These Weeks in Biology

January 8th, 2008 - February 6th, 2008

Welcome

Dr. Amy Angert joins us as an Assistant Professor in plant evolutionary biology. Her research explores how natural selection, environmental variation, and functional tradeoffs contribute to adaptive diversification and yield the distribution and abundance patterns we observe in nature. She is currently studying these processes in a diverse group of western North American wildflowers (Mimulus) and in winter annuals of the Sonoran Desert.

Research Funding and Grants

Professor LeRoy Poff: "Predicting relative risk of invasion by the Eurasian saltcedar and New Zealand mud snail in river networks under different scenarios of climate change and dam operations in the western United States", US Environmental Protection Agency, $600,000. Co-PIs are CSU colleagues in the Dept. of Civil & Environmental Engineering and in the Dept. of Forest, Rangeland and Watershed Stewardship. Collaborating federal scientists are from the US Geological Survey, the US Forest Service, and the US Bureau of Reclamation.

On the Road

Diana Wall, Breana Simmons, and Ed Ayres (NREL) are in Antarctica to study the ecology of polar desert soils as part of the McMurdo Dry Valleys LTER. Wall's team also includes Byron Adams (Brigham Young University) and this is Diana's 17th year of Antarctic research. You can read about their activities on their blog: http://nemablog.wordpress.com/

In late November, Diana Wall presented 2 seminars as Distinguished Ecologist, Program in Ecology, University of Wyoming.

In December, Diana Wall attended Board meetings of the National Research Council Polar Research Board and Island Press Board; and the Heinz Center for the Environment Awards Dinner in Washington, DC. She presented an invited paper at the American Geophysical Union meeting in San Francisco "Global Change in Antarctica is Triggering Changes in Biodiversity and Terrestrial Ecosystems".

Professor Stephen Stack attended the International Plant and Animal Genome Conference January 11-16 where he gave invited talks titled "The role of BAC-FISH in Sequencing the Tomato Genome" in the Large Insert DNA Libraries and Their Applications Workshop and in the Tomato Sequencing Meeting.

Assistant Professor Lorrie Anderson attended the International Plant and Animal Genome Conference January 11-16 where she was the co-organizer of the Plant Cytogenetics Workshop and gave a talk titled "The relation of MRE11 protein to early recombination nodules during meiosis."

Lisa Angeloni, Sarah Bevins, Luke Caldwell, Cameron Ghalambor and Helen Sofaer attended the Conservation Management of the Island Scrub-jay Workshop in San Diego, CA on February 1 and 2, sponsored by the Nature Conservancy.

Professor Mike Antolin and Graduate Fellow Dylan George were in Bethesda, MD on Jan. 22-23 to participate in the RAPIDD (Research and Policy in Infectious Disease Dynamics) working group sponsored by the National Institutes of Health Fogarty International Center.

New Publications from Biology

Wall, D. H. 2007. Biodiversity: Extracting lessons from extreme soils. In P. Dion and C. S. Nautiyal, eds. Microbiology of Extreme Soils/. Springer Publishers, The Netherlands.

UNESCO & SCOPE (Wall, D. H., V. Behan-Pelletier, A. P. Covich and P. Snelgrove). 2007. Hidden assets: Biodiversity below-surface. UNESCO-SCOPE Policy Briefs No. 5. September, Paris.

Hunt, H. W., A. M. Treonis, D. H. Wall, and R. A Virginia. 2007. A mathematical model for variation in water-retention curves among sandy soils. Antarctic Science 19:427-436.

Wall, D.H. 2007. Global Change tipping points: Above- and below-ground biotic interactions in a low diversity ecosystem. Philosophical Transactions of the Royal Society B, Biological Sciences, 362:2291-2306.

Bush DR and Leach J 2007. Translational Genomics for Bioenergy Production: There's room for more than one model. Plant Cell 19: 2971-2973

BACON, CHRISTINE D.; FELTUS, F. ALEX; PATERSON, ANDREW H.; BAILEY, C. DONOVAN. 2008. Novel nuclear intron-spanning primers for Arecaceae evolutionary biology. Molecular Ecology Notes 8: 211-214

Special Assistant Professor Gul Shad Ali and Professor A.S.N. Reddy have written a book chapter (Title: Regulation of alternative splicing of pre-mRNAs by stresses) in Nuclear pre-mRNA processing , Springer-Verlag, Berlin.

Special Assistant Professor Irene Day and Professor A.S.N. Reddy have written an invited book chapter (Title: Proteomic Approaches to Construct Calcium Signaling Networks in Plants) in Plant Proteomics: Technologies, Strategies and Applications, John Wiley & Sons.

Special Assistant Professor Gul Shad Ali and Professor A.S.N. Reddy have written a book chapter (Title: Spatio-temporal organization of pre-mRNA splicing proteins in plants) in Nuclear pre-mRNA processing , Springer-Verlag, Berlin.

Special Assistant Professor Gul Shad Ali, former Postdoctoral Research Associate K.V.S.K. Prasad, Special Assistant Professor Irene S. Day and Professor A.S.N. Reddy have published a paper (Title: Ligand-dependent changes in the mobility of FLAGELLIN SENSITIVE2, an Arabidopsis receptor-like kinase) in Plant Cell Physiology, 48: 1601-1611.

Angeloni L, Schaepfler MA, Lawler JJ, Crooks KR. 2008. A reassessment of the interface between conservation and behaviour. Animal Behaviour 75:731-737.

Kelly, J.K., Holeski, L. M. and H.S. Arathi. 2008. The genetic correlation between flower size and water use efficiency in monkeyflowers. Evolutionary Ecology Research. 10: 147-152

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