARCS is a wonderful social network and its educational programs keep members engaged.

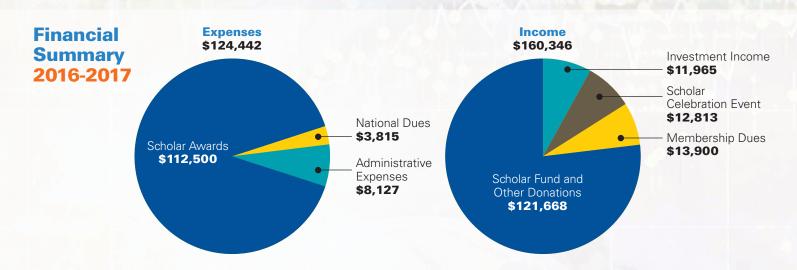
Victoria Wellstead Murphy Member since 2015

### **Of Special Note**

Congratulations to Jeanne VanBriesen, Ph.D., P.E., on her induction into the 2016 ARCS Alumni Hall of Fame.

The Alumni Hall of Fame honors ARCS Scholar Alumni who have made outstanding contributions to the advancement of science and to increase our nation's scientific competitiveness. Now a member of ARCS Pittsburgh, Jeanne has conducted important research on water quality that impacts local, state, national, and international policy and engineering practices. She says of her award:

"ARCS Foundation had a profound effect on my graduate career and my confidence. Knowing that an organization like ARCS recognized my potential and now wants to reward the years of effort I have put into science has strengthened my resolve to work on critical problems and make a difference in the world."





www.arcsfoundation.org/pittsburgh pittsburgh@arcsfoundation.org

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