



Hello!

This spring has proven to be extremely busy as all in ARS prepare to continue their important research and other work activities while at the same time adapt well to challenging times.

Even though economic uncertainties are likely to continue to be with us for the near term, there is significant optimism about the essentiality of USDA research to help address global food security challenges, environmental sustainability needs, and biobased economy opportunities in the years ahead. The Secretary frequently highlights these themes. Similarly, our many valued customers, partners, and other stakeholders generously acknowledge the value of, and their continuing support for, our research.

As pointed out before, this year represents USDA's 150th anniversary, for which there have already been several celebration events and more are planned. ARS is a pivotal part of USDA's history and an equally important part of the Department's future.

On April 10, **Secretary Vilsack** participated in a USDA anniversary celebration in Manhattan, KS, that featured two ARS building dedications, a new ARS wind erosion research facility, and a new ARS wheat and sorghum milling laboratory. Dignitaries present for the ribbon cutting included U.S. Senator Pat Roberts and Congresswoman Lynn Jenkins. USDA agency representatives from ARS, NRCS, RD, RMA, NASS, APHIS, and FSA were present as well to mark the occasion.

As part of USDA's anniversary, a special "Day of Celebration" will be held at USDA on May 15; USDA exhibits will be displayed at the [USA Science & Engineering Festival](#) in the Washington, DC Convention Center April 28-29, and at the [Smithsonian Folklife Festival](#) on the National Mall in Washington, DC, June 27-July 1 and July 4-8.

As a tribute to USDA's proud past and promising future, ARS is participating in all of these events, and has dedicated its [May/June 2012 issue of Agricultural Research magazine](#) to this commemoration. The magazine will feature an in-depth article highlighting ARS research contributions to our Nation's food, agriculture, and other industries. Be sure to read this special edition.

ARS will celebrate scientific contributions and other workforce achievements at our annual awards ceremony on June 12 at the Beltsville Agricultural Research Center. This ceremony is a chance to honor ARS' top performers of the past year. ARS employees continually contribute to the advances in science and technology that have helped make American agriculture the success story that it is today. ARS research continues to be essential to improving the global agricultural and food system.

I, and our agency leadership, value every employee's contribution to achieving this vital mission, and I look forward to the possibilities and opportunities our research will bring in the future.

Sincerely,

Handwritten signature of Ed Knipling.

Ed Knipling

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Did You Know?

Around ARS



www.ars.usda.gov/yourtwocents

Your Two Cents (Y2C) continues to be a forum for discussion of ARS topics that are important to you! Spring is a time for renewal...so check out the changes we have made on the [Y2C site](#). Hard to believe, but Y2C is getting ready to celebrate its 2nd birthday! We want **your input** on how you think we should mark the occasion, take part in the new poll, or post an idea that you think would help us serve you better. Looking for some free training...need ideas for strengthening your professional relationships? Check out the [Toolkit](#) on the [ARS Cultural Transformation site](#). Our theme for April and May is "Inclusion and Outreach." You can find links to AgLearn courses on this topic, as well as books and activities for your use. ❀

Gerald F. Combs, Jr., Director, ARS Grand Forks Human Nutrition Research Center, Grand Forks, ND, is proud to report that Center colleagues are once again participating in the "Walk the Talk" program this year. Employees' steps are being tracked on a wall chart to monitor their progress. Center employees are also holding biweekly noontime teach-ins on topics such as how to use USDA's [MyPlate](#) site, the health benefits of movement, and low-calorie cooking. At the conclusion of week 4, and with 20 participants reporting their steps, Center staff averaged 59,675 steps for the week—for a cumulative average of 223,767 steps per person! ❀



"Walk the Talk" Chart at GFHNRC.

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

Since DigiTop Navigator launched in June 2011, users have suggested many ways to improve usability. As a result of the feedback, enhancements were made. Users can now export up to 500 records at a time; choose to display 10, 20, or 50 records per page; and browse by journal title. Try Navigator and share your feedback so we can serve you better. Contact us with questions or comments at DigiTop@usda.gov. DigiTop Navigator helps you work more effectively with alerts and citation lists, exports to bibliographic managers, and emailing citations. Navigator also saves you time by combining records from AGRICOLA, AGRIS, BIOSIS, CAB Abstracts, Food Science and Technology Abstracts, MEDLINE, and Zoological Record. DigiTop, USDA's Digital Desktop Library, is a service of the USDA National Agricultural Library. ❖

Meetings and Events

The National Pork Industry Stakeholder Meeting, sponsored by ARS and NIFA, took place on April 4 in the George Washington Carver Center, Beltsville, MD. The meeting was coordinated by **Eileen Thacker**, ARS National Program Leader for Animal Health. The purpose of the meeting was to develop and enhance USDA research and outreach plans that are responsive to the needs of animal agriculture and USDA stakeholders. Representatives from the National Pork Board and the National Pork Producers Council were in attendance, as well as ARS and NIFA National Program Leaders. ❖

Cyril Gay, ARS National Program Leader for Animal Health and Safety, and **Dan Strickman**, ARS National Program Leader for Veterinary, Medical and Urban Entomology, met with a delegation from the Institute of Experimental and Clinical Veterinary Medicine, Kharkov, Ukraine, and the ARS Arthropod-Borne Animal Diseases Research Unit, Manhattan, KS, April 24-25, in Manhattan. The group met to develop a proposal for studying African swine fever (a viral disease in pigs) in the Ukraine by examining the relationship of soft ticks with native wild pigs. This meeting and the proposed study are funded by the Department of Defense and coordinated by the ARS Office of International Research Programs. ❖

Eileen Thacker, ARS National Program Leader for Animal Health, attended the East Coast Fever Workshop in Nairobi, Kenya, April 14-20. The workshop was part of the Feed the Future initiative. Thacker presented an overview of ARS animal health research to the participants. Feed the Future is the U.S. Government's global hunger and food

security initiative. It supports country-driven approaches to address the root causes of hunger and poverty and forge long-term solutions to chronic food insecurity and malnutrition. The initiative draws on resources and expertise of agencies across the U.S. Government, including USDA. For more information about the initiative, visit <http://www.feedthefuture.gov/>. ❖



Photo Corner



USDA Secretary Tom Vilsack.



From L to R: Tom Herald, Research Leader of the ARS Grain Quality and Structure Research Unit; NPA Acting Area Director Mickey McGuire; Ben Hancock, Executive Vice President of the Wheat Quality Council; Mark Hodges, Director of Plains Grains, Inc.; ARS Administrator Ed Knipling; and Bradford Seabourn, Director of the ARS Hard Winter Wheat Quality Laboratory gather to cut the ribbon at the ARS building dedication in Manhattan, KS.



ARS Administrator Ed Knipling (right) with Jay Armstrong, Kansas Wheat Commissioner.



NASA Space Shuttle Discovery flying over the Building 003 Clock Tower in ARS' Beltsville Agricultural Research Center (BARC), Beltsville, MD, at 10:23 a.m., April 17, on her way to Dulles International Airport, from which she will be moved into her permanent exhibit at the National Air and Space Museum's Steven F. Udvar-Hazy Center, Chantilly, VA. The photo was taken by horticulturist Cristina Paul, ARS Molecular Plant Pathology Laboratory, Beltsville, MD.



A close-up of Discovery flying over BARC. The NASA T-38 jet escorting Discovery is partially visible at the bottom of the image. Photo by Cristina Paul. For more Discovery photos, including Paul's, go to <http://www.space.com/15294-space-shuttle-discovery-photos-smithsonian-flight.html>.



From left to right: Technical Information Specialist Jay Green, ARS Information Staff; Technical Information Specialist Eileen Dykes, FSIS Food Safety Education Staff; Henry the Hand; and Will Sawyer, creator of the Henry the Hand hand-washing hygiene campaign—at the 2012 National Health Promotion Summit in Washington, DC, April 10-11.

Notable Awards



Annette Miller.

Biological Science Laboratory Technician **Annette Logan Miller**, ARS National Center for Genetic Resources Preservation, Fort Collins, CO, is a first-round winner of the 2012 USDA Art and Agriculture competition in the Future of Agriculture category for her quilt titled "Seeds for the Future." The phrase "Seeds

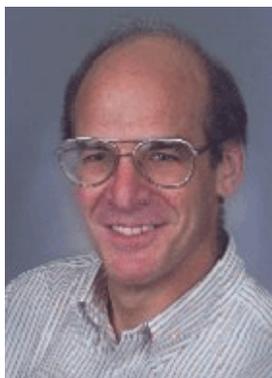
for the Future, Collect ~ Assess ~ Preserve" refers to the mission of the ARS National Plant Germplasm System and the ARS National Animal Germplasm Program. The quilt honors the critical role of genetic materials preservation in the future of agricul-

ture. The upper third of the art quilt depicts an aerial view of fields, pastures, and natural riparian areas. The lower portion depicts bags of seeds, liquid nitrogen storage tanks, and fields of seedlings. The quilt uses hand-dyed recycled seed bags, beads, and ribbons. Strands of DNA are quilted into the frame. The final round



Miller's quilt titled "Seeds for the Future".

of judging will take place May 7-11, and final winners will be announced on May 25. Miller's quilt is on display in the USDA South Building, Washington, DC, for the rest of the year. ❀



Michael H. Haas.

Research Scientist **Michael J. Haas**, ARS Sustainable Biofuels and Co-products Research Unit, Wyndmoor, PA, is the 2012 recipient of the A. Richard Baldwin Award, the highest service award given by the American Oil Chemists Society (AOCS). The award recognizes Haas's significant contributions to the Society sustained over the past 22 years. He will be honored during the 2012 AOCS Annual Meeting & Expo, April

29-May 2, Long Beach, CA. ❀



Theresa L. Pitts-Singer.

Entomologist **Theresa L. Pitts-Singer**, ARS Pollinating Insects Research Unit, Logan, UT, received the 2012 Pacific Branch of the Entomological Society of America (PBESA) Physiology, Biochemistry and Toxicology Award for her work on solitary bees and for efforts towards developing a nesting attractant in a commercial pollination management system. The award was presented during the

ESA Pacific Branch Annual Meeting, March 26-28, 2012, in Portland, OR. ❖

Steven E. Naranjo, Center Director and Entomologist, ARS Arid-Land Agricultural Research Center, Maricopa, AZ, was presented with the C.W. Woodworth Award, an annual award given by PBESA. Naranjo gave a plenary lecture on his research at the group's annual meeting. The C.W. Woodworth Award is PBESA's highest honor, and recognizes achievement in entomology in the Pacific region of the United States during the past 10 years. ❖

Supervisory Microbiologist **Vijay Juneja**, ARS Residue Chemistry and Predictive Microbiology Research Unit, Wyndmoor, PA, was chosen as the winner of the 2012 NSF Food Safety Leadership Award in Research Advances by NSF International, a public health and safety company. Juneja was honored for significant career accomplishments, including risk assessments and predictive modeling for emerging technologies; strategy development for risk assessments on cooked foods; and his strong ability to develop, implement, supervise, and integrate research programs that can quickly adapt to changing research needs. The award was presented at the 2012 Food Safety Summit on April 18 in Washington, DC. ❖



Vijay Juneja.

Soil Scientist **Gale Dunn**, ARS Agricultural Systems Research Unit, Fort Collins, CO, has been honored by the Colorado Wheat Industry with the establishment of the Gale H. Dunn Scholarship for his outstanding contributions to Colorado wheat and agricultural producers. The schol-



Gale Dunn.

arship will be awarded to high school seniors interested in pursuing an agricultural career. The establishment of a scholarship is one of the highest honors bestowed by the Colorado Wheat Industry. Dunn was formally honored at the Colorado Wheat Industry reception on April 4 in Fort Collins, CO. ❖

Research Molecular Biologist **Lisa Ainsworth**, ARS Global Change and Photosynthesis Research Unit, Urbana, IL, has been announced as the winner of the 2012 Charles Albert Shull Award of the American Society of Plant Biologists (ASPB). Created in 1971 to honor ASPB's founding father and the first editor-in-chief of *Plant Physiology*, this award recognizes young researchers and is considered the most prestigious early career award in the field of plant biology. Ainsworth's research is on identifying key mechanisms by which plants respond to specific elements of climate change, and using those to maximize crop production in the future. ❖



Lisa Ainsworth.

Research Entomologist **Fernando Vega**, ARS Sustainable Agricultural Systems Laboratory, Beltsville, MD, was formally recognized by the National Coffee Association during its convention held March 22-24, 2012, in Charleston, SC. He was honored for his contributions to the science of coffee agriculture and significant, positive impact on the worldwide coffee community, including groundbreaking work in fighting the persistent scourge of the coffee berry borer, and his uniquely personal and professional contribution to the U.S. coffee industry and the worldwide coffee community. ❖

Did You Know?

Everybody loves a comeback story, and ARS has been responsible for many over the years. But did you know that ARS could play a central role in a new comeback-in-the-making—involving a tree that was wiped out by a hurricane in the late 1960s?

The tree is called the tung tree, and its seeds are the source of environmentally friendly, inedible oil used in wood finishing. The trees flourished along the Gulf Coast until a series of events—culminating in Hurricane Camille in 1969—led to the demise of the region's tung oil industry. In response, ARS stepped in to develop blueberry varieties that would thrive in the hotter, humid southern climate. Thus, ARS played a key role in establishing the region's now-thriving blueberry industry to replace tung oil production.

Despite the tung oil industry's decline, ARS and Mississippi State University partners began a tung oil breeding program in the early 1970s at the agency's research station at Poplarville, MS. After 40 years, these trees are still maintained there today, representing the largest and most diverse selection of tung tree germplasm in North America.

When the trees were planted, the thinking was that they would provide a source of germplasm for future efforts to revive the tung oil industry. And sure enough, that day may have arrived. In March, a representative of a tung oil company in Florida visited ARS scientists at Poplarville. The company is interested in re-establishing the profitable production of tung oil in the United States. This may be the first request in 40 years to obtain tung tree seed for possible commercialization. ARS is working with the company to make seed available as a first step toward ramping up production of tung oil, most of which is now imported from China, the tung tree's center of origin.

ARS assistance in efforts to bring back tung oil production in the United States is one of many examples of how ARS research provides crucial research support for U.S. agriculture. If this latest effort is successful, tung trees may make a comeback and be planted near blueberries developed to replace them.

Did you know that...

- The first tung tree seed reportedly was brought to America from Hankow, China in 1905 by David Fairchild, then senior agricultural explorer for USDA?

Written by **Sean Adams**, ARS Information Staff.



Tung tree fruit—about 3 inches in diameter—seeds, and oil.

Contributors to this issue:

We thank the following individuals for contributing stories, ideas, photographs, and their time to this issue:

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