



ARChiveS

ARCS® Foundation Atlanta Chapter

Achievement Rewards for College Scientists

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.

Upcoming Events

- September 27
Fall Cocktail Party
- September 30 - October 3
All Members Conference (AMC), Chicago, IL
- October 26
Emory's Brain Health Center Education Event
- November 19
Scholar Awards Luncheon
- April 20-24
Charlottesville Retreat

Inside this issue:

- President's Desk 2
- Educational Trip 2
- Spring Luncheon 3
- Alumni Spotlight 4-6
- 2016 Retreat 7
- Neil deGrasse Tyson 7
- Campus Visits 8

Volume No. XVI Issue 4

Spring 2015

Donor Appreciation Event at Georgia Tech

Georgia Tech President G.P. 'Bud' Peterson and the First Lady, Valerie, opened their historic home on April 1, 2015 to honor ARCS Foundation Atlanta Century level and above donors. In addition to our donors, celebrants included current Georgia Tech ARCS scholars and distinguished scholar alumnus, Dr. Alejandro Toriello. The location and perfect springtime weather created an ideal setting for mingling and discussions among members, guests and hosts.



John and Marcia Donnell pose here with Alejandro Toriello, ARCS Foundation Atlanta Scholar and speaker at the event, and Liz and Mike Troy, who were his sponsors throughout his time at GA Tech, 2008-2010.

Val Peterson, ARCS Atlanta member and past president of the ARCS Foundation Denver Chapter, spoke of Bud's and her enthusiasm for Georgia Tech, the city of Atlanta, and their continuing support of our organization. She also shared a little known interest of Bud's in woodworking. To prove her point, she pointed out a beautiful dining room cabinet that he had made for their residence.

Jane Dolinger introduced the scholars who attended and briefly recapped our chapter successes: awarding over \$3.8 million to almost 380 scholars over 23 years; and, committing to award \$345,000 to 48 scholars at our 2015 Scholar Luncheon.

Dr. Toriello, now a Georgia Tech Assistant Professor, spoke about his work in the field of industrial engineering focused on the mathematical optimization of supply chain and logistics management. He affirmed how important his scholar award was to his academic success.

Funds Development Chair, Nancy Chambers and her committee, including Anne Easterly, Libby Jones, Sally McDaniel, Frances Swensson, Sherry Lundeen, Mitzi Hill, Sarah Batts, Lee Doyle, Lisa Bankoff and Robin King, worked hard to make this event a success. And, it definitely was! Future plans call for other donor recognition events at partner schools.



Paula Bevington and John and Marty Gillin enjoy the company of the hosts, Georgia Tech President, Bud Peterson and his wife, Val, ARCS Atlanta member.

Divulging a Secret at Dunwoody Rotary



Pictured here are Rick Woods, Dunwoody Rotarian and ARCS supporter, his wife, Marilyn Woods, and ARCS Atlanta member Nancy Chambers. This photo was taken at the donor appreciation reception at Georgia Tech.

On an early March morning, ARCS Foundation National VP Communications Chair and Atlanta Chapter Funds Development Chair, Nancy Chambers, roused a full house of Dunwoody Rotarians by promising that she was about to reveal one of Atlanta's best kept secrets. Nancy proceeded to deliver an informative and fact filled talk about the history, progress and results of ARCS Foundation and our Atlanta chapter.

ARCS donor and Rotary member, Rick Woods, believes the ARCS Foundation story should be shared and invited us to present at their weekly meeting. He was right. Nancy and the ARCS Foundation message were well received.

- Anne Easterly

From the President's Desk



President Jane Dolinger

It has been a very eventful spring for ARCS Foundation Atlanta! I think you will be inspired as you read the ARChiveS articles, which include the exciting night at the Fox with Neil DeGrasse Tyson, our rock star ARCS Scholar Alumnus. You can also see pictures from the first ever Donor Appreciation Reception at the home of Georgia Tech president, Dr. G.P. "Bud" and First Lady Val Peterson; the annual university site visits conducted by Sylvia Dick, VP of University Relations, and her team; and, of course, our annual spring luncheon. In addition, our spring issue is a time in which we focus on our Scholar Alumni. Susie Deyo, Scholar Alumni Chair, has tracked down ten of our alumni, and I'm sure you will enjoy reading what each is doing after receiving his/her PhD. Reading of their success will make you feel proud of your membership in ARCS Foundation Atlanta and your investment in our scholars.

In addition, our Funds Development team, led by Nancy Chambers, VP Funds Development, has had a very successful year. Our members, corporate donors, foundations, and friends have continued to support our mission, and we are grateful for their generous contributions. To that end, we have increased our scholar awards to 48 for a total of \$345,000. When these awards are given in the fall, we will have provided a cumulative amount of almost 4.2 million dollars in scholar awards since 1992!

We have a lot to be proud of and a lot to celebrate since our founding in 1992. Our Chapter's 25th anniversary will be here before we know it, and plans are underway to commemorate our silver anniversary with special events beginning in the fall of 2016 and culminating in a celebratory evening in April 2017. Co-chairs Ginny Plummer and Susan Higley will be implementing ideas from the 2017 Task Force, and they are already identifying committee chairs. I invite all of you to be involved in some way – whether it is chairing a subcommittee, serving on a committee, or volunteering to help stuff packets - whatever your schedule allows. I promise it will enrich your experience with ARCS and it will be personally rewarding.

Finally, I want to express my appreciation to the outgoing Board members for all their time, effort, and contributions to our Chapter. Your commitment and leadership have continued to fulfill our mission of advancing science and technology in the United States. I have enjoyed working with all of you this past year. Also, I extend a warm welcome to the new Board members and thank them for saying "Yes" to serving on the 2015-2016 Board of Directors. There is still work to be done as we continue to advance our mission.

Enjoy your summer. Whether you are traveling or taking a "Staycation," I hope you are able to enjoy some R and R with family and friends. I look forward to seeing all of you and connecting with you once again at many of our fall events.

--- Jane Dolinger

Educational Trip to Emory's Brain Health Center



Please mark your calendars for the Fall education event for the ARCS Atlanta Chapter on Monday, October 26th from 11:00 a.m. to 2:00 p.m. at Emory University's new Brain Health Center.

Our education session will feature Helen Mayberg, M.D., Professor of Psychiatry, Neurology and Radiology and the Dorothy C. Fuqua Chair of Psychiatric Neuroimaging and Therapeutics at the Emory University School of Medicine. Dr. Mayberg received a BA in psychobiology from the University of California, Los Angeles and an MD from the University of Southern California. She is a Board Certified neurologist, trained at the Neurological Institute of New York at Columbia University. She also earned a post-doctoral fellowship in Nuclear Medicine at Johns Hopkins.

Dr. Mayberg heads a multidisciplinary depression research program at Emory that is dedicated to the study of brain circuits in depression and the effects of various antidepressant treatments, measured using a variety of functional and structural imaging tools. She was recently named as one of Emory University's "Game Changers" in recognition of her pioneering Deep Brain Stimulation (DBS) research, which has been heralded as one of the first hypothesis-driven treatment strategies for a major mental illness. Dr. Mayberg will be telling us about her fascinating area of research and her incredible results.

Annual Meeting and Spring Luncheon

Jane Dolinger opened the Annual Atlanta ARCS Foundation meeting, May 13, 2015, by congratulating the Board members on their outstanding service. Each committee report illustrated once again how dynamic, productive, and successful our Chapter is in building support for outstanding scholars in science and technology. But the best illustration of all was the presence of four of our ARCS scholars who shared with us an overview of their current research.

Introduced by **Sylvia Dick**, V.P. for University Relations, the first speaker, **Jessica Knight** of Emory University, talked about her research on the long term effects of congenital heart disease. With the use of questionnaires with 600 families, she will track the effects of congenital heart disease on academic performance, behavior, quality of life, and self-esteem in children now 12-17 years old. To obtain a control group, parents will also fill out questionnaires about a healthy sibling of the affected child. We learned that Jessica has used her ARCS Foundation award to fund this study. Jessica said the ARCS award, as the first funding, opened the door for additional grants.

Temi Olubanjo, a fourth year electrical engineering student at Georgia Tech, reported on her development of a piece of “wearable technology,” a necklace with sensors that record the sounds of chewing and swallowing. This sensor is designed to be able to estimate the amount and texture of food eaten and to assist in reaching a healthy balance between energy intake and expenditure.

Steven Summers, a chemistry major who graduates from Morehouse College this year, told us about his summer research project which focused on a peptide hormone known to regulate body weight and appetite, and to play a role in the regulation of autonomic physiological activities that control blood pressure.

Farah Samli, is a first year ARCS scholar studying infectious disease at the University of Georgia. Her research focuses on vaccines. She and her colleagues have learned to combine a vaccine with an inert peptide called vacSIM that greatly improves the effectiveness of the vaccine. After injection, the vacSIM forms a porous matrix in the patient which allows the vaccine to egress slowly over time to generate a better immune response. She recently spoke at a TEDxUGA program and can be watched on YouTube.



Luncheon speakers: Jessica Knight, Emory University; Temi Olubanjo, Georgia Tech; Steven Summers, Morehouse College; Farah Samli, University of Georgia; Sylvia Dick, VP for University Relations



Linda Kay McGowan, Chair of 2017 Task Force, with Pat Tuff and Sylvia Dick, Committee Co-Chairs for the spring celebration in April 2017 to celebrate our Chapter's 25th anniversary.



Lynne Land and Yetty Arp, Public Relations Chair

ARCS Spotlight: 10 Scholar Alumni



Benjamin Austin
Ph.D.
ARCS Scholar
University of Georgia
2009-2010

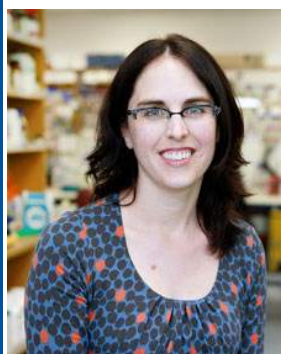
Benjamin Austin is Assistant Scientist (PhD, 2010) in the Department of Medicine at the University of Wisconsin-Madison School of Medicine and Public Health investigating vascular-related brain biomarkers associated with developing Alzheimer's disease (AD). In cooperation with the Wisconsin Alzheimer's Disease Research Center, he uses magnetic resonance imaging to evaluate the relationship between cerebral blood flow, cerebrospinal fluid (CSF) biomarkers, and cognition in asymptomatic middle-aged adults with a parental history of AD. He believes that this population holds the key to identifying brain biomarkers of AD risk decades before disease manifestation and will potentially help promote preclinical diagnosis of AD and early intervention and prevention strategies.



Elizabeth Driskell
Ph.D.
ARCS Scholar
University of Georgia
2010-2011

Dr. Driskell is currently an Assistant Professor in the Department of Pathobiology at the College of Veterinary Medicine at the University of Illinois at Urbana-Champaign. Her research program centers on investigating host-pathogen interactions of infectious respiratory diseases, particularly focusing on host response in influenza virus infections, and applying these findings to improved diagnostic platforms. The respiratory tract responds rapidly with factors that help us fight viral infections. She hopes to better understand these responses and use them to speed up diagnosis. This would help clinicians provide fast, appropriate treatment and aid in prevention of further disease transmission.

Dr. Driskell has been awarded USDA Hatch funding multiple years for her work on the development of rapid, field-deployable avian influenza virus subtyping assays with multiplexing capabilities. She is currently the Veterinary Pathology Residency Training Program Coordinator for University of Illinois and is an advisor to the Illinois Student Chapter of the American College of Veterinary Pathologists.



Monica Gerth
Ph.D.
ARCS Scholar
Emory University
2005-2007

Dr. Gerth is Principal Investigator with her own research group of graduate students at the University of Otago in Dunedin, New Zealand. (She married a New Zealander who worked in the same lab with her in Atlanta.) Her research involves engineering enzymes to do useful things (such as enzymes that can block biofilm formation), building new metabolic pathways in bacteria for the production of valuable chemicals, and re-engineering proteins for use as biosensors.

Dr. Gerth was a New Zealand Foundation for Science and Technology Post-doctoral Fellow in 2008-2011. She received a "Smart Ideas Grant" in 2013 of 1 million NZD over two years and a "Marsden Fast-Start Grant" in 2014 for \$300k over three years. She recently won Otago University's Translational Research Award (50K) for her research on novel ways to prevent biofilm-related infections.

ARCS Spotlight: 10 Scholar Alumni



Jodell Linder Jackson
Ph.D.
ARCS Scholar
University of Georgia
2007-2009

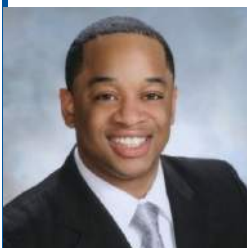
Dr. Jackson is a Health Information Systems Project Manager at the Vanderbilt Institute for Clinical and Translational Research. She helps build bioinformatics tools for researchers to utilize electronic medical records and advance translational research.

Dr. Jackson completed a post doc at Stanford University, published papers in the Journal of Allergy and Clinical Immunology as well as the Journal of Virological Methods, and was a lab manager for three years before her current position.



Heather Patisaul
Ph.D.
ARCS Scholar
Emory University
2000-2001

Dr. Patisaul is Associate Professor of Biological Science at North Carolina State University at Raleigh, NC. Her research focus is neuroendocrine development and endocrine disruption. She was named a National Institute of Environmental Health Sciences (NIEHS) Outstanding New Environmental Scientist Awardee in 2007 and has been continuously NIH funded since. She has published over 48 papers and given over 50 invited talks including the plenary lecture at the 2014 Annual Meeting of the German Society of Experimental and Clinical Pharmacology and Toxicology in April, 2014. She has served on several expert panels/working groups including the 2010 World Health Organization Expert Panel on the health risks of BPA.



Courtney Pollard, III
MD/Ph.D.
ARCS Scholar
Morehouse College
2005-2006

After graduating from Morehouse College, Dr. Pollard earned his MD/Ph.D. from the University of Virginia in 2014. He is presently an intern at MedStar Harbor Hospital in Baltimore, Maryland. His research focus is cancer metabolomics and cancer biomarkers. He will be doing his residency in radiation oncology at the M.D. Anderson Cancer Center in Houston, Texas, the top ranked residency program in this field.



Laura Redmond
Ph.D.
ARCS Scholar
Georgia Tech
2013-2014

Dr. Redmond is a structural engineer at the Jet Propulsion Laboratory in Pasadena, CA. Her dissertation was a seismic analysis and design of hybrid concrete-masonry structures, but her work focus is on dynamic load characterization for launch and landing of rover vehicles. While working on her dissertation, she conducted site visits to Belize, Jamaica, Puerto Rico, and Trinidad to interview engineers and government officials about building practices and earthquake hazards. Engineers she interviewed in the Caribbean have been interested in her dissertation results.

ARCS Spotlight: 10 Scholar Alumni



Jason Sello
Ph.D.
ARCS Scholar
Morehouse College
1996-1997

Dr. Sello is Associate Professor in the Department of Chemistry at Brown University. Prior to his appointment at Brown, Prof. Sello was a visiting scientist at the John Innes Centre in Norwich, England and a post-doctoral research fellow at Harvard Medical School with Prof. Christopher T. Walsh. He earned a Ph.D. in biophysics from Harvard University in 2002 under the supervision of Prof. Stuart L. Schreiber.

Dr. Sello has been synergistically using experimental methods from chemistry, molecular biology, biochemistry, and genomics to develop new anti-infectives and biotechnology platforms for the conversion of plant biomass to biofuels and commodity chemicals. He has received recognition for his accomplishments, including a National Science Foundation Career Award and the Martin Luther King Jr. Visiting Professorship at Massachusetts Institute of Technology.



Todd Smith
Ph.D.
ARCS Scholar
University of Georgia
2008-2009

Dr. Smith is a microbiologist at the Centers for Disease Control and Prevention in Atlanta, GA. His research focus is rabies virus vaccine, monoclonal antibodies, and anti-viral compounds.

He received a Directors Recognition Award (2013) and an Honor Award (2014) from the National Center for Emerging and Zoonotic Infectious Diseases for assisting in the investigation of an unusual case of rabies associated with an organ transplant. Another significant event was the birth of his son in March of 2013.



Alejandro Toriello
Ph.D.
ARCS Scholar
Georgia Tech
2008-2010

Dr. Toriello is an Assistant Professor in Industrial Engineering at Georgia Tech. His research focus is supply chain, logistics management, and mathematical optimization. Though he started his career at the University of Southern California in 2010, he is happy to be back as a professor at Georgia Tech and hopes that he can advise an ARCS scholar soon. Recently, he spoke to a group of ARCS Foundation Atlanta donors, members, current ARCS scholars from Georgia Tech, and their guests at our donor appreciation party in early April.

"Let me start by saying how thankful I am for being selected as an ARCS scholar. I consider it one of my greatest achievements thus far, and I am immensely proud to count myself as one of the amazing group of students that your organization selected to receive this award. I want you ladies to know that you are doing an outstanding job! You all are embarked on a truly altruistic endeavor, and it is my fervent prayer that this organization thrives for years to come."
--Courtney Pollard

"I'd like to add that my ARCS scholar award was tremendously important to me (not just financially - but it was also a huge confident boost/validation.)"
--Monica Gerth

SAVE THE DATE!!!!

April 20-24, 2016 Charlottesville, VA

ARCS Foundation Atlanta Retreat for Members and Spouses



You will definitely want to be part of our next retreat to one of the most beautiful and historic towns in the country--glorious Charlottesville!

The committee is hard at work planning a fabulous gathering featuring the best of Charlottesville.

Stay tuned for more updates but definitely circle those dates for next year!

- Cathey Millichap and Barbara Williams

Neil deGrasse Tyson Spends an Evening in Atlanta



On March 24, 2015, over 4,000 people including more than 60 ARCS Foundation Atlanta Chapter members and guests spent "An Evening with Neil deGrasse Tyson" at the Fox Theatre in Atlanta. Dr. Tyson began the evening by welcoming ARCS Foundation members, and explaining to the crowd that ARCS Foundation provided support to him while he was working on his PhD studying Intergalactic Supernovae at Columbia University in the late 80's and early 90's.

Dr. Tyson's lecture was entitled, "Adventures in Science Literacy (scientific, cultural, political, sociological observations)." He spent a fair amount of time presenting examples of currency from other countries honoring scientists and in some cases even including mathematical expressions on the notes. The one "scientist" that appears on US currency is Benjamin Franklin, but you won't find any references to his experiments in the artwork –

he is there due to his role as a founding father. Dr. Tyson also presented maps of the world where the size of the countries represented the amount of scientific research taking place. The trend for the United States, especially as compared to Japan and South Korea, was troubling. When discussing the interaction of religious beliefs and science, Dr. Tyson employed his often repeated quote: "The good thing about science is that it is true whether or not you believe in it."

A highlight of the evening occurred when Dr. Tyson phoned his friend, Bill Nye the Science Guy, so that he could talk to the crowd via FaceTime projected on the screen. At the end of the evening, Dr. Tyson answered questions posed by members of the audience, advising a UGA student not to choose a research area based on current needs. It is better to explore where your curiosity takes you. People not involved in the original research but with complementary strengths may find totally unexpected applications of your discoveries further down the road. It was an educational and enjoyable evening for our group, and we want to thank Sylvia Dick for arranging for the block of great seats!

Campus Visits

Your University Relations team had a big week the first week of April, visiting the campus of each of our academic partners. These visits are our opportunity to announce the upcoming year's allocations, which total \$345,000 for 2015-2016, as well as to go over the expectations and needs of not only ARCS Foundation, but also our academic partners.

We were warmly welcomed at each school by both the administrators and our current scholars, who gave us updates on their work. Each of them expressed appreciation for their ARCS Foundation Scholar Award and demonstrated an enviable passion for their work. We heard about vampire bat rabies, global health, earthquakes, sustainable concrete, the effect of water pollution on a primitive tribe of South America, protein folding and unfolding (Alzheimer's), alternative fuels, robotics, autism and cardiovascular disease, to name just a few.

When the last site visit was over, our team quickly and unanimously reached an important conclusion. We of ARCS Foundation Atlanta can be proud that we are championing the best and brightest at Emory University, Georgia Tech, Morehouse College, and the University of Georgia.



On the visit to Morehouse College, the University Relations Committee members were pleased to see this display in the hall, proudly showing the current ARCS scholars at Morehouse.



Nancy Chambers, Elizabeth Martin, Jane Dolinger, Sylvia Dick, and Mitzi Hill pose in front of the Georgia Tech stadium where a huge welcome sign for ARCS Foundation Atlanta was displayed.

PO Box 52124
Atlanta, Georgia 30355

Newsletter

Regina Olchowski
Editor

Clare Whitfield
Editor

Alicia McCabe
Publisher

Visit us on the web
www.arcsfoundation.org

2014—2015 OFFICERS

Jane Dolinger
President

Leslie Petter
VP for Administration

Louise Yeoman
VP for Finance/Treasurer

Lee Doyle
VP for Membership

Sylvia Dick
VP for University Relations

Nancy Chambers
VP for Funds Development

Ronnie Martin
VP for Communications

Beth Finnerty
Anne Sterchi
Co-VPs for Education/Events

Carol Meier
Recording Secretary

ARCS® Foundation, Inc.
a 501(c)3 non-profit organization,
Tax ID 58-2004368
ARCS is Registered in the
US Patent & Trademark Office

*Contributions in Memory,
Honor or Celebration of
someone special or an
occasion may be made to
ARCS Foundation Atlanta's
Endowment Fund.*

Send to:

*ARCS Foundation Atlanta
Attention: Treasurer
PO Box 52124
Atlanta, GA 30355*