Research Breakthrough

A team of UC Berkeley researchers, headed by Markus Pauly of the Department of Plant & Microbiology, has identified a plant gene responsible for adding acetate to a sugar-laden hemicellulose in plant cell walls, according to a study published in Plant Cell this week.

The research performed by the Pauly team provides a new avenue for reducing the level of acetylation in plant feedstocks and lowering the cost of biofuel production. [Link to full story]

Undergrad Research Opportunity

Undergraduate research opportunities are now available in the Kerfeld Lab in Plant & Microbial Biology. The Kerfeld group studies the cyanobacterial carbon concentrating mechanism (CCM). The CCM consists of transport systems for inorganic uptake and a specialized bacterial organelle, the carboxysome, for fixation of CO2. The CCM vastly improves photosynthetic efficiency in cyanobacteria.

The overall goal of the research projects is to improve carbon capture by design of a novel Ci pump and the design and characterization of a minimal functional carboxysome. The research experience includes cloning and expression of proteins and assisting in developing imaging methods for studying carboxysomes in cyanobacteria. The laboratory is located "on the hill" in Building 64 at Lawrence Berkeley National Lab.

To Apply: Send letter of interest and a copy of your transcript to ckerfeld@berkeley.edu

Arash Komeili Tenure Talk

Assistant Professor Arash Komeili will give a seminar on Friday, November 18, 2011 entitled "Molecular Mechanisms of Compartimentalization and Biomineralization in Bacteria".

The seminar will be from noon to 1 pm followed by a reception in 338 Koshland Hall.
Advancing Participation in Science

A group of 100 UC Berkeley faculty and graduate students -- including representatives from the department of Plant & Microbial Biology -- attended a minority-student conference last week as part of a campus effort to increase diversity and change the face of science.

The Berkeley contingent, which included Chancellor Robert Birgeneau, joined more than 3,500 attendees at the 2011 national conference of the Society for Advancement of Chicanos and Native Americans in Science. The annual meeting is the largest conference in the country dedicated to giving a boost to minority students in research, teaching, leadership and policy in science, technology, engineering and mathematics.

Rocio Sanchez, grad student advisor at PMB, Arash Komeili, PMB faculty, Michael Shapira, GGM and IB faculty, Kevin Hockett of the Lindow Lab and Nicole Slusher of the Komeili Lab, attended. Read the full article at the UC Berkeley News Center

Grad Student and Postdoc Fellowship Opportunity

The Center for Emerging and Neglected Diseases is now accepting proposals for the 2012 Science and Engineering for Global Health Fellowship. The application deadline is February 1, 2012. This fellowship provides $10,000 for Ph.D. candidates and postdocs interested in conducting infectious disease-related research in the lab of a collaborator in a low or middle-income country.

Through the fellowship, awards of $5,000 will be made to qualified individuals, with a matching $5,000 grant provided to the host institution in a developing country. Funds may be used to support international travel, living expenses and research activities beginning in summer 2012. Fellows are expected to travel abroad for 2 to 3 months, and present in a research symposium upon returning to UC Berkeley in fall 2012.

For more application information, please visit: http://globalhealth.berkeley.edu/cend/sefellows.html

Another great resource for fellowship opportunities can be found at the Grad Student web site: http://grad.berkeley.edu/publications/egrad/1011.shtml

Quick Survey - Climate Research at Cal

Do you have opinions about how Berkeley can improve Energy and Climate programming including research, education, and interdisciplinary collaboration? A group of students at UC Berkeley is currently working with the Vice Chancellor of Research to survey the campus community for opinions on the current state of energy programming at Berkeley. Your input to the survey will have a direct impact on the future of energy research and education at CAL!

Please visit this page to access the survey and access additional information on the project:
Save the Date for PMB Events through 2014

In order to use resources more wisely and accommodate everyone's busy schedule, the PMB Events Committee has planned upcoming events through 2014. Our events are a combination of scientific conferences, social gatherings, potlucks and more. Please make a note of the following dates:

- **PMB Holiday Party 2011** - Friday, Dec. 2, 2011, 5:30-9 pm, Alumni House (PMB department only including all faculty, grad and undergrad students, lab staff and departmental staff.) *Watch your email for invitation or stop by Koshland 111.*
- **PMB Spring Social 2012** – Friday, May 6, 2012, Krutch Theater, Clark Kerr Campus 4-8 pm. Same invitees as above.
- **PMB Retreat 2012** -- Friday, Sept. 21-23, 2012. Marconi Conference Center, Tomales Bay, CA. All faculty and first-year grad students invited; lab staff and students by invitation of faculty.
- **PMB Holiday Party 2012** – Friday, Nov. 30, 2012, 4-8 pm, Alumni House.
- **PMB Spring Social 2013** – Friday, May 3, 2013, 4-8 pm, Alumni House.
- **PMB Retreat 2013** -- Saturday, Sept. 13, 2013. Clark Kerr Campus, all day. All faculty and first year grad students; others by invitation of faculty.
- **PMB Holiday Party 2013** – Friday, Dec. 6, 2013, 4-8 pm.
- **PMB Spring Social 2014** – Friday, May 2, 2014, 4-8 pm.

Fire alarm assembly area; hazardous waste disposal

Do you know where to go if there is a fire, earthquake or emergency in Koshland Hall? If there is a fire alarm and the building is evacuated our temporary staging area is the lawn in front of 101 Barker Hall, right next door. Please go there so we can take attendance and make sure everyone is safe and accounted for. This is a temporary location and will likely change in January - consult our web site for updates.

If there is an earthquake, please duck and cover until the shaking stops. Our earthquake/disaster staging area is much further away, down the path toward the Campus West Gate to the grassy area next to Strawberry Creek. Our website has just been updated with all of this information, including a map to both staging areas. Please visit [pmb.berkeley.edu/emergency-procedures](http://pmb.berkeley.edu/emergency-procedures) for more information.

In addition, procedures for disposing of hazardous waste have been confirmed and posted. Hazardous waste disposal, including an overview of safe procedures, our relationship with our Campus Partner Environmental Health and Safety, and guidelines for disposal of Biohazardous Waste are now posted on our website. Please review the page thoroughly as there have been recent changes and additions. Please visit: [pmb.berkeley.edu/hazardous-waste](http://pmb.berkeley.edu/hazardous-waste)