

Achievement Rewards for College Scientists

Upcoming Events

April 8 Alzheimer's Educational Tour

April 30 - May 3 Boulder Retreat

May 7 Annual Spring Meeting and Lunch

May 7 - 10 National Board Meeting

June 11 Old/New Board Meeting

September 17 - 20 ARCS NAM

November 20 Scholar Awards Luncheon

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ARChiveS

ARCS® Foundation Atlanta Chapter

Volume No. XV Issue 3

Spring 2014

Annual Membership Meeting and Luncheon 10 AM, May 7, Piedmont Driving Club

Luncheon Speaker: Dr. James W. Curran "AIDS in the 21st Century"



James W. Curran, M.D., MPH James W. Curran Dean of Public Health

Rollins School of Public Health Emory University In 1981 while at the Centers for Disease Control and Prevention, Dr. Curran was asked to lead a task force to determine what was behind the first cases of what we now know as AIDS. He led the nation's efforts in the battle against HIV/AIDS prevention for 15 years before joining the Rollins School of Public Health in 1995 as Dean and Professor of Epidemiology. Dr. Curran received the Surgeon General's Medal of Excellence in 1996, the John Snow Award from the American Public Health Association in 2003 and the prestigious Ryan White Distinguished Leadership Award in 2011 in recognition of his 30-year commitment to AIDS. In 2009, the Rollins School of Public Health's Dean's position was named in his honor, the first time Emory University bestowed this recognition on a sitting dean.

In This Issue: Susie Deyo reports on ten ARCS Foundation Atlanta scholar alumni (pages 3-5) and shares below one of the many letters of appreciation she received as Scholar Alumni Chair:

"To the ARCS community,

I write this letter as an expression of sincere appreciation to you for your tremendous support over the years.

As a student at Morehouse College in the late 1990s, I proudly served as an ARCS scholar, and I remember very well how honored I was to wear the ARCS medal across my chest. I did so, however, without perhaps fully knowing what unimaginable adventures lied ahead. Full of optimism and also some trepidation, I graduated from Morehouse College and soon stepped into the role of an M.D./ Ph.D. student at nearby Emory University. Finishing both degrees in 2009 (with my Ph.D. in systems neuroscience), I went on to pursue my dream of becoming a neurosurgeon at the University of California, San Francisco Medical Center. In 2015, I will graduate and journey to the University of Toronto to complete my training in the field of functional neurosurgery, which focuses on treating patients with movement disorders such as Parkinson's Disease.

Along the way, I have had the opportunity to interact with many people who have provided needed encouragement and scientific expertise, however I have never forgotten the extraordinary generosity I found within the ARCS community. Now a husband and a father, life still holds so much promise for my family and me, and I have ARCS to thank for so many memories and triumphs in reaching toward my dreams. Thank you."

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From the President's Desk



President Gracia Conn

As I write this article I am reminded that today is Pi Day, March 14 (3.14) an official day of celebration since 2009. It is amazing to learn that over 4,000 years ago mathematicians created the number that is now known as Pi, the ratio of the diameter of a circle to the circumference. Our scholar scientists and mathematicians continue this process of inquiry started thousands of years ago. We must support their efforts as they pursue new ideas through their

-- Gracia Conn

research and studies. Coincidentally, Albert Einstein was born on March 14, 1879.

With this issue of ARChiveS we are nearing the end of my two-year term as President of ARCS Foundation Atlanta. It has been a time of challenges, estab-

lishing new ideas, and developing lasting friendships within the membership and the universities. I want to thank the Board members for their incredible support. They are an amazing group of forward thinking women.

During this two-year term, we received the largest single gift to the Endowment Fund and established an Endowment Fund Policy. We increased the number of scholar awards given, welcomed two new university presidents, created two new Board positions, and developed on-line registration for events. Lastly, we launched "Task Force 2017," the committee which will prepare us for our 25th anniversary in 2017.

To our membership and corporate donors who generously support our outstanding ARCS Scholars, I extend my thanks. This is what ARCS Foundation is all about.



Gracia and her son, The Reverend Doyt L. Conn, Jr., Rector at Epiphany Episcopal Church, Seattle, WA, who gave the Invocation at the 2013 Scholar Awards Luncheon. Photos by Jim Fitts

Applications for New Members on Web / due June 30

Now is the time to prepare your nominations for new members to ARCS Foundation Atlanta. Because several active members have moved to associate status, we have vacancies for active membership. We encourage you to invite prospective members to join ARCS Foundation.

The 2014 application is on our chapter website: Login, go to the Documents Library, drop down to membership, and select the 2014 application. The new application is four pages: two to be completed by the candidate and one each for the sponsor and co-sponsor. The four-page completed application should be sent to Lee Doyle, Vice-President Membership, either by email or post. Application deadline is June 30, 2014.

Apple Pop-Up Museum Tour

At the Apple Pop-Up Museum, 34 chapter members and guests, including John Lundeen and Debbie Liss, right, took a private, guided tour of the curated collection of game-changing Apple computers and electronics. Debbie organized the "invitation only" event which raised \$1,600 for the Endowment Fund.



Photo by Lisa Bankoff

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ARCS Spotlight: 10 Scholar Alumni



Matt Allen Ph.D. ARCS Scholar Georgia Tech 2003-2005

Following completion of his Ph.D. degree, Dr. Allen spent a year in research at Sandia National Laboratories as a Postdoctoral Appointee. He accepted an appointment to the University of Wisconsin-Madison in 2007 and was recently given tenure and promoted to Associate Professor in the Department of Engineering Physics.

Dr. Allen has co-authored numerous academic papers in scientific publications including Mechanical Systems and Signal Processing, Journal of Sound and Vibration, Journal of Acoustical Society of America and Nonlinear Dynamics. His most recent paper (co-authored with R. Kuether) focuses on "A Numerical Approach to Directly Compute Nonlinear Normal Modes of Geometrically Nonlinear Finite Element Models," Mechanical Systems and Signal Processing, In Press, 2014.

Research focus: Structural Dynamics of linear, nonlinear and time-varying systems. This technology is the key to avoiding failures in high speed aircraft, wind turbines and automotive components to name just a few Of note – Dr. Allen has been the principal investigator on over \$1.1 million of funded research including major grants from the National Science Foundation, Sandia National Laboratories and the Air Force Office of Scientific Research, where he received the Young Investigator Award.



Kimberly Dougherty Ph.D. ARCS Scholar Emory 2003-2006

Dr. Dougherty received her Ph.D. in Neuroscience in 2006 and is currently a senior "postdoc" in Ole Kiehn's laboratory in the Neuroscience Department at the Karolinska Institute in Stockholm, Sweden.

Research Focus: Her research is "focused on neurons in the spinal cord that are involved in walking." She has co-authored five research papers from her postdoctoral work, in addition to two review papers and two textbook chapters. Recent publications are "Locomotor Rhythm Generation Linked to the Output of Spinal Shox2 Excitatory Interneurons", Neuron (peer-reviewed neuroscience journal), and "Optogenetic Dissection Reveals Multiple Rhythmogenic Modules underlying locomotion," Proceedings of the National Academy of Sciences.

Kimberly is currently on the job market, looking for faculty positions in the US and looks forward to starting up her own research group and continuing to focus on the spinal cord.



Vivien G. Dugan M.S., Ph.D. ARCS Scholar UGA 2004-2005

During her final semester of doctoral research, Dr. Dugan was recruited for an NIH-funded Postdoctoral Fellowship position in Washington, DC, to study the origins of pandemic and H5N1 avian influenza viruses with collaborative mentors at The Armed Forces Institute of Pathology and The Institute for Genomic Research.

In 2006, she transitioned to the Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health in Bethesda, MD, to continue studying the evolution of pandemic and avian influenza viruses, including the 1918 'Spanish flu' and the 2009 H1N1 pandemic influenza virus ('swine flu'). In 2010 she joined the J. Craig Venter Institute (Rockville, MD) as an Assistant Professor of Viral Genomics where she expanded her research of influenza viruses at the human-animal interface and branched into synthetic biology, vaccine development, and the genomics of mosquito-transmitted viruses.

Research Focus: Now an NIH Program Officer in the Office of Genomics and Advanced Technologies, Division of Microbiology and Infectious Diseases, NIAID, her program is focused on Functional Genomics (understanding the functions of unknown genes in pathogens) and applying novel, advanced technologies to develop medical diagnostics, therapeutics, and vaccines for combating infectious diseases and responding to emerging public health threats.

ARCS Spotlight: 10 Scholar Alumni



Jill R. Glausier (née Bordelon) Ph.D. ARCS Scholar Emory 2006-2008

Upon completion of her Ph.D., Dr. Glausier accepted an offer as a Postdoctoral Scholar in the Translational Neuroscience Program at the University of Pittsburgh under the mentorship of Dr. David Lewis. Dr. Lewis's laboratory is world renowned for studies investigating the cortical circuitry deficits underlying cognitive dysfunction in individuals with schizophrenia.

Postdoctoral Research: "Since joining the lab, I have been awarded an individual postdoctoral National Service Research Award (NRSA) from the National Institute of Mental Health, and have published manuscripts in Neuropsychopharmacology, Biological Psychiatry, Neuroscience, and Trends in Neuroscience." Her most recent publication in Molecular Psychiatry "was the first quantitative assessment of pre- and postsynaptic integrity of any type of specific neuronal connection in schizophrenia subjects. Images from this study were chosen for the cover of the January 2014 edition of Molecular Psychiatry. I have had the opportunity to present this and other research at numerous scientific conferences, including invited talks at the International Congress on Schizophrenia Research conference, and the Gordon Conference Research Seminar on Inhibition." She plans to "continue elucidating the underlying pathophysiology contributing to the debilitating cognitive deficits individuals with schizophrenia must endure."



Jennifer Sorrells Ph.D. ARCS Scholar Emory 2006-2007

Dr. Sorrells completed her Ph.D. in Organic Chemistry at Emory and is currently a Product Manager for Nalco Champion in Houston, TX. Following graduation, she completed a postdoctoral research appointment with Dr. Karen Wooley at Washington University in St. Louis and at Texas A&M University in Corpus Christi.

Postdoctoral Research: "I studied larger amphiphiles (polymers) and built unique functionality into the systems. While in academia, I co-authored eight academic papers in various peer-reviewed journals including The Journal of the American Chemical Society and The Journal of Chemical Education."

Following her postdoctoral appointment, she "moved on to work in the energy industry, initially as a chemist developing renewable fuels for two years at a start-up company in Houston called KiOR. While there, I blended new fuels and co-invented processes which resulted in three published patents. I moved to Nalco Champion in 2012. Initially I worked as a Senior Research Chemist, co-inventing a fuel additive which is awaiting a patent, before moving to my current role in the marketing department as Product Manager."



Christina R. Scherrer Ph.D. ARCS Scholar Georgia Tech 2002-2003 2004-2005

Dr. Scherrer "took a break in her Ph.D. program for a year to teach math in an Atlanta public school." She is an Associate Professor of Industrial Engineering Technology at Southern Polytechnic State University in Marietta.

Research Focus: "Applications of industrial engineering to the public sector, especially public health. I also do education research, especially on the effectiveness of on-line education."

"My most significant career success was being awarded the NSF BRIGE grant for optimization models for public health policy. In addition to my research, this grant also funded an outreach program I coordinated to greater Atlanta area high schools, teaching students the ways that engineers can 'do good' in the world. In the last few years, I have collaborated with researchers from the Georgia Health Policy Center on several projects used to inform policy in the state, and with researchers at the CDC to work on global health issues. And from a personal standpoint, my husband and I are now parents to three wonderful children."

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ARCS Spotlight: 10 Scholar Alumni



Alecia Septer Ph.D. ARCS Scholar UGA 2010-2012

Following completion of her Ph.D. degree, Dr. Septer moved to Cambridge, MA, and Harvard University, where she is a Life Sciences Research Foundation Postdoctoral Fellow in the Department of Molecular and Cellular Biology. The Gordon and Betty Moore Foundation funded the three-year fellowship. She has published two first-author papers from her dissertation work and two co-author papers from her postdoctoral work.

Postdoctoral Research Focus: "Communication between individuals is an important aspect of social behavior and is required for coordinating group activities in a wide range of organisms. While we use language as a primary mode of communication, microorganisms have evolved their own diverse strategies employing diffusible molecules and contact-dependent mechanisms to send and receive signals both within and between species. Bacteria use these communication methods to coordinate group functions including host infection and toxin production for intercellular competition. As a microbiologist, I'm interested in understanding the genetic approach to identify and characterize the environmental factors, regulatory pathways, and molecular mechanisms that control social behavior in bacteria."



Nathan Rowland M.D./Ph.D. ARCS Scholar Morehouse 1996-1998



(See Dr. Rowland's letter, page 1.)



Alexander Williams Ph.D. ARCS Scholar Georgia Tech 2010-2011 Following completion of his Ph.D., Dr. Williams joined Pratt & Whitney in Hartford, CT., where he is currently a Senior Project Engineer managing advanced combustor technology development programs.

"My work centers on advanced combustor technology development including but not limited to: emissions control, cooling technologies, advanced coatings and exit temperature quality management."



Lonnie T. Sullivan II ARCS Scholar Morehouse 2011-2013

Lonnie is a first-year medical student (MSI) at Duke University School of Medicine.

"Since graduation I have continued my pursuit of obtaining a higher education by choosing to matriculate at Duke University School of Medicine. Duke provides a unique curriculum that highlights allowing students to engage in an entire year of research as a part of their medical education. In having conducted research during my undergraduate education, I was drawn to Duke for this wonderful opportunity to engage in research that is directly related to various fields in medicine."



PO Box 52124 Atlanta, Georgia 30355

Newsletter

Carla Fackler Editor

Judy Schmidt Editor

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Visit us on the web www.arcsfoundation.org

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

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

Advancing Science in America

Gender Does Matter

In 2011, the Indiana University Institute on Women's Philanthropy conducted The Study of High Net Worth Women's Philanthropy. They found that gender does matter in some aspects of philanthropy. The Institute found that high net worth males and females report differences in why they give to an organization.

Since 1958, the all-female ARCS Foundation has raised over \$87 million to fund almost 16,000 scholars. The Atlanta chapter, founded in 1992, has raised more than \$3.2million to support more than 622 scholar awards. Clearly, ARCS Foundation is a player in the Women's Philanthropic Community.

We were curious to see how ARCS Foundation Atlanta chapter measures up on some of the basic findings from the study and to discern any insights we can gain from the research.

Among other key findings, the study found that women are more likely than men to support a non-profit organization for the following reasons:

- The gift makes a difference
- The organization is efficient in its use of the donations
- Give something back to the community
- Donors are active volunteers
- Serve as an example to young people

Against these findings, we believe that ARCS Atlanta chapter is doing an excellent job. Our donations go directly to our scholars so donors know that their contributions go right to work. However, to increase our impact, we must expand donations well beyond dues. That's why we continually ask members to make donations above their dues and help us identify new donors and sources for funds.

By funding scholars at our partner schools - Emory, Georgia Tech, Morehouse and UGA, we are assured that our monies stay in Georgia and strengthen our community. On the volunteer front, we have robust involvement, but it could be improved. Members are asked for donations and are encouraged to participate on committees and attend meetings and educational sessions. The more each of us invests of our time, talent and treasure, the stronger our chapter will be.

On the last finding, we believe the direct, non-restricted scholar awards and the luncheon experience set the bar very high on our willingness to be philanthropic examples for young people. For the first time ever, during our annual fund solicitation, we have asked former scholars to 'give something back.' The results thus far have been modest. As we plan for the next 20 years for our chapter, we should explore ways to connect more energetically with our scholars.

It is estimated that, due to longevity and personal interests, women will be directing much of the \$41 trillion in generational money transfer that will take place over the next 20 years. Our hope is that the women of ARCS Foundation will continue to view our mission as a worthy investment.

--Anne Easterly and Sally McDaniel, Funds Development

Educational Tour – Tuesday, April 8 10 a.m.-12 p.m. Alzheimer's Disease Research Center, Emory University Room 201, Nell Hodgson Woodruff School of Nursing, 1520 Clifton Road Introductory Remarks: Dr. Allan Levey, Program Director Followed by discussion, tour and box lunch (\$20) Register online by April 1 ... www.arcsfoundation.org