

ARCS-Pittsburgh Newsletter

www.arcsfoundation.org/pittsburgh

Summer 2012

Achievement Rewards for College Scientists

*Advancing Science
in America®*

ARCS Foundation advances science and technology in the United States by providing financial awards to academically outstanding U.S. citizens studying to complete degrees in science, engineering and medical research. The Pittsburgh Chapter has the additional focus of increasing the number of doctoral scholars pursuing advanced scientific study and research in the Western Pennsylvania region.

The Pittsburgh Chapter
Chartered in 2003, the Pittsburgh Chapter is one of the newest of 17 chapters. In a short time, the Chapter has already made a sizable financial commitment to its first two partner universities, Carnegie Mellon University and the University of Pittsburgh. A third partnership with Penn State University is underway with funding that began in fall 2010.



Kathleen M. Testoni Receives ARCS 2012 Light Award for Stellar Service

The Pittsburgh Chapter recognized Kathleen Testoni as recipient of the ARCS Light Award for 2012 at its Annual Meeting in May. Kathy became a member of the Pittsburgh Chapter in 2004. She has held leadership roles including Membership Co-Chair, Nominating Co-Chair and for the past two years has been the Director of Student Relations.



The ARCS Light Award is a distinctive honor awarded to a Chapter member who has given the highest quality of long-term service to the Chapter. The selected outstanding member is recognized by the Chapter at the Chapter's Annual Meeting and at the ARCS Foundation national Annual Meeting.

Only one ARCS Light Award may be designated by the Chapter each year. However, the award need not be given every year.

Congrats, Kathy, on this well deserved honor!

We have a million reasons to be proud!

Last February, ARCS Pittsburgh notified our three university partners -- Carnegie Mellon University, the University of Pittsburgh and The Pennsylvania State University -- that we would fund ten new students for three years beginning with the academic year 2012-2013, making a total of 32 ARCS Scholars in western Pennsylvania.

Five of the new students will be at CMU, four at Pitt and one at Penn State. Each of the ten students will receive \$5,000 a year or \$15,000 over the three-year period.

When this new commitment of \$150,000 (ten students times \$15,000) is added to our previous commitments and awards, the total comes to \$1,027,500 -- which means that ARCS

Pittsburgh has committed to award a total of over one million dollars to our scholars!

Adding to our excitement at achieving the million-dollar milestone is the fact that 2013 is our tenth anniversary.

We were founded in May 2003. Bev Elliott, Millie Ryan and Kathy Testoni have agreed to chair a committee to celebrate these two achievements next spring. We will keep you informed as their plans solidify.

Each and every one of us deserves congratulations for attaining the million dollar mark within ten years. Every donation made and every hour of volunteer time given over our 10 year history contributed to it.

So thank you one and all!

Pittsburgh Chapter Board of Directors 2011-2012

Carol Stockman, President
 Fran Abraham
 Barbara Andrews
 Linda Burke
 Doris Calian
 Carol Caroselli
 Maureen Cohon, Esq.*
 Maren Cooke
 Doris Cope
 Ann Fromm-Cotton
 Dione Graswick
 Carol Heppner
 Jennifer Martin
 Pam Meadowcroft
 Mary Anne Paul
 Debbie Scully
 Arlene Sokolow
 Kathy Testoni
 Missy Unkovic
 Janet Wood
 Lise Woodard
 Maureen Young

Communications Committee Co-Chairs 2011-2012

Chair: Debbie Scully
 Co-Chair: Ann Fromm

*Special thanks to
Debbie Meyers and CMU for printing
and mailing this newsletter.*



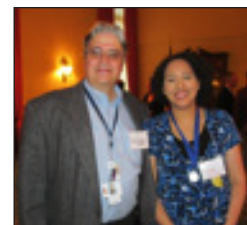
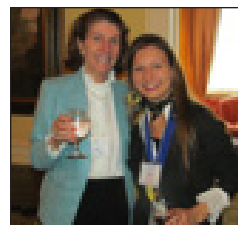
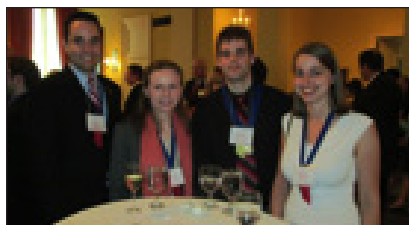
Scholars Highlight their Research at the 2012 Scholar Showcase Event

The Scholar Showcase Event on March 28, 2012 at the Twentieth Century Club was an enjoyable and educational time for all who attended. The format focused on third-year scholars and their research projects.

Prior to the main event, the host committee, patrons and donors enjoyed a short cocktail reception. All scholars attended and mingled with guests. We had an increased response for the Host Committee/Patron reception in 2012.

The event then moved to the area where third-year scholars presented their abstracts, and attendees could listen in an informal setting to their presentations ranging from computational learning theory to neurodegenerative diseases.

The evening concluded in the auditorium as coffee, tea and cookies were available, with remarks by the Pittsburgh Chapter's second-year ARCS Scholar graduate Dr. Armen Arevian. A total of 142 people (including the 30 ARCS scholars) attended the event. The success of event was due to the collaboration of the members of the committee and the participation of our scholars.



Congrats to our ARCS Alumnus Andy Rape

Andy Rape, recipient of the Carol and Richard Heppner ARCS award 2008-11, received the 2012 Graduate Research Award at CMU's commencement for his outstanding research on regulation of cellular traction forces. After finishing his PhD in only three and a half years, Andy is now a postdoctoral fellow at the University of California Berkeley.

While at CMU in the Biomedical Engineering Department, Andy co-authored six scientific articles. He worked with Dr. Yu-li Wang on developing a novel micropatterning method for soft hydrogels, researching the interplay between cell shape, motility and traction forces, and investigating the regulation of traction

forces in microtubules. His thesis was titled "Regulation and Function of Cellular Traction Forces."

We're proud of Andy and wish him well in his new work at Berkeley.

Six Members Leave the Pittsburgh Chapter Board

The ARCS-Pittsburgh Chapter has been privileged to benefit from the many talents of the following women whose Board term ends in June 2012.

Carol Caroselli
 Doris Cope
 Mary Anne Paul
 Debbie Scully
 Kathy Testoni
 Maureen Young

On behalf of the entire membership, our heartfelt thanks go out to each of you for your endless hours of hard work.

A Letter from our New President, Missy Unkovic

Dear ARCS Foundation—Pittsburgh Chapter Members,

I am honored and excited to be writing my first official President's Letter. Having just arrived home from the National Annual Meeting in Denver, I am full of enthusiasm about ARCS's mission and have all kinds of ideas about how to carry it out.

My thanks goes to all of you who will help to make ARCS successful during the coming year: those of you who will sit on the Board, work on a committee, help with our web page, introduce new members to ARCS, help to fund scholar awards, help to provide for our administrative needs, or help with any of our programs. Summer tends to be a relatively relaxing time for ARCS, since the academic year has ended, and some of our scholars are off for well-deserved vacations, visits home, or field work. Nonetheless, we are busy preparing for the fall and for the various new member teas and al fresco lunches we will hold this summer.

I also want to thank those of you who helped to make last year so successful. We had a great Board to guide us ably led by our President, Carol Stockman. Carol's willingness to do whatever was needed for the Chapter, her ability to speak and write so articulately, her calm manner even in the face of difficult situations, and her sense of humor made her a wonderful president. Many, many thanks to Carol.

The nearby pictures of the Scholar Showcase prove how fabulous it was. Thanks very much to Carol Caroselli, Arlene Sokolow and their committee. Pam Meadowcroft and Millie Ryan did their usual magic, making winter luncheons at the Twentieth Century Club fun, interesting and helpful for our future planning.

Our financial team -- Dione Graswick, Jennifer Martin, and Lise Woodard -- kept us honest with their good control

over our financials. A special thanks goes to Janet Wood for her third year coordinating programs for us. Sue Breedlove helped to make our trip to Penn State fun and totally interesting. Beth Wainwright worked tirelessly to improve the usefulness of the web site. Of course, Debbie Scully and Ann Fromm-Cotton saw that we were well informed about all ARCS activities, while Fran Abraham recorded the results of our Board meetings with gusto. Linda Burke, Carol Heppner, and their committee worked tirelessly to ensure that our next Board will be just as good as this past one.

And all of our work would be in vain without our fundraising and membership groups. Thanks to Mary Ann Paul, Maureen Young, Doris Calian, and Arlene Sokolow for a job well done. Barbara Andrews and Kathy Testoni worked wonderfully together connecting us to our universities and scholars. Congratulations to Kathy for her ARCS Light Award.

This coming year, the Board will miss the wise advice and talents of Carol Caroselli, Doris Cope, Mary Anne Paul, Debbie Scully, Kathy Testoni, and Maureen Young as they rotate off, but we hope they will continue to help ARCS in other ways. And we are excited that we will be joined by Debbi Linhart, Julia Gleason, Christy Gookin, Jan Wagner, Karen Meck, Ruth Garfinkle, Kate Freed, and Lourdes Castellanos.

Because ARCS Pittsburgh was founded in 2003, next spring we will celebrate our tenth anniversary.

In addition, with the commitments we have made to our scholars for the next three years, total ARCS Pittsburgh commitments to scholar awards amount to more than one million dollars. Stay tuned for a celebration of a million dollars and 10 years!

Membership Update: Keep up your recruiting efforts!

You heard the good news at our Annual Meeting: ARCS Pittsburgh has committed over \$1,000,000 to scholars since our inception in 2003. That's an awesome accomplishment!

To continue to attract the best and brightest young scientists to our region for graduate study, we absolutely MUST raise more money by attracting new members to ARCS.

Through the generosity of members like you, ARCS Pittsburgh has been able to support 71 young scientists to date. Please talk about ARCS to your friends,

associates and anyone who might be interested in our mission, and tell them that we will be hosting informational get-togethers for tea, cocktails or dessert some of our members' homes.

An event was held June 21 at 2 p.m. at Linda Burke's in Oakland, and others will be held on July 17 at 2 p.m. at Doris Calian's in Fox Chapel and on July 19 at 6 p.m. at Kathy Testoni's in Shadyside.

If you can give us names and phone numbers of potential members you think might be interested in attending one of these events, we will send them an

invitation. They will have the opportunity to meet at least one of our scholars to hear about their research and what ARCS has meant to them. You are welcome to attend as well, but it is not necessary. We are counting on you to guarantee the future of ARCS in Pittsburgh. Please help us.

A reminder to current members: please review your renewal membership form and return it by July 31, 2012. Your continued support and generosity are greatly appreciated.

Doris Calian, Membership
412-784-0944

We bid farewell to the following third-year scholars. We wish them continued success as they complete their studies and look forward to staying in touch with them.

Carnegie Mellon University Third-Year Scholar Alumni

Melissa Day

Dr. Arnold O. Beckman Award 2009-2012
B.Ch.E., Chemical Engineering, University of Delaware, 2009
Carnegie Institute of Technology, Chemical Engineering Department
Research interest: sustainable energy

Robert Fisher

The Fine Foundation Award 2009-2012
B.S., Computer Science, Polytechnic Institute of NYU, 2009
School of Computer Science, Machine Learning Department
Research interest: computational learning theory

Lauren Jackson

Jeanne Berdik Founder Award 2009-2012
B.S., Materials Science and Engineering, North Carolina State University, 2009
Carnegie Institute of Technology, Materials Science and Engineering Department
Research interest: electronic materials for sustainable energy

William Levine

Pittsburgh Chapter Award 2009-2012
B.S., Physics, University of Virginia, 2009
Mellon College of Science, Department of Physics
Research interest: medium energy physics

Julia Schwarz

The BNY Mellon Award 2009-2012
B.S., Computer Science, University of Washington, 2007
School of Computer Science, Human-Computer Interaction Institute
Research interest: privacy and security in ubiquitous computing



University of Pittsburgh Third-Year Scholar Alumni

University of Pittsburgh School of Medicine, Interdisciplinary Biomedical Graduate Program

Mahlon Collins

Huntington-Testoni Award 2009-2012
B.S., M.S., Neuroscience and Experimental Psychology, Central Michigan University, 2009
University of Pittsburgh School of Medicine, Center for Neuroscience
Research interest: neurodegenerative diseases

Callie Norris

McCague-Munchmeyer-Ragni Award 2009-2012
B.S., Biology, Francis Marion University, 2008
University of Pittsburgh School of Medicine, Interdisciplinary Biomedical Program
Research interest: cellular and molecular pathology

Douglas Marvel

Pittsburgh Chapter Award 2009-2012
B.S., Microbiology and Immunology, University of Rochester, 2007
University of Pittsburgh School of Medicine, Immunology Program
Research interest: scientific problems related to fighting cancer



Penn State University Field Trip a HUGE Success!

ARCS members had their first field trip to the Penn State campus on April 27, 2012.

A small bus was hired to transport 18 members and the other 6 drove themselves and met us there. Once we arrived, we were joined by the three ARCS members who live in the State College area and our four PSU ARCS scholars.

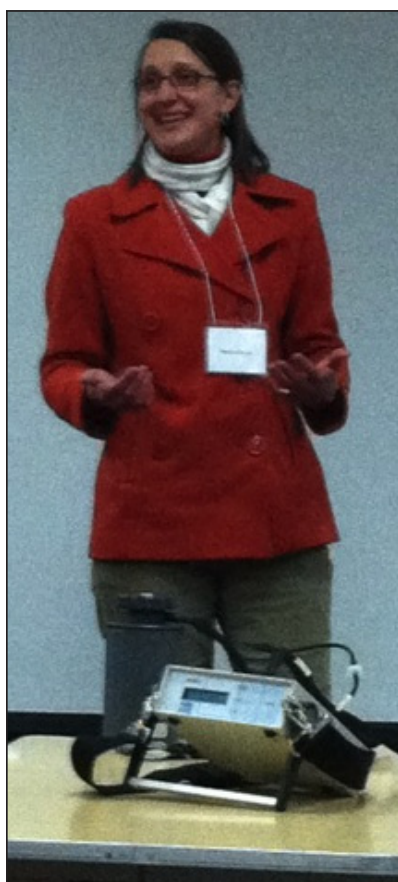
Our first stop was the greenhouse where our scholar Molly Hanlon talked about her plant research, followed by a talk and demonstration on soil by scholar Denise Finney.

We had lunch at the new Millennium Science Complex as we heard from Penn State President Rodney Erickson and Dean of the Research and Graduate School Henry "Hank" Foley.

The group split up for tours of the complex, with both groups getting to see the Materials Wing and the Life Sciences Wing. We learned highlights of the unique structure of the building itself and also how it is being utilized to promote the collaboration of the materials and life sciences.

And what trip to Penn State would be complete without a trip to the Creamery!

Many thanks to Steve Blake, director of development for the College of Research and Graduate Studies at Penn State, for arranging our fun day.



Above: ARCS scholar Molly Hanlon in her scholarly greenhouse. **Left:** Denise Finney gives ARCS members the dirt on soil. **Below:** Penn State's new Millennium Science Complex.



Welcome to our New First-Year Scholars 2012-13!

Carnegie Mellon University Scholars

Peter Chapman (Computer Science)

Peter has completed his bachelor's degree at the University of Virginia where he did substantial research in information security. He has presented his results at professional conferences including the Computer & Communications Security Conference of the Association for Computing Machinery, and the Hot Topics in Security Workshop. Peter was runner up for the Computing Research Association's Outstanding Undergraduate Researchers Award.

Peter Lund (Biomedical Engineering)

Peter has graduated from the University of Pittsburgh, with dual majors in applied mathematics and neuroscience and with a GPA of 3.96. One of the few recipients of Pitt's Chancellor's Award when he entered Pitt, he also won the Culver Award in the Department of Mathematics and received summer fellowships to perform research at CMU-Pitt's Center for the Neural Basis of Cognition. He was one of four Pitt nominees for the congressional Goldwater Award. Peter's main research interest is neuroscience and brain-machine interface.

Thomas Jackson (Electrical and Computer Engineering)

Along with completing his bachelor's degree at Cornell with a GPA of 4.0, Thomas Jackson shows serious leadership ability. He led this year's Cornell's Autonomous Underwater Vehicle Team of 40 undergraduate engineers, a student-run project team with the primary goal of competing in the Robo-Sub Underwater Vehicle Competition. One of Thomas' recommenders speaks of Thomas' "astonishingly excellent" academic record. From ECE's pool of applicants (U.S. and international students), Thomas was identified as a superstar by faculty members in two research areas.

Matthew Edwards (Mechanical Engineering)

The strongest U.S. applicant in the mechanical engineering admitted list, according to MechE department head Nadine Aubry, Matt has excelled at Princeton University, earning a 3.8 GPA. He is one of the top Robotics students in our applicant pool this year and will be working with Professor Metin Sitti whose research is in micro robots.

Lauren Eve Strahs (CEE)

Lauren earned her bachelor's degree in civil and environmental engineering from the University of Michigan in May 2012, where her research focused on analysis of drinking water samples for microbial diversity. She participated in a NSF-funded project at Drexel University focused on indoor air quality and she completed an internship at the American Society of Civil Engineers in Washington, DC. Her Ph.D. research interests are drinking water, and she is especially interested in an interdisciplinary experience.

University of Pittsburgh Scholars

School of Medicine

Whitney Lane

Whitney graduated from Purdue University Indiana with a bachelor's degree in biology, and a GPA of 3.95 and GREs that place her in the top 5 percent of students applying to graduate school. With interests in molecular genetics and virology, she is poised and able to articulate what she wants to pursue in grad school. Whitney is an example of a student who had many options but chose to attend the University of Pittsburgh in part because of the offer of the Jeanne Berdik Founder's award.

Brooke Sullivan

An intense and motivated researcher, Brooke earned a bachelor's degree in biotechnology from the University of Nebraska, graduating with a 3.9 GPA. She is an Idea Networks of Biomedical Research Excellence Scholar, a program sponsored by the NIH.

Courtney Andersen

Courtney graduated from UMASS-Lowell with a bachelor's degree in biological sciences, earning a 3.95 GPA. With an interest in pharmacology and signaling mechanisms, she has excelled in her first year coursework and shows great promise in the laboratory.

School of Engineering, Department of Bioengineering

Jaime Gerhart

At Messiah College, where Jaime earned a bachelor's degree in biomedical engineering, she maintained a 3.82 GPA while participating on the women's lacrosse team. She

earned several honors, including being awarded a four-year President's Scholarship from Messiah College and being selected to the Dean's List, the College Honors Program and the Academic Honor Roll. Jaime has also been involved in an outreach project working on oxygen concentrators in partnership with a mission hospital in Zambia, which she visited last summer as the site team leader. Her main interest is in cardiovascular bioengineering.

Pennsylvania State University Scholar

Laura Radville

A native of West Newbury, Mass., Laura earned her bachelor's degree biology and studio art from College of the Holy Cross. She then went on to earn her master's in biology from the University of Rhode Island. Impressed by the quality and quantify of ecology research at Penn State, Laura will be joining the ecology program there and will study effects of climate change on roots of arctic plants in Greenland.

Missy Unkovic Earns YWCA Award

Incoming ARCS President Missy Unkovic received an annual "Tribute to Women Award" from Pittsburgh's YWCA, which honors women who are active in business and non-profit organizations.

"I'm very pleased," Missy says. "I was nominated because I've served on a number of non-profit boards which help women and are run by women."

One such board serves the FISA Foundation, from which Missy will step down as president on June 30 – just in time to assume the ARCS mantle. FISA's mission is to help women, girls and people with disabilities by awarding grants and otherwise working with its non-profit partners.

After graduating from Mills College in California and being elected to Phi Beta Kappa, Missy earned a master's degree in mathematics from Carnegie Mellon University. She has worked for Citibank, Mellon Bank and the Rockwell Corporation, and she ran her own consulting business until recently.

In addition to leading ARCS and FISA, Missy chairs the board of the Hemophilia Center of Western Pennsylvania, a medical center serving people with bleeding disorders, and has served on the board of trustees for the Phipps Conservatory. She also sits on the board of the Smithfield Trust Company in Pittsburgh.

Missy lives in Shadyside with her husband, John, and family dog, Alena. John and Missy's daughter, Rachel, lives in northern Iraq and works for a non-governmental organization that helps refugees.

ARCS Foundation and Pittsburgh Donors 2011-2012 CORPORATIONS AND FOUNDATIONS

FULL SCHOLAR AWARDS

The BNY Mellon Charitable Foundation (II)
The Fine Foundation (II)
Thomas W. and Carol K. Henderson Family Fund
of the Pittsburgh Foundation
PPG Industries Foundation (II)
Westinghouse Electric Foundation (II)

INDIVIDUAL DONORS

FULL SCHOLAR AWARDS

G. Patricia Beckman
Roy and Susie Dorrance
Leslie and Hans Fleischner (IV)
John T. Ryan III and Catharine M. Ryan
in honor of their daughter, Maureen Emily Ryan

HALF AWARDS

Jeanne and Dick Berdik (III)
Linda Beerbower Burke and Timothy F. Burke, Jr.
Bev and Steve Elliott (III)
Susan M. and R. Michael Harter
Bettyanne and James C. Huntington, Jr.
Margaret P. Joy
Deborah W. Linhart
Mary Anne and John Paul
Carol and Paul Stockman (II)
Kathleen M. and Louis Testoni (II)

THIRD AWARDS

Francine Abraham
Mary Lou Bennett
Charlotte and Henry Beukema
Cynthia Carrow and James Kyper
Mimi Barash Coppersmith
Ann Fromm
Carol and Richard Heppner
Susan T. B. Kendall
Jennifer and James Martin
Carol and James McCague
Barbara R. Palmer
Margaret V. Ragni, MD and Frederick L. Porkolab, MD (II)
Millie and Gary Ryan (II)
Elizabeth T. Wainwright (II)
Maureen Young

Roman numerals indicate multiple awards

ARCS Foundation appreciates the generosity of those who have contributed to support our Scholars!

Your “Hot Tickets” Can Help Our Scholars See the ‘Burgh’

One of the goals of ARCS for our scholars is to help them see what Pittsburgh has to offer, and to encourage them to live in our wonderful city as they continue their careers.

Most students cannot afford our major league sporting events or cultural events. Now we have a way to let them take advantage of our own unused event tickets.

If you can't use your ticket(s), email Kathy Dee and she will send out an email blast to the scholars that certain “Hot Tickets” are available.

If a scholar can use them, he or she will contact you directly and arrange to get them. With enough advance notice, you can mail them to the scholar. On short notice, you and the scholar can arrange to meet, or you can arrange for the scholar to pick them up.

Once a scholar has claimed a ticket(s), please email Kathy Dee so she can let the others know the ticket(s) has been promised. Contact Information: Kathy Dee email KathyDee28@aol.com or phone 412-243-5333.

Please include:

- Your phone number
- The name of the “Hot Ticket” event and date



Mark Your Calendars: Upcoming Events You Won't Want To Miss!

September 11, 2012

Donor Appreciation Event hosted by CMU

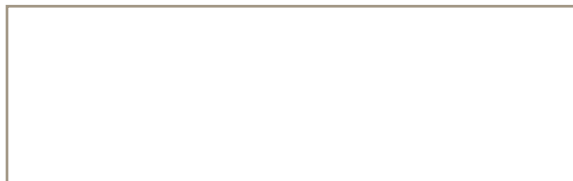
October 2012

Tech Tea at the McGowan Center for Regenerative Medicine

November 14, 2012

Program at the UPMC Sports Medicine Center Concussion Center for members and spouses

More details regarding each event will be forthcoming by email and post.



Carnegie Mellon University

