Greetings from the Department of Biological and Agricultural Engineering at LSU. It is my pleasure as department head to introduce you to this newsletter describing the accomplishments of our faculty, staff and students. It has been about 18 months since our last newsletter, so we have a lot for you to catch up on. I think you will find much progress and activity underway.

As most of you know, Dr. Allen Rutherford served as interim head in BAE for the 2011-12 year. In 2012, the department transitioned officially from the College of Agriculture to the College of Engineering, better aligning its programs and degrees. We of course still remain closely tied to the AgCenter in research and extension activity. I was humbled to learn that the faculty proposal for the transition to College of Engineering included the request for me to serve as department head, which I gladly accepted, allowing Allen to return to “only one job” as head of Renewable Natural Resources. I appreciate his direction and thank him for his invaluable guidance during the transition.

For those that don’t know me, I hold the Humphreys T. Turner Professorship in my academic home as a professor in Civil and Environmental Engineering and teach hazardous waste management in the environmental engineering program. The vast majority of my time is dedicated to BAE, and I’m enjoying teaching BE 3290, Professionalism and Ethics, for the first time. Teaching a new course after 29 years at LSU may prove an old dog can learn some new tricks. My research work is in transport and fate of hazardous substances in subsurface environments and I’ve been working for many years on the cleanup of a local Superfund site. Prior to my appointment in BAE, I served as associate dean and interim dean in the College of Engineering and interim dean and dean of the LSU Graduate School. It's an honor and privilege to now work along side the faculty, staff and students in BAE.

We’ve certainly hit the ground running in the middle of 2012 with an internal review of both BS and MS programs, SACS accreditation and ongoing ABET accreditation documentation. The department is also engaged in College of Engineer’s Clearpoint Strategy scorecard management tool to give us a better view of resource allocations. As with business and industry, continual assessment and feedback for improvements, along with careful analysis of resources has become a major part of academic unit management.

Resources and staffing are constant challenges in BAE due to ongoing budget reductions and increasing enrollment. We continue to struggle with budget matters and reductions in our department, while at the same time meeting our teaching load, with very high enrollment. This has resulted in larger than normal classes. For example we expect to have sixty or so seniors in capstone design next academic year. As you may know, Dr. Roberto Barbosa left LSU last year to work in the private sector. We wish him all the best. Sadly, we suddenly lost Dr. Ron Sheffield due to illness in November 2012 and hold his family in our thoughts and prayers. He will be missed by many.

As department head, I’ve been working with the faculty and college on our strategic plan. It is a living document and is in continuous review, to reflect the direction of the department. Overall, it is meshed with the College of Engineering’s Strategic Plan and reflects the overall LSU Flagship Agenda. Within those overall initiatives, I see three critical initiatives for the department in 2013 being: 1) enhancement of our undergraduate teaching laboratories, 2) Federal support of cutting edge research in collaboration with our state medical institutions promoting a PhD program in BAE, and 3) securing additional resources to meet our teaching obligations. [Continued on Page 3]
Senior Design Presentations were held May 2, 2012. Nine teams participated in the oral presentations.

**Ammonia Filtration System for Alligator Housing**

Members: Andrew Calogero, Michael Wood, Jessica Madden and Brett Maraist
Advisor: Dr. Ron Sheffield

**Bioreactor Design for Culturing Anterior Cruciate Ligament Bioscaffolds**

Members: Sarah Dwyer, Melinda Hunter, Lacey Prestwood, Megan Barnum and Lauren Hoft, Advisor: Dr. Mandi Lopez

**Optically Triggered, Selective Therapeutic Nanomaterials**

Members: Shenai Powell, Toni Borel, Tracey Schlotterer, Kristian Doucet and Jacob Bihm
Advisor: Ammar Qureshi and Dr. Dan Hayes

**Nano-encapsulation of Omega-3 Fatty Acids for improved Function Using Dry Spraying**

Members: Robert Behringer, Lacey Simon and Miles Friddle, Advisor: Dr. Carlos Astete and Dr. Cristina Sabliov

**The LaHouse Mobile Project**

Members: Kevin Holly, Andrew Taylor, Czarina Patolilic and Ari Deitch; Advisor: Dr. Steven Hall and Dr. Claudette Reichel

**BEasy Lift**

Members: Charles Henkel, Jonathon Pepper, Kyle Richard and Jake Farlow
Advisor: Dr. Steven Hall
The department is well positioned to pursue these initiatives as we have a very successful faculty and staff. They excel in research, teaching, service and extension activity, as you will find in this newsletter. Our students speak very highly of the department and indicate to me that their time spent with us is a rewarding experience. After seven months on the job, I can say the same – the students, faculty and staff of BAE are excellent in every way.

As always, and especially in these difficult budget times, your support of the department is essential to make our goals become reality. In the near future, we will be engaging friends and alumni of the department to help with development of our undergraduate laboratories. While the curriculum has changed quite a bit from agricultural engineering toward biological engineering, many laboratory exercises remain the same. In fact, some of the original equipment you saw years ago may still be in use today, while more modern equipment is actually in the field.

Please feel free to visit us any time, enjoy our newsletter, and thank you for all you do to support BAE and the College of Engineering.

Dr. Ronald Erle Sheffield

Dr. Ronald Erle Sheffield died Nov. 24, 2012. He received his BS at Unity College, Unity, Maine; MS at Virginia Tech University, Blacksburg, Va.; and Ph.D. at North Carolina State University, Raleigh, N.C. A veteran of the U.S. Marine Corps, he served as an associate professor in the Department of Biological and Agricultural Engineering since 2008. Prior to working for LSU, he worked for the Extension Service at the University of Idaho and North Carolina State.

Donna Elisar, Department of Biological and Agricultural Engineering administrative support specialist, received the 2011 Charles E. Dunbar, Jr. Career Service Award in recognition of unselfish service to citizens of Louisiana through the merit system of employment. The award is sponsored by the Louisiana Civil Service League.

In Memoriam

Elisar receives civil service award
Fall 2011

Eleven students obtained their Bachelor of Science in Biological Engineering degrees at the commencement exercises on December 16, 2011. Congratulations to Abby Duhe, Frank L. Fazio, Jr., Alexandria Haslauer, John Hebert, James Hollier, Yasmin Mohammad, Jordan Moree, Adrian Serio, Zaanan Wheeler, Mallory Witte, Emily Worsham. Quoc Nguyen and Jose Rojas received their Master of Science in Biological and Agricultural Engineering. One student, Andy Zanetti, received a Ph.D. in Engineering Science.

Pictured from front left: Yasmin Mohammad, Alexandria Haslauer, Abby Duhe, Mallory Witte, (second row left) Jordan Moree, Zaanan Wheeler and Adrian Serio, (third row) James Hollier

Spring 2012

Twenty-nine students obtained their Bachelor of Science in Biological Engineering degrees at the commencement exercises on May 18, 2012. Congratulations to Megan Barnum, Gary Bernard, Jacob Bihm, Jason Bordelon, Toni Borel, Andrew Calogero, Ari Deitch, Kristian Doucet, Sarah Dwyer, Mitchell Feigley, John Filostrat, Charles Henkel, Lauren Hoft, Kevin Holly, Melinda Hunter, Eric Ledet, Seon Lee, Jessica Madden, Jessica McCallum, Mary-Anne Nguyen, Czarina Patolilic, Jonathan Pepper, Addy Reine, Kyle Richard, Tel Rouse, Tracey Schlotterer, Joshua Tate, Nicole Walker, and Michael Wood. Four students graduated with honors: Mitchell Feigley and Tel Rouse with magna cum laude for a GPA between 3.89 and 3.80. Kevin Holly and Jonathan Pepper with cum laude for a grade point average between 3.70 and 3.79. Four students received Distinguished communicator medals: Andrew Calogero, Kevin Holly, Melinda Hunter, and Mary-Anne Nguyen. Tel Rouse won a National Science Foundation Fellowship. Three students received Master of Science in Biological and Agricultural Engineering: Bijeet Mukherje, Pranjali Muley, and Laura Picou. Javed Iqbal received a Ph. D. in Engineering Science.
Six students obtained their degrees at the commencement exercises on August 3, 2012. Nicole Henderson received a Bachelor of Science in Biological Engineering degree. Four students received Master of Science in Biological and Agricultural Engineering degrees: Yin Lin Chiu, Amanda Hendrix, Christian Lohrey, and Srikanth Tirumala. Jon Risinger received a Ph.D. in Engineering Science.

Fall 2012

Nine students obtained their Bachelor of Science in Biological Engineering degrees at the commencement exercises on December 14, 2012. Congratulations to Robert Behringer, Jr., Kieran Donegan, Jake Farlow, Miles Friddle, Daniel Jones, Brett Maraist, Lacey Prestwood, Lacey Simon, and Andrew Taylor. Jingyan Li, LeKeith Terrell and Chelliah Navin Vijayanathan received their Master of Science in Biological and Agricultural Engineering.

Pictured from front row left: Andrew Taylor, Brett Maraist, Lacey Simon, Jake Farlow (second row left) Jingyan Li, Chelliah Vijayanathan, Daniel Jones and Robert Behringer.

Summer 2012

Six students obtained their degrees at the commencement exercises on August 3, 2012. Nicole Henderson received a Bachelor of Science in Biological Engineering degree. Four students received Master of Science in Biological and Agricultural Engineering degrees: Yin Lin Chiu, Amanda Hendrix, Christian Lohrey, and Srikanth Tirumala. Jon Risinger received a Ph.D. in Engineering Science.

Spring 2013

Seventeen students obtained their degrees at the commencement exercises May 17, 2013: Jacob Beckham, Kelly Bui, Benjamin Cote, Sean Cotlar, Jordan Duhon, John Guillot, Kameron Kilchrist, Austin Li, Allysson Lunos, Malcolm Richard, William Shockey, Callie Silvia, Matthew Sinclair, Sharis Steib, Amanda Taylor, and Teriana Wilcox.

The Biological and Agricultural Engineering Scholarship Awards Program was held at the LSU Nelson Memorial Building on March 28, 2012. Fifteen scholarships were awarded to high-achieving students majoring in biological engineering and two fellowships to graduate students. The scholarships awarded were: Harold T. Barr Memorial Scholarship to Daniel Rees; Richard L. Bengtson Endowed Scholarship to Kelsey Cage and Caroline Tulloh; William & Barbara Brown Scholarship to Jake Farlow and Sharis Steib; Mansel M. Mayeux Honorary Scholarship to Linsey Oliver and Hunter Starring; Wiley D. Poole Memorial Scholarship to Natalie Derise, Christopher Sylvester, and Rachel Voss; Scott-Windam Scholarship to Christina Juneau; Carl H. Thomas Memorial Scholarship to Linda Cross and Shelby Pursley; BESO Michael Mailander Memorial Scholarship to Erin Young; Louisiana Section ASABE Student Scholarship to Stephanie Dickerson; and Charles E. Severance Endowed Fellowship to Adam Dassey and Stefanie Gilliam.

Pictured from front right: Dr. Richard Bengts on, Stefanie Gilliam, Christina Juneau, Sharis Steib, Hunter Starring, Caroline Tulloh, Dr. Paul Coreil, (second row) Adam Dassey, Daniel Rees, Jake Farlow, Natalie Derise, Shelby Pursley, Christopher Sylvester, Erin Young, Linda Cross, Stephanie Dickerson and Rachel Voss.

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Landry Honored as Distinguished Alumni

Mr. Henry J. Landry, Jr., P.E., received the 2012 Distinguished Alumni Award from Dr. Richard Bengtson. Mr. Landry received his BS in Agricultural Engineering in 1974. He is the president, general manager and owner of International Manufacturers Representatives, Inc., in Baton Rouge.

Audiffred Receives Rising Star Award

Dr. Julianne Forman Audiffred received the 2012 Rising Star Award from Dr. Marybeth Lima. Audiffred received her BS in Biological Engineering in 2002. She received a MSBAE in 2005 and a Ph.D. in Engineering Science from LSU in 2009. She has been employed as a senior research and design engineer at Albemarle since December 2009. Her primary role with Albemarle is executing process scale-up and generating cost estimates.
Ensure future excellence

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Please mail your donation along with this form to LSU Department of Biological and Agricultural Engineering, 149 E.B. Doran Building, Louisiana State University, Baton Rouge, LA, 70803. You can also donate to the Department of Biological and Agricultural Engineering online at www.lsufoundation.org.
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