Student Leadership Council
New Officer Elections and Officer Goodbyes

By Mark Elton, GATech, Industrial Liaison and Communications Officer

The SLC served as the student voice for the Center, operates the research webcasts and continues to foster academic and industrial networking and friendships within the Center. Among other business discussed was the upcoming annual student retreat. This year it will be held at UIUC on August 7-9th and is open to all students wishing to attend. The format will be similar to last year’s retreat held at Vanderbilt. There will be brief project reports, industry seminars, and an education and outreach development period, all sprinkled with a healthy dose of social events to allow those present to meet and get to know each other better. Those students wishing to attend should contact their local SLC representatives.

Keith Wait received his bachelor of science in mechanical engineering from Rice University in 2004 and a master’s degree from Vanderbilt University in 2006. Currently Keith is working towards a PhD, also from Vanderbilt. Prior to returning to graduate school, he worked for a short time at a defense contractor that integrates and launches target rockets for military anti-missile systems. Keith’s research for the Center is the design and control of the hexapedal walking robot for search and rescue. Its relevance to the Center and to the benefit of society is that it will demonstrate that fluid power is able to provide similar or higher force and power densities for mobile robotics than electrical actuation. Further, the project will demonstrate that fluid power can have applications outside its traditional boundaries. Also, Keith has recently been elected to serve as the SLC’s new President.

Silvanus Udoka received his bachelor of science degree in manufacturing engineering technology from Web State University in Ugdon, Utah. Following his undergraduate education, Silvanus earned both a masters and a PhD in industrial engineering and management from Oklahoma State University. His research interests are in the areas of Automation of Integrated Manufacturing Systems and Robotics applications, as well as Immersive 3-Dimensional (3-D) Environments for interactive visualization and visual depiction of such systems/applications. Dr. Udoka’s ongoing and future academic plans are to seek opportunities to continually integrate knowledge from the manufacturing/production domain to emerging areas such as effective and efficient fluid power systems. His research within the Center is in the area of Multimodal Interfaces to support User Centered Design. This involves the study of Interactive Environments (virtual and augmented environments) to characterize and experiment on multimodal human/system interfaces using multiple sensing and display modalities to achieve operational effectiveness. The ultimate aim is to answer questions such as: what combinations of user interfaces and feedback are needed in order to successfully and consistently complete required tasks, and where should they be located? How should designers determine whether to provide the information as an interface object or as something that is mentally represented by the user? What is the realistic allocation of tasks between the human operator and the system (such as a testbed) to insure intuitive and safe, as well as easy to use and easy to learn, in order to consistently and successfully complete required tasks?

Leadership Team

William K. Durfee earned his academic bachelors degree in engineering and applied physics from Harvard University, and completed his masters and PhD in mechanical engineering from the Massachusetts Institute of Technology. Along with co-directing the education and outreach program, Will is a member of the Test Bed 6: Fluid Power Orthotics team. This aligns with one of his main research areas, which is rehabilitation engineering. In a related project, Will is studying the use of electrical stimulation of muscles combined with a smart orthosis to restore primitive gait to individuals who are paralyzed from the waist down from a spinal cord injury. The approach uses fluid power to store and pipe energy from one joint to the next, resulting in a system that should be much simpler and much more compact than competing technologies.

CCEFP Profiles

Students

Ritson Delphish (NCAT, continuing service), Aaron Kimball (MSOE, continuing service). Other representatives will be elected from the new students entering this fall.

The Center also recognized former president, Serena Tyson and vice president, Jonathan Baker, as well as the other student officers who served on the SLC for a job well done.

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Representatives on the SLC are: Andy Willhite, Vanderbilt (newly elected); Matteo Pelosi (Purdue, newly elected); Mike Rannow, UMN (continuing service); Andy Willhite, Vanderbilt (newly elected); Tim Deppen, UIUC (continuing service); Executive Committee Representative: Mike Rannow, UMN (continuing service); Industry Liaison & Communications: Mark Elton, GA Tech (newly elected); Serena Tyson and vice president, Jonathan Baker, as well as the other student officers who served on the SLC for a job well done.
CCEFP Welcomes a New Team Member

Mr. Donald Haney will serve as deputy administrative director for CCEFP. Don has been a part of the University of Minnesota community for over five years, serving as the administrative aide for the UMN’s Upward Bound Program in the College of Education and Human Development and most recently, was employed with the Design Institute in the College of Design. Don brings a wealth of valuable office management experience to the Center. He is well versed in program coordination, event and project planning.

New Education Advisory Board Members

Christine Cunningham, (Museum of Science, Boston), Mike McElligott (Bimba) and Chris Kolbe (HUSCO International) have joined the Education Advisory Board (EAB) of CCEFP. The EAB is an external network of industrial and academic professionals who evaluate and provide guidance on the CCEFP education and outreach initiatives.

Education and Outreach Research Experiences for Undergraduates and Teachers

The CCEFP has another excellent Research Experiences for Undergraduates (REU) and Research Experience for Teachers (RET) program that spans across all seven universities. The Center has 19 diverse undergraduate students working on current research projects from TB3: Hydraulic Hybrid Vehicle to TB6: Orthosis and all related projects in between.

Students often pursue research experiences or internships as a way to gain additional experience and knowledge outside of the classroom. REU programs exist to identify exceptional candidates for graduate school as well as foster knowledge of the subject and provide a valuable opportunity to learn what a researcher can do.

The Center has expanded its RET program to include the RET Orientation program at Vanderbilt University under the direction and guidance of the Center’s Education Advisory Board Chair, Prof. Stacy S. Klein. The Center will have eight RET’s across four campuses. The underlying goal of the RET program is to allow middle and high school teachers to have experience working in a lab with a faculty member or graduate student. At the end of the program, each teacher will design curriculum surrounding their research and implement it into their courses during the following academic year.

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Relationship Marketing

Develop strong relationships. People do business with people they know, like and trust. It’s our job to make this connection happen. To do that, we must go beyond the superficial and become genuinely interested in our customers and prospects. For instance, we can meet clients at a coffee shop and get to know them personally, without the usual business discussions. I often do that. I make mental notes on what is going on in their lives, so I can refer to it the next time we connect. Then I nurture my relationships by consistently staying in touch.

Consistency is the key.

We can stay connected with our contacts by sending heartfelt cards like Joe did, or by phone calls, emails or newsletters. We lose 10% of our influence every month we do not have contact with our clients. And just a 5% increase in customer loyalty could add 20-80% to your bottom line. A disappointing statistic shows that 91% of all real-estate agents are forgotten by clients within one or two years after they close or represent a buyer on a home because they did not stay in touch with them.

Form a strategic objective to stay in touch.

Here are a few ideas. Try one on for size. Set up campaign postcards to go out once a month. Find or develop a system for remembering birthdays. For those in real estate, record closing dates and send anniversary cards. Veterinarians can record the birthdays of client’s pets and send birthday cards.

I personally use an online service that has a phenom-enal system for managing my contacts, as well as printing and mailing postcards and greeting cards. I customize and personalize the cards with my own handwriting font, signature and photos. I have found that a simple and sincere card can make a huge impression on someone, especially if they are having a bad day. Sometimes I include a gift card or small gift of teas or sweets with a thank you card.

Understand and use the Law of Attraction.

When we express appreciation, recognition or encouragement, we are focused on giving and abundance, not scarcity. Every human being wants to feel acknowledged, loved and appreciated. When we send love and thanks out into the world, we get it back tenfold. What we focus on expands, so if we are focused on our lack of money, we will continue to have a lack of money. This is the Law of Attraction. We can inspire ourselves by feeling and visualizing what we now want in our lives. It helps to begin the day by meditating, listening to beautiful music, taking a walk or calling someone with whom we have had good business results. The popular book and independent grassroots movie, The Secret, shows how to apply this law to achieve anything we want in our personal and business lives.

Kody Bateman, a mentor and colleague of mine said, “Appreciation wins over self promotion every time.” That sums it up beautifully.

Use the Rule of 250 to build a referral network.

As small business owners and entrepreneurs, we each know at least 250 people. Some of us know many more than that. Each one of those 250 knows another 250, and so on. See where this is going? When we make a commitment to stay in touch with people we know—and remember they each have hundreds of contacts—we have the potential to reach thousands. Additionally, we can build our networks by joining local and online business networking groups. Referred customers are usually already sold on us through the testimonial of the person who referred us. Did you know that in occupations such as real estate, as much as 90% of the business comes from relationships or referrals?

When we build strong networks and nurture meaning-ful relationships with the people we serve, we will garn er unlimited referrals and be less affected by economic down cycles. Start making relationship marketing part of your business today and watch your business grow.

About the Author: Karen Saunders is the owner of MacGraphics Services (303-680-2330), a design firm for today’s entrepreneur.