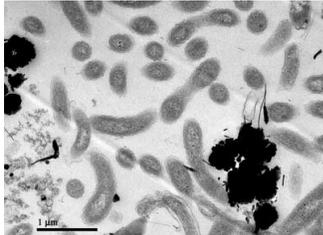


A MESSAGE FROM THE  
EXECUTIVE DEAN  
OF AGRICULTURE AND NATURAL RESOURCES

July 2007

Faculty and Staff Activities and Accomplishments

The Rutgers New Jersey Agricultural Experiment Station (NJAES) now offers a portal for all of its information that is available in Spanish. Visitors to the portal can access information on outreach programs that are offered in Spanish; fact sheets related to taking care of infants, commercial agriculture, and general health and nutrition; as well as links to other websites that offer Spanish-language material. **The portal is located at <http://njaes.rutgers.edu/espanol>.**



The Department of Energy Joint Genome Institute Community Sequencing Program has selected a proposal by **Elisabetta Bini** and **Max Häggblom** (both Biochemistry & Microbiology) for sequencing the genome of *Selenospirillum indicus*, a new species isolated by members of Häggblom's lab. Updates regarding the progress of the sequencing project will be posted at <http://www.jgi.doe.gov/sequencing/why/CSP2008/sindicus.html>. (Micrograph courtesy of Elisabetta Bini.)

Extension Specialist **Carol Byrd-Bredbenner**, **Dan Hoffman** (Nutritional Sciences), and **John Worobey** (Nutritional Sciences) have recently joined the multi-state project "An Integrated Approach to Prevention of Obesity in High Risk Families." The project team leaders are Madeline Sigman-Grant from the University of Nevada and Beth Olsen from the University of Michigan. The goals of the study include the identification of factors contributing to excessive weight gain in children ages 4–10 years; identification of characteristics that differentiate families in the target population; assessment of parent–child interactions and their effects on weight gain; and determination of behavior differences in low-income families in the parent-child relationships and their influence upon the first two factors. Byrd-Bredbenner, who will attend the next meeting held in October, Hoffman, and Worobey are the only participants from Rutgers University.

Nine proposals were recommended for funding through the 2007 Research Infrastructure Awards Program. Funding through the New Jersey Agricultural Experiment Station, the School of Environmental and Biological Sciences, and the Office of the Executive Dean totaled \$250,600. Combined with matching funds from individual investigators as well as the Biotech Center, the Center for Turfgrass Science, the Center for Remote Sensing and Spatial Analysis, and the departments of Biochemistry and Microbiology, Animal sciences, Plant Biology and Pathology, and Nutritional Sciences, new equipment totaling more than a half-million dollars will be added to the campus infrastructure. Awards were as follows: An automated genetic analyzer for shellfish genetics and breeding to **Ximing Guo**; a microarray scanner to **Elisabetta Bini**; two quantitative reverse transcriptase real-time PCR instruments, one to **Judy Storch** and one to **Dina Fonseca**; a near-infrared spectrometer to **Mike Westendorf**; a bioanalyzer to **Wendie Cohick**; an ultra-sensitive camera system for epigenetics and gene expression to **Eric Lam**; and upgrades of existing facilities to **Tamar Barkay** and to **Rick Lathrop**.

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**Anthony Broccoli** (Environmental Sciences) served as a panelist on the New Jersey Network's public affairs program, "On the Record." The panel discussed the effect of expected changes in storm frequency and intensity on homeowner's insurance. The discussion was taped before a live audience at the Ninth Annual Symposium of the Insurance Council of New Jersey in Woodbridge on June 15 and aired earlier this month.

**Joan Ehrenfeld** (Ecology, Evolution, and Natural Resources) has been reappointed to the Water Science and Technology Board of the National Research Council for a second three-year term.

### Student Activities and Accomplishments

**Mathew Bruno** (Environmental Sciences) received an award from the Center for Environmental Bioinorganic Chemistry at Princeton University for his summer research in the laboratory of Biotech Center member **Lily Young** (Environmental Sciences). His project is titled "Nitrification in Strain CL3." Two undergraduate students participating in the Aresty Summer Science Research Program have recently joined the laboratories of Biotech Center members. School of Engineering student Merudh Patel (Biomedical Engineering) will work with **Nilgun Tumer** (Plant Biology & Pathology) and Douglass College student Michelle McBride (undeclared) will work with **Elisabetta Bini** (Biochemistry & Microbiology). The students will receive \$3,000 stipends and present a poster of their work at the end of the 10-week program.

**Katherine Parisi** (undergraduate; Microbiology) presented results of her work at the 2007 Northeastern Microbiologists: Physiology, Ecology and Taxonomy Meeting in Blue Mountain Lake, NY, June 22–24. Her participation at the meeting was supported by an Aresty Fellowship. **Ines Rauschenbach** (graduate program, Microbiology; Molecular Genetics) and **Nora Lopez** (graduate program, Microbiology; Molecular Genetics) also presented at the meeting.

**Rebecca Potosky**, was recognized at the Rutgers University 6<sup>th</sup> Annual Student Employee Awards Ceremony. Potosky has been a student worker in the state 4-H office for several years.

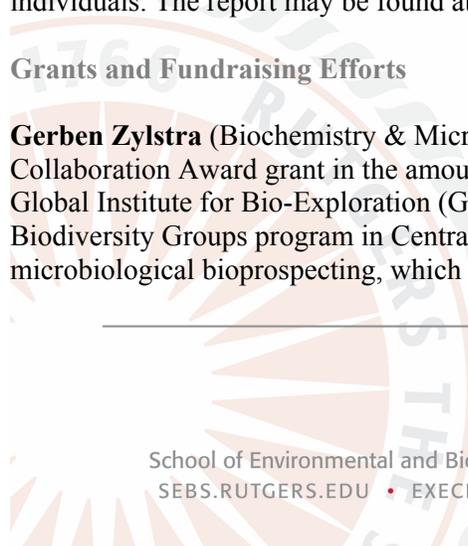
### Publications and Editorships

**Rutgers NJAES Equine Science Center** has released its 2007 Equine Economic Impact Study Report. The report is the result of a partnership with several government agencies, industry groups, and individuals. The report may be found at <http://esc.rutgers.edu>.

### Grants and Fundraising Efforts

**Gerben Zylstra** (Biochemistry & Microbiology) has received a Fogarty International Research Collaboration Award grant in the amount of \$120,000 over three years. This grant is offered through the Global Institute for Bio-Exploration (GIBEX) and will supplement the existing International Cooperative Biodiversity Groups program in Central Asia. Most of the funding will be spent in Kyrgyzstan on microbiological bioprospecting, which will further advance GIBEX's mission.

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The Northeast Sun Grant Initiative Competitive Grants Program awarded funding to **Thomas Molnar** (Plant Biology and Pathology) for his study “Developing the Potential of Hazelnuts as a Feedstock for BioDiesel and other Oleochemicals in the Northeast. New high-yielding and widely adapted genotypes of hazelnuts have been shown to yield great amounts of oil. This study will help identify which genotypes, of which some already exist in Rutgers University’s collection, express high oil yield potential and are most useful for making biodiesel and other oleochemicals. This study is anticipated to reveal the economic potential of hazelnuts for oil production. Molnar will receive \$58,062 over the next two years.

The New Jersey Department of Environmental Protection awarded a grant of \$70,000 to Biotech Center member **Max Häggblom** (Biochemistry and Microbiology) from the Spill Research Fund. The one-year research project focuses on “Developing Tools for Monitored Natural Attenuation of Methyl tert-Butyl Ether.” Co-PIs on the project are **Lee Kerkhof** (Marine & Coastal Sciences) and **Laura Youngster** (graduate program, Biochemistry and Microbiology).

A Busch Biomedical Research Grant was recently awarded to BCAE member **Nilgun Tumer** (Plant Biology & Pathology). Tumer received \$44,981 from the Charles and Johanna Busch Memorial Fund for a two-year research project to establish a model system in the nematode *Caenorhabditis elegans* for Shiga-toxin induced disease. Shiga toxins of *Escherichia coli* were responsible for the recent contamination of spinach and other food-borne illnesses.

#### Conferences, Seminars, and Other Events

**Jason Grabosky** (Ecology, Evolution and Natural Resources) attended a New York City street tree planning task force meeting on July 11. The task force formed after Mayor Michael Bloomberg announced PlaNYC, a blueprint for the city to improve the quality of life and urban environment in the face of escalating population projections. The plan detailed 127 initiatives within five key areas of the city’s environment: land, air, water, energy, and transportation. Grabosky is also working with the City of New York Parks and Recreation department on a mortality study of 44,500 trees planted over the past several years.

The 2007 New Jersey Governor’s School of Engineering and Information Technology got underway June 26 at the BCAE. Eight talented high school students who have completed their junior year will study biotechnology, robotics, and engineering in lectures and hands-on laboratory activities. The Rutgers program is one of six sites for the intensive, three-week residential program. Coordinators of the program are **Raul Machado**, visiting scholar from University of São Paulo (USP)/ESALQ/Brazil; **Wendie Cohick** (Animal Science); and **Rong Di** (Biotech Center assistant research professor). **Gerben Zylstra** (Biochemistry & Microbiology) assisted with coordination for SEBS and **Don Brown** assisted for the School of Engineering.

**Brian Oleksak**, Sussex County Agriculture program associate, developed and implemented a training module “Introduction to Soils and Plant Nutrition” to aid in the delivery of accurate, research-based information regarding best management practices to use in the home lawn and landscape. Eighty-four Master Gardeners from Sussex, Passaic, and Bergen counties were instructed using a developed PowerPoint presentation.

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**Joan Ehrenfeld** (Ecology, Evolution, and Natural Resources) gave an invited talk entitled “Plant-soil feedback in exotic plant invasions: Legacy effects of plant influence on microbial communities” at the 7<sup>th</sup> BIORHIZ Workshop, held in Hundested, Denmark (June 11–14).

## DEAN'S CORNER

I have two very exciting new developments to share with you this month. First, the New Jersey Department of Labor and Workforce Development recently awarded seven new grants to the NJAES Office of Continuing Professional Education totaling \$681,050. These grants are to be used over the next 12 months for the enhancement of skill levels of participating employees. Over 8,500 trainees will be exposed to one or more topics ranging in subject from business communication and leadership to quality control techniques, technical writing, occupational safety, English as a second language, and a series of personal computer skills courses. Grants were awarded to Document Solutions, Actavis, Rudolph Technologies, Elcom Technologies, Hackensack University Medical Center, St. Joseph's Medical Center and Cooper University Hospital.

Second, the NJAES Food Innovation Center construction contract was awarded on June 25 to Stanker & Galetto from Vineland, NJ. Construction on the new center in Bridgeton began on July 23, with heavy equipment, trailers, and fencing arriving on that day. The building will be up and enclosed by January 2008, the interior finish will be done by April 2008, and equipment installation will be completed by May 2008. The official completion date for the construction is June 25, 2008. Getting to this point has been made possible because of the outstanding commitment to this project by the NJAES, our state and federal legislators, and state and federal agencies.

Also, I invite you to participate in these upcoming events:

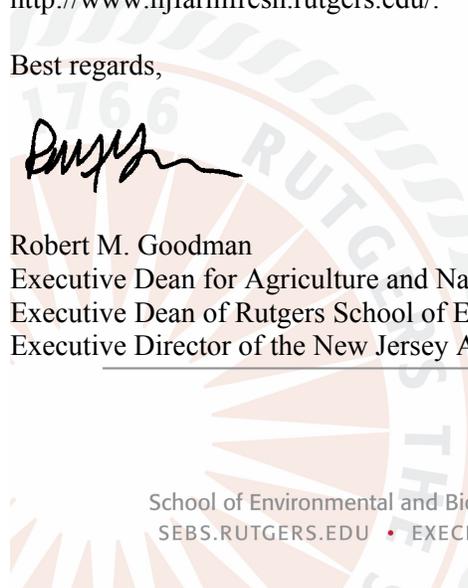
- Jersey Tomato Tasting at Rutgers Agricultural Research and Extension Center, 121 Northville Rd., Bridgeton, NJ (August 8, 1–3 p.m.)
- The 17<sup>th</sup> Annual Great Tomato Tasting at the Snyder Research and Extension Farm, 140 Locust Grove Rd., Pittstown, NJ (August 29, 3 p.m. to dusk)

For the latest information on what's in season in the Garden State, sign up for biweekly reports here: <http://www.njfarmfresh.rutgers.edu/>.

Best regards,



Robert M. Goodman  
Executive Dean for Agriculture and Natural Resources  
Executive Dean of Rutgers School of Environmental and Biological Sciences  
Executive Director of the New Jersey Agricultural Experiment Station



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