



Have You Invested in ARS Yet?



www.ars.usda.gov/yourtwocents

ARS launched an employee feedback program on April 28, 2010.

As of May 17, 130 ideas, innovations and other inputs

have been submitted to “Your Two Cents,” ranging from password requirements to matrix management philosophy. Frustrations with foreign travel processes, publication authorship and credit time have been frequent topics. Come see what the buzz is about and share your ideas, too! Put your two cents out there for agency leaders—and all of ARS if you choose!—and tune back in for discussion and appropriate actions in the coming months. Not sure where to begin? We are looking for further comments, best practices and feedback on some topics already posted.

USDA Secretary Vilsack Celebrates Arbor Day at ARS’s U.S. National Arboretum



Secretary Vilsack and schoolchildren shoveling mulch around a newly planted magnolia tree.

On April 30, 2010, **USDA Secretary Tom Vilsack** joined Interim Director **Ramon Jordan**, ARS U.S. National Arboretum (USNA), Washington, DC,

schoolchildren and two National Football League (NFL) Washington Redskins players to celebrate Arbor Day by shoveling the first scoop of mulch

around a newly planted USNA introduction, *Magnolia ‘Galaxy’*, while students from Brent Elementary and Center City Public Charter Schools’ Trinidad Campus helped finish the job. USNA staff, Washington Youth Garden staff and volunteers and members of the Herb Society of America led the Secretary and the students through different “Ornamental Edibles” activities in the National Herb Garden, all designed to encourage healthy eating. The children also participated in running and passing drills in the meadow with Washington Redskins wide receiver Malcolm Kelly and safety Reed Doughty after receiving milk mustaches from the Dairy Processor Education Program’s “Milk Mustache Mobile.”

ARS Scientists Author Book Chapter on Trends in the U.S. Dairy Industry

Three ARS scientists were invited to write a chapter on the U.S. dairy industry for a book recently published by Island Press. “Livestock in a Changing Landscape” is a two-volume series that examines the drivers, consequences and responses to the global livestock revolution with case studies from around the world. The chapter, “The United States: Trends in the Dairy Industry and Their Implications for Producers and the Environment,” was written by Soil Scientist **J. Mark Powsell** and Center Director **Neal Martin** of the ARS U.S. Dairy Forage Research Center, Madison, WI, and Soil Scientist **Michael Russelle** of the ARS Plant Science Research Unit, St. Paul, MN. The chapter is available at www.ars.usda.gov/mwa/madison/dfrc. More information on the book is available on the publisher’s website at <http://islandpress.org/livestock/>.

ARS Ames Laboratory Dedication

On April 19, 2010, **Secretary Vilsack**, **ARS Administrator Ed Knipling** and other ARS and USDA officials helped celebrate the completion of USDA's largest-ever construction project: the National Centers for Animal Health (NCAH) in Ames, IA. The cutting-edge \$460-million research center provides nearly 1 million square feet of laboratories, offices, animal space and administrative space for some of the Nation's top animal health scientists. It consolidates three USDA units previously operated separately at Ames: the ARS National Animal Disease Center, and the National Veterinary Services Laboratory and the Center for Veterinary Biologics, both operated by USDA's Animal and Plant Health Inspection Service. The new facility includes a state-of-the-art Biosecurity Level 3 Agriculture (BSL-3-Ag) animal-containment facility for studying a range of endemic, zoonotic and foreign animal diseases.

ARS Lab in Oklahoma Celebrates 25th Anniversary

The ARS South Central Agricultural Research Laboratory (SCARL) in Lane, OK, will celebrate its 25th anniversary this year, and especially on June 12 during its annual field day. SCARL scientists and staff, in conjunction with the Oklahoma State University (OSU) Wes Watkins Agricultural Research and Extension Center, with which SCARL is co-located, will present ongoing research projects through field tours and posters. In addition, there will be demonstrations of equipment and irrigation used in small-scale vegetable production. There will be an exhibit featuring unique live insects and related animals provided by the OSU Entomology Department's Insect Adventure. Additional events will include chuckwagon cooking, information about fire ants, a petting zoo and draft horses, and antique tractor exhibits.

NAL Celebrates Preservation Week

ARS's National Agricultural Library (NAL) participated in the American Library Association's Preservation Week (May 9-15, 2010) by opening an exhibit of selected items from the Schimmelpfennig

Family Mill Collection. The exhibit will be on display in the Library's main lobby through July 9. The new exhibit aligns with this year's Preservation Week theme focused on the preservation of items held in personal, family and community collections that are at risk of deterioration, damage and loss.

Toastmasters Club Serving USDA for 50 Years

Agricultural Research Center (A.R.C.) Toastmasters Club 3039 celebrated its 50th anniversary in March 2010. The club will hold a luncheon on May 22 in Greenbelt, MD, to formally celebrate the occasion. Current and previous members are invited to register for the event. The club has improved the communication and leadership skills of many people on the Beltsville Agricultural Research Center (BARC) campus. A.R.C. Toastmasters' meetings are the first and third Wednesdays monthly starting at 5:00 p.m. in Room 021, Building 005, BARC, Beltsville, MD. Meetings are open to the public. For more information, call Attila Nemes at 301-504-5177 or e-mail him at Attila.Nemes@ars.usda.gov.

BARC Celebrates 100 Years of Innovation



Beltsville Agricultural Research Center.

On Saturday, June 5, 2010, ARS's Beltsville Agricultural Research Center (BARC) in Beltsville, MD, will celebrate 100 years of

research at its Public Field Day. The event will be a fun-filled day for the entire family, highlighting research efforts that BARC scientists are making to help improve agriculture and everyday life. The event will feature animal and research exhibits, hands-on demonstrations, educational hayrides and farm equipment. It will be held 10 a.m.–4 p.m., rain or shine.

Around ARS

On May 7-11, **Cyril Gay**, ARS National Program Leader for Animal Health and Safety, attended the 97th Annual Meeting of the American Association of Immunologists in Baltimore, MD. Scientists from more than 30 countries attended this meeting to learn the latest techniques and new developments in the field of immunology.

On June 2, **Steve Kappes**, ARS Deputy Administrator for Animal Production and Protection, will attend a conference on “Biotechnology Research for a Complex World” to celebrate the 20th Anniversary of the European Commission-United States (EC-US) Task Force on Biotechnology Research in Barcelona, Spain. He will represent the Animal Biotechnology Working Group for the U.S. delegation. **Judith St. John**, ARS Associate Administrator for National Programs and the U.S. Co-chair of the EC-US Task Force will present the impacts of the EC-US Task Force on Biotechnology Research. The conference objective is to encourage participation of EC and U.S. scientists to discuss the future of biotechnology research and its effect on society.

On May 31-June 2, ARS researchers will attend the Animal Genomics for Animal Health International Symposium in Paris, France. The symposium will focus on identifying ways to advance the use of animal genomics to solve animal health problems. **Cyril Gay**, ARS National Program Leader for Animal Health and Safety and Steering Committee Chair for the animal genomics symposium; Supervisory Research Geneticist **Hans Cheng**, ARS Avian Disease and Oncology Laboratory in East Lansing, MI; Research Molecular Biologist **Hyun Lillehoj** and Research Chemist **Joan Lunney**, ARS Animal Parasitic Disease Laboratory in Beltsville, MD; and Research Geneticist **Tad Sonstegard**, ARS Bovine Functional Genomics in Beltsville, MD, will all co-chair various symposium sessions. Gay will provide closing remarks at the end of the meeting.

On May 14-15, Animal Scientist **Ken Turner**, with the ARS Appalachian Farming Systems Research Center in Beaver, WV, discussed ruminant nutrition and forages for sheep and goats at the Tennessee Small Ruminant College in Murfreesboro, TN. The program focused on both goats (meat and dairy) and sheep (wool and hair). Producers from small farms in Tennessee and surrounding states received research-based production and management information for small ruminants.

Research Plant Physiologist **Heping Cao**, ARS Southern Regional Research Center, Commodity Utilization Research Unit in New Orleans, LA, was invited to conduct a symposium and several seminars March 18-April 4, 2010. He gave a presentation on “Improving Recombinant Protein Purification Yield” at the BIT Life Science Third Annual Protein & Peptide Conference (PepCon-2010) in Beijing, China. He was also an invited seminar speaker for Beijing Forestry University’s College of Life Sciences and Biotechnology in Beijing and Nankai University’s Department of Plant Biology and Ecology in Tianjin. His seminar was entitled “Starch and Lipid Biosynthesis and Biotechnology.”

Research Nutritionist **Susan Raatz**, ARS Grand Forks Human Nutrition Research Center, Grand Forks, ND, was elected Secretary/Treasurer of the Health and Nutrition Section of the American Oil Chemists Society for the May 2010-April 2011 term.

Steve Shafer, ARS Deputy Administrator for Natural Resources and Sustainable Agricultural Systems, and **Charles Walthall**, ARS National Program Leader for Climate Change and Air Quality programs, attended the first meeting of countries participating in the Global Research Alliance (GRA) on Agricultural Greenhouse Gases in Wellington, New Zealand, in April 2010 to plan organizational structure, operations and research. The United States was chosen to coordinate cropland research, and Shafer will serve as the international point of contact for research on reducing greenhouse gas emissions while sustaining crop yields. An ARS

multi-location project, Greenhouse gas Reductions through Agricultural Carbon Enhancement network (GRACEnet), is being considered as one model for international collaborative projects. ARS research will be central to U.S. participation in the GRA, which also includes international research on mitigating greenhouse gases in livestock and paddy rice production systems. The GRA was announced by Secretary Vilsack and ministers representing 20 other countries during the Copenhagen Climate Change meetings in December 2009.

On April 26-28, 2010, **Cyril Gay**, ARS National Program Leader for Animal Health and Safety, attended the National Foundation for Infectious Diseases 13th Annual Conference on Vaccine Research in Washington, DC. Gay organized two symposiums for the conference: Vaccines, Poverty, and World Hunger; and Live Vaccines Still Alive and DIVA (Differentiating Infected from Vaccinated Animals). Research Microbiologist **Manuel Borca**, Supervisory Research Chemist **Marvin Grubman**, and Research Leader **Luis Rodriguez** with the Plum Island Animal Disease Center, Orient Point, NY; and Supervisory Veterinary Medical Officer **Marcus Kehrli**, with the ARS Virus and Prion Research Unit, Ames, IA, gave presentations on swine fever and foot-and-mouth vaccines and on controlling and eradicating foot-and-mouth disease and pandemic H1N1 influenza.



Canada thistle, a particularly troublesome perennial weed throughout the United States.

On April 20-22, 2010, ARS hosted the annual meeting of the APHIS Technical Advisory Group for Biological Control Agents of Weeds (TAG-W) in Beltsville, MD. The group discussed issues relevant to the REE priorities on food security, climate change and bioenergy.

Agency representatives from APHIS, ARS, NIFA, the U.S. Bureau of Land Management,

the Bureau of Indian Affairs, the U.S. Geological Survey, the U.S. Environmental Protection Agency and State stakeholders participated.

Simin Nibkin Meydani, Director of the USDA Jean Mayer Human Nutrition Research Center on Aging at Tufts University, Boston, MA, planned and chaired the “Women in Science and Medicine” symposium, which was held on April 27, 2010, during nutrition sessions of the Experimental Biology annual meeting in Anaheim, CA.



Sauer (right) and Van Brahana, with the U.S. Geological Survey, gather information about the interaction between surface runoff and groundwater.

Soil Scientist **Thomas Sauer**, with the ARS Soil, Water, and Air Resources Unit in Ames, IA, helped organize a 2-day Bouyoucos Conference in Nebraska City, NE, held last year, which included an

interdisciplinary group representing various specializations within soil science, philosophy and policy. The goal of this conference, which was funded by the Soil Science Society of America, was to provide an opportunity for scientists to explore the ethical aspects of environmental management with a particular focus on soil stewardship as it relates to global climate change. Because of that conference, a statement titled “An Urgent Appeal for Soil Stewardship” was drafted recently to heighten awareness of the climate change implications for soil sustainability, and the need to connect the science with the ethical underpinnings of potential policy initiatives.

Michael Shannon, ARS National Program Leader for Water Resources, attended the Organization for Economic Cooperation and Development (OECD) Workshop on “Improving the Information Base to Better Guide Water Resource Management Decision Making” in Zaragoza, Spain, held May 4-7. As the U.S. delegate, Shannon made a presentation and chaired a session. The focus of the workshop was to identify priorities for developing and using policy-relevant water resource management data and information, and to review current data and

other related information to determine if it meets the needs of decision makers and other water system stakeholders in OECD and non-OECD countries.

On April 15th, 2010, ARS Southern Regional Research Center (SRRC) representatives from New Orleans, LA, in collaboration with 18 other Federal agencies and the Federal Executive Board of New Orleans, participated in a roundtable conference with Historically Black Colleges and Universities (HBCUs) in Louisiana with the objective of promoting, supporting and strengthening the relationship between HBCUs and Federal agencies. SRRC has hosted quarterly meetings for this group since September 2008. Supervisory Research Geneticist **Deepak Bhatnagar**, research leader of the ARS Food and Feed Safety Research Unit, New Orleans, LA, serves as the Chair of this interactive group, and ARS Program Analyst **Georgina Acosta** and Research Biologist **Kanniah Rajasekaran**, ARS Food and Feed Safety Research Unit, New Orleans, LA, provide leadership on various subcommittees.

Research Agronomist **Mari-Vaughn Johnson** represented the ARS Grassland, Soil and Water Research Laboratory at Temple, TX, at a series of meetings in Hawaii held the week of April 5-9, 2010, to help coordinate biofuel research collaboration between USDA-ARS labs (Temple, TX, Hilo, HI, and Beltsville, MD), the University of Hawaii at Manoa and the Office of Naval Research.



Plant Pathologist **Ruhui Li**, ARS National Germplasm Resources Laboratory (NGRL), Beltsville, MD, attended the National Park Service's "Spotlight on National Park Resources in the National Capital Region" conference at Frederick (MD) Community College on April 20, 2010. She presented a poster co-authored with NGRL Plant Pathologists **Ray Mock** and **Gary Kinard** and Park Service Botanist Mary Willeford Bair on a virus survey of ornamental cherry tree collections on the National Mall and surrounding parks. The survey was conducted to determine virus

infection status of the collections before they are used as nursery stock to propagate new trees or before germplasm is shared internationally.

On April 7, 2010, **N. Andy Cole**, Research Animal Scientist and Acting Research Leader of the Renewable Energy and Manure Management Research Unit, Bushland, TX, gave a presentation to approximately 90 livestock producers and farmers from Kentucky who visited the High Plains Agricultural Region. The tour was sponsored by the Kentucky Farm Bureau. Cole's presentation covered a general overview of High Plains agriculture, especially the beef cattle sector, an update on new and potential future air quality regulations that affect livestock producers, and a summary of data regarding the environmental impacts of feeding distiller's grains to finishing beef cattle.

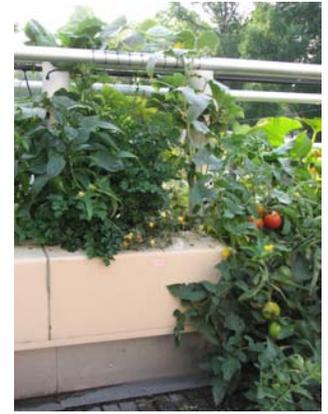
ARS People's Garden Efforts



In last month's edition of *ARS & You*, we spotlighted Secretary Vilsack's People's Garden Initiative and encouraged ARS locations to participate. Here are some stories and photos showcasing some of the efforts around ARS. Send us your high-quality photos or share your location's efforts to help support this initiative.

A Girl Scout Troop from Calumet, OK, visited the ARS Grazinglands Research Laboratory (GRL), El Reno, OK, to participate in the lab's People's Garden project. The girls ranged in age from kindergarten to 6th grade, and were assisted by Location Operations Manager **Bill Jensen** and Plant Physiologist **Charles MacKown**, ARS Forage & Livestock Production Research, El Reno, OK. The girls planted butterfly weed, which is a native species of milkweed, and goldenrod in the GRL Butterfly Garden. They were invited to return in approximately 30 days to view the progress of their planting efforts. Location Administrative Officer **Eilene Gibbens** arranged the visit and photographed the event.

ARS researchers in Temple, TX, are involved in a startup Community Supported Agriculture (CSA) project with a young producer in Bartlett, TX. The CSA will provide fresh, locally grown vegetables weekly for an annual fee. The producer is starting with 5 acres and will build a client base and increase acreage according to demand. The producer hopes to begin selling produce this fall in and around Austin, TX. ARS will provide soil analysis, consultation, greenhouse experiments, fertilizer methods and recommendations to help support the project.



Employees at the ARS Grand Forks Human Nutrition Research Center, Grand Forks, ND, held a "friendly" contest for best planter. The 21 garden boxes on the second-floor terrace were gone in a flash when word spread about the contest. The planter boxes reflected the personalities of each gardener. Some grew practical zucchini, radishes, beets, peppers, onions and tomatoes. Some chose herbs like dill, basil and rosemary. Still others opted for luxuriant colors with boxed beds of marigolds, petunias and black-eyed Susans.



Rain garden at the ARS Northern Great Plains Research Laboratory, Mandan, ND.

Notable Awards



On May 6, 2010, **Steven Kappes**, ARS Deputy Administrator for Animal Production and Protection, was awarded the Presidential Rank Distinguished Executive Award, the highest honor that may be given to Senior Executive Service (SES) members. He is being honored for mapping the bovine genome and identifying specific challenges to beef cattle genetics research, and for advancing the study of farm cattle by uncovering ruminant biology and evolution with a bovine genome study.



Dennis Gonsalves, Director, ARS Pacific Basin Agricultural Research Center, Hilo, HI, also was awarded the Presidential Rank Distinguished Executive Award for controlling virus problems in tropical crops, while researching how to control pests in Hawaii, including the fruit fly. His work on the transgenic virus-resistant papaya helped control the ring spot virus that nearly killed off the plant in that State.

Jitender P. Dubey, a Microbiologist with the ARS Animal Parasitic Diseases Laboratory in Beltsville, MD, was elected to the National Academy of Sciences on April 27, 2010. Dubey is a parasitologist and expert on *Toxoplasma gondii* (*T. gondii*), a parasite that infects animals and humans worldwide. Cats are the primary hosts for this organism. *T. gondii* is usually transmitted by eating raw or undercooked meat. Nearly one-third of the world's population have been exposed to this parasite, which does not cause serious illness—except potentially to people with weakened immune systems, and in congenitally infected children (disease present at birth). Dubey's research has furthered the understanding of this parasite and its transmission. He is one of 72 new members (and 18 foreign associates) elected to the Academy in recognition of "distinguished and continuing achievements in original research."



Stripe orchid developed by Griesbach.

Robert Griesbach, Deputy Assistant Administrator, ARS Office of Technology Transfer, Beltsville, MD, will receive the American Horticultural Society's 2010 H. Marc Cathey Award at a ceremony on June 10 for his research on the genetics of

flower color and for developing orchids for the mass-market. The award is one of 12 Great American Gardeners Awards that the Society presents annually to individuals, organizations and businesses that represent the best in American gardening.

Darshan Kelley, Research Chemist with the ARS Immunity and Disease Prevention Research Unit in Davis, CA, was awarded the American Society for Nutrition's (ASN) Robert H. Herman Memorial Award, which is given to a clinical investigator in recognition of significant contributions to the biochemical and metabolic aspects of human nutrition. The award was in recognition of Kelley's pioneering work on the effects of specific dietary fatty acids on human health, particularly immune function. His demonstration of the adverse effects of trans fatty acids and the health benefits of omega-3 fatty acids have had a major impact on clinical nutrition research, the formulation of infant formulas and other foods, and nutrition policy and practice.

Thomas Badger, Director of the ARS Arkansas Children's Nutrition Center in Little Rock, AR, was named a Fellow of the American Society for Nutrition. ASN is a nutrition organization dedicated to bringing together outstanding researchers, clinical nutritionists and industry to advance the knowledge and application of nutrition.

On March 24, 2010, Dr. Steve Zeng, Chair, Department of Agricultural Science and Natural Resources at Langston University in Oklahoma, presented Research Agronomist **Paul Bartholomew**, ARS Forage and Livestock Production Research Unit of the ARS Grazinglands Research Laboratory (El Reno, OK), located at Langston, OK, with a certificate of appreciation “for his outstanding contribution to the enhancement of students’ learning experience through international agriculture seminars” and for the work he has done with Langston extension and outreach staff, as well as his cooperation with other scientists in the department.



Erhan tests a soy-based polymer slurry.

Sevim Z. Erhan, Center Director of the ARS Eastern Regional Research Center in Wyndmoor, PA, was given this year’s United Soybean Board’s (USB) Outstanding Achievement Award, the organization’s highest honor. She was given the award for her research in expanding markets for soybean oil in the areas of soy-based printing inks, hydraulic fluids and soy-based composites.

She has authored more than 200 publications and holds 7 U.S. patents. Her hydraulic fluid technology has been incorporated into more than 144,000 elevators by the National Park Service. Many of her discoveries are licensed to large agribusiness corporations, and are indicative of the impact of her work on the U.S. soybean industry. Check future editions of *ARS & You* for “Did You Know” articles on these discoveries.

Supervisory Research Geneticist **Deepak Bhatnagar**, Research Leader of the ARS Food and Feed Safety Research Unit at the Southern Regional Research Center in New Orleans, LA, was recently elected a Fellow of the Society for Industrial Microbiology “in recognition of distinguished career accomplishments and dedication to the advancement of the applied microbiological sciences.”



Cerambycid beetle illustration.

Taina Litwak, Scientific Illustrator with the ARS Beltsville Agricultural Research Center, Systematic Entomology Laboratory (SEL), Washington, DC, entered her illustration of a longhorned beetle into the Juried Exhibition of the Illustrators Club of Washington, DC, Maryland and Virginia. She won the Gold Medal in the Technical,

Medical, Scientific Category. Litwak produces illustrations of insects and mites for SEL scientists for publication in scientific journals and books. The title of the winning illustration is “Cerambycid beetle - *Elaphidion costipenne*.” The illustration will be exhibited May 13–June 26, 2010, at PEPCO’s Edison Place Gallery, 702 Eighth Street, NW, Washington, DC. The illustration has also been selected for another juried exhibition June 14–August 6, 2010, as part of the Guild of Natural Science Illustrator’s Annual Meeting at the D.H. Hill Library Exhibit Gallery, North Carolina State University, Raleigh, NC.

Hydrologist **Thomas J. Jackson**, ARS Hydrology and Remote Sensing Laboratory, Beltsville, MD, was elected an SPIE Fellow in April 2010. SPIE is the international optics and photonics society founded in 1955 to advance light-based technologies. Fellows are members of distinction who have made significant scientific and technical contributions in the multidisciplinary fields of optics, photonics and imaging. Jackson is being honored for his achievements in remote sensing in hydrology.

Two ARS scientists, Research Leader **Don Knowles**, ARS Animal Diseases Research, Pullman, WA, and Agronomist **Vicki Bradley**, ARS Plant Germplasm Introduction and Testing, Pullman, WA, were given a USDA Unsung Hero for 2010 award. Knowles was recognized for his efforts to control animal diseases by developing research solutions to infectious diseases of agriculturally important animals. Bradley is being recognized for her research on developing

drought-tolerant plants. The award is given annually to a select group of employees and is presented by the Organization of Professional Employees of the U.S. Department of Agriculture (OPEDA).

Mary M. Ashby, Agricultural Science Research Technician; **David J. Augustine**, Research Ecologist; and **Justin D. Derner**, Supervisory Research Rangeland Management Specialist (Research Leader), with the ARS High Plains Grasslands Research Station in Cheyenne, WY, received the National Grasslands Research and Technology Award from the U.S. Forest Service for Outstanding Research Station.

Nutritionist **Deborah Thompson**, ARS Children's Nutrition Research Center, Houston, TX, co-authored an article that won "Best Article of 2009" in the *Journal of Nutrition Education and Behavior*. The article, entitled "Creating Healthy Home Food Environments: Results of a Study With Participants in the Expanded Food and Nutrition Education," demonstrated how an existing national nutrition education program for limited-resource families (Expanded Food & Nutrition Education Program) was successfully adapted to include a focus on obesity prevention. The significance of this research is that it demonstrates that adapting existing programs to include a focus on obesity prevention could be an effective method for reaching those in need, particularly when tailored to their specific needs and interests.

On May 7, 2010, the San Francisco Bay Area Federal Executive Board named Research Chemist **Andrew P. Breksa, III**, ARS Processed Foods Research Unit, Albany, CA, their 2010 Federal Employee of the Year in the category of Equal Employment Opportunity. The Executive Board acknowledged the impact of Breksa's outreach efforts, and in particular his contributions as a regional coordinator for the American Chemical Society's (ACS) Project SEED Program, a summer research internship program for economically disadvantaged high-school students. Under Breksa's leadership, the Albany program has grown to be the third largest in the country, and was nationally recognized for supporting the

ACS California Section and ARS's commitment to outreach, diversity and equal opportunity.

On May 18, the American Oil Chemists' Society (AOCS) presented the 2010 AOCS Award of Merit to Research Chemist **Keshun Liu**, ARS Small Grains and Potato Germplasm Research Unit, Aberdeen, ID. The award is presented annually in recognition of leadership in technical, administrative or special committees and activities and outstanding service that has advanced the Society's standing. Liu has shown professional dedication and marked leadership in technical program development, having organized/co-organized at least 18 symposiums and having delivered more than 35 presentations at AOCS meetings.



Large white turkey female.

Microbiologist **Geraldine Huff**, ARS Poultry Production and Product Safety Research Unit, Fayetteville, AR, won the National Turkey Federation Research Award for 2010, given for outstanding turkey research published during the last 6 years. Huff will be recognized at the annual Poultry Science Association meeting, July 11-15,

in Denver, CO.

The ARS Richard B. Russell Agricultural Research Center in Athens, GA, won the 2010 Waste Reduction Award in the Industry category from the Athens-Clarke County Recycling Division in Athens, GA. The project is led by **Britton Ormiston**, the Environmental Management Systems Coordinator for the Center. The facility houses more than 200 ARS and USDA employees.

Did You Know?



A flake of Super Slurper absorbs nearly 2,000 times its own weight in moisture.

Super Slurper...it's not an ice-cold drink. It's one of ARS's all-time greatest scientific achievements. ARS researchers at what was then the Northern Regional Research Center in Peoria, IL—now the ARS **National**

Center for Agricultural Utilization Research—developed a novel wonder called “Super Slurper.” Super Slurper is a cornstarch-based material. Starch is a naturally abundant compound found in potatoes and grains like corn and wheat, and is a byproduct of the corn milling process. Although most of the products from corn milling go into food and feed, about 4.5 billion pounds of starch is produced annually, largely for non-food purposes.

ARS researchers developed the cornstarch material in pursuit of alternatives to petroleum-based commodities. During the oil shortage in the 1970s, petroleum prices were tremendously high. The commodity was in high demand, but extremely limited. Holding true to its problem-solving brand, ARS scientists set out to find agriculture-based alternatives to reduce the country's dependence on petroleum-based commodities.

The ARS research team conducted a series of experiments combining cornstarch with synthetic chemicals until they discovered the magic compound: a product so thirsty it could absorb hundreds of times its own weight in water. Someone called it “Super Slurper,” and the name stuck. Later improvements to the original technology led to technology that can hold nearly 2,000 times its own weight in water! In 1976, ARS filed for patent protection on the technology, which gave rise to a new starch-based industry. The original technology is the foundation in many of today's consumer products, including disposable diapers, feminine hygiene products, wound dressings, batteries, cold packs, car filters, talcum powder, and a host

of other products that require moisture absorption and retention. If you've ever held a baby, you know the importance of moisture absorption!

A more recent use of the technology is as a grass seed coating to help retain moisture and boost germination. Seeds coated with Super Slurper material require less watering. Homeowners can appreciate new “moisture lock” technology—that means less lawn care...more time to relax!

Written by **Tara T. Weaver-Missick**, ARS Information Staff.



Components of Yellow Corn

Starch	61.0 %
Corn Oil	3.8 %
Protein	8.0 %
Fiber	11.2 %
Moisture	16.0 %

Average Yield Per Bushel

Starch	31.5 lbs.
Gluten Feed	12.5 lbs.
Gluten Meal	2.5 lbs.
Corn Oil	1.6 lbs.

Source: Chippewa Valley Ethanol Company

Please submit story ideas and national award items to Tara T. Weaver-Missick, tara.weavermissick@ars.usda.gov or call 301-504-1663.