ACADEMIC PROGRAMS OFFICE

We would like to say a special thank you to each of you that helped make New Student Orientation a success. We had close to 650 students to attend the three CALS sessions. Again, thanks to each of you for your hard work.

This year's summer reading text will be It Happened on the Way to War by Rye Barcott. We will use the book in ALS 103, so CALS is advising all incoming freshmen to participate.

WISE Bridge Event – Friday, August 10, 2:00-4:00 p.m.; Riddick Atrium – Fall semester is right around the corner and our WISE women will be moving in a few days early to participate in a summer bridge program to kick of their WISE experience. We need your help! The College will be hosting a college meeting with them. We will have ice cream, faculty introductions, a CALS scavenger hunt, and a general Q&A session. It would be great to have our women faculty in CALS come out to meet the WISE women and wish them well as they begin their first semester with us. Please email me if you can join us.

Wolfpack Welcome Week – College Connection Event – Tuesday, August 14, 1:00-3:00 p.m.; Scott Courtyard (grassy area between Fox, David Clark Labs, and Kilgore halls) - Celebrating CALS...Small School Feel with Big School Opportunities - Students can come learn about their College and have fun with the CALS Ambassadors. We'll have a club fair, games, free ice cream, and a t-shirt giveaway (with student id)! This year we would like to set up a department/major area where students can talk to faculty/staff/students in their home department.

To register (your club and/or department), please visit:

http://harvest.cals.ncsu.edu/applications/cals_registration/index.cfm?eventID=758

If you have questions, please contact Tricia Buddin.

Hold the Date:

Welcome Back Academic Programs Faculty and Staff - August 14.
The Fall Academic Programs faculty meeting will be held Tuesday, August 14, 2012 from 9:00 a.m. to 12:00 noon in 2215 Williams Hall. All those with teaching and advising responsibilities are encouraged to attend. At this meeting you will hear from Interim Associate Dean and Director of Academic Programs, Dr. Sam Pardue, and meet our new Assistant Director, Dr. Vicki Martin. We will also provide you with important announcements/updates, recognize 2012 teaching and advising award recipients and introduce new faculty members.
The 2012 CALS Career Expo, "Make a Life, Make a Living, Make a Difference," will be held on Thursday, Sept. 27th from 1:00-6:00 p.m.! Please encourage your employer contacts to register at www.cals.ncsu.edu/career/employers, or they can call our office at (919) 515-3249 and we can get them set up. Even if they aren't actively hiring, this is a great way to connect with students and establish a presence on campus.

All students are encouraged to attend, and the event is open to alumni job seekers, as well. This year we also hope to better address the needs of 1st and 2nd year students by dedicating a section of the event to internships and on-campus leadership opportunities. CALS juniors and seniors will be on hand to talk about their experiences and provide advice.

The list of registered companies is available on the Career Services website. With this year's event being a month earlier than usual, we will need your help in advertising the event to students!

The Focus On Your Future workshop is scheduled for Wednesday August 15 from 12:30-3:30pm. Speakers include representatives from Quintiles, Novozymes, Syngenta, LabCorp, the EPA, and more. This is a great way for students to kick off the school year with career goals in mind. Students can register at cals.ncsu.edu/career.

Whole Foods Markets has pledged its support to the NC 10% Campaign, an initiative of the Center for Environmental Farming Systems that encourages consumers to purchase locally produced food.

Late blight, a plant disease that can kill tomato plants, has been found on North Carolina tomatoes earlier in the growing season this year than usual, and home gardeners who grow tomatoes may want to be aware of the threat.

Saturday morning is an unusual time for a crop field day, but that didn’t stop more than 100 participants who attended N.C. State University’s Research Hop Yard Tour and field day held in Raleigh.

What was a narrow, barren lot beside the Clay County administrative office building in downtown Hayesville is now a peaceful park, thanks to recent efforts of Cooperative Extension Master Gardener volunteers. Their donated work saved the county more than $10,000.

During State 4-H Congress, held at North Carolina State University and around Raleigh, 4-H’ers showed compassion for their fellow North Carolinians by packing meals for the elderly, sewing teddy bears for chronically ill children and performing odd jobs at UNC-TV.

A new invasive pest from Asia likes fruits and berries as much as you do. A Cooperative Extension
entomologist at is working to stop the hungry fruit fly, or at least slow it down. Read more in N.C. State’s Bulletin.

**Juntos summit unites Latino students in quest for higher education and rewarding careers**
Seventeen-year-old Arely Vasquez may not know what college she is going to attend or what she’d like to major in, but a couple things are for certain: She will be going. And she credits the Juntos program and its summer summit for keeping her motivated to do what it takes to get accepted at a top-tier school.

**Land-grant universities honored with Borlaug Medallion**
In recognition of the many contributions that land-grant universities like N.C. State University have made to improving food production, the World Food Prize has awarded its Borlaug Medallion to U.S. land-grant universities. This year, as N.C. State celebrates its 125th anniversary, land-grant universities across the country also are celebrating the 150th anniversary of the Morrill Act of 1862 that started the land-grant system.

**NORTH CAROLINA AGRICULTURAL RESEARCH SERVICE**

**Upcoming Field Days:**

- **July 31** – Apple and Peach Field Day, Mountain Research Station, Mills River, NC
- **Aug. 8** – Turfgrass Field Day, Lake Wheeler Road Field Laboratory, Raleigh, NC
- **Sept. 5** – Soybean and Tillage Field Day, Upper Piedmont Research Station, Reidsville, NC
- **Sept. 6** – Peanut Field Day, Peanut Belt Research Station, Lewiston-Woodville, NC
- **Sept. 12** – Cotton Field Day, Upper Coastal Research Station, Rocky Mount, NC
- **Sept. 19** – Small Flock Field Day, Center for Environmental Farming Systems, Goldsboro

**Summer Research Stations Superintendents Meeting – July 16-17, 2012**
The Research Stations Superintendents held their annual Summer Meeting on July 16 and 17. The meeting was held in Carthage and included several speakers as well as a farm tour. Presentations to the group were made by Trimble precision agriculture representatives, Commissioner Troxler, Dr. David Smith, Dr. Patrick Hunt of USDA-ARS, and several of the superintendents themselves. Of note, the meeting was attended by Jerry Fankhauser, Director of Research Stations with Purdue University who made a presentation on the Purdue system as well as a general overview of Indiana agriculture and the drought situation there this summer. The group toured the Sandhills Research Station, whose staff hosted a meal for all attendees. The summer meeting is intended to be an exchange of ideas and mid-year update for the research stations, and the feedback was very positive as the Research Stations strive to improve their service to faculty and agricultural research.

Receive the latest **NC Agriculture Research Service news:**
https://twitter.com/#%21/CALSResearch

http://cals.ncsu.edu/research

**Plants for Human Health Institute and Kannapolis News:**
**Dr. Mary Ann Lila** is hosting two environmental scientists from Bhutan in her labs, as part of an international conservation and bioexploration partnership. Here's a link to the story on our site (where a PDF is available if needed): http://plantsforhumanhealth.ncsu.edu/2012/07/24/n-c-state-university-hosting-scientific-scholars-from-bhutan-at-n-c-research-campus/
INTERNATIONAL PROGRAMS

GRANTS

Hort CRSP Trellis Fund  CALS International Program’s has received a Trellis Horticultural CRSP grant to support its Honduran project PROMESA. As part of the award, an NCSU Doctoral student in crop science, Ms. Amanda McWhirt will travel to Honduras in the fall of 2012 to serve as a technical resource person for the project. While in Honduras Ms. McWhirt will work with the PROMESA staff to teach sustainable gardening techniques, plant seasonal vegetables and other horticultural crops and participate with field days, site visits and other extension activities for local farmers and their families. In addition, the NCSU Graduate Student will assist with the development of a 3 Ha. demonstration and research farm located on property donated by a local agriculture high school. Upon her return to NCSU, Ms. McWhirt will continue to assist the project by seeking additional resources and providing technical support to the project for one year.

VISITORS

Thailand  On 10 July, CALS International Programs hosted Khon Kaen University from Thailand. Dr. Sanun Jogloy is a former graduate of NC State and is now interested in establishing a partnership with CALS to work on peanut research. Khon Kaen University is located in the Northeast part of Thailand approximately 400 kilometers from Bangkok and has established itself as one of the leading universities in Thailand. The Faculty of Agriculture has a department of Ag Extension, Ag Economics, Animal Science, Fisheries, Plant Science and Ag Resources. We hope to establish a Memorandum of Understanding with Khon Kaen University in the near future. Please contact Dr. John Sabella at jasabell@ncsu.edu for more information or visit the university’s website at http://www.kku.ac.th/eng/main.php.

Embassy of Burkina Faso  The CALS International Program Office hosted visitors from Burkina Faso on 16 July. The Ambassador to United States, Mexico and Argentina, Seydou Bouda and the Social Affairs Attaché, Karim Kabore were visiting from Washington D.C. to discuss possible linkages with CALS, CVM and College of Textiles. They are particularly interested in cotton and collaborations with Crop Science on cotton crops. The Embassy in Washington hopes to plan a trip in the fall for a delegation from Burkina Faso.

University of Surrey  Dr. M. Von Schantz visited with CALS IPO on 23 July to strengthen the university-wide partnership with University of Surrey and discuss our continued collaboration with the UGPN (University Global Partners Network). To
Interns at CEFS  The CEFS Summer Internship Program concluded on 27 July and the four CALS-sponsored International interns will have completed their exciting program abroad. The IPO sponsored two students from the University of Zagreb in Croatia (FAZ) and two students from the National University of Agriculture in Honduras to engage in the eight-week program on sustainable agriculture and community food systems. The interns learned basic research and data collection techniques, worked with community members on development projects and identified constraints and benefits of sustainable agriculture practices. During the final week, Dr. John Sabella traveled to CEFS to give a seminar on International Agriculture to the intern class and all interns gave project presentations on what they have learned through the internship.

OFFICE OF DIVERSITY

Successful Fourth Annual CAALS 3-D Summer Research Experience  
The Summer Research Experience, which is the first component of the CAALS 3-D Program, was held from July 16 through July 20, 2012 at NCSU. Forty-four African American, Latino, and Native American male, and for the first time this year, female students from the North Carolina School of Science and Mathematics (NCSSM), and one Latino student from Cary High School (referred by the NC Society of Hispanic Professionals) participated in hands-on experiential research projects in CALS laboratories. This program is targeting these young men and women because they are from groups that are underrepresented in CALS.

CAALS 3D Opening Session-  
Interim Dean Dr. Sylvia Blankenship provided opening remarks to welcome the students to the College and the 2012 CAALS 3D Program. Dr. Louis Hunt, Vice Provost for the Enrollment Management and Services and University Registrar, welcomed the students to NC State University and provided uplifting remarks. Dr. Joan Barber, Vice Chancellor for Student Affairs for NCSSM gave opening remarks and thanked NC State for affording NCSSM students such a wonderful opportunity. Dr. Sam Pardue, Interim Associate Dean for CALS Academic Programs, and Dr. David Smith, Associate Dean for CALS Research, made informative presentations on CALS academic programs and research programs respectively. Dr. Thomas Easley, Director of Community Diversity in the College of Natural Resources, was the keynote presenter and motivational speaker. Dr. Easley provided insight on the importance of researchers and academicians/teaching professors in STEM. Mr. Scott Mabry, Environmental Health and Safety professional, provided lab safety training. Ms. Crystal Lee Pow, a doctoral student in Toxicology and recipient of the Dean’s Graduate Research Assistantship (2010-2012), served as Mistress of Ceremony. The Opening Session was also attended by some CALS Diversity Council members and CALS faculty who provided the research experiences for the youth.

CAALS 3D Research Experiences:  All of the students participated in forensic anthropology lab (Dr. Ann Ross) where they learned how to analyze human and non-human specimens to determine distinguishing characteristics such as hallmarks of disease of the bone.

Thirty-five students chose to participate in Track 1 of the summer research experience. In Track 1, students were paired with a leading CALS scientist and worked in that lab for the rest of the week. There were 10 CALS faculty members who provided
research experiences for Track 1. Track 1 included the following research experiences and corresponding learning objectives:

**Plant Biology (Dr. Marcela Rojas-Pierce)** – Students learned the basis of drug discovery, concepts of cell biology and learned about live cell imaging and its usefulness via the confocal.

**Soil Science (Dr. Alex Graves)** – By observing microbe growth on agar plates and employing PCR reactions, students gained an understanding about the increasing needs for measures to detect, identify and address microbial contamination in soil and water supplies. Students also learned about the significance of detecting antibiotic resistant bacteria in the environment.

**Genetic Organic Agriculture (Dr. Julie Grossman)** - Students learned how to extract nitrogen from organic farm soils, measure the amount of nitrogen found in the extract using a scientific instrument called a Flow Injection Analysis System, and then compared which soils have the most nitrogen.

**Plant Molecular Biology (Dr. Terri Long)** - Students learned how to prepare growth media and pour plates, use sterile technique to plate seeds, biochemical assays that measure the classic physiological responses to iron deprivation, and uses of confocal microscopy to determine gene expression and protein localization in plants’ roots.

**Biological Engineering (Dr. Wayne Yuan)** - Students learned how to do microalgae culture experiments for biofuel production by preparing culture media, monitoring cell growth, and analyzing cell lipid contents.

**Agriculture Engineering (Dr. John Classen)** - Students learned how to set up ammonia sampling towers, apply ammonia fertilizer to the site and record temperature and wind data; extract ammonia from the coating, use lab instrumentation to quantify the ammonia concentration, and help analyze data to determine the ammonia flux from the soil surface.

**Crop Science: Turfgrass (Dr. Susana Milla-Lewis)** - Students learned to use AFLPs, a type of molecular marker, to generate DNA fingerprints of a collection of accessions from different Turfgrass species in order to evaluate levels of diversity and genetic relationships between the different samples.

**Animal Science (Dr. Sunny Liu)** - Students learned how to perform cell cultures, DNA purification, PCR methods and Gel electrophoresis.

**Entomology (Dr. Yasmin Cardoza)** - Students learned how to assess arthropod behavior and performance on plants, implement research projects to assess sustainable pest management practices, and work with a diversity of biological organisms with varying nutritional requirements.

**Biochemistry (Dr. Jose Ascencio-Ibanez)** - Students learned basic DNA methodologies, the power of DNA technology, and basic techniques in molecular biology.

Three faculty provided research experiences for Track 2 wherein students spent about 8 hours in each lab. Track 2 included the following research experiences and corresponding learning objectives:

**Microbiology (Dr. Jose Bruno–Barcena)** - Students learned to use plating techniques to differentiate cells and explain the environmental impact of microorganisms.
**Biotechnology (Dr. Sue Carson)** - Students isolated DNA from a selection of typical foods and used polymerase chain reaction (PCR) and agarose gel electrophoresis to determine which foods are genetically modified.

**Colonoscopy on mice (Dr. David Threadgill)** - Students learned the techniques for performing a colonoscopy on mice. This laboratory used the mouse as an experimental genetic model to investigate factors that contribute to inter-individual differences in health and disease. Current research activities include the identification and functional characterization of alleles contributing to cancer susceptibility.

**CAALS 3-D Closing Session and Student Presentations**: During the closing session, it was amazing for CALS faculty and graduate students to see these groups of high school students give an articulate, detailed presentation on the lab techniques they learned during the week. Each group presented for 10 minutes. Dr. Bill Grant, professor of Biology and Coordinator of Biological Sciences acted as the Master of Ceremony, and provided the students with very inspiring closing remarks.

**Eastern Band of Cherokee Tribe Indian Education Program**

On July 11th, Dr. Lisa Guion Jones, Assistant Dean for Diversity, Outreach, and Engagement and Professor of Extension Education, welcomed a group of 20 high school honor students from the Eastern Band of Cherokee Tribe Indian Education Program. Students from this group have come to NC State for the past two summers to tour NC State’s campus and to spend some time getting to know what the different Colleges in the University have to offer. Dr. Jones organized some interactive and educational activities for the students which included a dynamic presentation on plant sciences by Drs. Chad Jordan, Coordinator of Undergraduate and Teaching in the Department of Plant Biology, and an exciting tour of the Phytotron by Dr. Carole Saravitz, Phytotron Director and Research Associate Professor. Dr. Jones made a presentation and provided information on CALS academic degree programs.

**Labs for Learning Youth Spend a Day at CALS**

On July 24, 2012, 16 rising 8th graders who are participating in the NCSSM’s Labs for Learning program visited CALS. Through interactive workshops youth learned about: 1) what they need to do NOW and on into high school in order to be competitive for admission to NCSU presented by Mr. Ronnie Chalmers, Undergraduate Admissions counselors from the Office of Undergraduate Admissions; as well as 2) financial aid and scholarship availability and requirements presented by Mr. Cecil Outlaw, Assistant Director of the Offices of Scholarship and Financial Aid. The subject matter focus of Labs for Learning is on life sciences. Ms. Rushyannah Killens, Microbiology Graduate Research Assistant and CALS Diversity Council member, provided a hands-on scientific lab experience. Students were taken to the Microbiology lab to visit and participate in an experiment. Dr. Jones made a presentation and provided information on CALS academic degree programs.

**Attend September 2012 Opening Doors Session**

Opening Doors is a three-day retreat that provides a framework for increasing diversity awareness and enhances a person’s ability to create an inclusive organization. Opening Doors is open and free to all faculty and staff within the College. The format of Opening Doors provides for open discussion, self-examination and an objective analysis of our social system as well as a constructive means to bridging
differences through understanding personal responsibility. As a result, constructive methods of creating a welcoming and inclusive environment are developed. The overall goal of Opening Doors is to facilitate both personal growth and systemic organizational change. Over the past six years, the College has implemented it as a foundation component of our work to foster system change around pluralism and inclusion. All Opening Doors sessions are held at the Eastern 4-H Center. The last CALS sponsored session of this year will be held on September 19-21, 2012. The workshop is absolutely free to all CALS personnel and includes all meals and lodging. Transportation is provided from NC State to the Eastern 4-H Center on a first come first served basis. There must also be two participants willing to drive the van provided. Registration for the September 2012 Opening Doors session is available at http://www.cals.ncsu.edu/openingdoorsworkshop.

National Observances-
Women’s Equality Day (August 26th)
International Day of the World’s Indigenous People (August 9th)

COLLEGE ADVANCEMENT

The 21st Annual CALS Tailgate will be held September 15, 2012 at Dorton Arena. For more information and to register, go to www.alumni.ncsu.edu/2012_CALSTailgate

From the JC Raulston Arboretum:
Memberships Make a Difference! Please consider supporting "Raleigh's Garden -- Your Garden" by joining today!
http://www.ncsu.edu/jcraulstonarboretum/join_and_support_us/membership/membership.html

Photography at the JCRA:
Sponsored by the JC Raulston Arboretum and the Triangle Carolinas Nature Photography Association
Opening Reception August 25, 2012 (Saturday) – 2:00 PM–5:00 PM
Exhibit August 27–October 5, 2012 (Monday–Friday) – 8:00 AM–5:00 PM

Got Gifts-In-Kind? If not, think about this: In tough economic times, we have to adapt and become more entrepreneurial as we try to find support for our programs. Often, companies and individuals are able to continue donating equipment, materials and supplies, even if they must cut their cash contributions. If you receive any non-cash gifts, please complete the form BA-151 (http://www.cals.ncsu.edu/advancement/ba151.doc) and forward to chris_wessel@ncsu.edu. We will make sure your donors are sent University receipts and acknowledgment letters showing how important their support is to CALS. If you have any questions about non-cash gifts, please call Chris at 919.515.7678.

Gift Planning: If you would like to add a section in your print, electronic or any other written piece regarding gift planning, contact Sonia Murphy (513-0637 sonia_murphy@ncsu.edu). Sonia can draft a short piece making your alumni and friends aware of how they can support your programs through a bequest, gift of retirement plans, trusts, etc.

CALS Gift Legacy Web Site: In an effort to better serve faculty and staff with helpful information, we have created a comprehensive gift planning Web site. We have an increasing number of friends of the College who now are benefitting from life income gifts, gift annuities and other charitable vehicles. Thank you for taking the time to explore the benefits of gift planning at http://www.legacy.vg/ncsucals.
CALS Chronicle Enewsletter: The official enewsletter of CALS Alumni and Friends Society is sent quarterly. Please send your announcements, departmental events, and updates for the next issue to calsalum@ncsu.edu. If you wish to subscribe to the enewsletter, email calsalum@ncsu.edu.

Employee Retiree List: We need your help! We request that all departments and county offices please continue to send us your updated retiree lists with all contact information available. When employees – faculty and staff – retire, just send Scott Troutman (scott_troutman@ncsu.edu) a quick email letting him know so that he can add them to our list.

2012 COMMODITY MEETINGS

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<td>Summer Meeting Plant Food Association of NC, Inc.</td>
<td>August 5-6</td>
<td>Grove Park Inn, Asheville, NC</td>
<td>David Smith</td>
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<tr>
<td>Summer Green Road Show</td>
<td>August 8-9, 2012</td>
<td>Hickory Metro Convention Center, Hickory, NC</td>
<td>David Monks</td>
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<tr>
<td>NC Poultry Federation 45th Annual Conference</td>
<td>August 9-10, 2012</td>
<td>Grandover Resort and Spa, Greensboro, NC</td>
<td>Roger Crickenberger</td>
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CALS ADMINISTRATION

I am pleased to announce that Dr. Richard H. Linton will be appointed the next dean of the College of Agriculture and Life Sciences, effective September 15, 2012. Please see the attached news release.

Dr. Linton, who currently serves as professor and chair of the Food Science and Technology Department at The Ohio State University, comes to us with a strong agricultural sciences background and significant experience leading successful collaborative initiatives with academia, industry and other key stakeholder groups. I am confident that he will be a great asset to CALS, the university and the state, especially as the college evolves and seeks to better position itself to address the agricultural challenges of the future. Please join me in welcoming Dr. Linton to NC State!

I also take this opportunity to again thank Dean Emeritus Johnny Wynne for his many years of dedicated service to the College of Agriculture and Life Sciences and Interim Dean Sylvia Blankenship for her continued leadership of the college until Dr. Linton’s arrival in September.

Warwick Arden
Provost and Executive Vice Chancellor