

# APSC

The Department of  
Animal and Poultry Sciences

[www.apsc.vt.edu](http://www.apsc.vt.edu)

## Dear Alumni and Friends:

This past weekend I had the privilege of sharing the elation and excitement with a set of young people that only four years at an institution of higher learning can produce. The day began in the lobby and auditorium of Litton-Reaves, where faculty and staff prepared a scrumptious meal with all the fixin's, including biscuits, bagels, fruit, and all the coffee one could consume.

Discussions with graduating seniors, their parents, family, and friends about their academic careers and future endeavors are among the greatest blessings for those of us working in academe. After a couple hours of chatting and group photos, well over 100 newly minted graduates proceeded across the stage in Cassell Coliseum to receive their diplomas and begin another chapter of their lives. Ryan Burnette, president of the CALS Alumni Association addressed the graduates and eloquently challenged them to a life of service. Ryan's sense of humor and accomplishments (Biochemistry, Ph.D. '04) seemed to strike a chord with the graduates and audience, and the enthusiasm mounted in response to the challenge. What an absolutely marvelous event and venue. This is always such a welcome and delightful time in Blacksburg.

The department continues its legacy of excellence for the college, university, and Commonwealth. Recent reports indicate one of the largest incoming freshman classes will enroll in the department this fall. This matriculation will be met with arguably one of the most gifted animal sciences faculties in the country. In support of this thesis, members of this faculty have successfully competed for over \$3 million in federal funding from agencies including the National Science Foundation, United States Department of Agriculture, and the Pork Board. Even more resources have been secured from a number of state and local

agencies, as well as a plethora of allied industries. Securing these funds is indispensable to the land-grant mission as these additional resources allow us to better serve our stakeholders with new knowledge and provides the next generation of leaders even greater opportunities to grow intellectually. Being part of such a dynamic and vibrant faculty is certainly a privilege.

Should you have any questions or comments about the department or animal agriculture in general, please don't hesitate to let me know.

As always, should you find yourself in Blacksburg for whatever reason, please stop in for a visit.

Respectfully,



David E. Gerrard  
Professor and Department Head  
Department of Animal and Poultry Sciences



*David E. Gerrard, professor and  
department head*





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VT/0614/WEB/APSC-58

## Faculty recognition

### Teresa L. McDonald

Not only did Teresa McDonald have a major impact on the equitation program at Virginia Tech, her influence in intercollegiate riding has also spread far and wide for many years. Teresa was an active board member for the Intercollegiate Horse Show Association for years and was a founding member of the Intercollegiate Dressage Association, serving as a board member and steward. She was known in both organizations as "Madeline Albright," because of her voice of reason and rational approach during volatile situations. To acknowledge T's significant contributions to these organizations, both the IDA and IHSA honored her with special awards this spring.

Each year the IDA names a coach of the year who not only embodies the spirit of the organization, but also goes above and beyond, not only for their students, but also for the betterment of the IDA. This award will be known in the future as the Teresa L. McDonald Coach of the Year Award. At IDA Nationals in April, Bill and Joseph McDonald were present at the awards banquet to award the trophy to this year's recipient, Kari Briggs, from Otterbein University.

Bill and Joseph also traveled to IHSA Nationals in Harrisburg, Pennsylvania, on May 3 to present another of these special awards. During her involvement in the IHSA, Teresa served on the education committee that established a written test of horsemanship to help promote well-rounded horsemen, instead of just accomplished riders. This spring, the top two scorers from each zone in IHSA were invited to the National Championship to take part in a practicum phase administered by two of the show's judges. The winner of the very first Teresa L. McDonald IHSA Scholarship Challenge was Shannon Bower from Bridgewater College. Shannon received a scholarship and memorial trophy presented during an awards ceremony by Bill and Joseph.



*Teresa L. McDonald*



*Presentation of the Teresa L. McDonald Coach of the Year Award. L to R: IDA President Beth Beukema, Joseph McDonald, award recipient Kari Briggs, and Bill McDonald.*

## Faculty activities

### Virginia Cooperative Extension Celebrates 100 Years



Elizabeth Gilbert

Mark Cline

#### Grant Award

Elizabeth Gilbert and Mark Cline were awarded a Commonwealth Health Research Board Grant for the proposal entitled, "Using anorexic and obese chickens to identify targets for appetite regulation." Keith Ray in the Department of Biochemistry is a Co-Investigator and Paul Siegel is a Collaborator. The project focuses on using a proteomics approach to identify appetite-associated proteins in the hypothalamus (a region of the brain that modulates appetite) of low-weight (LWS) and high-weight (HWS) selected chickens that originate from a common genetic ancestor. The LWS chickens are hypophagic with some anorexics, while the HWS are compulsive feeders that become obese as juveniles. Understanding differences in appetite regulation in these lines of chickens might shed light on novel strategies for treating eating disorders in humans.

In 2014, we celebrate the signing of the Smith-Lever Act, which established the Cooperative Extension Service, a unique educational partnership between the U.S. Department of Agriculture and the nation's land-grant universities that extends research-based knowledge through a state-by-state network of extension educators. For 100 years, the Smith-Lever Act has stimulated innovative research and vital educational programs for youth and adults through progressive information delivery systems that have improved lives and shaped a nation. Join us as we celebrate 100 years of extending knowledge and changing lives.

On May 8, Virginia Tech hosted Virginia Cooperative Extension Day – Extension Centennial Showcase. Extension faculty and staff from more than 15 departments and three colleges provided displays that informed participants about the people and programs that are extending knowledge and changing lives across the commonwealth, the country, and the world. The showcase highlighted the Extension faculty who work in 107 county and city offices, 11 agricultural research and extension centers, and six 4-H educational centers.

To celebrate our tradition, the Department of Animal and Poultry Sciences provided two displays that highlighted APSC Extension's role throughout the years. Youth and adult programs were celebrated at this event.

#### 1940s and 1950s



*Virginia Cooperative Extension and Virginia Department of Agriculture team up to formalize grading of feeder cattle during the 1940s and 1950s, which identified and assured the quality of calves being sent to the Midwest to be finished and allowed for commingling of ownership for marketing purposes. By the mid-1950s, Virginia's graded feeder calf sale program was recognized nationally as unsurpassed. In 1997, through cooperative efforts among VCE, Virginia Cattlemen's Association, VDACS, and producer organizations, the Virginia Quality Assured Feeder Cattle program was born. This program has resulted in more than \$5.2 million in value-added income for beef producers.*

[VA Cooperative Extension Record Group 26/2, (AGR 3913)]  
Digital Library and Archives, University Libraries, Virginia Tech.

#### 1955



*VCE helps initiate first state Beef Cattle Improvement Association in 1955. Cattle producers embrace weighing and grading of cattle as objective means to make genetic improvement. The performance movement in Virginia followed early research work establishing the fact that growth rate in cattle is heritable. On the Wampler Farm in Rockingham County, a scale was utilized to measure growth for performance programs.*

[VA Cooperative Extension Record Group 26/2, (AGR 4230)] Digital Library and Archives, University Libraries, Virginia Tech.

**Join us as we celebrate  
100 years of extending  
knowledge and  
changing lives.**

100 years continued from page 3

## 1965



In 1965, a selection method of young growing birds for body weight gain leads the poultry industry to generate substantial increases in growth efficiency that was profitable for poultry producers, but has also allowed for the efficient production of high quality, low fat protein. The amount of feed needed to produce broiler meat has been reduced by more than 25 percent, sparing increased demand on limited land and water resources.

By 1982, the development and refinement of the precision-fed rooster assay allowed for a quick and accurate method to determine the protein quality of a feed ingredient. This method has been deployed worldwide in poultry production and has also been used as a non-terminal method to evaluate protein quality for pet food manufacturers.

[VA Cooperative Extension Record Group 26/2, (AGR 4121, AGR 4358)] Digital Library and Archives, University Libraries, Virginia Tech.



## 1967

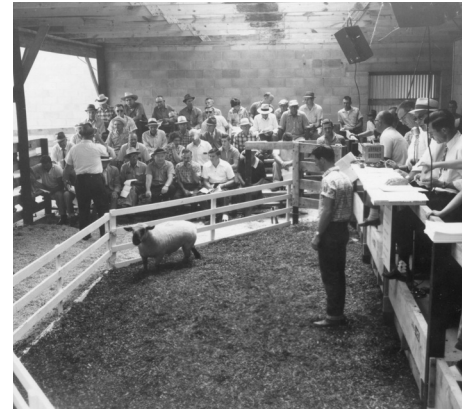


In 1967, the Virginia Central Boar Test Station Facility opens at the Tidewater AREC. This site will serve for the next 27 years as the home for performance testing of developing breeder boars from purebred herds in the commonwealth.

Beginning in 1994, producer seminars were organized and conducted by Extension specialists, focusing specifically on improving waste management practices, nutrient management, and environmental protection on hog farms. These initial programs served as the model for education programs that continue today as a component of the Department of Environmental Quality permit for swine farms. Subsequent to this, swine specialists and Extension agents initiated and continue to deliver certification programs in pork quality assurance and swine transport quality assurance, both of which are components of packer- required pork process verification.

[VA Cooperative Extension Record Group 26/2, (AGR 4811)] Digital Library and Archives, University Libraries, Virginia Tech.

## 1975



In 1975, the first Performance Tested Ram Sale is held at the Shenandoah Valley Agricultural Research and Extension Center. The station is operated in collaboration with the Virginia Sheep Producer's Association and serves as host to the ram test and other Extension sheep education programs and events.

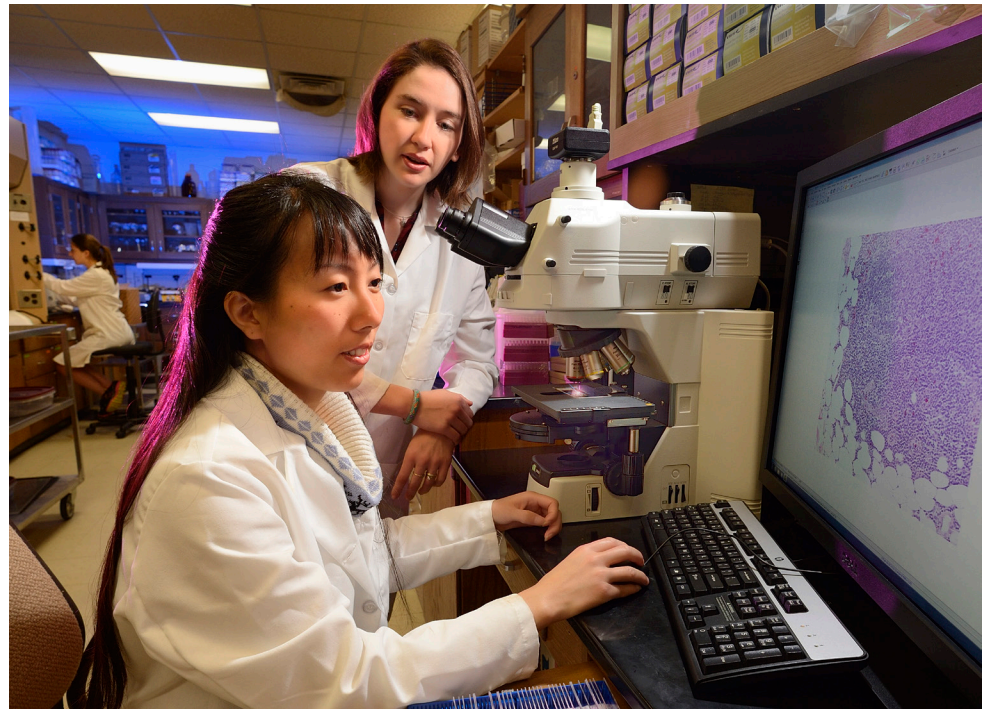
Throughout the years, ram evaluation has gone beyond just performance and has included parasite resistance. In 2012, the Southwest AREC station began evaluating genetic differences among sires for growth and parasite tolerance. This program annually attracts participation from producers across the Eastern U.S., and is the only program of its kind currently in existence.



## Understanding food intake regulation and adipose tissue development in chicks: An agri-medical model

Mark A. Cline and Elizabeth R. Gilbert

The Virginia chicken lines have been selected by Paul Siegel for low (LWS) or high (HWS) body weight for more than 57 consecutive generations (years) and now display at selection age (56 days) a 10-fold difference in body weight and associated differences in appetite regulation and adipose tissue development. The LWS are hypophagic with some anorexics and are relatively lean and resistant to fat accumulation, whereas the HWS are compulsive eaters and become obese as juveniles and are feed-restricted to avoid metabolic and cardiovascular disorders. These genetic lines represent a model for studying appetite regulation and adipose development in the meat-type chicken, as a major concern for the broiler industry is excess feed consumption in broiler breeders and in broilers during the growing and finishing stages of production leading to excess adipose tissue deposition. Understanding the regulation of feed intake and partitioning of energy to fat storage in different locations of the body may provide a unique avenue to affect feed consumption and body composition during different stages of growth. The body weight lines of chickens also represent a unique model for eating disorders and metabolic syndrome and research may shed light on novel pathways affecting anorexia and over-consumption of food, as well as site-specific deposition of fat in the body. For the past decade, Mark Cline has researched the neurophysiology of appetite regulation in birds, with a focus on the body weight lines. He has demonstrated striking differences in the feed intake response to exogenous administration of different neurotransmitters, including insulin and neuropeptide Y (NPY). Elizabeth Gilbert has been researching the molecular regulation of adipose tissue deposition



*Zhang, a Ph.D. student, (above), evaluating inflammation in adipose tissue through microscopic evaluation of hematoxylin and eosin-stained cross-sections of abdominal fat from the obese HWS chickens as Elizabeth Gilbert observes. In humans, obesity is associated with a chronic state of mild inflammation in adipose tissue, with differences among anatomically distinct depots.*

in the lines and recently showed that the LWS as compared to HWS chicks have greater fatty acid oxidation efficiency in their adipose tissue, metabolic flexibility (ability to switch between glucose and fatty acids as a fuel source) in skeletal muscle, and also a lower threshold response of blood glucose to exogenous insulin.

The hypothalamus, a region of the brain that modulates appetite, releases signals that affect energy intake via the central nervous system and also acts on the adipose tissue to increase energy storage or energy release. The adipose tissue releases factors that act on the hypothalamus to affect appetite regulation. Understanding this “cross-talk”



*Zhang assisting with the primary culture of adipocytes from anorexic and obese chickens. Growing fat cells in culture provides a controlled environment free of other physiological factors in order to determine specific effects of various hormones and neuropeptides on cellular metabolism and growth.*

between the hypothalamus and adipose tissue is critical for understanding whole body energy balance in the animal and this reciprocal communication is referred to as the hypothalamus-adipose tissue axis. With Cline’s focus on the role of the hypothalamus in affecting food intake and Gilbert’s focus on the molecular regulation of adipose tissue formation and how neuropeptides

## Alumni Awards



*Chad Joines*

### *2013 Outstanding Alumni Award for the Agricultural Technology Program*

#### **Chad Joines** **Director of Beef Cattle Operations,** **Virginia Tech Beef Center**

Chad Joines is an alumnus of the Agricultural Technology program at Virginia Tech. Since graduating, Chad has worked at the Virginia Tech Beef Center and is currently the director of beef cattle operations. Chad has spent countless hours assisting with labs for both two-year and four-year classes. He is always willing to share his knowledge of beef cattle and the agricultural industry with our students and is very well respected by all who work with him. He is very helpful in designing practical and interesting lab opportunities for undergraduate students.

Chad's service to the beef cattle industry is notable. A few of the numerous examples are: vice president of the Virginia Beef Cattle Improvement Association Board of Directors, Co-Superintendent for Open Beef and Assistant Superintendent Junior Beef Cattle Show at the State Fair of Virginia, and judge of several local and regional beef cattle shows. Chad has bred and raised several bulls tested and awarded by the Virginia BCIA.

The 2013 Outstanding Alumni Award serves to recognize our appreciation of Chad Joines' hard work and service to the College of Agriculture and Life Sciences.



*L to R: Shane, Don, Diane, Ryan, Anne (Ryan's wife), Dean Grant*

### *2013 Virginia Tech College of Agriculture and Life Sciences Alumni Organization Hall of Fame Award*

#### **The Horsley Family –** **Don, Diane, Shane, and Ryan** **Land of Promise Farm, Virginia Beach,** **Virginia**

The Horsley family owns and operates Land of Promise Farm, a successful farming operation in Virginia Beach that produces soybeans, corn, wheat, swine, and beef cattle. They also have a local niche market for agricultural enterprises in sweet corn and pecans. Their swine enterprise supplies project pigs to 4-Hers around the state and beyond. In 2011 the farm was recognized as the Sunbelt Expo Southeastern Farm of the Year for Virginia, and in 2012, the Horsleys were presented the Virginia Beach Excellence in Agriculture Award. In 2013, they were the host farm family for the Virginia Ag Expo.

The Horsleys are a Virginia Tech legacy family. Don graduated from the Animal Science Department in 1970, while sons Shane and Ryan each received B.S. and M.S. degrees in APSC during a span from 1999 to 2004. Diane, a 1970 graduate of Radford University, is a Hokie at heart and a longtime supporter of the Department of Animal and Poultry Sciences, the College of Agriculture and Life Sciences, and Virginia Cooperative Extension.

As a family their contributions to Virginia

Tech have been extensive, including service on advisory boards for the APSC Department and the Tidewater AREC. Their support of important initiatives includes the Alphin-Stuart Livestock Teaching Arena, the Virginia Tech 4-H Foundation, the Dean's Fund for Excellence, the Andy Swiger Land Grant Award, the Tidewater AREC Staff Development Fund, the Virginia Tech Pylon Society, and the Virginia Tech Hokie Club. Both Shane and Ryan have had and continue to have involvement in the teaching, research, and Extension missions of Virginia Tech as guest lecturers for APSC classes, on-farm research trials with VT-CALS researchers, and livestock judging and Extension programs.

All members of the family – Don, Diane, Shane, and Ryan – have held or are currently holding major leadership roles in numerous state and local agricultural organizations, boards and associations. Their collective leadership in agriculture, and their support of Virginia Tech, the College of Agriculture and Life Sciences, Virginia Cooperative Extension, and 4-H youth development has been exceptional. The Horsley family is a truly deserving recipient of the 2013 Hall of Fame recognition by the College of Agriculture and Life Sciences Alumni Organization.



*L to R: Dr. Alan Grant, dean of the College of Agriculture and Life Sciences; Norm Vincel; Dr. Dave Gerrard, head of Animal and Poultry Sciences.*

*Virginia Tech College of Agriculture and Life Sciences Alumni Organization 2013 Outstanding Alumni Award*

**Norm Vincel**  
**General Manager, VA/NC Select Sire Power**

While a Virginia Tech student (Animal Science, 1973), Norm Vincel was a member of the Block and Bridle Club, Alpha Zeta, and a singer in the New Virginians. His first job after college was with Southern States Cooperative and he was employed in 1974 as beef coordinator for VA/NC Select Sires Inc. Norm served in this position for 17 years, during which time beef semen sales grew almost 20 percent annually. Because of his working knowledge and strong work ethic, Norm was promoted to Director of Marketing (1992 – 2011) and presently serves as the general manager of Select Sire Power in Rocky Mount, Virginia.

Norm has been an effective servant for the Virginia beef cattle industry and has emerged as an industry leader. Throughout his career in the artificial insemination industry, Norm has developed into a valuable resource regarding beef cattle genetics and reproduction. He has been active in state and national beef cattle organizations and has been a deserving recipient of

many prestigious service awards. Norm is a popular speaker on many beef cattle educational programs and always finds time each year to guest lecture in Dr. Dan Eversole's senior-level beef/sheep production class.

Norm and his organization have always been very supportive in funding departmental outreach and educational programs. He is closely allied with the Department of Animal and Poultry Sciences and has served numerous times on the APSC alumni advisory board. Norm Vincel is a worthy candidate who represents the very best and richly deserves recognition from the College of Agriculture and Life Sciences for his sincere interest and continued support in alumni and departmental activities.



*L to R: Dr. Alan Grant, dean of the College of Agriculture and Life Sciences; Dr. Randy Borg; Dr. Dave Gerrard, head of Animal and Poultry Sciences.*

*Virginia Tech College of Agriculture and Life Sciences Alumni Organization 2013 Outstanding Recent Alumni Award Nomination*

**Dr. Randy C. Borg**  
**Senior Quantitative Geneticist, Cobb-Vantress, Tyson Foods**

Randy Borg grew up on a dairy farm in Nebraska. His B.S. degree in animal science at the University of Nebraska was designed to prepare him to return

to the family farm. When events propelled him in a different direction, he came to Virginia Tech to study quantitative genetics and animal breeding. His unique and increasingly rare experience in livestock production, coupled with specialized training at Virginia Tech, provided him with the opportunity to apply cutting-edge genetic and genomic technologies to increase the efficiency of global food production and serve poultry producers in a rapidly expanding global marketplace. In this sense, he exemplifies the goal of the modern land-grant university to combine science and practical experience to impact global food production.

While at Virginia Tech, Randy taught the animal genetics course in the Agricultural Technology program, a task that required both specialized skill and an understanding of on-farm applications. Since leaving Tech for global research company Cobb-Vantress, he has maintained research connections with Dr. Paul Siegel and the Virginia Tech poultry genetics program to facilitate technology transfer to the poultry industry. Dr. Borg is thus both an active collaborator with, and a highly visible alumnus of, Virginia Tech.

As senior quantitative geneticist, Randy has responsibility for Cobb-Vantress' ongoing programs for genetic evaluation, the development of new methods to enhance rates of genetic improvement, and the conduct of in-house research to identify opportunities to enhance their product lines. He also was recently invited to participate in Tyson's leadership development program, designed to prepare young employees for additional responsibility in the parent company.

*Alumni Awards continued from page 7*



*L to R: Dr. Alan Grant, Dean of CALS; Vernon Meacham; Dr. Dave Gerrard, head of APSC.*

### *College of Agriculture and Life Sciences 2013 Outstanding Alumni Leadership Award*

#### **Vernon Meacham** **Director of Development for CALS,** **Virginia Tech**

Vernon Meacham joined the College of Agriculture and Life Sciences in 2005 as Associate Director of Corporate and Foundation Relations. His responsibilities included increasing corporate and foundation support for faculty endowments, student scholarships, building and improving facilities, cultivating sponsored research, and developing student and alumni programs. As current director of development for CALS, Vernon provides leadership for the college's fundraising and donor relations efforts. In his role, he works closely with individual donors, corporations, and foundations to build relationships with the college and administers the development office. The CALS fundraising team exceeded the college's \$52.4 million goal in the seven-year "Campaign for Virginia Tech – Invent the Future," capital campaign that concluded in 2011. Since that time, the development staff has consistently increased giving for the college to provide critical philanthropic support for Virginia Cooperative Extension and the Virginia Agricultural Experiment Station as well as the college's teaching and research missions.

Prior to coming to Virginia Tech, Vernon worked in agribusiness as an animal nutritionist and as an executive in the fertilizer industry. He worked in developing consulting programs and nutritional products for horse, beef cattle, and swine markets and later with the creation of a novel slow-release, organic-based fertilizer manufacturing process.

Vernon currently serves on the CALS Alumni Organization Board, the Virginia Agriculture Leaders Obtaining Results (VALOR) Advisory Council, and has served on the Alpha Gamma Rho Alumni Board.



*Marilyn and Winston Samuels*

### *College of Agriculture and Life Sciences 2014 Influential Black Alumni Award*

#### **Winston and Marilyn Samuels** **Maxx Performance Inc., Roanoke,** **Virginia**

As entrepreneurs, Winston and Marilyn Samuels founded Maxx Performance Inc., a progressive food ingredient biotechnology company based in Roanoke, Virginia. Winston is president and CEO of the company. An alumnus of Animal and Poultry Sciences, he has 24 years of experience in food and nutrition, animal nutrition, and health, and the pharmaceutical and biomedical industries. Winston was recognized in 2008 as the Department of Animal and Poultry Science's Outstanding Alumnus.

Marilyn is responsible for the financial management of Maxx Performance Inc. and works closely with Winston shaping the vision and direction of the company. Marilyn earned her B.S. in psychology at Virginia Tech. In 2013, the College of Agriculture and Life Sciences inducted Winston and Marilyn into the CALS Hall of Fame.

Even with the time and resources that their entrepreneurial activities have demanded throughout the years, the Samuels have been generous benefactors to Virginia Tech. Their philanthropy began shortly after graduate school when they made a gift to support graduate student travel in the Animal Sciences Department. Their generosity has continued since that time and they have supported programs and activities across the campus, including:

- Animal Science research
- The Parents Fund
- The Graduate School
- The College of Agriculture and Life Sciences Dean's Fund for Excellence
- Multicultural Affairs
- Women in Leadership and Philanthropy
- CALS Alumni Organization's Scramble for Scholars
- Agricultural and Applied Economics Department

Winston and Marilyn also saw a need, through their son Joel's involvement with the VT ice hockey team, to assist these student athletes with their travel accommodations. The Samuels Family Student Travel Fund provided chartered buses and professional drivers to take the team to games and tournaments throughout the region.

The Samuels established the Samuels Family Enrichment Fund to provide

*continued on page 9*



*Alumni Awards continued from page 8*

support to students for travel abroad in order to "...enhance and enrich the academic experiences of students in Agricultural and Applied Economics by expanding their opportunities for experience in international business and strategic management."

Winston currently serves on three advisory councils at Virginia Tech: the Entrepreneurial Ecosystem Advisory Group for the Virginia Tech Foundation, the Pamplin College of Business Advisory Council, and the Department of Animal and Poultry Sciences Advisory Committee.

## Staff Activities

### Wanda Grubb Retires from the APSC Advising Office

Wanda Grubb officially retired from her position as Student Services Specialist on April 1. Over her career, which spanned more than 30 years, Wanda touched the lives of an amazing number of students, providing help, support, and guidance in a consistent, competent, and caring manner. She has been integral in helping more than 3,000 undergraduate students graduate.



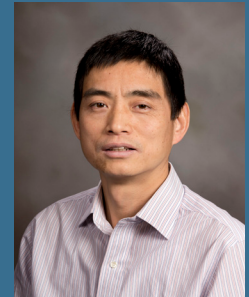
A celebration was held for Wanda on May 2 and was well attended. Colleagues, students, alumni, and friends took this opportunity to thank her, and to express their gratitude and appreciation for all that she has done. Wanda is looking forward to a happy and active retirement and we all wish her well in her future endeavors.

## New Faculty

### Hao Shi Research Assistant Professor, Department of Animal and Poultry Sciences

Hao Shi obtained his B.S. in Veterinary Medicine at Anhui Technical Teachers College and M.S. in Animal Physiology and Biochemistry at Nanjing Agricultural University in China. He obtained his Ph.D. degree in Muscle Biology at Purdue University in 2007. After graduation, he went to Yale University School of Medicine for his postdoctoral training in the field of signal transduction and regenerative medicine.

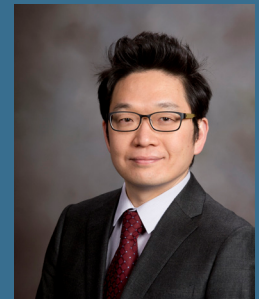
He joined the Department of Animal and Poultry Sciences at Virginia Tech in 2013. Shi's research is to use pigs and genetically altered mice as tools to study skeletal muscle growth and muscle stem cell homeostasis under normal physiological and metabolically perturbed conditions. His research team is focusing on the investigation of the role of a novel metabolic pathway in postnatal muscle growth and maintenance. The findings will provide potential molecular targets for growth and medicinal intervention to benefit animal industry and human health.



### Kiho Lee Assistant Professor, Department of Animal and Poultry Sciences

Kiho Lee earned his B.S. in animal science at Seoul National University, and M.S. and Ph.D. from the department of animal sciences at Purdue University. Zoltan Machaty was his mentor for the M.S. and Ph.D. degrees. During his degree, he investigated factors that could improve efficiency of somatic cell nuclear transfer in pigs. After completing his degree, he worked on his postdoc training at the University of Missouri, Columbia. He joined Randy Prather's lab where he generated various genetically engineered pigs for biomedical applications. One example is the production of severe combined immunodeficiency (SCID) pigs lacking adaptive immune systems. Using genetic engineering technology, he disrupted expression of recombination activating gene (RAG) 2 in these pigs thus creating pigs presenting T-B-NK+ SCID phenotype. Because the pigs lacked adaptive immune systems, they could fully adopt and support growth of human stem cells. This was the first report in large animals. These pigs may have a significant impact in biomedicine because the pigs can be used to monitor stem cell growth after cell transplantation and progression of cancer cells, providing a good model for preclinical tests.

After three years of postdoctoral training, Kiho became a member of the Hokies. At Virginia Tech, Lee's lab currently focuses on early embryonic development in pigs. Understanding mechanisms underlying the dynamic changes that occur during this stage of development can lead to more efficient ways to generate pig embryos, thus increasing overall productivity. Specifically, Lee is interested in dynamic changes of epigenetic marks observed after the cloning or fertilization process. His interest is to identify epigenetic abnormalities in cloned- or *in vitro*-derived embryos. Lee is also interested in producing genetically engineered pigs



*New Faculty continued from page 9*

for agriculture and biomedicine purposes. Because pigs share a similar physiology to humans, pig models can recapitulate human physiology much better than currently available rodent models. Lee's immediate interest is in pigs; however, based on his wide experience in handling embryos from different species, he would be interested in generating genetically engineered large animals for various purposes.

*agri-medical model continued from page 5*

influence adipose cell dynamics, they together study how the brain and fat act in concert to modulate energy balance in the chick. One factor that is known to play an important role in mediating appetite and adiposity is NPY, and a major focus of Gilbert and Cline's research program is aimed at understanding the molecular mechanisms underlying NPY's effects on the hypothalamus and adipose tissue of chickens.

## Michael E. Persia Assistant Professor Department of Animal and Poultry Sciences

Michael E. Persia grew up in central Pennsylvania, and attended Penn State where he received a B.S. in animal and biological sciences with a minor in poultry technology and management in 1997. After graduation, he was accepted into the animal science graduate program at Ohio State where he completed an M.S. degree in 1999. In 2003, Mike graduated from Illinois with a Ph.D. in animal sciences after studying applied poultry nutrition. Moving to the University of Delaware, Mike completed a three-year stint as an associate scientist concentrating on nutrient management from a research standpoint, gaining his first formal experience in the classroom. In 2006, Mike joined Syngenta Animal Nutrition, gaining invaluable experience and perspective as a manager of research and development working on an enzyme technology platform. During this time, he was elected to a three-year term on the board of the Southern Poultry Science Society, including serving as president of this organization in 2011-2012.

In 2009, Mike rediscovered his passion for teaching and interacting with young people after accepting a research and



teaching position at Iowa State as an assistant professor. This year Mike accepted a similar position at Virginia Tech and currently holds a three-way appointment contributing to research, Extension, and teaching in his new role. Mike has been a member of Poultry Science Association since 1997 and has served on the environmental committee, as chair of the student competition in 2011, and as co-chair of the nutrition section in both 2012 and 2013. During the course of his career, he has authored or coauthored 26 peer-reviewed papers; 11 Extension publications; 22 invited presentations; and more than 60 scientific abstracts. Mike served as an *ex officio* member of the Iowa Turkey Federation and the Virginia Egg Council as part of his outreach program. He teaches or has taught graduate courses in non-ruminant nutritional physiology and undergraduate classes in introductory poultry science, poultry fellows and leadership, introductory animal science laboratory, and is a frequent guest lecturer in feeds and feeding, sustainable agriculture, introductory animal science, animal nutrition, and poultry management.

Persia has maintained an active role in the poultry nutrition class taught at the Midwest Poultry Consortium summer program. Mike is most proud of the accomplishments of advising the two Ph.D. candidates, six M.S. students, and 14 undergraduates who have either graduated from or are currently working in the lab and the two great poultry clubs that he has had the pleasure of advising over the past five years.

## New Staff

Ashley Clark has recently taken the position of Undergraduate Coordinator in the APSC Undergraduate Advising Office. She was born and raised in Pulaski, Virginia, and was a four-year member of Future Farmers of America and a lifetime member of 4-H. After growing up around dairy cattle, beef cattle, and riding horses in her spare time, she decided to major in Animal and Poultry Sciences. After receiving her B.S. in APSC and M.S. in Education at Virginia Tech, she accepted a teaching position at Surry Central High School in Dobson, North Carolina, teaching all the agriculture classes and advising the FFA group. Along with teaching and advising she was the head JV softball coach. Her hobbies are coaching basketball, playing softball, serving as Relay for Life team captain, farming, and doing anything outdoors. Given the opportunity to return to Blacksburg, she worked as the graduate coordinator in Agricultural and Applied Economics from 2012 to 2014. Ashley returned to the APSC Department as Undergraduate Coordinator in May 2014.



## APSC Graduate Student Awards Luncheon

The APSC Annual Graduate Student Awards Luncheon was held April 25. The following graduate students were recognized for their contributions to the APSC Department:

Robert Jacobs and Deidre Harmon shared the Outstanding Graduate Teaching Award.

Wei (Lacee) Zhang received the E.T. Kornegay Outstanding Ph.D. Award.

Shuai Zhang received the Outstanding M.S. Student Award.



L to R: Robert Jacobs, Deidre Harmon, Lacee Zhang, Shuai Zhang

## Undergraduate Student Accomplishments and Activities

### APSC Dean's List Spring 2013

Whitney Abraham	Summer Driscoll	Emily Hurley	Amber Noel	Natalie St. John
Kacey Adams	Megan Dunn	Savana Hutchinson	Megan Ohlhaber	Christine Stephan
Meredith Adams	Lauren Engel	Tasha Jackson	Andrea Oliver	Victoria Stewart
Jackson Ames	Kari Estes	Erica Jacquay	Emily Oliver	Meredith Taccetta
Katherine Amos	Erica Feldman	Margaret-Katherine Jeter	Rachel Owens	Tonia Tadrick
Kaitlyn Asbury	Shawnee Felts	Kelsey Johnson	Karen Park	Emily Tanner
Brent Ashley	Taylor Fisher	Mary-Katherine Jones	Grace Parker	Nicole Teets
Ella Barnes	Caitlin Flint	Katelyn Jones	Bly Patterson	Emily Thompson
Katelynn Basala	Stephanie Folkerts	Kathryn Joyce	Kaitlyn Peden	Alexa Turner
Cassandra Basham	Levi Gardner	Aminata Kalley	Richard Preisser	McCauley Vailes
Catherine Beach	Gabrielle Gauthier	Caitlin Keese	Jessica Repep	Julie Van Scoik
Andrea Bradley	Hannah Geisler	Tae Kim	Anna Revercomb	Andrea Varidakis
Casey Braginton	Savannah Giannasi	Kelsey Kirschnick	Maria Rittenhouse	Christina Vezza
Amy Brandon	Eleanor Gould	Kea Kiser	Natasha Robbins	Galen Vosseller
Amanda Broadway	Anastasia Graf	Elizabeth Knick	Jessica Ross	Hannah Wade
Olivia Brooks	Victoria Gray	Andria Laib	Amber Rosser	Courtney Walski
Sabrina Brooks	Sarah Greenway	Savannah Lambert	Lauren Ruben	Taylor Watson
Caleb Brown	Connor Grimes	Emily Lamotte	Jaime Rutter	Philip Waugh
Asjah Brown	Samantha Habib	Sarah Lipps	Andrew Sahol	Mary Weatherman
Makayla Burton	Keri Hardin	Bethany Lyon	Katy Sayre	Hope Wentzel
Danielle Cain	Kalynn Harlow	Anh Tu Mai	Courtney Scarborough	Kristen Wereszynski
Mary Carrier	Emma Helm	Margeaux Malone	Marie Schirmacher	Sarah Wieland
Brittany Castle	Patricia Helsel	Kerryn Manden	Ariel Schmidt	Emily Williams
Hannah Cheng	Sarah Helweg	Jessica McCarty	Kara Schneide	Julian Worley
Keagan Clevenger	Hanna Herdegen	Betty McConn	Taylor Scott	Sarah Wray
Victoria Cox	Emily Hilburger	Bailey McDade	James Shatt	Sarah Wysor
Bradley Dalton	Rhiannon Hodges	Erin McDougall	Lauren Sheehan	Kelsey Younts
Morgan Daughtry	Julie Holdridge	Colleen McIntyre	Deanna Shenk	Allison Yu
Mary Davis	Alyssa Homyk	Aidan Meehan	Steven Shipp	Madeline Zimmermann
Lindsay Deacon	Katherine Howe	Victoria Mellin	Emma Shirey	
Anna DeBerardinis	Maureen Howren	Nicholas Moore	Brittany Sholes	
Nycole Deleeuw	Katie Huffman	Rebecca Mowry	Drew Sollenberger	
Dillon Didehvar	Camilla Hughes	Kelsie Mullikin	Wesley Spangler	

## APSC Dean's List Fall 2013

Lindsey Arthur	Lauren Engel	Kellen Levinson	Marie Schirmacher
Kaitlyn Asbury	Catherine Farnan	Meredith Lewis	Emily Schlake
Ella Barnes	Erica Feldman	Keil Lycke	Ariel Schmidt
Kathryn Baugh	Taylor Fisher	Bethany Lyon	Kara Schneide
Catherine Beach	Taylor Franzreb	Margeaux Malone	Melissa Schramm
Joshua Bowyer	Gabrielle Gauthier	Sarah Martin	Lauren Sherrod
Casey Braginton	Hannah Geisler	Megan McLean	Steven Shipp
Amy Brandon	Ursula Gerson	Aidan Meehan	Emma Shirey
Olivia Brooks	Savannah Giannasi	Julia Molle	Bradley Shultis
Asjah Brown	Anastasia Graf	Nicholas Moore	Mary Smith
Caleb Brown	Victoria Gray	Courtney Morris	Shane Softy
Alexis Bruzugul	Sarah Greenway	Rebecca Mowry	Drew Sollenberger
Kelly Byrum	Connor Grimes	Caila Mullen	Natalie St. John
Danielle Cain	Alisa Gusterer	Kellsie Mullikin	Christine Stephan
Rachel Calcutt	Carla Gutierrez	Adam Murray	Eric Stewart
Brittany Castle	Samantha Habib	Andrew Neel	Ashley Strader
Maritza Castro	Kalynn Harlow	Lauren Neff	Devi Sturm
Tracy Childress	Aaron Heishman	Amber Noel	Emily Suess
Hannah Church	Emma Helm	Arynn O'Kane	Meredith Taccetta
Kyle Civalier	Patricia Helsel	Mallory Obenour	Sarah Taylor
Adrienne Clark	Sarah Helweg	Megan Ohlhaber	Alyssa Thompson
Keagan Clevenger	Hanna Herdegen	Andrea Oliver	Casey Tignor
Benjamin Coates	Rhiannon Hodges	Grace Ott	Alexa Turner
Andrew Correa	Dixon Holland	Rachel Owens	McCauley Vailes
Elena Cox	Erin Holland	Nicole Paris	Julie Van Scoik
Lindsay Creger	Emily Horton	Grace Parker	Allyse VanCampen
Brian Cromer	Camilla Hughes	Kaitlyn Peden	Christina Vezza
Morgan Daughtry	Kimberly Jakubowski	Danielle Porier	Maria Vezza
Mary Davis	Katelyn Jones	William Porzio	Galen Vosseller
Anna DeBerardinis	Erika Joseck	Richard Preisser	Ashley Walker
Lindsay Deacon	Kathryn Joyce	Jessica Repep	Philip Waugh
Nycole Deleeuw	Kelsey Kallapos	Anna Revercomb	Deborah Weinstein
Meghan Delp	Caitlin Keese	Kathryn Ritenour	Hope Wentzel
Daniella Diaz	Jordyn Kim	Maria Rittenhouse	Kristen Wereszynski
Erin Dlubac	Kea Kiser	Jessica Ross	Sarah Wieland
Jennifer Donaggio	Elizabeth Knick	Caitlin Rowan	Austin Witmer
Summer Driscoll	Amanda Kordenbrock	Willow Ruud	Emily Woodward
Hana Dudley	Anna Koskinen	Andrew Sahol	Janie Young
Megan Dunn	Andria Laib	Katy Sayre	Madeline Zimmermann
Rebecca Ellis	Rachel Leach	Courtney Scarborough	

## 2014-2015 APSC SCHOLARSHIP RECIPIENTS

*Litton Sheep Industry Student Leader Scholarship*

**Emma Helm**

*Lorenz Neuhoff Jr. Pork Industry Student Leader Scholarship*

**KaLynn Harlow**

*Ralph Hunt Beef Industry Student Leader Scholarship*

**Emma Reeves**

*Lou Dixey Beef Industry Student Leader Scholarship*

**Peyton Lee**

*Fred Campbell Horse Industry Student Leader Scholarship*

**Kellsie Mullikin**

*Denver D. Bragg Poultry Science Student Leader Scholarship*

**Betty McConn**

*Rocco Lamb Farms Student Leader Scholarship*

**Jillian Lowery**

*Animal and Poultry Sciences Scholarship*

**Julie Van Scoik**

*A.L. "Ike" Eller Scholarship*

**Thomas Cromer**

**Taylor Fix**

**Elizabeth Knick**

**Marie Schirmacher**

*E.A. & H.H. Livesay Scholarship*

**Kami Meador**

*Ashe-Lockhart Scholarship*

**Katie Baugh**

**Brittany Castle**

**Ursula Gerson**

*Owen Thomas Jr. Memorial Scholarship*

**Sam Cross**

**Kurtis Devore**

*Tom and Christine Marlowe Freshman Scholarship*

**Kellen Levison**

*Richard S. Ellis IV and Roy A. Meek Jr. Scholarship*

**Hannah McDonald**

*George G. Green Scholarship*

**Emily Williams**

*Harry Wyatt Scholarship*

**Alexa Turner**

*Lou Dixey Scholarship*

**Tanner Edwards**

*William Earl Browning Scholarship*

**Stuart Hill**

*Ralph Hunt Scholarship*

**Jake Richards**

**Kaitlyn Smith**

*Virginia Pork Industry Scholarship*

**Catherine Beach**

*Mary Howe diZerega Memorial Scholarship*

**Keri Hardin**

**Grace Ott**

*Arden N. Huff Scholarship*

**Victoria Gray**

**Kathryn Joyce**

*Delano Scholarship*

**Devynn Breen**

**Wrenn Calcutt**

**Taylor Franzreb**

**Keil Lycke**

*Jack S. Copenhaver Scholarship*

**Emily Asbury**

**Ben Coates**

**Stephanie Dick**

**Erin Dlubac**

**Nicole Hendrix**

**Jessika Peery**

**Allyson True**

*Charles W. Thomas Memorial Scholarship*

**Ella Barnes**

**Asjah Brown**

**Lindsey Johnson**

*C. Gordon Thornhill Scholarship*

**Jacob Marshall**

**Adam Murray**

**Hope Wentzel**

**Austin Witmer**

*Emily Jane Hilscher Memorial Scholarship*

**Payton Lawrence**

**Kellsie Mullikin**

*General J.E.B. Stuart-Real Daughters (of the Confederacy) Award*

**Kaitlyn Peden**



*Kaitlyn Peden answering questions about her poster at the 2014 Mid-Atlantic Nutrition Conference.*

Congratulations to Kaitlyn Peden on winning the Undergraduate Student Poster Competition at the 2014 Mid-Atlantic Nutrition Conference in March! As part of her senior capstone project, Kaitlyn has investigated differences between overweight and lean mares in the expression of genes that help regulate the body's inflammatory response after exercise, using samples she helped collect during her semester at the Middleburg Agricultural Research and Extension (MARE) Center. Results of Kaitlyn's study will provide new knowledge on the interactions between adiposity and peripheral cytokine response, and ultimately help horse owners better understand and manage obesity in the recreational pleasure horse. Kaitlyn is co-mentored by Drs. Rebecca Splan and Eric Wong.

Congratulations to Kaitlyn also for winning the Dick and Ann Saacke Scholarship for spring 2014.



*Kaitlyn Peden helps plant the vegetable garden at the local elementary school.*

## APSC Participates in Unique **Service-Learning Course**

*C.M. Wood*

In Virginia Tech's first ever winter term, 13 students (six freshmen and seven upperclassmen) and four faculty from the College of Agriculture and Life Sciences spent two weeks in Senegal, West Africa, as part of a unique first-year experience. The program was developed to give new students a chance to explore and learn while fulfilling Virginia Tech's motto "Ut Prosim: That I May Serve," and was then extended to include returning students. The core of the experience was the two-week trip that included hands-on participation in research and outreach efforts in sustainable agriculture, education about the country and its people, and a chance to build lifelong friendships while engaging in professional and personal development opportunities. The framework for this high-impact experience was a three-credit course, ALS 2984 – Sustainable Agriculture In The Developing World: Past, Present, and Future. Students began meeting once a week midway through fall semester and completed the course requirements early in the spring semester with two poster presentations and a slide show at the Dean's Forum on Global Engagement, a daylong university-wide program.



*Demonstrating the water purifier, one of several prototypes introduced in the village of Santamba.*

*Senegal continued from page 14*

Animal and Poultry Sciences participants in this outstanding adventure included three freshmen, Elisabeth Barker, Keil Lycke, and Katlyn Smith; four seniors, Brent Ashley, Cheyenne Cline (APSC minor), Emma Shirey, and Cassella Slater; and one faculty member, Dr. Cindy Wood, the lead instructor.

Students and faculty met once each week for eight weeks during the fall semester, learning basic French phrases and absorbing background information about Senegal's geography, history, agriculture, and people with the help of several Senegal Scholars, visiting Senegalese professors, and graduate students. Thanks to a project developed by another faculty participant, Dr. Ozzie Abaye, the group worked with "Team Senegal," students in a VT Mechanical Engineering senior-design course, on the service-learning component of the course as well: demonstrating prototypes of equipment designed to help farmers make silage for their livestock, plant fields more efficiently, and preserve food for the dry season. All of this occurred in partnership with a U.S. Agency for International Development-Education and Research in Agriculture (USAID-ERA) capacity-building grant at several Senegal universities, led by Virginia Tech.

The group departed Washington, D.C., on Dec. 28, 2013. The 14-day itinerary included overnight stops in Dakar, the capital of Senegal, and Thies, an important textile center and home to

two of the major agricultural research and teaching institutes, ENSA (in English, National Advanced School for Agriculture) and ISFAR (in English, Institute for Advanced Rural and Agricultural Training). In the northern delta region, the group spent four days in St.-Louis, the capital of Senegal during its colonial period. Highlights included visits with counterparts in the agricultural program at the Université Gaston Berger, tours of modern agricultural enterprises and traditional farms, and a day at the Djoudj Bird Sanctuary, a UNESCO World Heritage site.

From St.-Louis, the group traveled to Toubacouta, their home for almost a week, by way of the holy city of Touba and its grand mosque and Koalack, a small city with a bustling market. In Toubacouta and the village of Santamba, VT students worked with Senegalese college students on a number of projects: planting trees at a community center; starting a vegetable garden at a local elementary school; teaching children a variety of new games ("duck, duck, goose" became "donkey, donkey, sheep"); helping to build a community center; and working with villagers on several prototypes, including a silage compactor,



*The tour of the mosque in the holy city of Touba was an unexpected highlight of the trip.*

a seeder, a mango dehydrator, and a hand-powered water purifier.

Along with the work, there was also time for fun: bargaining for items in the market, exploring the village, taking an early morning boat tour on the Saloum River, and enjoying a local concert. When it was time to depart for Saly, a seaside resort town and the last stop on the trip, it was hard for everyone to say goodbye.

The last two days in Senegal included a short safari in the Bandia Nature Preserve, a detour to the Lac Rose (Pink Lake), which due to weather conditions was not pink at all, and some final shopping. A long layover in Paris allowed for one final adventure, a short tour of the city with brief stops at the Louvre and the Eiffel Tower, before the final leg of the journey brought us back to Washington, D.C. on Jan. 11, 2014. The program was a huge success and planning for winter term 2015 is already underway.

*continued on page 16*

Senegal continued from page 15



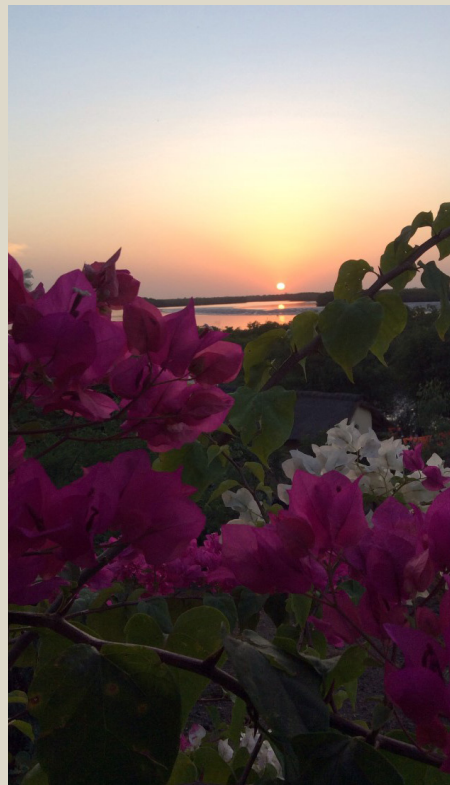
*Under (and on) the Baobab tree, Senegal's national tree.*



*A good time was had by all: Virginia Tech students and the children of Santamba Village.*



*At the USAID-ERA office in Dakar, with a few of the many people who made the trip memorable for all.*



*The view from the dining area of the lodge where we stayed in Toubaouta.*

We would like to thank the following for the support (financial and otherwise) that made this opportunity possible. At Virginia Tech: The Office of First Year Experiences; the College of Agriculture and Life Sciences; the Education Abroad Office; The Office of International Research, Education, and Development (OIRE); Animal and Poultry Sciences; Crop, Soil and Environmental Sciences; and Human Nutrition, Foods and Exercise. In Senegal: USAID-ERA; Université Gaston Berger (UGB); Ecole Nationale Supérieure d'agriculture (ENSA); and Institut Supérieur de Formation Agricole et Rurale (ISFAR).

## Undergraduate Activities



*Seniors eagerly await their opportunity to "dunk the professor" at the annual Senior Picnic.*



*APSC hosted its first Spring Graduation Breakfast on May 17. More than 50 graduates attended with their family and friends to celebrate this momentous occasion. (Picture courtesy of Nada Tamim)*



## Virginia Tech Equestrian's Reanna Wall takes the National Champion title at the 2014 IHSA National Championship

By Vicki Morrison

The first few days of May were an exciting time at the 2014 Intercollegiate Horse Show Association National Championship, as a small group of Hokies sported their maroon and orange at the Pennsylvania Farm Show Complex in Harrisburg, Pennsylvania. On the first day of competition, Virginia Tech's very own Reanna Wall rode for the title of Individual Walk/Trot/Canter champion – and did not disappoint.

Reanna Wall, a senior in psychology from Radford, Virginia, rode on Thursday afternoon against a field of 15 of the best Walk/Trot/Canter riders from around the country. Wall's journey to the National Championship was a long time coming; she joined the Equestrian team her sophomore year and always demonstrated a desire to want to learn more about equitation and improve her riding and horsemanship.

"Reanna Wall is a very different rider today than she was three years ago when she joined our program," coach Sherri West said. "Her win at Nationals proves that through hard work and determination dreams really do come true!" Wall's quietly fierce determination helped her battle back after several injuries which set back her riding during her junior year on the team, but she bounced back every time more eager than ever.

In order to qualify for the National Championship, riders must accumulate 36 points in their given level, place in the top two at the Regional competition (which Virginia Tech hosted this year), and then place in the top two at IHSA Zone Finals. Wall took home Reserve Champion at both Regionals and Zone 5 Finals, hosted at Berry College in Mount Berry, Georgia, which qualified her for Nationals. And on May 1, Wall rode for the title.

"My advice for Reanna leading up to post-season competition was to believe

in herself. If she believed, the judges would believe as well," said West. "I think she took this piece of advice to another level, demonstrating poise and confidence previously unseen from her in the show ring." Even leading up to the draw at Nationals, Wall exhibited such calmness and readiness, and even when the "riders up" command came she was ready to ride and confident that the Championship was hers.

"It's funny," said hunter team captain Vicki Morrison, the day before [April 30] when we got to the Farm Show Complex, we ran into Bob Cacchione, the founder of the IHSA. He recognized us from his visit to Virginia Tech this past fall and asked what Wall was competing in. I confidently said 'Reanna rides tomorrow in Individual Walk/Trot/Canter. She'll be the one with the blue ribbon!' And I was so happy when she won later that I said to Mr. Cacchione, 'Didn't I say yesterday she'd be the one with the blue ribbon?'"

Wall won her class aboard a Skidmore College horse, Leroy, who was later named the High Point Horse of the Show for winning several classes with the top riders at the horse show. Wall and Leroy worked very well together and impressed renowned United States Equestrian Federation "R" judges Mike Rosser and



*L to R - Hunter team captain Vicki Morrison, 2014 Individual Walk/Trot/Canter Champion Reanna Wall, head equitation instructor and hunter team coach Sherri West, and Bob Cacchione, founder of the Intercollegiate Horse Show Association.*

Scott Hoffstetter in a 7-minute long flat class. "Reanna could not have drawn a more perfect horse for her. You could tell that once she mounted, it was going to be a great ride," Morrison said.

"This is a very exciting time for Virginia Tech Equestrian," coach West stated. "With her win at IHSA Nationals, Reanna became our fourth National Champion to date. Jill Waligura-Diemar won back-to-back top honors at IHSA Nationals in 1996 and 1997 and dressage rider Katie Bucy was an IDA National champion in 2005."

Wall's ride at Nationals proved to herself and many others within this program that having fun, staying confident, and relying on a great support system is all part of being successful in the horse show world. Above all, Wall went into her Nationals ride with the goal of riding well and having fun while she was riding, and walked out of the ring with a tricolor Champion ribbon, a big smile, and the title of the newest Virginia Tech National Champion.

## Youth Events popular at State Cattle Industry Convention



*Ken Matthews, APSC student and member of Virginia Tech Beef Leadership Council, serves as a ring steward at the Commonwealth Classic. Virginia Beef Leadership Council and Virginia Tech Block and Bridle worked together throughout the show weekend serving as check-in/weigh-in staff, ring help, announcers, and ringside assistants.*

**The 2014 Virginia Cattle Industry Convention and Commonwealth Classic youth beef shows were held at the Rockingham County Fairgrounds in Harrisonburg, Virginia, March 27-30. Despite the cold, rain, snow, and sleet experienced at one point or another throughout the weekend, the events were successful and enjoyed by all. A special thank you goes to the Commonwealth Classic exclusive event sponsor, Zoetis.**

The State Youth Cattle Working Contest started off the weekend of youth events beginning on Friday, March 28. Earlier this spring, four regional contests were held in various locations across the state to determine the top nine teams that would be represented at the 2014 State Youth Cattle Working Contest. A total of 51 teams competed at the regional levels. Waynesboro Nursery hosted the first regional contest on March 13 and sent Rockingham County 4-H/FFA Team B (Caley Ellington, James Ritchie, and Tristan Showalter) and Fort Defiance FFA Team B (Autumn Garber, Casey Glover, and Anna Foley) on to the state level. From the Southern Piedmont Regional contest that was held on March 14 at the Southern Piedmont AREC, Randolph Henry FFA

(Ryan Hamlett, Dottie Long, and Scott Pugh) moved on to the state level. In 2014, the New River Valley Regional Contest and the Southwest Virginia Regional Contest were held together at G & G Livestock in Fort Chiswell on March 15. The New River Valley was able to send four teams: Grayson 4-H Team A (Mitchell Farmer, Kassie Compton, and Lucas Mitchell), Grayson 4-H Team B (Tre' Parks, Jordan Roten, and Ethan Reedy), Rural Retreat (Ashtyn Matney, Hunter Addison, and Michael Addison), and Grayson 4-H Team C (Caleb Brannock, Garrett Shumate, and McGuire Osborne) on to the state contest. In the Madison area, the regional contest was held at Tucker Livestock on March 19. The two teams representing the Madison area were Orange County

C (Hunter Koontz, Autumn Rogers, Sierra Coleman) and Orange County A (Blake Hopkins, Robert Nixon, and Zach Swoope).

The State Youth Cattle Working Contest, as well as the regional contests, begins with teams completing a cattle processing map. This processing map is judged and returned to the team with any corrections prior to the team working the cattle. The teams then work a total of three head of cattle and are judged on the preparation and administration of a growth implant, a seven-way clostridial vaccination, a respiratory complex, ear tags, dewormer, and any other products that are deemed appropriate. In addition, the teams are also judged on the safety and handling of the cattle, as well as the time it takes to work all three head. For the 2014 State Youth Cattle Working Contest, first place was awarded to Rural Retreat High School, which consisted of Ashtyn Matney, Hunter Addison, and Michael Addison. Orange County A – Blake Hopkins, Robert Nixon, and Zach Swoope – took home second place honors. Third place honors were awarded to Randolph Henry High School. Congratulations to all those teams that made it to the state level. A special thank you goes to Merck Animal Health, Southern States Cooperative Inc., Virginia Farm Bureau, and Zoetis, along with our regional contest product sponsors Bayer, Boehringer Ingelheim, Merial, and Zoetis.

The new Youth Meat Quality Assurance (YMQA) Program hosted youth training in conjunction with the Commonwealth Classic. 108 4-H and FFA youth participated in this statewide training. The youth learned proper animal management, husbandry, and handling techniques while at the training. By attending the classroom portion of the training, youth were certified in the Youth Pork Quality Assurance Plus program; youth who participated in both the classroom and a chuteside training

Youth Events continued from page 18



Judge Caleb Crosswhite, Washington, D.C., congratulates a beef exhibitor at the 2014 Commonwealth Classic.

were Beef Quality Assurance- certified. Both YPQA Plus and BQA certifications are recognized as national certifications through the Virginia Department of Education and are both part of the YMQA certification program that is administered through Virginia Cooperative Extension. All youth participating in these trainings will be fully eligible to compete at the State Fair of Virginia held in October. The 2014 State Cattle Fitting Contest began Saturday morning, March 29. This inaugural contest was open to exhibitors at the Commonwealth Classic and encouraged youth to gain the ability to work with a team to enhance the showing performance of a groomed animal. The 2014 contest saw four teams

compete. The Intermediate Division (ages 13 – 15) was won by the Junior Angus Association, which consisted of Jake McCall, Will Clark, Caleb Boden, Chet Boden, and their coach Ruth Boden. The Junior Hereford Association took home second place honors with team members Olivia Williams, Brent Hostetter, Ashley Hostetter, Kelsey Trainor, and coach Herk Williams. Orange County 4-H won the Senior Division (ages 16 – 19) of the cattle fitting contest. Their team members included John Michael Knight, Cody Boden, Zach McCall, Blake Hopkins, and coach Patti Knight. Second place went to Clarke County 4-H, with team members Mark Alexander, Catie Hope, Hunter Wimmer, Helena St. Clair, and

coach Mark Alexander. The Youth Cattle Fitting Contest would like to thank its sponsors: Country Folks, Pearson Livestock Equipment, and Virginia Club Calf Producers.

Another new contest, the 2014 Youth Cattle Sales Contest, was also held Saturday morning of the Commonwealth Classic. The objective of this contest was to gain a working understanding of performance and pedigree information. The five competing teams were to take pedigree information, marketing materials, and an animal to a panel of judges and attempt to sell the judges that animal, based on a pre-chosen scenario. Top Intermediate Division honors went to the Smyth County Livestock Club and

*Youth Events continued from page 19*

their team members Alex Wheeler, Zach Jones, and John Morgan Pratt, coached by Andy Overbay. Rockbridge County 4-H – Jenna Hamilton, Brent Hostetter, and Ashley Hostetter, with coach Patty Hamilton, took home second place honors. The Senior Division was won by 4-C Cattle Company of Augusta County. Coached by Sarah McCall, this team consisted of Cody Boden, Jake McCall, Caleb Boden, and Zach McCall. Rockbridge County 4-H team Lindsey Fenster, Brandon Hamilton, Sarah Harris, and Davis Fenster, along with coach Patty Hamilton, took home second place honors. Broadway FFA took home third place with their team members Kaylyn Beach, James Ritchie, and Taylor Burgess, coached by Callie Randolph. A special thank you goes to the Youth Cattle Sales Contest sponsors Cattleman's Supply and CFC Farm and Home Center.

The Commonwealth Classic hosted 160 exhibitors, 46 commercial heifers, 84 prospect steers, and 108 breed entries, for a grand total of 238 head shown throughout the weekend. The youth beef shows started off with the Showmanship division. Top honors went to Jack Redifer in Senior Showmanship, Blake Hopkins in Intermediate Showmanship, Zachary McCall in Junior Showmanship, and Holly Moore in Novice Showmanship. Reserve Champion showman was awarded to John Michael Knight in Senior Showmanship, Jake Snyder in Intermediate Showmanship, Taylor Wright in Junior Showmanship, and Samantha Moore in Novice Showmanship.

Saturday afternoon and Sunday morning featured the youth registered breed shows. The youth Hereford show began the evening shows in Ring B. The Herefords had a strong showing with 27 head from 16 exhibitors. The Overall Grand Champion Hereford Heifer was awarded to Olivia Williams from Fairfield. Liana Durrer, of Ruckersville, received the Overall Reserve Grand Champion Hereford Heifer. Other honors included:

seven exhibitors showing 13 head. Overall Grand and Reserve Champion Purebred Simmental Heifer honors were awarded to Savannah Cline of Wytheville. In the Percentage Division, Overall Grand and Reserve Champion Heifer were awarded to Alex Wheeler of Atkins. The All Other Breeds division saw breeds such as Limousin, MaineTainers, Lim-Flex, and Chianina compete for top honors. Lexi Henderson of Berryville won the AOB Grand Champion Heifer. Samantha Moore of Raphine received the AOB Reserve Champion Heifer.

March 30 began with the Youth Commercial Heifer show and was followed by the Youth Prospect Steer Show. Jenna Kibler, of Edinburg, won the Grand Champion Commercial Heifer and Bethany Gochenour, of Lebanon Church, was the exhibitor of the Reserve Champion Commercial Heifer. Grand Champion Prospect Steer honors went to Kyle Lutz, of New Market, while Tyler Custer, of Fulks Run, won Reserve Champion Prospect Steer.

The Youth Angus Show saw a very strong showing of 51 head of Angus cattle from 30 youth exhibitors. The Overall Grand Champion Angus Heifer was exhibited by John Michael Knight, of Montpelier Station. The Overall Reserve Champion Angus Heifer was awarded to Bryce Bowman of Barbourville. Other Angus honors included: Grand Champion Bred & Owned Angus Heifer – Elizabeth Cole; Reserve Champion Bred & Owned Angus Heifer – Mark Alexander, of Berryville; Grand Champion Owned Heifer – John Michael Knight; Reserve Grand Champion Owned Heifer – Bryce Bowman; Grand Champion Angus Steer—Weston Snyder; Reserve Champion Angus Steer —Kelsey Lawson; Grand Champion Bred & Owned Angus Bull Calf—Connor Orrock; Reserve Champion Bred & Owned Angus Bull Calf—Elizabeth Cole; Grand Champion Bred & Owned Angus Bull—Morgan Alexander; and Reserve Champion Bred & Owned Angus Bull—Connor Orrock.

The Overall Supreme Champion Heifer Drive rounded out a great weekend of events. This Supreme Drive saw the overall champions from all the youth heifer shows. John Michael Knight, from Montpelier Station, exhibited the Overall Supreme Champion Heifer. The Reserve Supreme Champion Heifer was exhibited by Bryce Bowman, of Barbourville. Both the Supreme and Reserve Supreme Champion heifers were from the Youth Angus Division.



## Virginia Tech Horse Judging Team Finishes Strong in the Intercollegiate Spring Contest in Gainesville, Texas



*L-R: Hannah McDonald, Taylor Ford, Rachel Owens, Ashley Owens, Charley Maxwell, and Emily Hendrix.*

A semester of focusing on the details of judging stock horse conformation and eight various performance classes culminated in a successful outing to Texas, where the six students on the VT Horse Judging Team continued their studies to prepare for the national Spring Intercollegiate Horse Judging Contest held in Gainesville, Texas, on April 15. The team had the opportunity to visit with many top professional trainers and judges in the Fort Worth area and see world champion horses from every segment of competition. Along with judging, the students worked hard to refine their verbal skills in the reasons competition area, where their accuracy and presentation skills earned them points toward the final tally.

Members of the team included Taylor Ford of Lewisburg, West Virginia; Emily Hendrix of Stafford, Virginia; Charley Maxwell of Montpelier, Virginia; Hannah McDonald of Cross Junction, Virginia; Ashley Owens of Lebanon, Virginia; and Rachel Owens of Virginia Beach, Virginia.

With 21 teams that hailed from California to Florida to Wisconsin, the Hokies finished fourth in halter judging and fourth in reasons competition. Individual awards were secured by Taylor Ford who finished 10th in halter judging, and Hannah McDonald who placed eighth in reasons. The contest was won by the University of Florida.

The team will continue to work towards the fall contests, which include the Ohio Quarter Horse Congress and/or the National Reining Horse Association futurity contests. The team is supported by the Department of Animal and Poultry Sciences, the VT Block and Bridle Club, and the Pat Stewart Endowment Fund. APSC faculty member Dr. Julia McCann coaches the team.

## DATES TO REMEMBER

**May 27**

Classes begin for First Summer Session

**July 3**

Classes end for First Summer Session

**July 8**

Classes begin for Second Summer Session

**Aug. 14**

Classes end for Second Summer Session

**Aug. 25**

Classes begin for Fall Semester

**Oct. 10**

Fall Break

**Nov. 22-30**

Thanksgiving Break

**Dec. 10**

Classes end for Fall Semester

**Dec. 12-18**

Fall Semester Exams

**Dec. 19**

Fall Commencement Ceremonies

## Update your information

We are interested in knowing what you are doing! Please help us keep our mailing list current by completing and returning this form to the Department of Animal and Poultry Sciences, Virginia Tech (0306), Blacksburg, VA 24061 or email vtaps@vt.edu with the following information.

Name: \_\_\_\_\_ Year and Degree: \_\_\_\_\_

Home Address: \_\_\_\_\_

Employer: \_\_\_\_\_

Current Position: \_\_\_\_\_

Work Address: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

News about Yourself:

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Would you like to be contacted concerning support of one of our scholarship programs or extra-curricular group activities?

 Yes

 No

## APSC contact information

Department of Animal and Poultry Sciences Area Code (540)

Main Office and Extension Office .....231-6311

Undergraduate Advising Office .....231-6936

### Club Advisors

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Campbell Arena ..... 231-3555

Judging Pavilion ..... 231-9150

Alphin-Stuart Arena ..... 231-9150

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