

HIGHLIGHTS FROM THE BIOTECH CENTER

January 2009

Faculty Activities and Accomplishments

A GIBEX-US delegation led by Biotech Center member Ilya Raskin visited the Kingdom of Bhutan in December of 2008. Accompanying Dr. Raskin were colleagues Mary Ann Lila (North Carolina State University) and Preston Scott (Executive Director of the World Foundation for Environment and Development). The visit was hosted by the Ministry of Agriculture of Bhutan and involved meetings with government officials as well as members of Bhutan's royal family. As a result of these meetings, a plan for the establishment of GIBEX-Bhutan was drafted. The plan involves a speedy signing of the MOU followed by a GIBEX training course in Bhutan as early as spring of 2009. The plan envisions Bhutan's Institute of Traditional Medicine Services and National Biodiversity Centre working together to establish GIBEX-Bhutan. GIBEX-Bhutan will concentrate on the bioexploration of Bhutanese flora for new sources of medicines, validation of existing traditional medicines, and the use of GIBEX technologies to advance scientific education within the country. GIBEX-Bhutan is poised to become a model for future international scientific programs and exchanges between Bhutan and US universities that can bring important sustainable economic and educational opportunities to the Bhutanese people.

Biotech Center member Lily Young was honored by the journal *Environmental Microbiology* for a paper published in 2006 (Rhine D, CD Phelps, LY Young. 2006. Anaerobic arsenite oxidation by novel denitrifying isolates. *Environ Microbiol.* 8(5):899-908). This paper was among the top 25 most cited articles in the journal for the period 2005-2006.

Grants and Fundraising Efforts

Wendie Cohick, member of the Biotech Center and Department of Animal Sciences, has received a new grant from the USDA entitled "Role of Nuclear IGBP-3 in Stress-Induced Apoptosis in Bovine Mammary Epithelial Cells." The grant will run from 1/1/09 through 12/31/2011 and is funded at \$349,981.

Nilgun Tumer and collaborators at the Biotech Center and the Animal Science Department were among the winners in the 2008 SEBS Infrastructure Awards competition. Dean Kukor announced that the team will receive funding for a Multi-User Biological Imaging Facility, which will include an upright fluorescence microscope, a fluorescence stereomicroscope, and a macroscopic digital imaging system. The Biotech Center will match the SEBS contribution and provide space to house the equipment on the first floor of Foran Hall. The other team members were Mehmet Uzun, Wendie Cohick, and Michael Lawton.

Conferences, Seminars, and Other Events

Biotech Center member Faith Belanger gave a presentation at the eighteenth annual Rutgers Turfgrass Symposium on January 12. Her topic was "A new model of genomic relationships among creeping, colonial, and velvet bentgrasses."

Drs. Ilya Raskin and David Ribnicky participated in the opening ceremonies for the new TIM laboratory on January 16. The instrument that is the centerpiece of the laboratory, called the TIM-1, is part of a complete artificial digestive system developed by scientists at the Dutch company, TNO. Rutgers is the first U.S. university to have one of the TIM instruments on site. As part of a collaborative arrangement with TNO, this laboratory will allow Rutgers scientists and other users to examine the fates and interactions of compounds as they pass through a fully functional model of the human digestive system. The TIM instrument will be very useful in the research of Drs. Raskin and Ribnicky, who study biology of natural plant products for pharmaceutical and other uses. The laboratory is located in Room 112, Foran Hall.