

May 2008

Faculty and Staff Activities and Accomplishments

Donald W. Schaffner, extension specialist and professor of food science, has accepted the position of director of the Center for Advanced Food Technology (CAFT). Don will lead CAFT as it works in partnership with industry, government, and university researchers to conduct basic research, as well product and process development for clients ranging from major food companies to small entrepreneurs.

Mukund Karwe (Food Science) received this year's Warren I. Susman Award for Excellence in Teaching. This prestigious award is the university's highest honor given to its most outstanding teacher. The award was presented at a reception at the President's House earlier this month.

(Photo: President Richard L. McCormick presents Mukund Karwe with the Susman Award for Excellence in Teaching.)

The President's Award for Research in Service to New Jersey was presented to **Rutgers NJAES Food Innovation Center** for outstanding research contributions of direct and demonstrable service to New Jersey. The award was presented at a reception at the President's House earlier this month. (Photo l. to r.: **Lou Cooperhouse**, director of the Food Innovation Center; **Margaret Brennan**, NJAES director of economic growth and development; and President McCormick.)

Steven Handel (Ecology, Evolution, and Natural Resources) has been selected as a Fellow of the Institute for Urban Design in New York City in recognition of his work on ecological restoration of urban environments. The Institute is a community of architects, planners, scholars, and public-sector leaders working in the world of urban design.

Rebecca Jordan (Ecology, Evolution, and Natural Resources) has received the Woodrow Wilson Foundation's Teacher as Scholars Award. The original award, given in spring 2007, was for \$15,000; it has been renewed for \$10,000 for spring 2008. Jordan has also received the Rutgers University Research Award for \$20,000 for summer 2009 for "Strengthening Minority Serving Institutional Partners in Research."

Lou Cooperhouse (Food Innovation Center) has been appointed by Governor Jon Corzine to serve on the New Jersey-Israel Commission. He is one of seven individuals in New Jersey appointed to the commission, which aims to increase economic, scientific, educational, and cultural relations with Israel.

Gil-Soo Han (Food Science) is the recipient of this year's Theobald Smith Society Young Investigator Award.

Paul Lachance (Food Science) is the recipient of the National Science Foundation International Safety Leadership Award for Lifetime Achievement in Education and Technology.

Thomas Montville (Food Science) is the recipient of the 2008 Bernard Oser Award for Food Ingredient Safety.

Peggy PolICASTRO (Nutritional Sciences) was nominated as "Undergraduate Research Mentor of the Year" by the Aresty Research Center for Undergraduates.

Harriet S. Worobey (Nutritional Sciences) was elected vice president for Affiliates of the New Jersey Association for the Education of Young Children on May 15.

Joe Ventola (assistant dean of Academic Programs and Research) received his doctorate in education on May 21 at universitywide commencement. (Photo, right, courtesy of Carol Martin Rutgers.)



Student Activities and Accomplishments



Ronn Friedlander (graduating senior, Biomedical Engineering and Ecology and Natural Resources double major) is the first Rutgers student to be awarded the prestigious Whitaker International Fellowship. Friedlander will be using the fellowship funds to do his graduate work in engineering at Cambridge University in England. The award allows winners to study biomedical engineering overseas and provides students with an international outlook. Friedlander has said that he plans to devote his time at Cambridge to studying engineering biosensors. After Cambridge, with funding from a National Science Foundation fellowship, Ronn will be studying medical engineering and medical physics in a joint Harvard-MIT Ph.D. program. He plans to design devices to diagnose diseases in remote locations. Friedlander and Gates Cambridge scholar **Suzanne Pilaar** (graduating senior, paleoecology and in evolutionary anthropology) were recently honored with a proclamation from Governor Corzine. (Photo l. to r.: Brian Spatocco, Ronn Friedlander, Suzanne Pilaar, Governor Corzine, and Michael Hayoun. Photo courtesy of RU COOL.)



Melanie Spero (graduating senior, biotechnology with a minor in biochemistry) was selected as the [speaker for the class of 2008](#) at the Rutgers universitywide commencement ceremony on May 21. Spero was recommended by **Barbara Zilinskas** (Plant Biology and Pathology) and nominated by Deans **Bob Goodman** and **Jerry Kukor**. Spero was selected from among three finalists following an interview and presentation. Among other topics, she spoke about her research project in **Eric Lam**'s lab, where she made transgenic plant lines that express a fluorescent protein sensitive to the redox state of the cell. Spero has accepted an offer to pursue graduate studies in microbiology at the University of Wisconsin in the fall. (Photo, left, courtesy of Carol Martin Rutgers.)

On May 7, **Deidre M. Stallings** (graduating senior, Biology) and **Tanya Gordonov** (undergraduate, Biology) were inducted into the New Jersey Alpha Chapter of Phi Beta Kappa. Phi Beta Kappa is the oldest and most respected undergraduate honors organization in the United States.

Karen Pesce (graduate student in Biochemistry and Microbiology), **Virian Serei** (undergraduate, Biotechnology), and Research Associate **Sinead Ni Chadhain** (Zylstra lab) presented posters on their research at the Theobald Smith Society meeting on May 6. The society is the New Jersey branch of the American Society for Microbiology. Pesce won the graduate student award for best poster.

Patricia Alvarez (graduate program in Ecology and Evolution) is the recipient of a Bevier Fellowship for 2008–2009.

The following graduate program in Ecology and Evolution students were awarded Pre-dissertation or Special Study awards from the Graduate School–New Brunswick:

- **Ryan Burrows** was awarded a Special Study Award of \$1,000 to study the conservation ecology of the endangered Mountain Cricket Frog, *Leptodactylus fallax*, in Dominica.
- **Maria Stanko** received a \$900 Special Study Award. Stanko will use her funding to attend a special course offered by the American Museum of Natural History at the Southwestern Research Station in Portal, AZ, on bee taxonomy and biology.
- **Holly Vuong** was awarded \$800 for a Pre-Dissertation Award. Vuong is extending her pilot project on the genetic diversity of *Borrelia burgdorferi* in upstate New York.

On April 17, **Kyle F. Bennett** (graduate program in Ecology and Evolution) gave an invited talk titled "Multiple Cryptic Species of the Scorched Mussel in the Florida Keys" at the Philadelphia Academy of Natural Sciences to the Philadelphia Shell Club.

Kirsten Schwarz (graduate program in Ecology and Evolution) received an NSF Doctoral Dissertation Improvement Grant for \$12,000 for her research proposal titled "The Spatial Dynamics of Lead Levels in Urban Soil and Correlations with Land Cover."

Tom Virzi (graduate program in Ecology and Evolution) has been invited by the NJ Division of Fish and Wildlife to present a talk at the 64th Annual Northeast Fish and Wildlife Conference on "Modeling Nest Success for the American Oystercatcher (*Haematopus palliatus*) Using Program MARK."

Benjamin McGraw (graduate student in Entomology) received the following awards: the C.C. Compton–George Markle Award for Outstanding Graduate Student in Entomology from Rutgers Department of Entomology and first place—student travel award for travel to the 41st Annual Meeting of the Society for Invertebrate Pathology in Warwick, UK. McGraw is also one of 14 students selected nationally for a spot in the United States Golf Association Internship Program.



Paul Stuart Wichansky (graduate student in Environmental Science) was chosen as one of Rutgers' "[Class of 2008: Ten Graduates to Watch](#)". Wichansky, who was born with cerebral palsy, a neurological disorder that affects body movement and muscle coordination, has received three degrees from Rutgers, two in meteorology and one in environmental science. His research focused on the impact that historical landscape changes have on weather patterns. (Photo, left, courtesy Carol Martin Rutgers.)

The **Food Science Department's Graduate Student Association** is a finalist in the 2007–2008 Institute of Food Technologists Student Association Chapter of the Year competition. The winners will be announced in the Institute of Food Technologists Student Association welcome assembly during the Institute of Food Technologists Annual Meeting in New Orleans June 2008.


Aishwarya Balasubramanian (graduate student in Food Science) a recipient of the Walter Hopkins Memorial Scholarship (\$1,000), as well as the 2008 Eastern Frosted Foods Association Scholarship (\$1,000).

Silvia Dominguez (graduate student in Food Science) is a recipient of the 2008 Eastern Frosted Foods Association Scholarship (\$1,000)

Andrew Draganski (graduate student in Food Science) has been nominated for the IFTSA North Atlantic Area Representative position.

Youn-Kyung Kim (graduate student in Food Science) received the CARIG-International Carotenoid Society Poster Award at the Experimental Biology Meeting, San Diego, CA, April 4–8.

Jose Maldonado (graduate student in Food Science) is a recipient of the 2008 Eastern Frosted Foods Association Scholarship (\$1,000)



Mohamed Badaoui Najjar (graduate student in Food Science) is the recipient of two IFT scholarships: the Food Microbiology Division scholarship (\$2,000) and the Graduate Scholarship (\$2,000).

Shadi Riazi (graduate student in Food Science) is the recipient of the Theobald Smith Society's (the New Jersey Branch of the American Society for Microbiology) graduate student poster competition.

Rashmi Tiwari (graduate student in Food Science) is a recipient of the 2008 IFT Graduate Scholarship (\$2,000).

Zafer Gezgin (graduate student in Food Science) is the recipient of the 2008 Eastern Frosted Foods Association Scholarship (\$1,000).

Alyssa Cocchiara (undergraduate, Nutritional Sciences) has been awarded a 2008 Douglass Residential College S.T.E.M. Summer Research Experience Award to work in **Wendie Cohick's** (Animal Sciences) laboratory this summer. Cocchiara will be working on the effect of alcohol *in utero* on mammary carcinogenesis.


Tatiana Toro-Ramos (graduate student in Nutritional Sciences) was a finalist for best oral presentation for her talk on "Development of Geographically Specific Prediction Equations for Body Composition" at the Future of Food and Nutrition: A Multidisciplinary Graduate Research Conference at Tufts University in Boston.

Nina Kardan (undergraduate, Nutritional Sciences) received a \$1,000 scholarship through Eastern Frosted Foods.

Jo Anne Crouch (May 2008 Ph.D. graduate of the Plant Biology Program) was awarded the Gerald O. Mott Scholarship for Meritorious Graduate Students in Crop Science by the Crop Science Society of America. The honor is accompanied by a \$2,500 honorarium. The award will be formally presented at the CSSA Awards Program at the ASA-CSSA-SSSA International Annual Meeting in Houston, TX, in early October.

Grants

A team from Rutgers School of Environmental and Biological Sciences and the Bloustein School for Planning and Policy has been awarded a \$100,000 grant from the State of New Jersey. The project is entitled "Assessing the Potential for New Jersey Forests to Sequester Carbon and Contribute to Greenhouse Gas Missions Avoidance" and is associated with the larger Rutgers University Global Climate & Environmental Change Initiative. The research team comprises **Richard Lathrop** (Ecology, Evolution, and Natural Resources, EENR), **Kristina Dahl** (Environmental Sciences), **Joan Ehrenfeld** (EENR), Frank Felder (Bloustein), **Jason Grabosky** (EENR), **Edwin Green** (EENR), **David Specca** (EcoComplex), **Mark Vodak** (EENR), and **Ming Xu** (EENR).



Julie Lockwood (Ecology, Evolution, and Natural Resources) received \$37,184 from the U.S. Fish and Wildlife Service for “Developing an Emergency Management Action Plan for the Endangered Cape Sable Seaside Sparrow (with G. Slater, R. Boulton, and S.L. Pimm).

George Hamilton (Entomology) received \$5,000 for “New Jersey Information Network for Pesticide and Alternative Strategies” from the Northeast IPM Center Partnership.

The Food Manufacturing Technology Facility, **Center for Advanced Food Technology**, received a short-term project award of \$140,000 under the CORANET contract from the U.S. Department of Defense to support the implementation of ultrasonic sealing on MRE pouches.

Richard Ludescher (Food Science) has been awarded an NIH grant for the tentative amount of \$300,000 for a project entitled “Modulating Molecular Mobility in amorphous Solids to Enhance Food Stability.”

Stacy Bonos (Plant Biology and Pathology) received a \$79,261 award from the Northeast Sun Grant for her project “Breeding switchgrass with improved biomass productivity on marginal land for the Northeast US.”

Tom Gianfagna (Plant Biology and Pathology) received a \$23,840 training grant from the World Cocoa Foundation to provide an 8-week training of two Borlaug Fellows Cocoa Scientists from Cameroon. The training will foster sustainable cocoa production practices that reduce losses to diseases, and improve post-harvest quality of cocoa beans.

Bingru Huang, Stacy Bonos, and Faith Belanger (Plant Biology and Pathology) received a \$30,000 award from the USDA for their project “Improving Selection for Heat Tolerance in Bentgrass.”

Donald Kobayashi and Bradley Hillman (Plant Biology and Pathology) received a 3-year \$399,990 award from USDA CSREES NRICGP for their project “Genome Expression Analyses of Interactions Between the Rice Blast Fungus *Magnaporthe oryzae* and Its Bacterial Pathogen *Lysobacter enzymogenes*.” A researcher from the University of Delaware will be collaborating with them on this project.

Eric Lam (Plant Biology and Pathology) and **Tom Leustek** (Plant Biology and Pathology) received supplemental awards from NSF of \$6,000 each to support undergraduate research in their labs this summer. In Lam’s lab, undergraduate **Mariya Skvortkova** will be characterizing mutants of plant metacaspases. In Leustek’s lab, a student will be working on the role of histidine in plant development.

Sharon Kinsey (Camden County 4-H agent) and Kelly Duffy (Camden County 4-H parent and volunteer) received a \$2,000 grant from the Campbell Soup Foundation from the Dollars for Doers program for use in educational programming for equine interests through camps, clinics, and educational workshops. Specific events to be funded include workshops on hunter undersaddle, English pleasure, starting to jump, trail riding, and animal rescue.

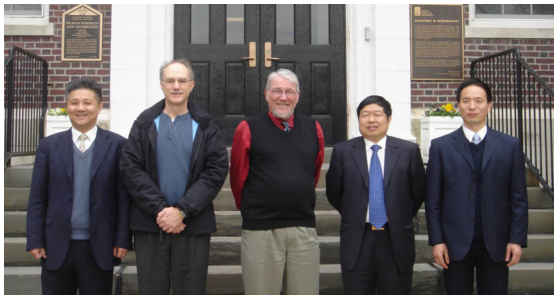
Gladis Zinati (specialist in nursery management) Ed Overdeest, Don Blew, **Ann Gould** (specialist in ornamental pathology), **John Dighton** (Marine and Coastal Sciences), and **James Johnson** (Cumberland County agricultural agent) received \$9,985 (second award) for "Low-input Management Practices for Container Ericaceous Nursery Crops from Sustainable Agriculture Research and Education."

Publications and Editorships

Alan Robock (Environmental Sciences) has the following in-press publication: The problems with geoengineering. *Science*.

A study conducted by **Richard Lathrop** and **Aaron Love** of Rutgers' Grant F. Walton Center for Remote Sensing and Spatial Analysis, in partnership with the American Littoral Society, on "Vulnerability of Coastal Habitats to Sea Level Rise" has been cited on a new NJ DEP webpage. The page can be accessed [here](#) and the full report can be found [here](#).

Conference, Seminars, and Other Events




(Photo: Campus Dean **Rick Ludescher** and Executive Dean **Bob Goodman** stand with Professor Jian Chen, president of Jiangnan University and others from Jiangnan University, Wuxi, Jiangsu, P.R. China.) Seven administrators from Jiangnan University visited Rutgers on April 7 to make learn about Rutgers' biotechnology and food science programs. The Chinese officials are interested in establishing more formal interactions, particularly

with respect to faculty and student exchange and research collaborations.

Joel Flagler (Bergen County agricultural agent) completed a successful pilot program with Transitions School in Wood-Ridge, serving youth with developmental disabilities. The youth have worked in a greenhouse for over four months, learning propagation, plant culture, and other valuable skills. Evaluations indicate the pilot program has had strong positive impacts on these young people. All 25 students have expressed great pride in their plant projects and nature craft activities. Several have expressed the desire to work in a greenhouse and learn more about horticulture. Based on these results, the principal of Transitions School has secured additional funding in excess of \$15,000 to extend the program through July 2008.

Nicholas Polanin (Somerset County agricultural agent) and **Jason Grabosky** (Ecology, Evolution, and Natural Resources) facilitated the 2008 Garden State Tree Conference held March 6–7 at the Cook Campus Center. Attended by over 140 arborists and landscape professionals from across the state and region, the conference featured speakers from Massachusetts, Virginia, and Pennsylvania, while also featuring graduate students, researchers, and professionals from Rutgers and NJ DEP.



The New Jersey Turfgrass Foundation and **Rutgers NJAES Center for Turfgrass Science** held the 13th annual Rutgers Turfgrass Golf Classic at Fiddler's Elbow Country Club in Far Hills, NJ, on May 5. Rutgers Athletic Director Bob Mulcahy and Executive Dean **Robert Goodman** spoke to the more than 300 golfers from 12 states and Canada who attended this year's fundraiser. The event raised over \$100,000 for student scholarships and faculty research grants and highlighted the strong commitment of the turfgrass industry in the region to the Rutgers Turfgrass Program.

Lily Young (Environmental Sciences) traveled to China in mid-May for a meeting with representatives from the Guangzhou Institute of Geochemistry (GIG) and the South China University of Technology (SCUT). They met to finalize plans for a workshop to be held in November 2008 titled "Managing the Future of Our Environment: Fate and Remediation of Contaminants in Air, Water, and Sediment." The workshop will be held at both of the Chinese locations, with two days scheduled at GIG and one day at SCUT. The organizing committee consists of Young and **Weilin Huang** (Environmental Sciences) from Rutgers, along with colleagues from the two Chinese institutions and joint sponsorship by all three institutions.

Joan Ehrenfeld (Ecology, Evolution, and Natural Resources) organized and co-hosted the conference "The Climate Ahead: Impacts of Climate Change on Water Resources" with the Climate and Environmental Change Initiative. The meeting, held at the Rutgers Student Center, attracted nearly 200 people.

Jason Grabosky (Ecology, Evolution, and Natural Resources) spoke in Australia at the Sustainable Systems for Urban Trees Conference. The conference traveled to three cities over a four day period: Brisbane, Sydney, and Melbourne. Grabosky gave three invited talks:

- Urban tree management in the development and maintenance of urban landscapes. Dealing with Root-Pavement Conflicts in Urban-Suburban New Jersey
- Update on the development and application of a load-bearing soil mix to use under pavements, CU-Structural Soil.
- Design considerations and establishing trees in parking lots.

Ed Green (Ecology, Evolution, and Natural Resources) will be the keynote speaker at the World Conference on Natural Resource Modeling in Warsaw, Poland, June 15–18.

Marisol Gutierrez, a postdoctoral fellow in **Henry John-Alder's** lab, gave an invited presentation on April 9 at the New Jersey Department of Environmental Protection in Trenton entitled "Atrazine, Amphibians, and New Jersey: Field and Laboratory Evidence."

Julie Lockwood (Ecology, Evolution, and Natural Resources) gave an invited seminar in the Ecology and Evolution Seminar Series at University of California–Davis titled "More Than Just a Pretty Face: What Can We Learn about Biological Invasions from Non-Native Birds" on April 4.

Judy Weis (Ecology, Evolution, and Natural Resources) gave an invited presentation in the Columbia University Seminar Series on Population Biology on April 21. The talk was entitled "Populations in Contaminated Estuaries: Behavioral Changes and Ecological Consequences for Five Species."



Anthony Broccoli (Environmental Sciences) gave an invited talk entitled “The Co-Evolution of Energy and Climate,” at Rutgers Energy Institute’s 3rd Annual Symposium last month.

Steve Decker (Environmental Sciences) gave an invited talk at Stony Brook University on “The Local Energetics Perspective on the Life Cycles of Midlatitude Synoptic-Scale Disturbances” last month.

Mark Miller (Environmental Sciences) co-chaired a special session on radiative atmospheric divergence in West Africa, and chaired two special sessions at the Atmospheric Radiation Measurement Program Science Team Meeting, March 10–14, Norfolk, VA. One session was on AMF measurements during the Convective Orographic Precipitation Study and the other was on a cloud and land surface interaction experiment.

Peter Strom (Environmental Sciences) served as chair of the Student Program, NJ Water Environment Association, Annual Conference, April 30.

Barbara Turpin (Environmental Sciences) served as an invited session co-chair for Ambient Air Quality Monitoring and Health Research: Workshop to Discuss Key Issues, Research Triangle Park, NC, April.

Cara Cuite (Food Policy Institute) gave an invited presentation—“What Consumers Really Want to Know about Food Recalls”—at the 2008 Grocery Manufacturers’ Association Consumer Complaint Conference, Dallas, TX, in April.


Rieks Bruins (Center for Advanced Food Technology) was invited to give a presentation at the Institute for Thermal Processing Specialists on “Non-Destructive Seal Strength Testing” on February 28.

Loredana Quadro (Food Science) was invited to present an overview of the mini symposium “Vitamin A, Carotenoids and Retinoids” at the Experimental Biology Meeting 2008, April 4–8, San Diego, CA.

Don Schaffner (Food Science) was invited to give the keynote lecture on food supply and terrorism at Gloucester County College in March.

Introducing Rob Muldowney

Robert Muldowney has been a research computing specialist in the school since 2002. Now, he has taken on an expanded role as a research computing consultant for bioinformatics. Previously, Muldowney supported the biochemistry courses and developed additional capabilities to support bioinformatic and genomic research. In his new role, he will shift his focus to protein structural analysis and research-related IT projects. Researchers wishing to discuss their research IT, structural biology, or bioinformatics needs may visit the new web portal at <http://benedick.rutgers.edu/WishingWell/> or contact Muldowney directly at muldowney@aesop.rutgers.edu.



Muldowney graduated from Rutgers College in 1986 with a bachelor's degree in chemistry. He spent nearly a decade in the pharmaceutical field developing quantitative mass-spectrometric methods for the determination of new drug candidates and their metabolites in support of clinical trials. After spending several years providing private science and computing consultation, he was offered a position at Rutgers under a USDA grant in 2000 to help develop a course in homology modeling of proteins and to provide Unix system administration for the Structural Biology Computational Laboratory. After the grant was completed, Muldowney was hired permanently in 2002.

FYI

Faculty and staff at the **Grant F. Walton Center for Remote Sensing & Spatial Analysis** have collaborated with artist Hector Canonge to create Parallel Grounds. Parallel Grounds is an interactive new media art installation that explores the relationship, transformations, and adaptations of the natural habitat and man-made environments in the state of New Jersey. The work is on display at the Jersey City Museum through August 24. To extend the project's scope over the internet, the artist invites the public's collaboration in posting pictures where clear signs of sprawl, smart growth, or land use/development are evident. For more information, visit www.hectorcanonge.net/parallelgrounds.

Summer is the time for **NJ 4-H County Fairs**. For information on your county fair, please visit <http://nj4h.rutgers.edu/fairs/default.asp>.

Please send contributions, photos, and questions to Amanda Kolling, kolling@aesop.rutgers.edu. Photos must be of high resolution and should add to the editorial value of a submission. Issues of the Dean's Monthly Message are published on the last Monday of each month. Deadline for submissions is one week prior to publication.