

**From the Department Head...**

The students, faculty and staff of BESS have been active in the past few weeks, with significant visibility at the UTIA Ag Day, the COE "Engineer's Day," and the Southeastern Soils Judging competition. [\(continued here...\)](#)

**SOIL VOLS 2<sup>ND</sup> IN SOUTHEASTERN REGION--QUALIFY FOR NATIONALS**

The University of Tennessee collegiate soil judging team took 2<sup>nd</sup> place in the Southeastern Soil Judging contest hosted by Virginia Tech on October 24<sup>th</sup>. The Soil Vols have qualified for the national contest to be held in Missouri in April, 2009. [\(continued here...\)](#)

**BIG ORANGE BACTERIUM**

Mark Radosevich and post-doc Srinivasan Velusamy are investigating bacteria found in different environments that have potential to degrade polysaccharides such as cellulose and hemicelluloses into sugars which then are fermented into ethanol. Discovery of efficient organisms that can rapidly break down the various polysaccharides present in biomass such as switchgrass and wood chips is needed to make cellulosic ethanol a reality. One such bacterium that three students in ESS355 isolated last spring from a soil sample collected in Antarctica is shown below. The bacterium is closely related to *Plannococcus maritimus* that naturally makes an orange pigment that is fairly close to UT orange.

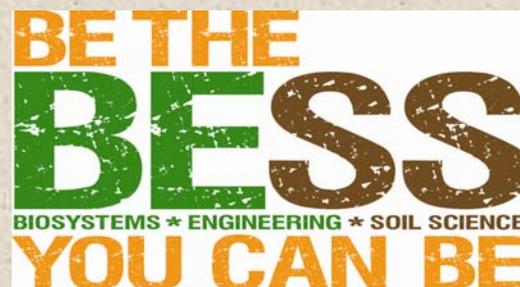


**STUDENT PROFILE**



**ABDOULAYE SAMBA** is a Senior in Biosystems Engineering, and is originally from Senegal. He is expecting to graduate in May, and is then planning on Graduate School, with a concentration in Bioprocessing. He was exposed to Biofuels research by working in Dr. Philip Ye's research lab, exploring physical properties of biofuels such as viscosity and ash content. Beyond finding Dr. Ye's research to be very interesting, Abdoulaye has found that working in a lab has made classroom topics easier to understand.

Abdoulaye's friends in other universities do not have the option to work in research labs, as those positions are reserved for graduate students. He appreciates opportunities that working in BESS research labs offers: to learn, first hand, skills that will help him do well school, and the chance to discover a focus for his graduate studies.



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Please submit news items to Darla O'Neill at [doneill1@utk.edu](mailto:doneill1@utk.edu)  
 BESS NEWS is issued on 1<sup>st</sup> and 3<sup>rd</sup> Mondays of each month. Archived issues will post to our [departmental website](#).  
 To subscribe (or unsubscribe), email [doneill1@utk.edu](mailto:doneill1@utk.edu)

# BESS NEWS - CALENDAR

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## Fall 2008 Seminar Schedule

November 7 Rajesh Jena (Proposal), Robert Hull (Final)  
 November 14 Jessi Journey, Naga Potteti (Final Presentations)  
 November 21 Brian Chomicki, Josh Rowe (Final Presentations)

## Faculty Meetings

November 10 BESS Faculty Meeting; CRIS/HATCH info; Retention meeting afterward  
 December 3 BESS Faculty Retreat; Tenure & Promotion meeting afterward

*Continued from Front Page.....*

## Department Head's Comments:

Doug Hayes coordinated our departmental **Ag day** participation at the Institute of Agriculture's annual celebration on October 18, with help from Joanne Logan, Julie Werner, and students Sean Nester, Katie Peay, Lori Gibson, and Joseph Freeman. Willie Hart was not only involved in our departmental display, but instrumental in the organization of the institute wide event.



**Engineers Day** has been a UT College of Engineering tradition for nearly 100 years. Each October, COE students and faculty spend time interacting with hundreds of potential engineering students from high schools across the region. This year, the Biosystems Engineering display received first place in the Class 1 category for their display of "Underwater Mapping for Evaluating Streambed Conditions." The group was led by John Tyner and Paul Ayers, and ASABE President Sean Nester. Students present/involved were: Sean Nester, Becca Messer, Alex McLemore, Adam Duncan, Joseph Freeman, James Bevington, Katherine Peay, Clayton Parsons

On October 24, the BESS Soil Judging team took 2nd place in the **Southeastern Soil Judging contest** hosted by Virginia Tech. The team was coached by Ryan Blair and Tom Ammons

## SOIL VOLTS 2<sup>ND</sup> IN SOUTHEASTERN REGION-QUALIFY FOR NATIONALS (CONTINUED FROM FRONTPAGE)

Two team members placed among the top 10 individuals in the region. Brian Lester (Wartburg) placed second after tying for 1<sup>st</sup> place and losing on a tie breaker. Chase Coakely (Clinton) placed 3<sup>rd</sup> amid the top ten individuals in the region. Rounding out the team were Stephen Holland (Nashville), James Hartsig (Nashville), Kiley Dickson (Jamestown), Kinder Tuckwiller (Lewisburg, WV) and Bart Webb (Elizabethon). The team was coached by Ryan Blair and Dr. Tom Ammons of the Biosystems Engineering and Soil Science Department. The team was sponsored by the Plant, Soil and Environmental Science club, the Department of Biosystems Engineering and Soil Science, and the College of Agricultural Sciences and Natural Resources.

### Final Team Results

Rank	Team
1	Tennessee Martin
2	Tennessee Knoxville
3	Kentucky
4	North Carolina State
5	Auburn
6	Tennessee Tech
7	West Virginia
8	Florida
9	Clemson
10	Western Kentucky
11	Georgia
12	Murray State



L to R: Kinder Tuckwiller, Kiley Dickson, Stephen Holland, Bart Webb, James Hartsig, Chase Coakely, Brian Lester, Dr. Tom Ammons, and Ryan Blair.

# CASNR INFO & CALENDAR

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*Ocean, Freshwater, Forests, Health and other Symposia at the Biodiversity Conference*

**THE NATIONAL COUNCIL FOR SCIENCE AND THE ENVIRONMENT** invites you to participate in the **9th National Conference on Science, Policy, and the Environment: *Biodiversity in a Rapidly Changing World***, to address the challenge the changing world poses to biodiversity (and to humanity). The conference will provide an opportunity to look at what is happening to biodiversity in the context of radical climate disruption, human population rise, land use changes, globalization and other economic forces.

**December 8-10, 2008**

**Ronald Reagan Building and International Trade Center, Washington, DC**

<http://ncseonline.org/Conference/Biodiversity/>

## **FUNDING FOR INTERNATIONAL RESEARCH AND SCHOLARSHIP AND STUDENT SCHOLARSHIPS FOR STUDY ABROAD**

If you are interested in locating funding opportunities for international research and professional activities, please take a look at our revised website: <http://ipanr.tennessee.edu/>. On the left side of the page, click on funding. If you are part of the teaching faculty or have contact with students, on the right side of the homepage, we have posted information on CASNR's two study abroad programs for 2009 and also a direct link to the Center for International Education's webpage on scholarships for study abroad. I hope there is something here that serves your needs.

---Dr. Robert H. Orr, Director of International Programs, phone: 865-974-7476

# UT-K & COE INFO & CALENDAR

## **CALL FOR NOMINATIONS FOR THE CHANCELLOR'S EXCELLENCE IN ADVISING AND TEACHING AWARDS.**

To: UT Knoxville Faculty and Students  
From: Sarah Gardial, Vice Provost for Faculty Affairs  
Subject: Call for Nominations

This is a call for nominations for the Chancellor's Excellence in Advising and Teaching Awards. We hope that you will take the time to nominate an exceptional teacher or advisor. Nominations will be accepted until **Nov. 7, 2008**. For more information or questions, please contact India Lane, Chair of the Teaching Council, [ilane@utk.edu](mailto:ilane@utk.edu).

The Chancellor's Awards are designed to recognize excellence in teaching and advising across UT Knoxville. These awards specifically seek to reward individuals who are uniquely effective in their roles and make exceptional contributions to student life in traditional classroom or nontraditional educational settings.

The Chancellor's Excellence in Advising Award recognizes the integral role of academic advising in the teaching mission of the university. These awards seek to reward individuals who are uniquely effective in helping students meet their educational and professional goals.

The Chancellor's Excellence in Teaching Award specifically seeks to reward those individuals who are uniquely effective in teaching, at any level and in any educational format. For further information on each of these awards, please go to <http://chancellor.utk.edu/honorsbanquet/>.

# EXTENSION INFO & CALENDAR

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## **GRANTSMANSHIP WORKSHOP – GRANTS.GOV PRESENTATION:**

Here's the link to the Grants.gov presentation from the October 29 Grantsmanship Workshop:

<http://taes.tennessee.edu/sponsoredresearch/announce.htm>

## **NRI WATER GRANT UPDATE:**

From "Rozum, Mary Ann" [MROZUM@CSREES.USDA.GOV](mailto:MROZUM@CSREES.USDA.GOV)

"In response to many requests, the NRI grant was changed in the farm bill to AFRI or Ag and Food Research Initiative. Due to legal changes, it will be delayed. A basic version of the RFA is expected on our website at [www.csrees.usda.gov](http://www.csrees.usda.gov) around the end of Nov. The full RFA will be up in January with new electronic application forms. A water grant is expected under the new program." ---Mary Ann Rozum

## **FIVE NEW NEEDS-BASED EXTENSION COMMUNITIES OF PRACTICE SELECTED FOR DEVELOPMENT**

To: Southern Region Cooperative Extension Directors/Administrators (ASRED)

From: Dan Cotton, eXtension

Subject: Regional/National CoP Priorities

I am excited to report eXtension is ready to move to the next phase of establishing a second group of national needs-based Communities of Practice. The regional aggregation of CoP priorities produced a number of CoP recommendations, which may be reviewed at:

[http://about.extension.org/wiki/Regional\\_Needs\\_Based\\_CoP\\_Priorities\\_2008](http://about.extension.org/wiki/Regional_Needs_Based_CoP_Priorities_2008)

Of those submitted priorities, the following have been selected for development into fully functioning national Communities of Practice.

- Water Conservation (Western Region)
- Energy, Sustainability and Housing - Home Energy (North Central Region)
- Food Safety (basic food safety) (Southern Region)
- Aquaculture (1890 Region)
- Sustainable Fisheries and Shore Lands (Northeast Region)

The Governing Committee approved these priority recommendations at their October 2 meeting. Now, each region has the opportunity to lead a process that will result in the development of a fully functioning national CoP addressing a defined audience (Community of Interest) important to Cooperative Extension.) We have contacted potential leaders of the "Food Safety" CoP using names you provided. They will be invited to participate in a conference call to talk through what needs to be done in terms of establishing a lead for the CoP, getting additional participants, scheduling planning meetings, submitting a letter of intent and developing a proposal. There are a couple of key deadlines that should be mentioned. Each needs-based CoP will be asked to submit a **"letter of intent" by November 15, 2008**. The letter is to include CoP goals, objectives, a list of CoP leaders and the Community of Interest to be served. After receiving feedback from the CoP Review Panel, a full proposal will be due February 2, 2009. eXtension will provide at no cost to the needs-based CoPs, access to the eXtension Web Conference Center for meetings and discussions. Also, up to \$10,000 will be provided to each CoP to assist them in the development of a successful application. Resources may be used to reimburse travel costs for any face-to-face work meetings the CoP deems necessary. Any unused funding will be credited to the CoP once their CoP application is approved. This will be in addition to the \$50,000 of start-up funding the CoP will be eligible to receive. Please feel free to share this email with others in your region. If you have questions, please contact me at your earliest convenience. Thank you for your support and may all of our collaborative work result in the development of five fully functioning priority-based CoPs.

## **NIWQP FY2008 PROJECTS ANNOUNCED**

The CSREES National Integrated Water Quality Program announces the funding of \$10 million in water resources projects:

[http://www.csrees.usda.gov/newsroom/news/2008news/10171\\_water\\_quality.html](http://www.csrees.usda.gov/newsroom/news/2008news/10171_water_quality.html)

A complete listing of the FY2008 Projects is posted on the National Water Program Website:

<http://www.usawaterquality.org/watershed/projects/2008.html>

Kelly Addy, Web Content Coordinator

National Water Program: A Partnership of USDA CSREES & Land Grant Colleges and Universities

<http://www.usawaterquality.org/> 401-874-7532

# EXTENSION INFO & CALENDAR

## GIRL SCOUT WATER DROP PATCH BOOKLET

EPA provided funding to develop water curricula for scouts. Here's the link for the Water Drop Patch booklet. We're very interested in making the booklet and all the activities available to other youth service organizations, like the FFA and 4H. The booklet has been very popular with the Girl Scouts, and we hope we can build on its successes!

Meghan Klasic, my former ORISE, did a fabulous job redesigning the booklet.

<http://www.epa.gov/adopt/patch/>

Thank you for making the connections for us with the FFA and Extension Service!

Patty Scott

US EPA, Office of Wetlands, Oceans and Watersheds

Ariel Rios Building, 4501T, 1200 Pennsylvania Avenue, N.W.. Washington, D.C. 20460

[scott.patricia@epa.gov](mailto:scott.patricia@epa.gov), (202) 566-1292, 240-314-7128 (Thursday flexiplace) 703-975-9839 (Cell), Fax (202) 566-1326

[URL:www.epa.gov/owow](http://www.epa.gov/owow)

## REMINDERS:

### 2008 Regional and State Extension Specialist Faculty Conferences

Plans are underway for the 2008 Regional and State Extension Specialist Faculty Conferences. Again this year the Eastern Region and Knoxville State Extension Specialist Faculty will meet together on **Monday, November 3**, at Rothchild's Catering and Conference Center, 8807 Kingston Pike, Knoxville. The meeting will begin at 9:00 AM and conclude after the Association meetings which will begin around 2:15 PM. If unable to attend, please contact Brenda Voiles <[bvoiles@utk.edu](mailto:bvoiles@utk.edu)> so that we can have an accurate count for lunch. Please remember to wear your name tags to the conference. If you are needing a name tag, please contact Debby Bowers as soon as possible to get one ordered: <[dbowers@utk.edu](mailto:dbowers@utk.edu)>. Please state the exact name that should appear on the name tag.

### Agenda

9:00 AM Farewell Coffee for Dr. Charles Goan

9:20 AM Welcome/Regional Director

UT Extension Dean's Report/Tim Cross

9:40 AM TSU Cooperative Extension Administrator's Report/Clyde Chesney

10:00 AM Institute of Agriculture Update/Joe DiPietro

10:15 AM Break

10:30 AM Program Highlights:

Family and Consumer Sciences

4-H Youth Development

Agriculture and Natural Resources

Resource Development

11:50 AM Greeting and Remarks/John Petersen

12:00 noon LUNCH

Introduction of New Staff and Retirees/Regional Director

1:15 PM Change Agent States for Workplace Diversity/Herb Byrd

(Survey Results and Next Steps) Thelma Sanders-Hunter

1:30 PM Update on Marketing and Communications/Lorna Norwood

1:45 PM Epsilon Sigma Phi Meeting

2:15 PM Association Meetings

TEAFCS

TAE4-HW

TAAA&S

### TDA – Water Resources Program “Request for Proposals” FY 2009 319 Partners:

Deadline for submittal of proposals (and Watershed Based Plans, if required) is **December 1**, 2008.

Link to RFP: <http://www.state.tn.us/agriculture/nps/319-RFPF.pdf>

# TAES INFO & CALENDAR

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## Grantsmanship Workshop – Grants.gov presentation:

Here's the link to the Grants.gov presentation from the October 29 Grantsmanship Workshop:  
<http://taes.tennessee.edu/sponsoredresearch/announce.htm>

## [S-AESDIRS] [US-AESDIRS] NIMSS: REQUEST PARTICIPATION IN PROPOSED PROJECT/ACTIVITY

Your institution/agency/entity is invited to participate in a new or revised project/activity, NC\_TEMP9. The following are directions for viewing the project proposal entitled "MWPS: Research and Extension Educational Materials" and for creating in Appendix E to authorize participation by your scientist(s) /specialist(s) in this proposed activity.

Please submit the Appendix E no later than **11/10/2008**

\*\*\*\*\*

To View the Proposal:

1. Go to the National Information Management Support System at <http://nimss.umd.edu>
2. Insert your login and password. (If you don't have a login ID, you'll need to register, also at the URL above.)
3. In the Top Menu, Select Project then Select View Projects
4. Enter the project number, NC\_TEMP9

\*\*\*\*\*

To Create and Submit an Appendix E for a Proposed Project:

1. Go to the National Information Management Support System at <http://nimss.umd.edu>
2. Insert your login and password. (If you don't have a login, you'll need to register, also at the above URL.)
3. In the Top Menu, Select Participants then Select Draft/Edit
4. On the Left side Menu, Select "Draft New"
5. Select the project number NC\_TEMP9
6. Fill out the form.
7. Click on Submit.

Thank you. Please contact the Administrative Advisor(Gerald Miller) if you have questions about the proposed project. Contact your System Administrator (in your Executive Director's office) if you have questions about the use of NIMSS.

## FUNDING OPPORTUNITIES:

### **NIWQP FY2008 PROJECTS ANNOUNCED**

The CSREES National Integrated Water Quality Program announces the funding of \$10 million in water resources projects: [http://www.csrees.usda.gov/newsroom/news/2008news/10171\\_water\\_quality.html](http://www.csrees.usda.gov/newsroom/news/2008news/10171_water_quality.html)

A complete listing of the FY2008 Projects is posted on the National Water Program Website:

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Kelly Addy, Web Content Coordinator

National Water Program: A Partnership of USDA CSREES & Land Grant Colleges and Universities

<http://www.usawaterquality.org/> 401-874-7532

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## **REMINDERS -- FUNDING OPPORTUNITIES:**

### **UTRF MATURATION FUNDING DEADLINE APPROACHING**

Please remind your faculty and staff that the deadline for the 2009 UTRF Maturation Funding Program is less than a month away (**November 21, 2008**).

The second annual UTRF Maturation Funding Program helps UT researchers further develop technologies that have the potential for commercial success. Up to \$15,000 (direct costs) will be awarded to the highest ranking proposals.

#### **Rules :**

- Open to all UT researchers (faculty, staff and students) at all campuses and institutes.
- Projects must be related to an existing UT invention/creation disclosure **OR** a proposal can be accompanied by a *new* UT invention/creation disclosure.
- Projects should provide new data or further demonstrate the technology to increase its commercial readiness.
- Funds should be directed to labor, materials and services necessary to achieve the proposed deliverable(s).
- Proposal should not exceed 3 pages and should describe the technology, the plan of work, the expected results, a budget (direct expenses only), and your assessment of the commercial opportunities for the technology.
- Proposal should be submitted to your campus research office by November 21, 2008.

#### **Judging Criteria:**

- Demonstration of a path for commercial development
- Market potential
- Stage of development

#### **Deadlines and Schedule:**

Deadline for proposal submission: November 21, 2008; Awards announced: December 19, 2008

Project start date: January 15, 2009; Project completion date: October 15, 2009

Final report to UTRF: November 16, 2009

For more information on the deliverables, rules and judging criteria, view the document posted at <http://utrf.tennessee.edu> or contact: Dr. Stacey Patterson, (865) 974-3140, [sspatter@utk.edu](mailto:sspatter@utk.edu)

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### **TDA – WATER RESOURCES PROGRAM “REQUEST FOR PROPOSALS” FY 2009 319 PARTNERS:**

Deadline for submittal of proposals (and Watershed Based Plans, if required) is **December 1**, 2008.

Link to RFP: <http://www.state.tn.us/agriculture/nps/319-RFPF.pdf>

**There are several changes in this year's RFP, so please read it over carefully before writing your proposal.**

TDA anticipates receiving approximately \$3.1 million from EPA in FY 2009 and will disperse that money across the state by funding projects aimed at abating nonpoint source pollution. *Please keep in mind that the number one goal of this program is to remove streams from the 303(d) list.* When allocating money, highest priority will be given to projects that have that as a primary goal. It is also important to point out that all projects that receive funds for BMP implementation must have a Watershed Based Plan developed for the area in which the project will be done. This year's RFP attempts to provide a brief format to follow in order to quickly write a complete Watershed Based Plan. We no longer fund projects with the sole purpose of writing a Watershed Based Plan. These plans should now be written following the format in the RFP and submitted along with the proposal for implementation projects.

The deadline for the submittal of proposals (and Watershed Based Plans, if required) is December 1, 2008. Proposals may be submitted as hardcopies, but e-mail submissions are much preferred. If you have any questions about Watershed Based Plans or the process of submitting proposals, please contact Sam Marshall, [sam.marshall@state.tn.us](mailto:sam.marshall@state.tn.us)). Ellington Agricultural Center, 440 Hogan Road, Nashville, TN 37220  
Telephone: 615-837-5306 Fax: 615-837-5025

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### **Call for Proposals for the Advancing Sustainable Agriculture Matching Planning Grants**

Southern SARE invites planning grants from states seeking to build long-term capacity for sustainable agriculture.

In anticipation of Congressional Authority to appropriate greatly increased funding for SARE that can include matching grants of up to \$1 million, Southern SARE's planning grants will offer states the opportunity to lay the ground work for applying for those matching grants. Proposals for the Advancing Sustainable Agriculture Matching Planning Grants are due Monday, **December 1**, 2008. Obtain the call for proposals at <http://www.southernsare.uga.edu>

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### **6th Annual P3 Awards:**

#### **A National Student Design Competition for Sustainability Focusing on People, Prosperity and the Planet**

URL: [http://es.epa.gov/ncer/rfa/2009/2009\\_p3.html](http://es.epa.gov/ncer/rfa/2009/2009_p3.html) Open Date: 09/22/2008 - Close Date: **12/23/2008**

Summary: The U.S. Environmental Protection Agency (EPA), as part of the P3 Award Program, is seeking applications proposing to research, develop, and design solutions to real world challenges involving the overall sustainability of human society. The P3 competition highlights the use of scientific principles in creating innovative projects focused on sustainability. The P3 Awards program was developed to foster progress toward sustainability by achieving the mutual goals of economic prosperity, protection of the planet, and improved quality of life for its people - people, prosperity, and the planet - the three pillars of sustainability. The EPA offers the P3 competition in order to respond to the technical needs of the world while moving towards the goal of sustainability. Please see the P3 website (<http://www.epa.gov/P3>) for more details about this program.

# Science as Team Sport

## Collaborating at a distance pays off

Based on the Research of [Benjamin F. Jones](#), Stefan Wuchty And [Brian Uzzi](#)

The Large Hadron Collider, accelerating subatomic particles to light speed before crashing them together in spectacular fashion 100 meters beneath the Franco-Swiss border, unites thousands of physicists and engineers from dozens of nations and hundreds of universities in one of the world's largest scientific collaborations. But calculus, a cornerstone of mathematics that is wielded *en masse* in the collider's humming tunnels and glowing control rooms, was developed by just two men, Gottfried Wilhelm Leibniz and Sir Isaac Newton, each of whom worked independently in the latter half of the 17th century. Recent research by Benjamin Jones (Management and Strategy), Stefan Wuchty (National Institutes of Health), and Brian Uzzi (Management and Organizations) sheds light on how scientific discovery—for ages sprung primarily from the minds of singular giants—is now more likely to arise from large, distributed teams. Published in the journal *Science*, the study shows that while the reach and influence of teams is growing, the benefits of this evolution are concentrated largely among the nation's most elite universities.

"There's the old, classical idea about the lone scientist, like Aristotle or Newton. As recently as the 1950s you had a higher probability of hitting a home run if you came to the plate by yourself," said Jones, describing how landmark scientific discoveries had been achieved for centuries. "Now, you have a better chance to hit that home run as a team."

Even among the very best schools—where rock star researchers and founders of fields shared washrooms and water coolers—there was still an advantage to collaborating with other schools. But this advantage was concentrated primarily among the elite.

But as any fan of the Chicago Cubs can tell you, simply assembling a team does not guarantee that you will be able to swing a bat, let alone hit a home run. And with the global, knowledge-based economy depending more and more upon ideas and innovations, the ability to understand and fine-tune research initiatives takes on heightened significance.

"How do you assemble a network and figure out where to plug in your ideas to get the best return? Where do you place your bets? How do you create systems to enhance research?" asked Uzzi.

### Following the Research Paper Trail

The beating heart of science can be found in the pages of research journals, where reports of the latest studies are published. Authorship of such papers is a primary indicator of scholars' productivity. So to take the pulse and measure of the national research apparatus, Jones and colleagues followed the paper trail. This particular trail was weighty and wired, with roots stretching back to the 1960s and the austere named Institute for Scientific Information (ISI).

The ISI Web of Science (WoS) is an online database that tracks the contents of roughly 8,700 leading academic journals. Jones and colleagues studied thirty years worth of WoS data, a total of 4.2 million research articles published from 1975 to 2005. Researchers from 662 major U.S. universities were represented, spanning 172 fields of science and engineering (SE), from astronomy to zoology. Another 54 fields of social science (SS), such as psychology and economics, were also represented.

### Collaboration across Academic Borders

"In the 1950s, worldwide, there were forty thousand publications in science and engineering. Now, there are about a million papers this decade," said Jones. "To be a renaissance man today, with a million papers published, is tough."

So tough, perhaps, that savvy scientists are teaming up, not just across campus but increasingly across time zones. In both SE and SS, multi-school collaborations were relatively rare in 1975 when no more than 10 percent of published collaborations involved more than one institution. Over the thirty years that followed, multi-school collaborations grew steadily to account for 30 to 35 percent of publications in 2005. Over that same period, single-author papers became increasingly rare, down from roughly 30 to 10 percent for SE, from 60 to 40 percent for SS. The number of collaborations that were confined to a single school remained fairly constant, roughly 60 percent for SE, 30 percent for SS.

For full article: [http://insight.kellogg.northwestern.edu/index.php/Kellogg/article/science\\_as\\_team\\_sport](http://insight.kellogg.northwestern.edu/index.php/Kellogg/article/science_as_team_sport)

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# Recognition Reception

Please join us in honoring Dr. Thomas H. Klindt for the leadership he has provided as  
Interim Dean to the  
Tennessee Agricultural Experiment Station

Friday, November 7, 2008

10 am to 12 pm

Rooms 156/157 Plant Biotechnology Bldg

Brunch will be served



"The quality of a leader is reflected in the standards they set for themselves."

Ray Kroc 1902-1984

# STUDENT INFO & CALENDAR

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## **SCHOLARSHIP FOR GRADUATE STUDENTS – GEOTECHNICAL, ENVIRONMENTAL, ETC.**

Anchor Environmental, Seattle, WA sponsors an annual scholarship for graduate students studying geotechnical, environmental, and other related subjects in engineering and science. Information about the scholarship and our company can be found at [http://www.anchorenv.com/firm/firm\\_scholarship.html](http://www.anchorenv.com/firm/firm_scholarship.html). The scholarships can be up to \$5,000 and they have awarded 5 to 7 of them each year. Applicants from the southeast are encouraged to apply, as recent winners have all been from East and West Coast schools. The applications are due November 10, 2008 and will be awarded in January, 2009.

Anchor Environmental, Seattle, WA, is an environmental science and engineering consulting firm whose expertise and focus is in aquatic-based remediation, waterfront development projects, and water resources planning and engineering. To promote and develop this focused service area, Anchor has established a scholarship fund to assist graduate students in their pursuit of higher education. Individual scholarship awards will range in value from \$500 to \$5,000 and be provided to the recipient's institution of higher learning to be disbursed to the student for graduate school tuition and supplies.

### **ELIGIBILITY:**

Full-time graduate students or persons accepted to United States graduate school

Undergraduate GPA equivalent of B average or higher

A major in: fisheries, environmental sciences, planning/land use, landscape architecture, or coastal, geotechnical, hydraulic or environmental engineering (any of which has an aquatic/waterfront emphasis)

### **APPLICATION:**

Applications are available on the internet at [www.anchorenv.com](http://www.anchorenv.com) or by emailing [scholarship@anchorenv.com](mailto:scholarship@anchorenv.com).

Applicants also need to include the following:

Letter(s) of recommendation » commendation (professional/academic) from professors, employers, etc.

» Certified copy of undergraduate and graduate (if applicable) transcripts

» A one-page essay stating your educational goals, describing reasons for selecting your major, future plans in the field and how this scholarship would help you.

» Resume (optional)

» Completed application form

### **DEADLINE:**

Applications must be postmarked by **November 10, 2008.**

Award of the scholarship will be in January 2009.

## NEW COURSE OFFERING ANNOUNCEMENT

### **Biofuels and Bioproducts Engineering**

CBE 494/590

Instructor: Abhijeet P. Borole.

Tue, Thu 5:10 PM ~C 6:25 PM

Description: The course will cover processes involved in transformation of biomass and other resources into biofuels and bioproducts. This will be an applied course, with focus on existing and upcoming technologies for bioconversion of renewable resources, description of current roadblocks and exposure to future needs. Intended primarily for senior class and graduate students from various disciplines, the course considers the emergence of biofuel/bioproduct engineering as a coherent field of research and practice. It will include a distinctive blend of elements ranging from molecular bioengineering and biotechnology to process design, resource assessment and life-cycle analysis. Biofuels such as ethanol, biodiesel, biohydrogen, and bioelectricity will be covered. A range of bioproducts from low volume, high value products to high volume low value products (biocommodities) will be discussed. Examples are biopolymers, renewable chemicals such as propanediol, lactic acid, etc. Among the biofuels, ethanol production will be the primary example, with coverage including feedstock production and logistics, biomass recalcitrance issues and unit operations within biorefineries. The course may include a few lectures from local experts on specific topics. The course will require the students to present a paper which can be on the general topic of bioproduct/biofuels or very specific targeting a single aspect of bioproduct development. Teams of students with different backgrounds (eg. Molecular Biology and Chemical Engineering or Biosystems Engineering) may jointly propose topics or choose from a list provided by the instructor.

# UTIA INFO & CALENDAR

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## Grantsmanship Workshop – Grants.gov presentation:

Here's the link to the Grants.gov presentation from the October 29 Grantsmanship Workshop:

<http://taes.tennessee.edu/sponsoredresearch/announce.htm>

There is a new Animals in the Workplace Policy that has been approved and adopted by the UTIA Executive Committee at the October 20, 2008 meeting. This policy applies to UTIA Campus Buildings only. The policy can be found here:

<http://agriculture.utk.edu/policies/index.html>



Dr. Neal Eash's  
ESS 210 & 120 classes deserve  
extra credit for their Halloween  
spirit!

