



There are many events happening with the start of the new academic year. Some of the events are listed below. I draw your attention to the Department meeting (10:00 AM on Monday, 27 August) and the car registration to park on campus. We all know that many tickets are written the first couple of days of the Fall semester—so get your registration updated before the first day of class.

As you prepare to teach this coming semester, please feel free to explore using the new Collaborative Classroom (202 Martin Hall). Unfortunately, the classroom only seats 16 students, so this will primarily work for those limited enrollment upper-level courses. Speak to Tracy or me to schedule using the room.

Finally, you might want to think about “updating” your webpage or updating a part of the Department’s webpages. One of the younger staff member let me know that our webpages read “like the telephone book.” We needed to have videos. A professor describing his or her research on a video is *far more interesting* than a descriptive paragraph and citations of publications. . . . So, we have been challenged. I anxiously await your response!

Finally, my heart goes out to the entire Romano family. I just heard that Frank passed away. I am so sad to lose such a friend and colleague.

-- Lou

Department News

Faculty and Staff Annual Meeting

Monday, 27 August at 8:00 AM in the Leone Cole Auditorium. Coffee and pastries will be served in the foyer beginning at 7:30 AM.

Preview Day, 29 September

Announcing the September 29th Preview Day. The browse session will be in Stephenson Gym from 9:30 - 12:00. Bottled water will be provided at your table but refreshments will not be available. Please let Joe Morgan know if you are willing to help.

Department Meeting

We will start the new academic year with a Department meeting at 10:00 AM in the Collaborative Classroom (202 Martin Hall) on Monday 27 August.

Freshman Convocation

All staff and their families are invited to the Freshman Convocation at 6:30 PM on Monday 27 August. Faculty members are asked to meet in the first floor of Stadium Towers at 6:20 PM (similar to graduation - but NO regalia). The Faculty will march onto the field and sit in arranged chairs. Immediately following the ceremony (ceremony means speeches from Dr. Meehan, the SGA President, Jason Sumner, the Marching Southerners and JSU cheerleaders teaching the JSU fight-song and other cheers, the ringing of the bell and a picture of the freshman class), a picnic will be held at Dillon Field, just west of the stadium. If participating, please notify Sharee Hutchinson at hutchinson@jsu.edu or by phone at 5020.

Academic Majors and Minors College Fair

This is sort of a "Preview Day" for existing JSU students to pick a major. The event is run very much like Preview Day, except it is visited by existing students and no parents. It will be 1:30 to 3:30 on Thursday, 20 September in the Theron Montgomery Auditorium. Please let Tracy know if you can help to "man" our table.

BlendKit 2012

BlendKit2012 is an open online course focused on blended learning. It is a 5-week course, Monday, September 24 - Monday, October 29, 2012. During last summer's BlendKit2011, approximately 200 faculty/designers from seven countries registered to participate as part of the cohort engaging with the BlendKit Course materials and with each other. BlendKit2012 will build on the successes of last year's open, online course by adding to the existing course:

- an LMS-based communications hub for registered participants
- two participant roles for registrants: 1) participant and 2) auditor
- online badges for completion of course activities
- certificates for successful completers of BlendKit2012
- new guest faculty for weekly webinars
- additional faculty case study audio interviews

For more information on BlendKit2012 and the underlying BlendKit Course materials, please visit: <http://bit.ly/blendkit2012> If you are interested in either auditing or participating actively in BlendKit2012, please complete the registration form at: http://bit.ly/blendkit2012_registration

University News

Upcoming Training on Specific Emergency Response Protocols at JSU

The University Police Department will present training on specific emergency response protocols. This will be a broad overview of what to do in case of an emergency on the campuses of JSU. The training is scheduled for August 21st, 2012 in room 1103-C of the Houston Cole Library. There will be two training sessions, one from 9 a.m. - 10:30 a.m.; and one from 3 p.m. - 4:30 p.m. Please email Melonie Carmichael at mcarmich@jsu.edu your time preference.

Office of the Controller Announces Accounts Payable Direct Deposit

Effective August 13, 2012, reimbursements from JSU Accounts Payable will be deposited directly into your bank account, with no waiting for a check to be mailed. Notification of payment will be sent to you via e-mail. Direct deposit will be mandatory for all employee travel or other reimbursement payments. Initially, payments will be deposited into the primary account on file with Payroll. However, if a change is required for the reimbursement deposit, the employee must complete the [Direct Deposit Authorization For Reimbursements Via Accounts Payable](#).

Jack Hopper Dining Hall Featuring Six-Dollar, All-You-Can-Eat Meals

The Jack Hopper Dining Hall will feature Six-Dollar, "all you can eat" meals ending with lunch on August 21. During this promotion, the dining hall will have special hours as follows:

	Breakfast	Lunch	Dinner
Friday, August 17	6:30 a.m. - 7:30 a.m.	11:30 a.m. - 1 p.m.	4:30 p.m. - 8 p.m.
Saturday, August 18	9:30 a.m. - 10:30 a.m.	Closed	Closed
Sunday, August 19	Closed	Closed	Closed
Monday, August 20	6:30 a.m. - 7:30 a.m.	11:30 a.m. - 1 p.m.	4:30 p.m. - 8 p.m.
Tuesday, August 21	7 a.m. - 8 a.m.	11:30 a.m. - 1 p.m.	Meal Plans Begin

Cash, debit and credit cards will be accepted.

2012-2013 Vehicle Registration is now Open

Vehicle registration for 2012-2013 opened on August 7. All vehicles that will be parked on the JSU campus during the 2012-2013 academic year must be registered in this manner and assigned decals must be displayed appropriately. For more information please visit <http://www.jsu.edu/police/parkingregistration.html>

International Research**Science Tour "Research in Germany" 2012: Understanding Biodiversity and Climate Change**

November 25 - December 1, 2012

In order to provide an optimum basis for the initiation of joint projects, the program will focus on issues related to biodiversity and climate change. However, due to the broad range of institutions involved, we expect the tour to be valuable to participants with more general interests as well.

Presently, visits to the following institutions are planned (tbc):

Universities

- 1) Friedrich-Schiller-Universität Jena (http://www.uni-jena.de/en/start_en.html)
- 2) University of Leipzig (<http://www.zv.uni-leipzig.de/en/>)
- 3) University of Potsdam (<http://www.uni-potsdam.de/index.html>)

Research Institutions

Max Planck Institute for Biogeochemistry, Jena (<http://www.bgc-jena.mpg.de/>)

The Helmholtz Centre for Environmental Research - UFZ (<http://www.ufz.de>)

German Centre for Integrative Biodiversity Research - iDiv (Institute in construction)

(<http://www.idiv-biodiversity.de/>)

Potsdam Institute for Climate Impact Research - PIK (<http://www.pik-potsdam.de/>)

German Research Centre for Geosciences - GFZ (www.gfz-potsdam.de/)

Institute for Advanced Sustainability Studies - IASS (<http://www.iass-potsdam.de/>)

Alfred Wegener Institute for Polar and Marine Research - AWI - Research Unit Potsdam (<http://www.awi.de/en/institute/sites/potsdam/>)

The Program starts on Sunday, 25 November at 5pm in Jena.

Our Services

The DAAD is responsible for the organization and implementation of the tour. We will be at your disposal during your stay and for a follow-up. All program-related costs in Germany (accommodation, travel, most meals) will be borne by the DAAD. International travel will be at the participants' expense.

Who May Apply?

There are two types of applicants:

Research Application: Applicants are typically experienced scientists with a research profile in the topic of the science tour and with a strong interest in international cooperation. They must have held a PhD/doctorate for at least two years and be affiliated with a non-German university/research institute

Your Application

To apply and for more information, please visit the website www.research-in-germany.de/sciencetour2012 and send us your CV, a list of publications, and a letter of motivation (one page). The application deadline is 15 September, 2012.

Student Opportunities

Chemistry Graduate Study at New Mexico State University

We offer M.S. and Ph.D. degrees in the five traditional subdisciplines of chemistry, Analytical, Biochemistry, Inorganic, Organic, and Physical, plus research in Toxicology. More information about the research projects available to students in our program can be found at <http://www.chemistry.nmsu.edu>. We offer competitive teaching assistantships to all students admitted into our program. We do not admit students into our program that cannot be supported financially during their first year of study. The maximum annual stipend is \$21,289. Students after their first year are typically supported by research funds from their chosen advisor or from departmental funds, provided that they are making good progress toward completion of their graduate degree. Interested students can contact me, William Quintana, Dept. Head, wquintan@nmsu.edu or Ms. Pedraza at (575) 646-2556 or dpedraza@nmsu.edu. Admission requests can be made through the Graduate School website of NMSU at <http://gradschool.nmsu.edu>.

Internships for Chemistry Students

I received a phone call and the email, below. I am not certain about the quality of the work, but some students might be interested. . . .

Dear Department of Chemistry Students,

If you're searching for a paid internship or scholarships, be sure to check out AfterCollege. [<http://www.aftercollege.com/>] This customized portal has a large network of employers specifically looking to hire members and recent graduates with your major at your school, and

there is no cost for you to use this resource.

[Want a paid internship?](#) Access our internship network to gain experience while you're in school.

[Interested in scholarships?](#) There are new ones available every quarter.

[Ready to launch your career?](#) Access your customized Career Network featuring jobs from employers looking for you.

We know you'll find great opportunities through AfterCollege, and we encourage you to join today.

Sincerely,

Elena Romanyuk

AfterCollege University Relations Team

Top Ten List

Top Ten Questions

Here are the top ten questions and edited answers from WonderQuest, where "science mysteries are solved. Ask a question and get clear, accurate answers." I find the questions that made their top ten list more interesting than the answers. I will give shortened versions of the answers. You can access the original source at:

Source: <http://wonderquest.com/>

1. Which way is forward on a ceiling fan? Which way should it go during the heating season? During the winter, turn the fan to 'reverse' to circulate the warm air without blowing air down and cooling you in the process. Hot air rises and a ceiling fan, running in reverse, gently mixes the air. During the summer, on the other hand, turn it to 'forward' to create a wind-chill effect as the air moves against your skin and cools you. [The instructions go on to say that if your ceilings are over 8 foot high, you should do the opposite. That means there is a ceiling height where you should never turn on your fan—halfway between "forward" and "reverse."]

2. What is considered to be the average size woman in America? According to the U.S. Department of Health and Human Services, the average U.S. woman is 5' 3.7 (162 centimeters) tall and weighs 152 pounds (69 kilograms). This corresponds to a Body Mass Index of 26.3 kg/m². By the way, the average U.S. male stands 5' 9.1 tall and weighs 180 pounds, with a Body Mass Index of 26.5 kg/m². [I think it says a lot that this question was asked instead of asking what is considered a healthy Body Mass Index - which is 18.5 to 24.9 kg/m².]

3. Which animal has longest and which the shortest life span? The giant tortoise lives the longest, about 177 years in captivity, and the gastrotrich (a minute aquatic animal) lives the shortest — three days. [The discussion from readers is all about animals with longer and shorter life spans. The authors stick to their guns and point out that a housefly does not just live for one day but has an average life of a month.]

4. Eye color *can* change with age? Changing eye color baffles people. It's the most-asked question I get. Eye color can change over time because of age or, unfortunately, disease. [The answer goes on to say that most eyes become lighter with age, except lighter eyes that become darker with age. . . and my wife says physics is boring!]

5. Which animals mate for life? Gibbon apes, wolves, termites, coyotes, barn owls, beavers, bald eagles, golden eagles, condors, swans, brolga cranes, French angel fish, sandhill cranes, pigeons, prions (a seabird), red-tailed hawks, anglerfish, ospreys, prairie voles (a rodent), and black vultures — are a few that mate for life. [Of course, not all these animals are 100% faithful to their mates, and in Austria a couple of giant turtles have fallen out after being together for 115 years. So, "for life" is relative.]

6. Just wondering, are brain cells really killed when alcohol is consumed? Usually brain cells are not killed. Roberta J. Pentney, professor of anatomy and cell biology at the University at Buffalo, concludes that alcohol does not kill brain cells but rather damages dendrites--the branched ends of nerve cells that bring messages into the cell. The good news is: the damage to the brain cells, for the most part, isn't permanent. [Isn't it amazing that some State written driver's exams will score an incorrect unless you select that 10,000 cells are killed by "one drink of alcohol." One drink of Bud-Lite is vastly different from a drink of Everclear.]

7. Does the moon rotate? The Moon rotates — **at the same speed as it orbits the Earth**. So, in the 27.32 days it takes the Moon to go around Earth, the Moon also spins about its axis one full revolution. That's why we always see the same face of the Moon. [Here the answer is obviously wrong. The rotational SPEED is much slower than the orbital SPEED. The rotational PERIOD is the same as the orbital PERIOD. So much for "clear, accurate answers."]

8. How often should I pump a septic tank? You pump out your septic tank to get rid of the solid sludge that accumulates at the bottom of the tank and the grease that accumulates as scum floating near the top. Both sludge and grease can foul the leaching field. How often to pump out depends on your tank size, family size, and how much of your wastewater is solid waste. [The answer goes on to discuss tank size and family size and how often to a tank needs to be pumped. Thankfully, I have nothing to add.]

9. What exactly are hazel eyes, and what color are they? "The question of Hazel eye color has haunted the literature," muses geneticist [Rick Sturm](#), principal research fellow at the University of Queensland in Australia. "The fact is eye color (like skin and hair color) is a continuous spectrum — from the lightest shades of blue to the darkest brown/black." He's taken 1,937 eye photographs, and divided the group into three major eye-color definitions. Sixty-percent fall in the 'blue' category, 26% in 'green/hazel' and 14% 'brown.' In addition, 74% of the green/hazel eyes had a brown ring around the pupil. This major pattern may explain a lot of eye color that is commonly referred to as hazel.

10. What is the most poisonous creature in the world? The most poisonous creature — a

tiny [poison-dart frog](#) (*Phyllobates terribilis*) of Colombian jungles — may obtain its poison by eating a small beetle from the family, Melyridae. We know the frog doesn't make its own poison but rather gets it by eating something toxic. We didn't know what it eats to extract the poison until recently. It's a convoluted story, and not yet entirely told, since Colombia restricts fieldwork, preventing further research there.

Contact Details

If you have items of news or interest that you would like included in the Department of Physical and Earth Sciences newsletter, then contact **Tracy Casey** before noon on Thursdays at: tscasey@jsu.edu or phone (256) 782-5232.