

partners

in POULTRY SCIENCE

Newsletter of the Center of Excellence for Poultry Science • University of Arkansas • Division of Agriculture

From the *director*



Dr. Walter Bottje,
Center of Excellence
for Poultry Science
Director

We've had a ton of things going on the last few months, but as you read this newsletter, you might begin to think that this is the Jason Emmert show.

I was absolutely pleased that Dr. Emmert came to the special announcement made on Oct. 13 in an old T shirt, fresh from the farm where he had been working with the judging team. It

meant; 1) he had no idea that he would be named the next holder of the Poultry Federation Chair, and 2) he was doing what he does best – teaching and working with students. Other news items on Jason is that the judging team got first place at the National Collegiate Poultry Judging competition - congratulations to Neda Tilley for getting high point overall and to the entire team. Jason also received a national teaching award from USDA.

The excerpted letter from Richard Lobb on Ashley Cox is very telling with regard to how well our students do 'on the job.' Ashley did an internship at the National

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UNIVERSITY OF ARKANSAS

UofA UNIVERSITY OF ARKANSAS
DIVISION OF AGRICULTURE

UA Poultry Judging Team Takes 1st Place in Nation

FAYETTEVILLE — The University of Arkansas Department of Poultry Science judging team took first place at the 39th Annual National Collegiate Poultry Judging Contest Nov. 7-9 on the UA campus. Eleven schools from across the country participated in the two-day event.

Neda Tilley, a sophomore from Leslie, had the highest individual score, and Valerie Brewer, a sophomore from Prairie Grove had the fifth highest score. Other members of the UA team were Dustin Biery, a junior from Fayetteville; and Ashley Swaffar, a sophomore from Farmington. Alternate was Josh Evatt of Vilonia, and coaches were Dr. Jason Emmert, associate professor and LeAnn Layman, a senior poultry science major from Springdale.

Following the first-place UA team, in order of scoring, were Kansas State University (KSU), second place; Penn State (PSU), third place; Louisiana State University (LSU), fourth place; and Texas A&M University (TAMU) fifth place. The other teams that participated were: Mississippi State University (MSU); North Carolina State University (NCSU); Stephen F. Austin University (SAFU); the University of Wisconsin-River Falls (UWRF); the University of Georgia (UGA); and West Virginia University (WVU).

Top 10 individuals for high score were: Neda Tilley (UA), John Small (NCSU), Kabel Robbins (KSU), Corey Bartholomew (PSU), Valerie Brewer (UA), Bo Kyle (LSU), Bradley Martin (TAMU), Jessica Butler (TAMU), Jacob Burden (KSU), and Matt Ventrella (PSU).

Sponsors for the event were The Poultry Federation, Arkansas Egg, Butterball, Cargill, Inc., Cobb-Vantress, Inc., George's Inc., and Tyson Foods, Inc. Special assistance to the contest was also provided by The Poultry Improvement Committee.

Members of the University of Arkansas team took first place in the National Collegiate Poultry Judging Contest held Nov. 7-9. Team members on the front row from left are Valerie Brewer, Ashley Swaffar and Neda Tilley; back row is Dr. Jason Emmert (Coach), Josh Evatt (alternate), Dustin Biery and LeAnn Layman (Asst. Coach).



in this issue

Judging Team Wins!
Emmert named Poultry Chair
Wideman named to CFAR
Shooting for Barney



Tyson hosts Meat Your Future
Ashley Cox interns at NCC
Savoy to become State-of-the-Art

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Chicken Council and obviously turned some heads.

There are several notable items in this issue of Partner's that you'll find interesting. A Listeria Summit was hosted by the Center in conjunction with Wal-Mart and Tyson. Tyson Foods, Inc., also hosted a 'Meat Your Future' day, which was a recruiting effort.

One of the more unusual, yet fun activities highlighted in this issue was the video project when we were 'Shooting for Barney.' If you don't quite understand what that means, see inside the newsletter for an explanation.

In closing, on behalf of the Center and my family, we hope that you and your family have a wonderful holiday season and happy new year!

At press time, the new Meat & Poultry® Magazine rankings came out. The University of Arkansas combined meat & poultry programs was ranked 3rd in the nation, up from 4th in the last rankings!

Partners is a newsletter for faculty, staff, students, alumni and friends of the Center of Excellence for Poultry Science, University of Arkansas Division of Agriculture and Dale Bumpers College of Agricultural, Food and Life Sciences, UA-Fayetteville.

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Emmert named Poultry Federation Endowed Chair

FAYETTEVILLE — Dr. Walter Bottje, head of the poultry science department at the University of Arkansas, announced Oct. 13th the appointment of Dr. Jason Emmert to the Poultry Federation Endowed Chair for Poultry Science in the Dale Bumpers College of Agricultural, Food and Life Sciences and the U of A System's Division of Agriculture.

Emmert, an associate professor, joined the poultry science faculty in 1997 as the Undergraduate Curriculum Coordinator. In 2002, Emmert received the Purina Mills Award for Excellence in Teaching. In 2003, Emmert was inducted into the University of Arkansas Teaching Academy.

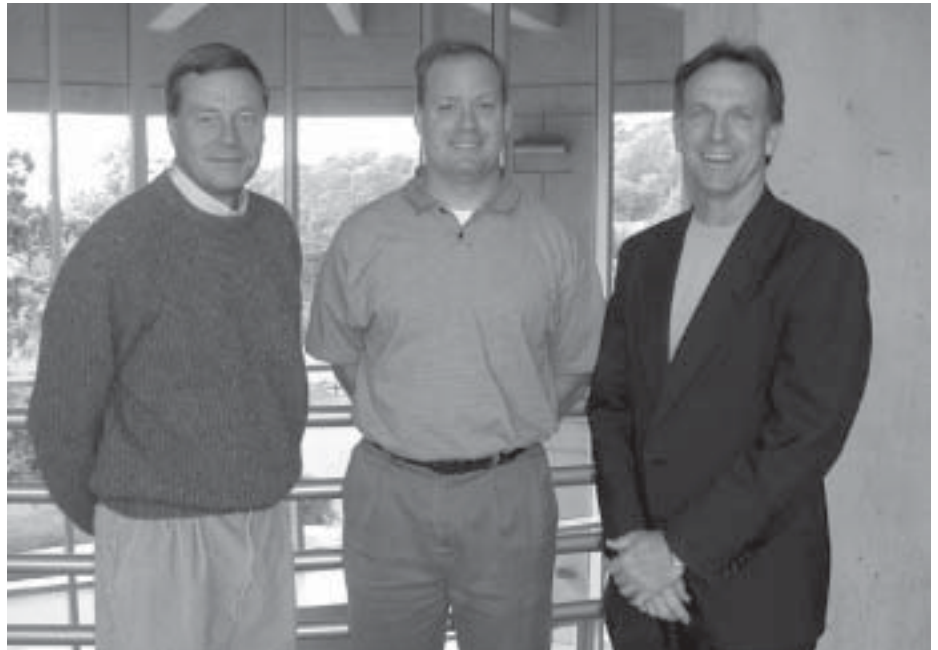
"Dr. Emmert is recognized as one of the leading educators in the poultry field and I'm proud that our college, in cooperation with the Poultry Federation, can honor his outstanding work in this manner," said Dr. Gregory Weidemann, dean of the college and associate vice president of the division of agriculture.

"It's obvious to me this poultry center continues to balance the importance of both teaching and research in their programs," said Morril Harriman, president of the Poultry Federation. "I was completely in agreement with the selection of Dr. Emmert for this position."

The chair was endowed by the Poultry Federation in 1998 to be held by a faculty member for three to five years to promote a program area and then moved to a different program.

Funds generated from the endowment will be used toward the enhancement of Emmert's teaching programs in the Department of Poultry Science.

"Jason has been instrumental in recruiting, advising and mentoring our poultry science students," said Bottje. "I am delighted to present this award to him on behalf of the Poultry Federation and look forward to seeing the new programs he will implement with this award."



NAMING OF THE NEW ENDOWED CHAIR: From left, Morril Harriman, president of the Poultry Federation, Jason Emmert, associate professor in poultry science and Walter Bottje, Department Head, pose after the naming of Emmert as the new Poultry Federation Endowed Chair.

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Wideman named to The Board of Directors of the National Coalition for Food and Agricultural Research



WASHINGTON, D.C. -The National Coalition for Food and Agricultural Research (C-FAR) has announced the appointment of Dr. Robert (Bob) Wideman, Jr., associate director of the University of Arkansas Division of Agriculture's Center of Excellence for Poultry Science, to serve on its board of directors.

C-FAR is a coalition of 20 national organizations, 43 universities and one corporation. Its mission is to sustain and enhance federal funding for food and agricultural research, extension and education. The Federation of Animal Science Societies nominated Wideman for service on the C-FAR board.

Wideman is a professor of poultry physiology in Dale Bumpers College of Agricultural, Food and Life Sciences. He joined the U of A in 1993 as the newly-established Arkansas Poultry Federation Chair.

In 2003, Wideman was appointed by U.S. Secretary of Agriculture Ann Veneman to serve on the Research, Education, and Economics Task Force. The task force was formed to evaluate the merits of establishing national institutes for food and agricultural research.

In 2001, Wideman served on the Poultry Science Ph.D. Program Assessment Committee for the Arkansas Department of Higher Education and was president of the Federation of Animal Science Societies.

POSC Employee Russ Tackett receives 30-year award from U of A



From left: Bob Wideman, assoc. director of the Center of Excellence, Russ Tackett, and Walter Bottje, Center Director attend the employee awards ceremony at the University of Arkansas.

FAYETTEVILLE — Mr. Russell Tackett has been the technician for the Poultry Environmental Research Lab since it was built in 1971. Russ is widely acknowledged in our unit as a key professional whose dedication, reliability, electrical engineering ability, and unwavering can-do attitude have provided the foundation for a multitude of successful research advances over the decades.

The present and former faculty and students of the Center of Excellence owe Russ much for their own successes and sincerely wish to convey our profound appreciation for Russ Tackett's years of dedicated professionalism.

Congratulations Russ on your accomplishment and we appreciate your continued dedication to the programs and mission of the Center of Excellence for Poultry Science.



COOKING OMELETS: From left, LeAnn Layman, Amanda Drake, Tamara Leonard and Josh Evatt, all members of the Poultry Science Club, cook omelets for the Nutrition Workshop held in Northwest Arkansas in October. The club often cooks for functions to raise money for worthwhile service projects and to fund their annual banquet. If your organization is looking for someone to cook breakfast, please contact Donna Tinsley at (479) 575-3250.

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Ashley Cox, undegrad, works at National Chicken Council and “blows them away”

The following is an excerpt of a letter sent to faculty member Susan Watkins from the National Chicken Council:

Dear Dr. Watkins,
I am writing to report on the internship of Miss Ashley Cox at the National Chicken Council. I must tell you that Ashley did not meet our expectations.

She did not meet our expectations, because she exceeded them by such a wide margin that she sort of exploded our expectations into little pieces and left them lying in the streets. Ashley rewrote the book on interning at NCC.

I knew Ashley was destined to dazzle us from her first day on the job, which was the Sunday that our Food Media Seminar began. The seminar is a signature event for NCC, attracting food editors from around the country. It was held in Washington for the first time this year. Despite the fact that she knew not a soul there, Ashley plunged right in to help manage the event, and her poise and tact were perfect for the occasion.

(There was more, but space is limited. So we could only include half of the letter.) It was written by:

Richard L. Lobb
Director of Communications
National Chicken Council

CONGRATULATIONS ASHLEY and thank you for representing the department so well!

Listeria “Summit” held on campus; hosted by Wal-Mart, Tyson and the U of A

FAYETTEVILLE —Listeriosis, a serious infection caused by eating food contaminated with the bacterium *Listeria monocytogenes*, has recently been recognized as an important public health problem in the United States. The disease affects primarily pregnant women, newborns and adults with weakened immune systems.

Symptoms include fever, muscle aches, and sometimes gastrointestinal symptoms such as nausea or diarrhea. If infection spreads to the nervous system, symptoms such as headache, stiff neck, confusion, loss of balance, or convulsions can occur.

Recently, Wal-Mart, Tyson Foods, Inc., and the University of Arkansas Center of Excellence for Poultry Science hosted a Listeria Summit for members of the food industry, which included educators, wholesalers and retailers.

Dr. John Marcy, Extension scientist and food safety expert with the U of A’s Department of Poultry Science and the Cooperative Extension Service in the Division of Agriculture, served as organizer and host of the event.

Topics during the two-day summit included discussion about the illness, ways to avoid contamination in food processing and overall food safety with regards to the participants’ business operations.

LISTERIA SUMMIT: From left, Dr. John Marcy, UA food safety expert, Gale Prince, Corporate Regulatory Affairs Director, The Kroger Company and Dr. James Denton, Food Safety Consortium member and emeritus faculty member attend a reception at Carnall Hall hosted by Tyson Foods, Inc., during the Listeria Summit on the U of A campus.



Lubing Systems, L.P. donates Nipple-drinking System



DONATION: From left, Dr. Wayne Kuenzel, professor of poultry science, Dale Goodwin, regional sales manager of Lubing Systems and Dr. Walter Bottje, center director pose after announcing that Lubing Systems of Cleveland, Tenn., has donated a \$5,000 custom-made nipple drinking system for the newly renovated broiler breeder house at the University of Arkansas’ poultry farm.

The president of Lubing Systems is Mr. John Hawk, and the U of A poultry department would like to thank him and his company for their generous and much-needed donation.

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Emmert receives National Teaching Award from USDA

SAN DIEGO — University of Arkansas faculty member Dr. Jason Emmert recently received a National Award for Excellence in College and University Teaching in the Food and Agricultural Sciences for the Southern Region. This award was presented by the USDA on Nov. 14, at the 117th Annual National Association of State Universities and Land-Grant Colleges (NASULGC) meeting held in San Diego.

Emmert is an associate professor in poultry science in the Dale Bumpers College of Agricultural, Food and Life Sciences and the Division of Agriculture at the U of A.

The award program is offered annually to honor a select group of college and university teachers who excel at teaching, make a positive impact on student learning and influence other teachers by example. It was originally designed to focus national attention on the teaching role in agricultural studies.

Teachers are nominated and then a selection committee chooses two award winners in each of the four USDA regions. Emmert received a plaque, a small statuette and a check for \$2,000, which will be used to enhance his teaching program at the U of A.

NATIONAL AWARD WINNER:

Dr. Jason Emmert, associate professor in poultry science, is shown holding his recent awards from the USDA higher education program committee. Emmert received a plaque, statuette and \$2000 check, which he will use to enhance his teaching program at the U of A.



Center of Excellence films hatching chicks for possible use on upcoming Barney video



SHOOTING FOR BARNEY: Aaron Bartlett, videographer, is shown filming hatching eggs in an incubator. A HIT entertainment representative, producer of the hit children's show "Barney and Friends" contacted the poultry science department asking for footage of chicks hatching from eggs.

After procuring eggs, chicks were hatched and filmed with the possibility of being used in an upcoming Barney and Friends video. The footage will also be used by Dr. Susan Watkins for incubation projects with local school children.

The PSGA donates 300 Turkeys to Ozark Food Bank

FAYETTEVILLE — Members of the Poultry Science Graduate Association (PSGA) recently donated 300 turkeys to the Ozark Food Bank.

"We had turkeys that were not currently being used for a research project, so Amanda Wolfenden, PSGA president, got the graduate students together and decided that if the department could spare them, we would provide the labor necessary to raise and process the birds so they could be donated to the Ozark Food Bank," said Lisa Bielke, past president of PSGA.

"Each day graduate students would head to the farm to care for the birds with the hope that this holiday, we could make a difference in the lives of hundreds of Northwest Arkansas families," said Bielke.

The birds were processed and delivered to the Ozark Food Bank on November 17th for distribution.

"Dr. Walter Bottje (department head) and the UA feed mill were kind enough to donate feed for the birds during their grow-out period, but the labor came from U of A graduate students," said Bielke. She went on to say she was proud of her group's efforts.

Not to be outdone by the graduate students, undergraduate members of the Poultry Science Club set up boxes on each floor of the poultry building and gathered food from faculty, staff and students, which was also donated for Thanksgiving dinners.



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U of A Poultry Science looks toward future: ready to make Savoy state-of-the-art

CONCEPT AND GOALS FOR THE APPLIED POULTRY RESEARCH FARM (APRF):

The overall objective of the APRF is to implement best available technology that is economically feasible so that APRF is transitioned from a Broiler Energy Verification unit into a competitive broiler production facility with uniform housing and equipment that can address the present and future research and education needs for the commercial production of broilers. The following areas would be addressed:

Making the unit a hands-on training facility for Poultry Science students to learn to manage modern tunnel ventilated facilities and learn the daily issues associated with poultry production (such as air quality, litter management, feed and water management and animal welfare audits.) Familiarize students with equipment operation and maintenance and develop an understanding for additional factors, which contribute to the success of poultry production such as water quality and sanitation, pest control and environmental concerns.

Industry needs service technicians who are familiar with the latest technology for managing poultry facilities. Developing the APRF into a teaching tool would complement and enhance the curriculum that is currently in place in our program. Students would have the opportunity to implement classroom knowledge, further strengthening their value to future employers. This could be achieved by developing a junior level special topics course that would be managed by Dr. Susan Watkins with the assistance of the APRF manager.

Companies send personnel that need new or specific training. By combining service technicians from several companies it will be possible to reduce the costs of any one company for employee training. In addition, the U of A will share expertise with other institutions such as Auburn and the University of Georgia.

Initial phases for conversion:

1) First phase: Convert existing houses to tunnel ventilation – this will include creating as uniform environment as possible in all four houses; solid side wall (Ag Foam is considered as solid side wall); total replacement of fans, controllers, cool cell pads and eventually, replace all other equipment in the houses; feed lines, feeding and water systems.

2) Second phase: to increase the number (n) of replicates, a fencing system will be put into each house to split each house into two long units (lengthwise). Additional feed bin capacity and feeder tubes will need to be installed in order to facilitate measurement of feed in each half house and different diets (depending on experiment objective).

The concepts and goals written here are just a brief overview or “starting point” for updating the farm at Savoy to a state-of-the-art facility that can be used by teaching programs in addition to poultry companies for training and research.

You will be hearing more about this much-needed project in the coming months. We invite you to get involved and assist us in transforming Savoy from a broiler energy verification unit to a competitive production facility that will benefit your organization or company.

Please feel free to contact Dr. Walter Bottje if you have pertinent information or resources that can help the U of A make the transformation possible.

Congratulations are in order...

Congratulations to faculty member Dr. Young-Min Kwon and his wife Jinnie. They welcomed a baby boy, Bethel, on Oct. 19th. Bethel weighed 7.2 lbs. and was 20 inches long.

Congratulations to USDA scientist Morgan Farnell and his wife Yuhua (post doc in animal science). They welcomed a baby boy, Matthew Norris, on Oct. 28th. Matthew weighed 8 lbs. 12 ozs. and was 21.25 inches long.

Congratulations to faculty member Dr. John Marcy. Dr. Marcy was married to Pat Hughes on December 18, 2004 in Fayetteville.

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Tyson Recruits UA Students during “Meat Your Future”



MEAT YOUR FUTURE: From left, Dr. Susan Watkins, organizer of event and UA faculty member; Carrie Burnett, Ulanda Terry and Jade Briggs, human resources representatives from Tyson Foods, Inc., and Ashley Swaffar, sophomore poultry science student and co-organizer of the event. “Meat Your Future” was a major recruitment event on the U of A campus. It gave students an opportunity to explore employment options, turn in resumes and meet team members from the largest protein provider in the world.

FACULTY NOTABLES:

David Chapman gave invited presentations on the control of coccidiosis to poultry producers in Thailand and Malaysia, July 5-17th, 2004, and was the invited keynote speaker at the meeting of the World’s Veterinary Poultry Association in Forli, Italy, October 8th, 2004.

James Denton served as Chairman of the National Alliance for Food Safety and Security Operations Committee and Board of Directors Meetings in Phoenix, AZ on Aug. 7th; and **Denton** conducted a HACCP workshop in collaboration with Rich Linton and **John Marcy** and Jon Porter at Purdue University, Sept. 27-29; **Denton** also gave an invited presentation during the National Turkey Federation Technical Regulatory Committee Meeting in Washington DC on Oct. 11-12; **Denton** also served as Program Chairman for the IFT International Food Safety and Quality Conference during the IFT fall meetings held in Chicago Oct. 23-24. **Denton** also participated in the National Advisory Committee for Meat and Poultry Inspection Meeting in Washington, D.C., Nov. 15-17 and served as Chairman of the subcommittee reviewing the issue of developing a data depository to help FSIS anticipate food borne hazards.

Gisela Erf gave an invited talk at the Avian Immunology Research Group Meeting in Munich, Germany, on “the delayed wattle response in chickens - a measure of cell-mediated immunity” Sept. 4-7. This talk was based on research conducted by Erf’s Honors

Grants Received:

Grants are listed in order of receipt...

H.L. Goodwin, Jr.
USDA NRCS \$200,000*

Billy Hargis, David Edmark, Dan Donoghue, Greg Weidemann (PI), Yanbin Li, Michael Johnson, Michael Slavik and Navam Hettiarachachy
USDA CSREES \$717,900**

Wayne Kuenzel, John Kirby
National Science Foundation \$74,467

Billy Hargis
Titan Corp \$8,107

Jason Emmert
United Feeds \$10,500

Walter Bottje (Broiler Breeder Farm)
Cobb-Vantress, Inc. \$18,447

John Kirby
National Science Foundation \$296,862

Jason Emmert
Phytex \$7,000

Park Waldroup
Tyson Foods, Inc. \$1,000

Park Waldroup
Loders Croklaan \$11,000

Jean-Francois Meullenet (PI) and Casey Owens
U.S. Poultry and Egg \$24,063*

Craig Coon
Danisco Animal Nutrition \$24,691

Craig Coon
Danisco Animal Nutrition \$200,000

Wayne Kuenzel
Intracranial Hypertension
Research Foundation \$17,850

Casey Owens (PI), Jason Emmert and Jean-Francois Meullenet
U.S. Poultry and Egg \$21,188

* Credit was given to another department.

** Credit was given to the Experiment Station.



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FACULTY NOTABLES (cont'd):

student **Indu Ramachandran**. She also gave an invited talk on Cell-mediated immunity in poultry: cells, cytokines and mechanisms in Mexico (Nov. 19) at a Symposium on Avian Immunology offered by ANECA (Asociacion Nacional de Especialistas en Ciencias Avicolas) in the city of Queretaro.

Jason Emmert was awarded the Poultry Federation Endowed Chair on Oct. 13th at the CEPS, and he recently received the National Award for Excellence in College and University Teaching in the Food and Agricultural Sciences for the Southern Region. This award was presented by the USDA on Nov. 14, at the 117th Annual National Association of State Universities and Land-Grant Colleges (NASULGC) meeting held in San Diego.

Yanbin Li gave an invited presentation at 2004 CIGR (International Commission of Agricultural Engineering) International Conference in Beijing, China, October 11-14, 2004. The title was "Microfluidics based biosensors for rapid detection of *E. coli* O157:H7." He also gave an invited presentation, titled "Brief introduction of biological engineering programs at the University of Arkansas," at the International Forum on Biosystems Engineering Programs, October 16-18, 2004, Hangzhou, China.

Casey Owens presented "Eggs as Ingredients" in the National Egg Products School in Columbus, Ohio, Oct. 10-14. And Poultry 101 was held at Auburn University, Oct 19-21. **Owens** is a program planner for Poultry 101 and represented the University of Arkansas.

Park Waldroup gave the following presentations: "Enzymes for Corn-soybean meal diets" at the Central America and Caribbean Poultry Congress, in San Pedro Sula, Honduras; and, "Recent Research in Broiler Nutrition" at the Arkansas Nutrition Conference in Rogers.

Susan Watkins served on the selection committee for the U.S. Poultry and

NOTABLES (cont'd):

Egg Family Farm Environmental Award. **Watkins** also gave invited presentations to the Walco Sales meeting in Dallas Texas; the Tyson Center, in Nacogdoches, TX; Sanderson Farms, in Bryan Texas; Pilgrim's Pride, in Nacogdoches, TX; The US Poultry and Egg Production and Health Seminar; Perdue Farms, in Evansville, IN; Tyson Foods, in Maysfield, KY; Pilgrim's Pride in Owensville, KY; the Georgia Poultry Conference, in Athens, GA; the Turkey Committee Meeting, in Eureka Springs; at the Cargill Production managers meeting, in Wichita, KS; to Tyson Foods, Monett Complex grower meeting; the OSU Poultry Waste Management Annual Update in Poteau and Spiro, OK; and the Poultry Service Industry Workshop, in Banff, Alberta, Canada. **Watkins** also served as co-chair the National Poultry Waste Management Symposium, in Memphis, TN

STUDENT NOTABLES

The University of Arkansas Poultry Judging Team took first place at the National Collegiate Poultry Judging Contest held Nov. 8-9. Members of the team are **Dustin Biery** from Fayetteville, **Valerie Brewer** from Prairie Grove, **Ashley Swaffar** from Farmington and **Neda Tilley** from Leslie. **Tilley** also took high-point individual overall and **Brewer** took fifth place overall.

Zhihui Liu, PhD student of **Yanbin Li's**, won the first prize of the Graduate Poster Competition at the Arkansas Section of ASAE 2004 annual meeting, October 1, 2004, Little Rock. His poster title was "The mechanism, scale up, and pilot plant scale test of a flow-through electrolyzing chamber for in-line inactivation of *Listeria* in recirculated chilling brine." **Abani Pradhan**, also a PhD student of **Yanbin Li's**, won the second prize at the same meeting. His poster title was "A quantitative microbial risk assessment model for *Salmonella* Typhimurium in poultry processing."

Jada Thompson, freshman from Lincoln, took 2nd place in the nation for the Poultry Evaluation Career Development Event at the National FFA Convention in Louisville, KY.

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