

# ARChiveS ARCS<sub>®</sub> Atlanta Chapter Newsletter

Volume No. VII, Issue No. I

Fall, 2005

## **Upcoming events:**

- 10/19 Board Meeting
- 11/03 Field Trip Georgia Tech
- 11/17 Scholar's Luncheon Ritz Carlton Downtown
- 12/01 Board Meeting
- 01/18 General Meeting
- 03/15 Board Meeting
- 04/27-30 Philadelphia Retreat

#### **Inside this issue:**

Scholar Sighting:	2
Jerome O'Neal	

- Upcoming Events 2
- Fall Cocktail Party 3 and Photos
- Scholar Sighting: 3
  Beven Livingston
- 2005-2006 **4** Officers
- Message from 4
  Shannon Stott

## Letter from President Teed Poe

Though the temperature has not changed, the season has and with it comes renewed activity for ARCS. Many of our board members have been planning over the summer, and we have just completed visiting the four universities at which we fund scholars. The chairs of each department expressed their appreciation for what we do and felt the luncheon was a wonderful event to showcase our scholars. Many of them work at tasks that are solitary and the road is long to an advanced degree. The luncheon is a confirmation of the journey they are taking. Our enthusiasm and support mean a great deal to them. For those of you who were present for Shannon Stott's (a fifth year scholar) presentation at our May meeting, you know how outstanding our scholars are and what great futures are on the horizon for them.

The Development Committee, so ably chaired by Shirley Kuse and Susan Higley, has raised a record sum that has allowed us to increase the scholarships to our returning scholars to \$6,000 for the coming year. This brings us halfway to our goal of in-



**ARCS President Teed Poe** 

creasing all our scholarships to that level by our 15th anniversary in 2006.

Thank you to all who have nurtured sponsors and to our members who have given so willingly.

At the National level there is much activity, too. At the June Annual Meeting in San Diego we heard a wonderful panel address the topic "Keeping America Competitive in World Science". The panel members were primarily from the University of California system but also included the new President of Harvey Mudd College. All of them made comments about the advancements in Asia, especially China. China is building 400 new universities to educate its students. Of concern to the panel were the retirement of so many Ph.D.s in the U.S. and the

scarcity of good science and math teachers at the secondary level. California has a program called "One Thousand Teachers, One Million Minds" to remedy this. There was also a presentation of \$100,000 to the National Endowment from Roy and Patty Disney in honor of Judith Miller, our president for the past two years. This raises the National Endowment to \$690,000. At the local level we are beginning to think about endowment too, so we can insure that scholarships will continue even during slow years for fund raising. It is something for all of us to consider.

The changing season brings to mind our fall cocktail party. It was a wonderful opportunity to meet new members and to catch up with one another after the summer and anticipate all that we will accomplish in the year ahead. See photos of the party on page 3.

— Teed M. Poe Atlanta Chapter President Page 2 ARChiveS

Sherry Lundeen's new email address is sbl55@bellsouth.net Michelle Gandy's new address is: 1170 W. Garmon Road Atlanta, GA 30327 Phone: 404-841-9929 and Fax: 404-841-9916. Betty Feezor is the new **Executive Director** of the Southeastern Flower Show. We regrettably report the deaths of Liz Levine's husband, Jay, and Cecy Jones' husband, Joe. We are sorry to hear that Sally Boice's father recently passed

## Scholar Sighting: Jerome O'Neal



Georgia Tech PhD candidate Jerry O'Neal and his wife Amy

-By Betsy Hansen

Jerome W. O'Neal is a man of many coats.

Several weeks ago he was sighted at Georgia Tech in a cap and gown as he received his Ph.D. in Industrial & Systems Engineering. Close by, watching all the pomp and ceremony with lots of pride and maybe a little relief, were Jerry's wife Amy and their children, Mary Grace and Andrew.

Jerry, as he is called by his friends and family, has swapped his cap and gown for another coat, this time bearing the inscription of Delta Technology, where he is an operations research specialist in their research, modeling, and design group. There was a time, quite a long time ago actually, when Jerry wore the coat of a cadet at the U.S. Military Academy at West Point and, for eight years following that, the coat of an Army officer.

In his new lab coat, Jerry becomes a problem-solver, not simple day-to-day problems. His are real world problems, messy problems that require complex solutions. Frequently solutions depend on establishing ground rules and constraints and searching for mathematical formulas that might be applied to them in a logical fashion. Once the problem is subjected to a set of formulas, a point can be reached where an optimal solution (or several solutions) can be found. This type of problem solving is called optimization, based on mathematical theory.

Jerry pointed out that only 20% of students who entered his Ph.D. program are U.S. citizens. When asked how parents might encourage their children to be curious about science, he suggested steering them into groups, such as summer camps

or competitions that could pique their curiosity. In such settings children can talk over their projects with other young people, as well as have the opportunity to compare themselves with others.

Jerry says our country has become complacent about research. "By its nature, it is a quiet and lonely life. Still it's critical that the U.S. continues to fund scientific research. If we don't, we will not remain current with the rest of the world." Jerry wanted to extend his personal thanks to ARCS and to his ARCS benefactors, Harriet and Sandy Miller and Linda Mauldin.



away.

Philadelphia's Independence Hall will welcome ARCS members in 2006.

## Mark Your Calendars

The Fall Educational Tour will be at the Georgia Tech College of Computing on Thursday, **November 3rd.** After a welcome by Dr. Richard DeMillo, Imlay Dean of Computing, the group will tour the Aware Home and the Borg Lab, with wine and cheese to follow. Watch your mail for details.

**November 17** is the annual Scholars' Luncheon at the Ritz Carlton Downtown. Elizabeth

Martin, chair, has procured Dr. David Satcher as the keynote speaker. Please invite potential ARCS donors or sponsors as luncheon guests. We want them to become acquainted with the scholars and the outstanding work that we are doing.

Kitty Hawks and Debby Robbins are planning the **April 27-30**, 2006 Philadelphia Retreat. Special events include cocktails at

the Acorn Club (the first women's club in the U.S.) cocktails and private tour of the Barnes Museum, and special "inside" tours at the University of Pennsylvania. The group will stay at the Park Hyatt Philadelphia Hotel in the heart of historic downtown Philadelphia.

## New Members Honored at Fall Cocktail Party

-By Stephanie Reeves

The last week of summer saw a full moon over the newly renovated Peachtree Battle home of Kathy (photo to right) and Marbury Rainer where ARCS members enjoyed our annual fall cocktail soiree. Kitty Hawks introduced our five outstanding new members and apprised us of their impressive credentials. They are: Sally Boice, Marie Foster, Michelle Gandy; Randy Jones, and Liz Lauer. Welcome, Ladies!

After a long, hot and heartbreakingly unpredictable summer it was great fun to connect again with fellow members and catch up on each other's recent activities. Of equal pleasure was making the acquaintance of new people.

For those of you who missed the Rainer's "exterior" library, you failed to see the hidden safe of the owner who originally built the house in the twenties.

Thank you, Anne Shearer, for planning this fun event and Rainers for sharing your lovely home and garden.



**ARCS** members and spouses enjoy cocktails and a dinner buffet in the lovely formal gardens at the Rainers' home (left). Our phobers in close ups, seen to the right. All captions are for those pictured left to right.



**Doyt and Gracia** Conn, Carol Teem and Jan and Gus Bennett



Pat Tuff and Eileen Small



Kitty Hawks, Virgil **Brown**, Berney **Bridges and Alice** Brown



Reg Bridges, Anita Kern and Sally Jobe



tographer Stephanie Reeves captured a few more mem-

# **Scholar Sighting: Beven Livingston**

-By Sharon Ansley

Béven Livingston is cheerful and upbeat as she balances being wife of a computer software executive, mother of a two and one-half year old son, neuroscience Ph.D. candidate at Emory, and interviewee for our ARCS newsletter. Beven told ARCS she initially became interested in the field of science because her mother had always thrived in healthcare as a neonatal nurse.

Beven grew up in Lexington, Kentucky and received a degree in physical therapy. She practiced in that arena for a time before entering the Ph.D. program where she planned to teach and do research in rehabilitation. Emory has a training



**Emory PhD Candidate Beven** Livingston

grant in movement science with support academically for the first two years. She has studied motor control and how the body's central nervous system controls the musculoskeletal system. Beven will finish in January and is looking for a teaching and research position.

Outside the laboratory, she loves all athletics, especially tennis. Beven currently plays on ALTA and USTA teams. She finds that her chosen field of physical therapy combines her interests in science, teaching and athletics.

The ARCS scholarship has provided her the great opportunity to attend the annual neurosciences meeting several times and to present her research data there. ARCS funding provided a computer and hard drive for data analysis and storage. Beven, a fourth year ARCS scholar, remarked that she found all the members of ARCS to be so positive and encouraging!



Newsletter Committee Gracia Conn, Editor graciaconn@mindspring.com Stephanie Reeves, Asst. Editor stephanie@edgarreeves.com Betty Feezor, Publisher bcfeezor@mindspring.com

Visit us on the web! www.arcsfoundation.org

#### 2005-2006 Officers

Teed Poe. President Jan Bennett, President Elect Janie Wilson, Past President Peg Cooley **VP** Communications Anita Kern VP Education/Field Trips Sherry Lundeen VP Funds Development **Ginny Plummer VP** Membership Kathy Berry **VP** University Relations Sharon Flores, Secretary Pat Leake, Treasurer Betsy Hansen **Parliamentarian** 

# Save the Date!

November 17, 2005 Scholars Luncheon Rítz Carlton Downtown

### **Achievement Rewards for College Scientists**

ARCS Atlanta Chapter Newsletter P.O. Box 52124 Atlanta GA 30355

## A Message from Fifth Year Scholar Shannon Stott



The generous support that I have received through ARCS has afforded me the opportunity to present my research at national conferences, allowing me to share my research with others and in return, receive valuable feedback. Most recently, my travels to a cryobiology conference in Portugal directly led to the publication of my research in a peerreviewed journal. In addition, the ARCS fellowship has allowed me to purchase supplemental research materials such as textbooks and journal subscriptions. All of these opportunities have significantly enhanced the quality of my research, and would not have been possible without the support of ARCS.

On a more personal level, through years of interactions with the members of ARCS, I have been inspired to continually work toward new discoveries in science and engineering, while being mindful of giving back to my community. Being the recipient of ARCS funding for five years, I can truly attest to the great impact of your philanthropic efforts. I strongly believe in the ARCS mission, and I sincerely hope that I can return the same generosity to future generations through ARCS.

Editor's Note: Shannon Stott presented her doctoral research at the ARCS spring luncheon, entitled "Cryopreservation of Living Tissues." Her presentation detailed how cell-cell and cellsubstrate interactions influenced the freezing of tissues. To investigate these interactions, Shannon has incorporated state-of-the-art experimental techniques, including microfabricated tissue constructs and ultra high speed (up to 30,000 frames per second) video cryomicroscopy. These tools have enabled Shannon and her advisor, Jens Karlsson, to quantify the exact initiation and progression of ice fronts inside cells and tissues. It is their hope to use the information to better predict and hence control ice formation, leading the way to successful protocols for long term storage of living tissues.