



# These Weeks in Biology

December 8th, 2007 - January 7th, 2008

## Accolades

Graduate student Alicia Ebert and undergraduate student Nahid Kalani, both of the Garrity lab, each won Best Poster Prizes at the graduate or undergraduate level, respectively, at the Front Range Neuroscience Symposium held on December 5, 2007. Congratulations!

Professor A.S.N. Reddy has been named a Professor Laureate for the College of Natural Sciences for 2007-2010, the highest award given to faculty in the College.

Professor Daniel Bush was elected to a three year term as Chair-Elect, Chair, and Retiring-Chair for the Section on Agriculture, Food, and Renewable Resources for the American Association for the Advancement of Science.

## Welcome

Welcome to Wiebke Tapken, Master student from Braunschweig, Germany. Wiebke comes from the lab of Ralph Mendel and will spend three months in the Pilon/Pilon-Smits lab to study a cytosolic NifS-like plant protein.

## Research Funding and Grants

Ph.D. students Chrissy Alba-Lynn and Liz Harp were approved for funding from the Sigma Xi Committee on Grants-in-Aid of Research, to support each of their dissertation research projects.

## On the Road

Assistant Professor Dhruba Naug made an invited presentation at the annual meeting of the Entomological Society of America in San Diego.

Prof. Don Mykles, postdoc Joe Covi, graduate students Erica Chao and Audrey McDonald, and undergraduates Brandon Bader and Casey Ehlinger presented papers at the Society for Integrative & Comparative Biology meeting in San Antonio Jan. 2-6.

Prof. Gregory Florant will be conducting research in the Galapagos Islands from Jan.7th to the 20th.

Professor Daniel Bush was the Keynote Speaker at the regional Plant Biology Meeting at the Universite Libre de Bruxelles, Brussels, Belgium on December 17, 2007.

## New Publications from Biology

Poon, W.-S., P.-C. Shaw, M.P. Simmons and P.P.-H. But. 2007. "Congruence of molecular, morphological, and biochemical profiles in Rutaceae: a cladistic analysis of the subfamilies Rutoideae and Toddalioidae." *Systematic Botany* 32: 837-846.

VerCauteren, K.C, P.W. Burke, G.E. Phillips, J.W. Fischer, N.W. Seward, B.A. Wunder and M.J. Lavelle. 2007. "Elk use of wallows and potential chronic wasting disease transmission." *Journal of Wildlife Diseases* 43(4):784-788 (this work is from a collaboration between Professor Bruce Wunder and researchers at the USDA National Wildlife Research Center here in Fort Collins).

Jeffress, J.K., S.L. Page, S.M. Royer, E.D. Belden, J. Blumenstiel, L.K. Anderson, and R.S. Hawley. 2007. The formation of the central element of synaptonemal complex may occur by multiple mechanisms: The roles of the N- and C-terminal domains of the *Drosophila* C(3)G protein in mediating synapsis and recombination. *Genetics* 177:2445-2456.

Doug Van Hoewyk, Marinus Pilon, Elizabeth A.H. Pilon-Smits. 2008. "The functions of NifS-like proteins in plant sulfur and selenium metabolism." *Plant Science* 174: 117-123

Doug Van Hoewyk, Hideki Takahashi, Eri Inoue, Ann Hess, Masanori Tamaoki, Elizabeth A. H. Pilon-Smits. 2008.

"Transcriptome analyses give insights into selenium-stress responses and selenium tolerance mechanisms in *Arabidopsis*." *Physiologia Plantarum* published online. doi: 10.1111/j.1399-3054.2007.01002.x

Colin F. Quinn, John L. Freeman, Miriam L. Galeas, Erin M. Klamper, Elizabeth A. H. Pilon-Smits. 2008. "The role of selenium in protecting plants against prairie dog herbivory: implications for the evolution of selenium hyperaccumulation." *Oecologia* published online. DOI: 10.1007/s00442-007-0907-8

Miriam L. Galeas, Erin M. Klamper, Lindsay E. Bennett, John L. Freeman, Boris C. Kondratieff, Colin F. Quinn, Elizabeth A. H. Pilon-Smits

"Selenium hyperaccumulation reduces plant arthropod loads in the field."

*New Phytologist* published online. doi: 10.1111/j.1469-8137.2007.02285.x

Tamaoki M, Freeman JL, Pilon-Smits EAH. 2008. "Cooperative ethylene and jasmonic acid signaling regulates selenite resistance in *Arabidopsis thaliana*."

*Plant Physiology* published online:  
<http://www.plantphysiol.org/cgi/content/short/pp.107.110742?keytype=ref&ijkey=W2VJHwU49619FmD>.

Ebert AM, McAnelly CA, Srinivasan A, Linker JL, Horne WA, Garrity DM. 2008. "Ca<sup>2+</sup> channel-independent requirement for MAGUK family CACNB4 genes in initiation of zebrafish epiboly." *Proc. Natl. Acad Sci. U.S.A.* 105(1):198-203 Epub 2008 Jan 2

*TWIB is published (semi) weekly by the Department of Biology, Colorado State University.*