



# These Weeks in Biology

August 23rd, 2008 - September 15th, 2008

## Special Events

The first Plant SuperGroup of the Fall semester will be on Friday Sept 26 at 3.15pm in room W205. Speakers will be Sung Bong Shin (Reddy lab) and Salah Abdel-Ghany (Pilon Lab). Salah concludes a seven year postdoc period in the Pilon lab. He will return to Egypt to take up a faculty position and will be missed dearly at CSU.

## Accolades

Former graduate student in the Pilon-Smits lab Doug van Hoewyk has taken up a new faculty position at Carolina Coastal University in South Carolina.

Narayana Murthy, a Post-doc with Marinus Pilon and Elizabeth Pilon-Smits will take up a position as researcher at the National Renewable Energy Lab (NREL) in Golden CO, starting October 1.

## Welcome

The Pilon lab welcomes new graduate student Wiebke Tapken and PMPB rotation student Margaret Fleming. Italian graduate student Marco Pitarello will visit the Pilon and Pilon-Smits lab for one year to do collaborative research, starting September 29. Wiebke is from Germany, Margaret from Maryland, Marco comes from Padova in Italy. Rodolfo Valdez who just received his Ph.D at CSU starts as a new post-doc in the Pilon-Smits lab and will study the ecological significance of selenium hyperaccumulation by plants.

Welcome to Jose Rodolfo Valdez, who joins the Pilon-Smits lab as of September 2008 as Postdoctoral researcher. Rodolfo will study Ecological Aspects of Plant Selenium Hyperaccumulation, particularly in the root zone.

## On the Road

Professor Greg Florant and Ashley Fenn, an undergraduate working in his laboratory are giving invited lectures at the World Marmot Conference in Cogne, Maison Grivola, Italy, September 2-7th.

Prof. Don Mykles travels to Boston for the Society for Integrative & Comparative Biology program officers meeting September 26-28.

Prof. Greg Florant will be attending the Ford Foundation Conference in Washington, D.C. on Sept 18-21th. He is presenting a paper on mentoring students and he is the Ford Foundation liaison for Colorado and Oregon.

Professor Mike Antolin was in Garden City, KS on August 26 presenting in a workshop on Prairie Dog Management in Grasslands.

Assistant Professor Shane Kanatous presented a seminar at the International Conference of Comparative Physiology and Biochemistry held in the Maasai Mara National Reserve in Kenya, Africa

## New Publications from Biology

Naug D. 2008. Structure of the social network and its influence on transmission dynamics in a honeybee colony. *Behav. Ecol. Sociobiol.* 62:1719-1725.

Assistant Professor Shane Kanatous and Linnea Pe arson are authors on a recent publication in the *Journal of Experimental Biology: The ontogeny of aerobic and diving capacity in the skeletal muscles of Weddell seals.* *J Exp Biol.* 2008 Aug;211(Pt 16):2559-65.

Antolin, M.F. 2008. Unpacking ??: Within-host dynamics and the Evolutionary Ecology of Pathogen

Transmission. Annual Review of Ecology, Evolution, and Systematics 39: 39:415-437.

Assistant Professor Rachel Mueller is a co-author on a paper recently accepted to the Journal of Biogeography: "Closing the ring: Historical biogeography of the salamander ring species *Ensatina eschscholtzii*"

Jeong J, Cohu C, Kerkeb L, Pilon M, Connolly EL and Guerinot ML (2008). Chloroplast Fe(III) Chelate Reductase Activity is Essential for Seedling Viability under Iron Limiting Conditions. Proc. Natl. Acad. Sci USA 105, 10619-10624

Abdel-Ghany SE and Pilon M (2008) MicroRNA-mediated Systemic Down-regulation of Copper Protein Expression in Response to Low Copper Availability in Arabidopsis. J Biol Chem 283, 15932-15945

Padmavathi L, Ye H, Pilon-Smits EAH and Pilon M (2008) Cysteine desulfurase-mediated sulfur donation pathways in plants and phototrophic bacteria. pp 131-147 In: (Hell R, Dahl C, Knaff D and Leustek T, eds) Sulfur metabolism in phototrophic organisms. Volume 27 in Series: Advances in Photosynthesis and Respiration (Govindjee, Series Ed). Springer, Dordrecht, The Netherlands

Van Hoewyk D, Pilon M, Pilon-Smits EAH (2008) The functions of NifS-like proteins in plant sulfur and selenium metabolism. Plant Science 174:117-123

Assistant Professor Chris Funk is lead author on two recent papers, one in Molecular Phylogenetics and Evolution: "Range-wide phylogeographic analysis of the spotted frog complex (*Rana luteiventris* and *Rana pretiosa*) in northwestern North America," and the other in Herpetologica: "Comparison of morphology and calls of two cryptic species of *Physalaemus* (Anura: Leiuperidae)."

Pearce, R.D., O'Shea, T.J., B.A. Wunder. 2008. Evaluation of morphological indices and total body electrical conductivity to assess body composition in big brown bats. Acta Chiroptologica. 10(1):153-159

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