

# partners

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A newsletter for faculty, staff, students, alumni, donors, industry and friends of the Center of Excellence for Poultry Science, a part of the University of Arkansas Division of Agriculture.

## Renovations Result in State-of-the-Art Hatchery for Poultry Science

**R**enovations at the Center of Excellence for Poultry Science research complex that were completed in March 2009 have resulted in a brand new, state-of-the-art hatchery for research and teaching.



The two-room renovation project, which took place in the existing hatchery, supplied much needed space for the replacement of outdated and inadequate teaching and research equipment, thereby providing more uniformity for research trials.

The hatchery now boasts four Jamesway P500 Setters and two Jamesway P500 Hatchers, each with a 5000 plus egg capacity. All of the equipment is networked to one main computer where temperature and relative humidity can be tracked at numerous intervals based upon need. With the aid of the computer networking, students and researchers now have actual control over temperature within 1/10th of a degree.

“By installing and using the Jamesway products, students now have hands-on access to equipment they will really see in the commercial poultry industry,” said Keith Bramwell, extension specialist for hatchery-breeder management, for the department of poultry science. “We now have the best incubation and hatchery set-up in the country for a University research department.”

A functional benefit of the new hatchery is the ability to pull the hatchers and setters, which are on rollers, out of their respective rooms in order to foam and fumigate

between hatchings. This could not be done in the old hatchery because the equipment was old and outdated and the design



Pictured are the Jamesway P500 Hatchers (each with a 5000 plus egg capacity) and the Jamesway Multi-Stage Controller.

did not allow this.

The cost for the equipment, which included hatchers, setters, networking controllers and backup alarms, totaled approximately \$120,000.00, and was covered in a joint venture between the poultry science department faculty and the Jamesway Incubator Company, Inc., of Cambridge, Ontario, Canada. Jamesway is one of the leading manufacturers and suppliers of poultry incubation systems.

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We're on Facebook (search Poultry Science Department, University of Arkansas)! You can also follow us on [Twitter.com/UAPOSC](https://twitter.com/UAPOSC). Plus: Visit us online at [poultryscience.uark.edu](http://poultryscience.uark.edu).

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According to *Economic Impact of Arkansas Agriculture 2009*, a publication of the University of Arkansas Division of Agriculture, Arkansas is a leading producer, processor and marketer of protein products, with direct impacts of:

- 1 in 4 agricultural jobs; and
- \$1 in every \$4 of agricultural wages and income

## Arkansas State Fair Broiler Show Encourages State 4H and FFA Program Members



Above: Keith Bramwell presents Daniel Griffin of Paragould with the Grand Champion Pen of Broilers at the 2009 Arkansas State Fair Broiler Show. Right: Alisa Zulkowski, judge for the show.



Above: Bob Wideman and Patty Tyree band chicks.

hatched chicks were banded, boxed and delivered by the poultry science department to participants throughout the state.

Each participant in the broiler show was a member of an Arkansas 4H Club or an Arkansas Future Farmers of

America program. They received a box of thirty broiler chicks and raised the chicks for approximately seven weeks, then entered the best three broilers from



Above: Cody Gallegher, poultry science student from Forman, was one of several students who helped during the show.

the bunch.

Alisa Zulkowski from Texas A&M judged this year's show.

This year's show was held October 10. Keith Bramwell, extension specialist for hatchery-breeder management for the poultry science department, served as the superintendent of poultry. Gary Davis, undergraduate recruiter, served as the show clerk.

The Center of Excellence for Poultry Science conducts the Arkansas State Fair Broiler Show each year and this year was no different. In August newly



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### Scholarship Luncheon

Bumpers College scholarship donors and students who receive scholarships had the opportunity to visit with each other at the college's annual Scholarship Luncheon in the Arkansas Union's Alltel Ballroom Oct. 9.

Thank you to all the donors who provide scholarships for our poultry science students.



Attending the luncheon were: front row, l to r: Hanna Arambel, Hayle Montgomery, Brandi Whittemore, Kristen Byrne and Whitney Downum. Back row, l to r: Hunter Smith, Cody Gallagher and Marvin Childers, president of The Poultry Federation.

Scholarship luncheon  
Continued on Page 6

## Poultry 101 Teaches Processing and Further Processing



Above: Shelly McKee of Auburn University, demonstrates using a hand injector to insert salt water into the meat prior to applying a rotisserie rub. Right: Paul Ludtke with Kerry Ingredients evaluates the color development in the breeding of the prepared samples.



Poultry 101, a three-day, hands-on workshop, was conducted by the Center of Excellence for Poultry Science Sept. 29-Oct. 1. Classes were held at the Pauline Whitaker Animal Science Center and labs took place at the Pilot Processing Plant.

The workshop was designed to introduce participants to production and processing factors that impact final product quality, safety and consistency.

Casey Owens, associate professor of poultry processing and products for the poultry science department, hosted the workshop. Other organizers for the event included Christine Alvarado with Texas Tech University and Shelly McKee of Auburn University.

Sponsors for Poultry 101 included Kerry Ingredients, Budenheim, JBT FoodTech, Stork and Novus.



*The Poultry Science Graduate Student Association welcomed new M.S. and Ph.D. students with an International Lunch at the beginning of the fall semester. Each PSGA member prepared a dish that represented their country. Above: Jeong Nam Kim, graduate student of Young Min Kwon, prepares Bulgogi, a traditional Korean dish.*



*Poultry Science students (L to R) Derek Turner, Coley Bolick, and Katie McGehee, prepare omelettes for participants in the annual poultry processors workshop and faculty and staff. The breakfast has become a much anticipated annual event.*

## Poultry Science Helps Guardsmen Prepare to Teach Poultry Basics to Afghan Farmers

**P**oultry scientists in the University of Arkansas Division of Agriculture recently taught poultry production basics to a National Guard agricultural development team headed to Afghanistan.

Soldiers from the 1-45 Agricultural Development Team of the Oklahoma National Guard attended a Poultry Production Short Course July 29. The guardsmen were deployed to Afghanistan in October and will train Afghan farmers on raising poultry as a food source.

The Unit, led by Major Doug Christerson, attended the 8-hour short course to learn a variety of information and techniques regarding the basic anatomy of the chicken, the recognition, treatment and prevention of common diseases, bird nutrition, breeder management, and managing small flocks.

“This team will face many challenges in their mission,” said Dustan Clark, interim associate center director of extension and extension veterinarian at the Center of Excellence for Poultry Science, as well as organizer of the short course. “It is a religious taboo for men to teach women in Afghanistan and women are the ones who care for livestock and poultry. This unit has four women and they will do the actual training.”

Other challenges the unit may face include illiteracy among those they are training, language barriers, rudimentary equipment (at best) and security for the farmers.

“The country is still at war and is suffering from a 12 year drought, in addition to over 40 years of war and unrest,” said Clark.

The training of the locals will take place at a university as well as in villages in the surrounding areas. Those trained at the University will return to their homes and pass what they learned about

basic poultry production to others in their area and so on.

Lectures and demonstrations were conducted by university poultry faculty and included Susan Watkins, extension poultry specialist; Keith Bramwell, extension reproductive physiologist; Dustan Clark,

interim associate

center director of extension and extension veterinarian; Nick Anthony, professor of poultry breeding and genetics; and Anne Fanatico, research associate with the U.S. Department of Agriculture’s Poultry Production and Product Safety Research Unit. Josh Payne, area animal waste management specialist for the Oklahoma Cooperative Extension Service – Oklahoma State University, also lectured on the value of litter as a fertilizer.



*L: Dustan Clark; R: Major Doug Christerson*

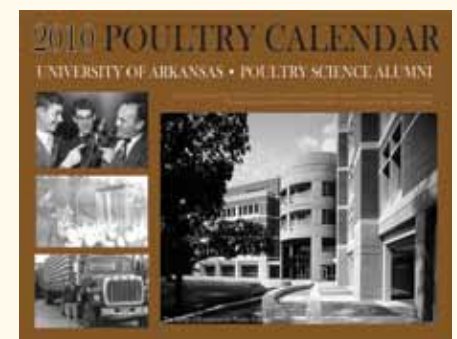
# 1 Fee 3 Memberships 1 Great Deal

**Join the Poultry Science Alumni Organization today!**

If you are a graduate of the poultry science department or have attended 10 or more hours at UA-Fayetteville and you want to join the **Poultry Science Alumni Organization**, all you have to do is join the University of Arkansas Alumni Association. You are automatically enrolled in the Dale Bumpers College of Agricultural, Food & Life Sciences Alumni Organization and the Poultry Science Alumni Organization!

For more information, contact Diana Bisbee  
479-575-2025 or  
dbisbee@uark.edu

If you are already a member, encourage other Poultry Science alumni to join today!



**2010 Poultry Science Alumni Calendars are available NOW!**

To get yours while supplies last, contact Lionel Barton, 479-225-6074 or lbarton@uark.edu.

\$15.00 per copy. All proceeds go into the Poultry Science Alumni Ring & Scholarship account.

## Poultry Science Students Meet Departmental Service Activity Requirements

Students who receive poultry science scholarships help to staff various activities that are conducted by the department throughout the year. Not only is student participation vital to these events running smoothly, but participation is also vital to the growth of the scholarship program as both the student numbers and tuition costs increase.

The students have been busy, and so far have worked the Poultry Federation's 50th Annual Poultry Festival live auction; lent their expertise as temperature takers at the Arkansas 4-H State Barbecue Contest and the Poultry Festival Barbecue Contest; hosted the Poultry Pioneers Museum Room at the Poultry Festival; were camp counselors for the Poultry Science Youth Conference; cooked and served chicken at the Missouri State Fair; assisted with preparations and cleanup for a Cobb-Vantress tailgate party prior to the Arkansas vs. Georgia football game; and worked the



*2009 BBQ Competition Temperature Taker Hannah Arambel*



*The Poultry Federation's Annual Poultry Festival Live Auction (2009). Pictured are, L to R: Chris Scarborough, Catherine Franklin, Tiffany Masters, Rene Fields, Hannah Arambel, Haley Harp, Darla Hancock*



*Missouri State Fair Poultry Grill. Pictured are, L to R: Whitney Tollett, Kaylee Rowland, Jessica Fritts, Brandi Whittemore*



*Youth Conference camp counselors. Pictured are, L to R: Kristen Byrne, Sarah Whipple, Whitney Tollett*

Arkansas State Fair Broiler Show.

## Wooley Retires After 32 Years of Service

Jerry Wooley, Cooperative Extension Poultry Specialist, retired June 30. Wooley joined the University of Arkansas Cooperative Extension Service in April 1977 as a county 4-H Agent for Conway County, Arkansas. In 1983 he was promoted to County Extension Agent Agriculture Community Development Leader for Crawford County, where he served until assuming the position of poultry specialist. Wooley enjoyed major responsibility in the Arkansas Youth Poultry Program. He developed relationships with the young people as well as their parents, 4-H leaders, and teachers and helped them



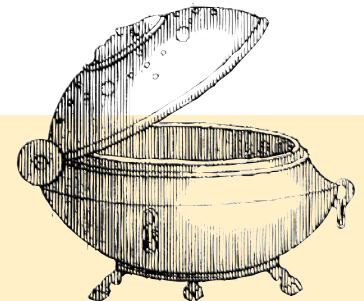
*Jerry Wooley, Cooperative Extension Poultry Specialist, retired June 30. In addition to his many duties, he chaired the 2009 Arkansas 4-H State Barbecue Contest and is pictured here with senior winner Rebecca Simpson of Cave Springs (right) and junior winner Rachel Sanders of Hickory Ridge (left).*

to become aware of the opportunities in poultry science at the University of Arkansas and the integrated poultry industry.

In 2005, Wooley was named Extension Specialist of the Year for the State of Arkansas at the Galaxy Conference held in January.

He also served as the Superintendent of Poultry at the Arkansas State Fair and as a board member of the Arkansas Farm & Ranch. Wooley was chairman of the 4-H Broiler and BBQ activity at the annual Arkansas Poultry Festival.

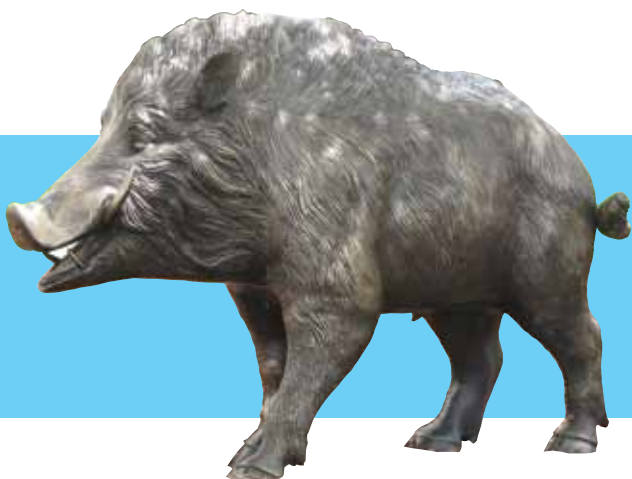
to become aware of the opportunities in poultry science at the University of Arkansas and the integrated poultry industry.



### Poultry Festival Means BBQ Cookoff!



*The Center of Excellence for Poultry Science competed in the BBQ cookoff during the Poultry Federation's 50th Annual Poultry Festival. They placed 3rd in the Allied Division. The BBQ team included, L to R: John Marcy, Jon Moyle, Walter Bottje, Caesar Coto, Keith Bramwell and Doug Yoho. Not pictured: James Denton, John Pruett, H.L. Goodwin and Alvin Phelps.*



**Statue Dedication** The hog statue, located in front of the John W. Tyson Poultry Science Building, was dedicated to Don Tyson by Paul Young III, son of the late architect Paul Young, Jr., on July 2.

"Today's dedication ceremony brought together two families who have played a significant role in the development of northwest Arkansas," said Chancellor G. David Gearhart. "I am pleased to have a new statue on our campus that represents their generous, philanthropic hearts."



Front row, L to R: Keith Lusby, Helen Brandenburger, Robert Wideman; Middle row, L to R: Dan Donoghue, Gisela Erf, Norma Stephenson, Krishna Hamal; Back row, L to R: Carolyn Frederick, Amanda Kavalir, Lara Baker, Wayne Kuenzel

## Brandenburger Named UA Employee of the Year

Helen Brandenburger was selected by the University of Arkansas as Employee of the Year for 2008-2009. She won in the Category II - Secretarial/Clerical division. Brandenburger won Employee of the 3rd Quarter, 2008-2009, as well.

She has had quite a colorful past. During the second world war she worked in an aircraft factory on Long Island building Hellcat and Wildcat fighters for the Navy. She came to the University of Arkansas 19 years ago and has served as the secretary for eight professors in the Center of Excellence for Poultry Science for the past 15 years.

“We nominated Helen for this award because of her outstanding service as the de facto technical editor and proofreader for our department,” said Robert Wideman, Associate Director of the Center. “She graciously performs this valued service in addition to accomplishing her traditional secretarial assignments.”

“Helen’s expertise is broadly recognized and highly appreciated by our staff, students and faculty,” said Wideman. “We all are sincerely pleased to see her win this award.”

## Tyson Foods Poultry Industry Short Course



L to R: John Kathol, Susan Watkins, Nick Anthony and Tommy Lorince study a chicken during an egg formation and candling lab conducted by Anthony during a Tyson Foods Poultry Industry Short Course that took place in October at the Center of Excellence for Poultry Science.



Victoria Anderson from Hope participates in the egg candling exercise during the 2009 State 4-H O'Rama Poultry Judging Contest held at the University of Arkansas July 22-24.

## FACULTY NOTABLES

**Dan Donoghue** gave a presentation titled “In vitro selection of enteric microflora for potential use as a probiotic culture against Campylobacter in poultry” at the 5th International Yakult Symposium on Probiotics in Amsterdam Netherlands, June 18-19th, 2009.

**Casey Owens Hanning** traveled to Cordoba, Veracruz, Mexico to present “Technological Innovations in Poultry Processing” at the 50th Anniversary of the Colegio De Postgraduados (Postgraduate College) in their 16th International Conference in Poultry. She presented on September 18, 2009.

**Dr. Gisela Erf**, her doctoral graduate students Fengying Shi, Lei Dong, Nadezda Stepicheva and Honors student Jordan Sorrick attended the 2009 Conference of the PanAmerican Society for Pigment Cell Research in Memphis, TN September 4-7, 2009. Erf and Shi presented research papers on autoimmune vitiligo selected for oral presentation by the Organizing Committee. Additionally, Fengying Shi was awarded a travel grant from the Society.



The Poultry Science Association awarded **Billy M. Hargis**, professor and director of the Poultry Health Research Laboratory, the Frank Perdue Live Poultry Food Safety Award. The award is given in recognition of devoted service and lasting contribution to the poultry industry and the Poultry Science Association.

**Dan Donoghue** gave a presentation

titled “Caprylic acid reduces enteric Campylobacter colonization in market aged broiler chickens but does not alter cecal microbial populations” at the 15th International Workshop on Campylobacter, Helicobacter and Related Organisms in Niigata Japan, September 2-5 2009.

**Susan Watkins** has been chosen as the contact for Phase One of a grant which will evaluate the efficiency and effectiveness of new lighting technology in the poultry industry.

**Gisela Erf** has been invited to participate in the vitiligo road map, a newly developed program of the National Vitiligo Foundation, due to her research in the field of vitiligo.

**Walter Bottje** recently had a paper published in Poultry Science entitled “Mitochondrial proton leak kinetics and relationship with feed efficiency within a single genetic line of male broilers.”

**Susan Watkins**, extension poultry specialist, recently partnered with the University of Georgia on a publication entitled “Poultry Housing Tips - The Importance of Flushing Evaporative Cooling Systems.” Vol. 21, No. 8, July 2009.

## STUDENT NOTABLES

**Lakshmi Kannan**, who received her Ph.D. under the supervision of Dr. Narayan Rath, will be working as a post doc in the Division of Rheumatology and Immunology at Harvard University (Beth Israel Deaconess Medical Center).

**Ixchel Reyes-Herrera** was awarded the Student Certificate of Excellence for her presentation at the 98th Poultry Science Association meeting in Raleigh, NC. The title of her presentation



# PARTNERS

*in* POULTRY SCIENCE

Scholarship luncheon continued from Page 2



Front row, l to r: Sara Lilygren, Emily Lhamon, Famous Yang; Back row, l to r: Mike Norton, Archie Schaffer and Justin West



l to r: Stacey Storey, Richard H. Forsythe and Kaylee Rowland



l to r: Jessica Fritts and Archie Schaffer

was “Validation of a simple screening procedure to estimate contaminant concentrations in processed poultry.” Ixchel is a University of Arkansas Graduate College Doctoral Fellowship Recipient and is completing her doctoral studies under the direction of Dan Donoghue. She also received both a Student Certificate of Excellence and the Nicholas Student Paper Award at earlier Poultry Science Association Meetings.



Doctoral candidate **Ixchel Reyes-Herrera** (right) and student worker

Ellie Donoghue (left) presented research results at the 15th International Workshop on Campylobacter, Helicobacter and Related Organisms in Niigata, Japan September 2-5 2009. The title of their presentation was “Campylobacter jejuni colonization altered mucin dynamics and gut architecture in broilers.”

#### IN MEMORIA

Joseph Noble Beasley, 85, passed away in May.

He served in the Army and then the Navy as pharmacist mate. He was on the faculty at Texas A&M University for seven years and at the medical school in Oklahoma City for two years. He retired from the poultry science department at the University of Arkansas in 1995.



John Marcy conducted a Culinary Arts Fundamental Course for Food Technologists September 14-18. The 40-contact-hour, five-day hands-on training workshop included preparation techniques, creating stocks and sauces, knife handling, and sauteing, roasting, broiling, grilling, braising, and poaching beef, pork and poultry.