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Vol.39, No. 40, October 2-6, 2006

## Calendar

### Monday, October 2

**Plant Research Laboratory and Plant Biology Seminar:** RNA silencing in plants (provisional). David Balcombe, United Kingdom, 4:10 p.m., 101 Biochemistry.

### Tuesday, October 3

**Physics and Astronomy Seminar:** D0 Higgs search. Wade Fisher, Fermi National Accelerator Laboratory, 2:00 p.m., 1400 Biomedical and Physical Sciences.

**Microbiology and Molecular Genetics Seminar:** *Flavobacterium johnsoniae* gliding motility: Do transporters transport cells? Mark McBride, University of Wisconsin – Milwaukee, 4:10 p.m., 1415 Biomedical and Physical Sciences.

### Wednesday, October 4

**Biochemistry and Molecular Biology Seminar:** Integration of protein-protein interaction and quantitative genetic data reveals functional pathways in *saccharomyces cerevisiae*. Nevan Krogan, University of California, San Francisco, 4:10 p.m., 101 Biochemistry.

**Pharmacology and Toxicology Seminar:** Ah receptor signaling and dioxin developmental toxicity in zebra fish. Dr. Richard Peterson, University of Wisconsin-Madison. 12:00 p.m., B448-49 Life Sciences.

**Ecology, Evolutionary Biology and Behavior Seminar:** Developmental bias, evolvability and tinkering with butterfly eyespots. Paul Brakefield, Institute of Biology, Leiden University, The Netherlands, 3:30 p.m., 247 Plant Biology.

### Thursday, October 5

**Binbin Lu Preliminary Exam:** Functional analysis of a phosphatidate transporter complex in *Arabidopsis*. 9:00 a.m., 208 Biochemistry.

**Neuroscience Seminar:** Winners and losers: Neurobiology of conditioned defeat. Kim Huhman, Georgia State University, 12:15 p.m., 1425 Biomedical and Physical Sciences.

**World Views Collide: A Dialogue on State-Authorized Embryonic Stem-Cell Research, Human Enhancements, Physician-Assisted Suicide and The Value of Life.** Presented by the Thomas M. Cooley Law Review and the Center for Ethics and Responsibility, Thursday, October 5, 2006, 1:00-9:00 p.m. Cooley Law School Temple Building, 217 S. Capitol Ave., 6th Floor Auditorium, Downtown Lansing, Michigan.

**What Every Faculty/PI Needs to Know about What They Can and Cannot Do with Federal Funds: Stop hoping they'll say "YES" and Learn to make it Happen!** The Office of the Vice President for Research, Contract and Grant Administration, SPROUTS and Human Resources are offering a workshop for Principal Investigators, Directors and Deans, 8:30 am to 12:00 noon, International Center Spartan Rooms B & C. Continental breakfast and registration will begin at 8:30 a.m. and the meeting will begin at 9:00 a.m. To register for the October 5<sup>th</sup> meeting please complete the registration form and return to Human Resource Development Resources, Suite 10 Nisbet Building, Fax: 432-2929. The cost to attend this workshop is \$150 dollars.

## Calendar continued

### Friday, October 6

**Science at the Edge:** Quantitative Biology and Modeling Seminar: Hydrogen tunneling and protein motion in enzyme reactions. Sharon Hammes-Schiffer, Pennsylvania State University, 11:30 a.m., 1400 Biomedical and Physical Sciences.

**Transcription Journal Club:** Presentation by **Colleen Doherty**, 12:00 noon, 502 Biochemistry.

### Saturday, October 7

**The Graduate School Workshop:** “From graduate student to professor: Stages of professional development.” **Saturday, 9:00 a.m.-3:30 p.m., Lincoln Room, Kellogg Hotel and Conference Center.** Lunch will be provided. Presenters at this workshop will discuss and answer questions on what research reveals about the match between graduate school training and life as a faculty member, as well as on survival skills students should cultivate now to better prepare them for future academic positions, including developing strong mentoring relationships in graduate school and the first faculty position. The afternoon breakout sessions will focus on expectations for promotion and tenure, on making the transition from graduate student to faculty member, and on teaching as professional development. A panel of nationally known researchers, educators, and administrators from MSU will also present their insights and answer questions on how to prepare and survive the tenure and promotion process. This workshop is aimed at doctoral students at all levels in their programs, from those just beginning their coursework and planning ahead to acquire the skills they need to successfully navigate academic culture, to those starting on their job searches and making the transition from graduate student to faculty colleague. **Registration is required.** To register, please send an e-mail to [gradwrsp@msu.edu](mailto:gradwrsp@msu.edu) and include your name, department, e-mail address, and the name of the workshop.

## Announcements

**Scheduled Power Outage at MSU Computer Center:** On Friday, October 6, Phase IV of electrical system upgrades in the Computer Center will take place. Many core computing and networking services will be unavailable starting at 6:00 p.m. All core services should be restored by 11:00 p.m. During the power outage, they anticipate that basic network access, both on-campus and Internet connectivity, will remain available; however, a number of core online services will be shut down. These include: [afs.msu.edu](http://afs.msu.edu), [angel.msu.edu](http://angel.msu.edu), [lon-capa.msu.edu](http://lon-capa.msu.edu), [magic.msu.edu](http://magic.msu.edu), and [mail.msu.edu](http://mail.msu.edu).

**Grants.gov Training:** Hands on training opportunities targeted for faculty and staff, **Monday, October 9, 2006, 1:30-3:30 p.m., 121 Chemistry.** The course will cover how to search for Funding Opportunities Announcements (FOA), download the free PureEdge software, download the application, and complete and submit the application form to CGA for approval. Tips and typical errors will be covered. **Registration is required.** E-mail Betty Crowell at [crowell@cga.msu.edu](mailto:crowell@cga.msu.edu) to sign up.

**Office of the Provost 2007-2008 Postdoctoral Fellowship Program:** The College of Natural Science is pleased to announce support for the Office of the Provost Postdoctoral Fellowship program. To facilitate recruiting, individuals may be recommended for a two-year appointment period. Starting dates for the appointments must be after July 1, 2007. Individuals must be U.S. citizens or permanent residents. Nominations should be forwarded to Dr. Richard Schwartz, Acting Associate Dean, no later than February 14, 2007. Nomination packages should consist of a letter from the faculty member interested in working with the individual that includes an outline of the activities the candidate will be involved in that are designed to help better prepare them for academic careers, a letter of support from the Chairperson or Director, a copy of the nominee’s curriculum vitae, and other information that seems appropriate.

## Announcements continued

**The Graduate School – Ph.D. Job Search Series Workshop:** “Writing curriculum vitae and cover letters for impact.” Presented by Dr. Matt Helm, **Wednesday, October 11, 5:00-7:00 p.m., Kellogg Hotel and Conference Center.** In developing your curriculum vitae (CV), it is crucial to represent your professional experience, accomplishments, expertise, and qualities in the most impactful manner possible. This workshop is designed to help Ph.D. students learn how to present their CV’s and cover letters in the most visually impactful and strongest possible manner and to provide insight from the perspective of the search committee. Learn what the search committee is looking for and how to write your way into an interview. Participants should bring a copy of their curriculum vitae. **Registration is required.** To register, please send an e-mail to [gradwrsp@msu.edu](mailto:gradwrsp@msu.edu) and include your name, department, e-mail address, and the name of the workshop.

**The Graduate School – Navigating the PhD: A Writing Workshop:** This is a two-part workshop. **Part 1:** Demystifying the dissertation, personal management, forming committees, working with committees, and comprehensive exams; and **Part 2:** Topics and proposals, writing strategies, revision strategies, the defense...and beyond, and graduate writing groups. Each part will be limited to 25 doctoral students. Although it is highly recommended that you attend both parts, you may register for only one part. Lunch will be served during the sessions. This workshop series is offered every semester. It is offered twice during Fall 2006. Series 1 is on **Saturday, October 21 and Saturday October 28 from 9:00 a.m.-3:00 p.m., The Writing Center, 300 Bessey Hall.** Series 2 is on **Friday, November 17 and Saturday, November 18 from 9:00 a.m.-3:00 p.m., The Writing Center, 300 Bessey Hall.** Additional information can be found at <http://writing.msu.edu/ntp/>. **Registration is required.** To register, please send an e-mail to [gradwrsp@msu.edu](mailto:gradwrsp@msu.edu) and include your name, department, e-mail address, the name of the workshop, and the dates you would like to attend.

## Position Vacancies (copies of notices are in maroon binder in Room 302A)

The US EPA, National Center for Environmental Assessment (NCEA) in Cincinnati, Ohio is seeking to hire **Toxicologists/Biologists** to collaborate in human health risk assessments and risk assessment methods development. Ideal candidates will have a Ph.D. degree or equivalent in biology, physiology, biochemistry, toxicology, pharmacology, or a related field, with experience. Salary will be commensurate with experience and qualifications. More than one position may be filled. Both US citizens and non-citizens are eligible via different avenues of application. For more information or to be informed when the positions are open for application, e-mail your contact information to Karen Proffitt at [proffitt.karen@epa.gov](mailto:proffitt.karen@epa.gov) or call 513-569-7531. More information about the NCEA can be found at <http://cfpub.epa.gov/ncea/>.

An **independent junior research group leader position** is available with Leibniz Institute of Plant Biochemistry Halle at **Martin Luther University Halle-Wittenberg.** The junior research group is part of the Federal State of Sachsen-Anhalt Excellence Initiative, “Structures and mechanisms of biological information processing.” The group is to work closely with one or more of the local Collaborative Research Centres SFB 610 “Protein states with cell biological and medical relevance,” SFB 648 “Molecular mechanisms of information processing in plants,” SFB 604 “Multifunctional signaling proteins: oligomeric protein complexes as mediators of cellular regulatory processes,” and the Graduate College GRK1026 “Conformational transitions in macromolecular interactions.” The successful candidate should have a research focused on one of the following areas: protein complexes in plant signal transduction and regulation, protein complexes in plant microbe interactions, or plant membrane protein complexes. The group will be located at the Leibniz Institute of Plant Biochemistry under Director Dierk Scheel on the Weinberg Campus of the University of Halle. Appointments will be made at the level of BAT-O Ia for a period of five years. Laboratory space, start up funds and consumables as well as additional salaries for one postdoc, PhD students and a laboratory technician will be made available. **Application deadline is Tuesday, October 31, 2006.**

A **research group leader position** is available with Leibniz Institute of Plant Biochemistry at **Martin Luther University Halle-Wittenberg.** A research group at the Leibniz Institute of Plant Biochemistry has established a platform for comprehensive profiling of plant secondary metabolites by CapLC-ESI QTOF-MS and GC-MS (Plant Physiol. 134:548-559, 2004). The technology is used to analyze metabolic changes observed in *Arabidopsis thaliana* and crop plants during development and in response to interaction with microbial pathogens and symbionts, as well as for biochemical phenotyping of mutants and exploration of natural diversity. They are seeking an outstanding researcher to lead and further develop this research group. Appointments will be made according to BAT-O IIa to Ib for a period of five years. **Application deadline is Tuesday, October 31, 2006.**

## Position Vacancies continued

An **assistant professor, tenure track, position** is available with the Department of Plant and Microbial Biology at the **University of California, Berkeley**, beginning July 1, 2007. Applications are invited from outstanding individuals using functional genomics, computational biology, proteomics or metabolomics, or a related approach, to study fundamental aspects of modern plant physiology and/or biochemistry at the molecular, cellular, organismal, or system level. The successful candidate, who will hold a faculty position at the University of California, Berkeley as well as an appointment at the Agricultural Experiment Station, will be expected to establish a vigorous, independent, and externally-funded research program. In addition, the candidate will participate in graduate instruction and training, teach a modern course in plant biology, and integrate into additional University and Departmental instructional and research programs. Applicants must have a Ph.D. degree, suitable postdoctoral or academic experience, and a strong research publication record. For any questions or to apply, please e-mail [PB-Recruitment@nature.berkeley.edu](mailto:PB-Recruitment@nature.berkeley.edu)  
**Application deadline is Thursday, November 30, 2006.**

A **postdoctoral position** is available at the **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knoell Institute**. They are searching for a highly motivated Ph.D. trained in molecular biology and/or biochemistry. The position is available immediately for a period of three years initially and will be hosted at the Department of Cell and Molecular Biology under Professor Hans Peter Saluz. Research is devoted to the study of stress-related mammalian host cell/tissue response reactions, arising naturally by interactions with pathogenic microorganisms, preferentially fungi or intracellular bacteria. They are seeking a scientist specialized in one of the following fields of pathogen-host interactions: FISH (cell/tissue), immunohistochemistry, apoptosis, necrosis; or gene expression: ChIP, siRNA libraries. The group will be embedded in the outstanding scientific environment of the Beutenberg Campus providing state-of-the-art research facilities and a highly integrative network of life science groups. For more information, please visit <http://www.hki-jena.de> and <http://www.beutenberg.de>. **Application deadline is Wednesday, November 15, 2006.**

A **postdoctoral position** is available at the **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knoell Institute**. They investigate the pathobiology of human-pathogenic fungi and identify targets for the development of novel natural product-based antibiotics. Successful candidates will investigate the pathobiology of *Candida albicans* within the framework of the DFG Priority Programme 1160, “Colonisation and infection by human-pathogenic fungi.” A doctoral degree in biology or life sciences is required. Experience in standard techniques of molecular biology, biochemistry as well as microbiology are expected. Excellent knowledge and skills in infection biology, microbial pathogenicity (bacteria, fungi, parasites), cellular microbiology and/or yeast biology are advantageous. For further information, please contact Dr. Bernhard Hube at [hubeb@rki.de](mailto:hubeb@rki.de) or visit <http://www.rki.de>. **Application deadline is Wednesday, November 15, 2006.**

Three **Ph.D. positions** are available at the **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knoell Institute**. They investigate the pathobiology of human-pathogenic fungi and identify targets for the development of novel natural product-based antibiotics. Successful candidates will investigate the pathobiology of *Candida albicans* within the framework of the DFG Priority Programme 1160, “Colonisation and infection by human-pathogenic fungi.” They are looking for postgraduates with top performance in biology, biochemistry, microbiology, or life sciences. For further information, please contact Dr. Bernhard Hube at [hubeb@rki.de](mailto:hubeb@rki.de) or visit <http://www.rki.de>. **Application deadline is Wednesday, November 15, 2006.**

## Travel

**U.S. loosens airline security rules:** Beginning on Tuesday, September 26<sup>th</sup>, passengers are allowed to carry lotions and gels onto airliners again after a six-week ban, but only in tiny containers of 3 ounces or less and only if they are in clear zip-top plastic bags. Air travelers are also allowed to buy drinks or other liquids, gels or aerosols at shops inside airport security checkpoints and carry them on board under partially relaxed anti-terror rules. If a passenger brings a container larger than 3 ounces from outside, it will still have to be put in checked baggage.



## Spotlight



**Michaela Teravest**, professorial assistant, is currently researching in Dr. Sieglinde Snapp's lab in the Department of Crop and Soil Sciences. Last year and next semester, she will be researching in Dr. Beronda Montgomery-Kaguri's lab. Currently, Michaela is investigating nitrogen release from cover crops. Last year she purified a protein fragment for antibody production. The protein is a light-sensing protein found in cyanobacteria.

Michaela is a second-year biochemistry student, interested in bio-based renewable energy sources. This semester she is at KBS because she wants to put her biochemistry education into perspective with environmental issues, ecology, and society. Michaela believes that this will give her a broader base to start from when doing research in the future. She is also working on a project with Tillers International.

Originally from Holland, Michigan, Michaela enjoys the outdoors, mountain biking, and kayaking. She is a member of the MSU Outdoor Adventure club, which organizes rock climbing, whitewater rafting, camping, hiking, and spelunking activities. She also enjoys skiing and waterskiing.

## New Research Awards for BMB Faculty

**PI: Burton, Zachary**

Award: \$255,477

Grantor: Natl Inst of Health – NIH/PHS

Title: Mechanism and Regulation of RNA Polymerase II Elongation

**PI: Garavito, Michael**

Award: \$255,477

Grantor: Natl Inst of Health – NIH/PHS

Title: Structure and Function of Family 1 Glycosyl Transferases

**PI: Hoogstraten, Charles**

Award: \$251,888

Grantor: Natl Inst of Health – NIH/PHS

Title: NMR and EPR Studies of Ribozyme Catalytic Mechanism

## Quote for the Week

Traditions are the guideposts driven deep in our subconscious minds. The most powerful ones are those we can't even describe, aren't even aware of. – *Ellen Goodman*

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