# WirginiaTech

# **Department of Animal & Poultry Sciences**

Spring 2011



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Block & Bridle pledge class

# **Letter from the Department Head**

Dear Alumni and Friends:



It is absolutely a great time of year to be on the Virginia Tech campus. Trees are nearly full of leaves, the smell of freshly mown grass fills the air and a plethora of young offspring fills the pastures along Rt. 460. Most importantly, the campus is 'alive' with extra-curricular activities and spring football practice has culminated in the ever-exciting "Maroon and White" game. Though a measurable portion of the excitement on campus is weatherrelated, many students are enthusiastic about completing a year of college. Whether it is the 'budding' freshmen who have successfully completed inorganic chemistry or the graduating seniors who finally managed to pass Dr. Knight's reproductive biology course (on the second attempt), the gratification associated with accomplishing a task is evident. Moreover, the anticipation of future opportunities in life abounds. As we reflect with these young people, we can't help but share in those feelings. This is one of the more gratifying pleasures of a university educator.

Indeed, the past couple years have been difficult for us as an organization, but we have not been alone. Our sister institutions across the nation have also struggled to maintain faculty numbers and support. Even so, we believe the department, college and university are all emerging from this economic downturn stronger, more efficient and better equipped to address the future needs of our clientele, especially our students and stakeholders. Though not on campus, four new faculty members have been hired in the areas of reproductive

biology, physiology, obesity, and youth development. By this fall, we anticipate filling the Paul Mellon equine chair position, and it remains quite possible that we could add yet other individuals to our faculty in the near future. This is indeed an exciting time to be in the Department of Animal and Poultry Sciences.

As such, we have begun investing heavily in our animal units, the very locations where we educate our undergraduates. interact with our stakeholders and discover new information. With the help of college personnel, we have conducted a major renovation at our swine unit and are replacing much of the fencing along Plantation Road. These types of activities, though seemingly small in comparison to educating the future leadership of agriculture, show others that we are proud of our discipline and we are good stewards of resources left to our oversight. We anticipate these activities to continue into the foreseeable future.

If you should have any thoughts or questions regarding the direction or vision of the department, don't hesitate to let me know (dgerrard@vt.edu) and most importantly, we thank you for your support and hope to see you on campus very soon.

Professor and Head Department of Animal and Poultry Sciences

# Recognition of Paul Siegel's Extraordinary Chicken Lines at Virginia Tech

The chicken lines developed by Dr. Paul B. Siegel, University Distinguished Professor Emeritus of Animal and Poultry Sciences at Virginia Tech, have been recognized in several ways over the past year. Following are excerpts from information presented on the Virginia Tech website, the journal Nature and National Geographic magazine.

The domesticated chicken has been a source of meat and eggs for humans for at least 8,000 years. But for a handful of researchers at Virginia Tech who, with their colleagues around the world, have conducted decades of research in genetic studies of animal domestication, the domesticated chicken is helping better understand everything from animal appetites to genetics. In the 1950s, Dr. Paul B. Siegel began breeding White Plymouth Rock chickens based on their weight at Virginia Tech. Although now retired, Dr. Siegel is still an enthusiastic researcher and mentor of students.

After earning his bachelor's degree from the University of Connecticut in 1953 and his master's degree and doctorate from Kansas State University in 1954 and 1957, respectively, Paul Siegel joined the faculty at Virginia Tech and began his experiment on high- and low-growth chickens during his first month on the job. He devised a simple experiment that continues to this day. That experiment was to develop two distinct lines from a common founder population of White Plymouth Rock chickens based on their weight at eight weeks of age. Every generation, he bred the heaviest and lightest chickens within their respective lines, thus establishing a high-growth and a low-growth group.

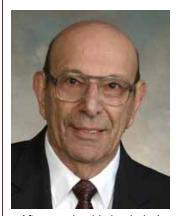
Today, Siegel's high-growth chickens dwarf their low-growth counterparts, weighing on average 10 times more by the time they reach the selection age of eight weeks. Siegel describes his experiment as one of resource allocation. "A population has to be balanced," he

said. "If we move one of the factors such as growth, reproduction, or immunology in one direction, the others will move in another direction. By selecting for growth, we are testing the genetic and immunological limits of poultry."

### A look at some of the research

Several Virginia Tech animal scientists have been able to utilize the high- and low-growth chicken lines over the years to advance their research projects. Mike Denbow, professor of animal and poultry sciences, has been using them to understand how the brain regulates food intake -- a significant issue in Siegel's line bred for extreme growth. He is testing several compounds to see what effect they have on the brain's ability to determine whether the body has enough energy. "Interestingly, pharmacological systems that affect food intake in mammals act the opposite in chickens," he said. "We have to find out why to have a complete understanding of growth in poultry." According to Denbow, if producers can introduce a compound into the food or water used at their chicken operations, they might be able to influence the chickens' food intake and, therefore, the productivity of the farm.

Meanwhile Ron Lewis, associate professor of animal and poultry sciences, has studied the change that Siegel's selection process has caused over time in an attempt to provide a simple understanding of the dynamics of the chicken populations. "We are tracing ancestral information about these highand low-growth chickens and taking a probabilistic approach to see how the lines changed over time," Lewis said. He said he hopes to track down the consequences of selection on effective population size. "I am interested in how many distinctive individuals over time a line must have to allow changes in that population due to selection to continue."



After earning his bachelor's degree from the University of Connecticut in 1953 and his master's degree and doctorate from Kansas State University in 1954 and 1957, respectively, Paul Siegel joined the faculty at Virginia Tech and began his experiment on high- and lowgrowth chickens during his first month on the job.

# **Recognition**, continued

Also studying poultry genetics, Eric Wong, John W. Hancock Professor in Animal and Poultry Sciences, has investigated gene expression of nutrient transporters in Siegel's chicken lines. In particular, he explored the expression of a series of amino acids and peptide transporters responsible for growth and nutrient management. "We asked ourselves. 'Does the expression of nutrient transporters play a role in the extraordinary growth in these poultry lines?' " Wong said. "We found that the answer was no. In fact, the high-weight birds had a lower expression and were able to assimilate nutrients efficiently." Despite the results, Wong and his students closed one door of research and opened another.

### A scientific breakthrough

The scientific community at large has benefited from the research done on the high- and low-growth chicken lines just as much as Virginia Tech faculty members have. Last year, an article in the scientific journal Nature highlighted a breakthrough in genetic studies of animal domestication, thanks in part to the two

lines of chickens developed at Virginia Tech. The research team identified a gene found in all of Virginia Tech's highgrowth chickens, but few of the low-growth ones, which appears to regulate appetite. The finding could have ramifications for both animal and human health studies involving weight. The Virginia Tech poultry lines, which include the complete pedigrees of 53 generations, might even provide clues about certain human health disorders such as obesity and anorexia nervosa. In addition, the team may have found a genetic mutation in poultry caused by animal domestication, the first such discovery of its kind.

### **National Geographic**

Dr. Siegel's high and low weight lines were featured in an article in National Geographic magazine in March 2011 in an article called "Taming the Wild – Animal Domestication". Please visit the following link where you can see pictures of the chickens and an excellent description of their value to genetic studies: http://ngm.nationalgeographic.com/2011/03/taming-wild-animals/ratliff-text



Low weight (left) and high weight (right) chickens from Paul Siegel's selected lines at eight week of age (Generation 27).

# **Faculty Awards and Recognitions**

# Rami Dalloul receives PSA Early Achievement Award for Research

The Poultry Science Association Early Achievement Award for Research is presented to recognize the achievements of PSA members in the early stages of their careers in poultry research. This award was presented to Rami A. Dalloul in 2011.

Dr. Dalloul's journey with poultry began as a little boy on the family farm in Lebanon where he grew up. He attended the American University of Beirut and received a bachelor's degree in animal sciences and a master's degree in poultry science. Dalloul attended the University of Maryland (College Park) to earn a doctoral degree under the direction of John Doerr. While at Maryland, he studied poultry gut immunity in the context of probiotic feeding and coccidiosis, a disease that was the focus of his postdoctoral research.

Dalloul and family moved to Virginia Tech in Blacksburg and quickly found themselves at home as part of the Hokie Nation. Since joining the faculty of the Department of Animal and Poultry Sciences in 2007, Dalloul established the Avian Immunobiology Laboratory, focusing his research on host-pathogen interaction and poultry immunology in addition to serving as a leading member for the turkey genome sequencing project. With a heavy research appointment, he has attracted more than \$1 million in external funding, has published over 13 manuscripts, and is currently mentoring four graduate students (two Ph.D. and two M.S.). Additionally, he acts as an academic advisor for 14 undergraduate students and serves as co-advisor to the Poultry Club. Dalloul also developed and teaches 'Poultry Laboratory and Advanced Avian Immunology', coteaches 'Contemporary Issues in Animal Sciences', and contributed to teaching advanced topics in immunology and

molecular biology.

Dalloul owes his early success to the highly collegial and supportive environment within his department, college and university, to his colleagues

environment within his department, college and university, to his colleagues and students, and most of all to his family for providing unconditional love and support.

# Mike Denbow recognized for teaching excellence in Virginia Tech's College of Agriculture and Life Sciences

D. Michael Denbow, professor of animal and poultry sciences, was awarded the 2011 Certificate of Teaching Excellence from the College of Agriculture and Life Sciences at Virginia Tech.

Through a positive environment fueled by collaborative learning, Denbow says he hopes to inspire his students beyond what they can do individually. "I believe that if one has a passion for their subject, one can usually pass along that passion, thereby motivating them to exceed their own expectations," said Denbow. "The challenge and joy for teaching can be found in those moments when we help someone grasp a concept."

Denbow has thoroughly embraced university teaching in the broadest sense. He currently teaches six different courses across all undergraduate academic levels, guides undergraduate research projects, mentors graduate students, serves as a department core advisor, and advises student clubs and organizations. He has also directed honors reading groups. "Dr. Denbow continually captures students' interest with his wit, humor, sincerity, and breath of subject matter. He continually strives to make matter relevant to his audience, giving examples of how the material affects them and their everyday lives," said David Gerrard, head of the Department of Animal and Poultry Sciences. "His efforts are consistently acknowledged in the student evaluations where students routinely say that his



Dr. Rami Dalloul



Dr. Michael Denbow

# **Faculty Awards and Recognitions**, continued

courses are the best they have taken, or he is the best instructor that they have had at Virginia Tech."

Denbow is considered one of the college's top academic advisors, having won the Alumni Award for Academic Advising last year. In addition to serving as a core academic advisor charged with guiding the department's first-year and transfer students, he is also the coordinating counselor with responsibilities for maintaining the undergraduate program.

Along with his teaching and advising duties, Denbow maintains a federally funded research program where he conducts innovative research on the neurochemical control of food intake. Denbow's research program allows him to bring the latest results to the classroom, as well as to train both master's degree and doctoral students. Each year, he also provides several undergraduate students the opportunity to conduct research in his laboratory.

Denbow earned his bachelor's and master's degrees at the University of Maryland and his Ph.D. from North Carolina State University, all in physiology.

Nationally ranked among the top research institutions of its kind, Virginia Tech's College of Agriculture and Life Sciences focuses on the science and business of living systems through learning, discovery, and engagement. The college's

comprehensive curriculum gives more than 2,400 students in a dozen academic departments a balanced education that ranges from food and fiber production to economics to human health. Students learn

from the world's leading agricultural scientists, who bring the latest science and technology into the classroom.

# Mark Estienne receives two awards in 2011

Mark J. Estienne, Associate Professor and Swine Research Physiologist, has been honored with two awards in 2011. On January 28th at the annual Virginia Pork Industry Conference in Franklin he was presented the 2011 Virginia Pork Industry Service award by the Virginia Pork Industry Association. This prestigious award is presented to individuals who serve and work for the betterment of the Virginia pork industry. In presenting the award, association member and awards chair, Jessica Pittman, indicated that "Dr. Mark Estienne is a skilled animal scientist and has many academic achievements. But the real reason he is most deserving of the Virginia Pork Industry Service Award is that he applies his skill and effort as a swine scientist toward topics that are important to pork producers and the pork industry."

Just 10 days later at the American Society of Animal Science Southern Section meeting in Corpus Christi, Texas, Dr. Estienne was recognized as recipient of the 2011 National Pork Board Swine Industry Award for Innovation. The research project and associated presentation paper that resulted in the award was "Use of MATRIX® and P.G. 600® in combination to synchronize estrus in replacement gilts." Criteria for this research innovation award includes the degree that the work creates an opportunity to advance the swine industry, addresses issues relevant to the swine industry, employs an untried approach that effectively addresses a conceptual problem and the soundness of approach.

Dr. Estienne is based at the Tidewater Agricultural Research & Extension Center in Suffolk, Virginia and oversees the swine



Dr. Estienne with a big buddy

# **Faculty Awards and Recognitions, continued**

research unit there. Prior to joining the Virginia Tech Animal and Poultry Science faculty in 1999, he was on the agricultural faculty at the University of Maryland – Eastern Shore, Princess Anne, Maryland. Mark and his wife Debbie live on a small livestock farm with their children in Suffolk.

# Paul Ruszler elected a Fellow of the Poultry Science Association

In September 2010 Dr. Paul L. Ruszler was elected a Poultry Science Association Fellow, the highest honor that the association bestows. The status of Fellow recognizes members for professional distinction and contributions to the field of poultry science.

Paul L. Ruszler was raised on an Indiana dairy farm with responsibility for the family chicken flock. Active in 4-H from the age of eight, he completed 76 4-H & FFA projects. He earned his B.S. in Poultry Science (1955) and M.S. in Poultry Management (1967) from Purdue and his Ph.D. in Poultry Production, Management and Environmental Physiology (1970) from Texas A & M. He began development of proper molting methods in 1963, later pioneered using perches and de-clawing pullets to control "hysteria" in caged hens. He is a member of PSA, WPSA, APHS and other poultry organizations. He is retired, U.S. Army Reserve Colonel, with 35 years of service.

Dr. Ruszler worked for Quaker Oats
Research Farms and Arbor Acres-Midwest
then became General Manager of Shaver
Poultry Breeding Farms, Cullman,
Alabama before joining the University
of Georgia Extension (1972) developing
extension programs for commercial eggs,
broiler breeders and youth. He published
the first Extension Bulletin (1973) on
molting procedures then adapted declawing after hatch, stopping "hysteria"
in caged pullets. Joining Virginia Tech
(1976), he published a user friendly,
molting manual adopted by National and
International producers because of its

humane features, requiring four reprints. In 1994, he pioneered full fed molting techniques adapted for commercial use. He initiated a computer program for producers in 1980 and developed a total light control system for the Virginia broiler breeder and egg industries. He led a task force controlling, within four months, the 1984 Avian Flu epidemic in Virginia. He initiated an IMP program, adopted nationally and internationally, controlling houseflies with the Ophyra fly predator. His manure management system, initiated in 1988, became the basis for state-wide programs. He presented 10 seminars in Korea on the development of our Integrated Egg Industry.

Dr. Ruszler served twice on the PSA nominating committee and chaired a third term. He also chaired the Maurice Stein Award twice and the Pfizer Extension Award. He served on the Professional Development Committee and PSA's voting delegate at the IFT Food Safety Workshop. He was an Associate Editor of the PSA Journal plus the JAPR since its inception. A speaker three times at SPEA's International Education Program, he coordinated the College Youth Program, chaired the EPA Task Force and the Education Committee. He conceived and co-directed the Mid-Atlantic Laver Management Workshop for 10 years and served as instructor and section leader at the National Shell Egg Quality School for 20 years, twice receiving the Best Instructor Award. He was co-founder of the National Poultry Waste Management Program in 1988, receiving the USDA Certificate of Appreciation and was appointed by the Governor to Virginia's **Humane Animal Transportation Task** Force, Egg Quality Assurance Program and Egg Board. He has been described as the prototype Extension person, moving research to the farm, showing how it contributes to the welfare of man and birds. He operates successfully in both worlds: academia and industry. His valuable work includes molting, lighting, pullet rearing, beak trimming and de-



Dr. Paul Ruszler

# **Faculty Awards and Recognitions**, continued

clawing, waste management, zoning, animal welfare, and fly control.

Ruszler's awards include: Virginia Egg Council's Outstanding Industry Service Award; Certificates of Appreciation from DeKalb Ag Research Inc. and Virginia Poultry Federation. He also received Rohm and Haas Public Information; Virginia Golden Egg; Eddie Mason Youth; and Rockingham Poultry Serviceman's Organization Awards and served for 20 years as Poultry Science Club Advisor.

He developed and taught Poultry Production for 28 years and Advanced Poultry Management for five years until retirement and chaired or served on six Ph.D. and nine M.S. committees with one student earning the PSA Certificate of Excellence Award. His students credit practical, hands-on experiences in the classroom and the field, for their learning skills. Dr. Ruszler's vision of animal welfare as the Industry's toughest nemesis has played out exactly as predicted and needing more pro-activity.

Dr. Ruszler supervised sabbaticals for international professors and developed cage layer systems for the Virginia Department of Corrections. He served on

the CREES Review Team for the Florida Dairy and Poultry Sciences Department. With no research appointment Ruszler completed 20 extensive trials, authored eight and co-authored 10 refereed journal papers, 56 abstracts, over 200 Extension Bulletins and reviewed over 20 USDA Small Business Innovation Research Cooperative Education Grants.

# Rebecca Splan is awarded the Faculty Teaching Award from Gamma Sigma Delta

Dr. Rebecca K. Splan received the 2011 Outstanding Faculty Teaching Award from the Virginia Tech Chapter of Gamma Sigma Delta, the Honor Society of Agriculture. Dr. Splan joined the department in January 2000 and has taught more than 1,700 undergraduates in 42 courses, mentored 42 undergraduate interns, guided 27 independent study and 13 undergraduate research projects, and supervised 30 study abroad participants. She specializes in developing innovative experiential learning opportunities for students of equine science, and currently spearheads the semester-long immersive Equine Studies program at the Middleburg Agricultural Research and Extension Center.



APSC Students at work and play

# **Outstanding Alumni Awards**

On March 18, 2011, the College of Agriculture and Life Sciences Alumni Organization honored outstanding alumni from the College at its annual awards banquet. The banquet, which was held at the Inn at Virginia Tech and Skelton Conference Center, recognized alumni who had made significant personal career achievements since completing their undergraduate or graduate degree, and who have provided service to their department, the alumni association or the college at large.

Each Department nominates an alumnus or alumna who graduated more than 10 years past, and a graduate from within the last 10 years, for these prestigious awards. This year, the Department of Animal and Poultry Sciences was honored to recognize Dr. William ("Billy") Lucas Flowers as its Outstanding Alumni, and Dr. Melinda Rose Cep as its Outstanding Recent Alumni, award winner for 2010-2011.

### **Outstanding Alumni Award**

Dr. Billy Flowers received his B.S. in Animal Science at Virginia Tech in 1982. He continued his studies at the University of Missouri, where he completed M.S. (1984) and Ph.D. (1987) degrees. In 1987, Dr. Flowers joined the Department of Animal Science at North Carolina State University (NCSU) where his career continued to flourish. He became a University Alumni Distinguished Professor at NCSU beginning in 1999.

Over his 23-year career at NCSU, Dr. Flowers has had tremendous impact on education, extension and research, with particular focus on reproductive physiology in the swine. His outstanding achievements are best reflected in his own words. "I love what I do. I love working with students. I love doing research. And working with industry is terrific because you can see things that you helped develop being applied in the real world."

Dr. Flowers has been an exemplary educator. He has instructed 11 courses. In classes, he encourages students to teach and learn from each other, and by doing. He has advised over 1,000 undergraduate students, and supervised 133 in special projects. He has mentored 18 graduate students. In 1992, he co-founded the Food Animal Scholars program, providing undergraduate students interested in food animal species early admission to veterinary school. In 1996 he taught the first distance education course in Swine Management in Southeastern U.S. and is currently on an advisory team for 'Swine On-line', a national distance education effort providing training in swine management and production.

In his earliest work, Dr. Flowers developed breeding strategies that helped swine producers transition from natural service to artificial insemination. He established semen quality parameters now commonly used by boar studs world-wide. He demonstrated the importance of seminal plasma proteins as fertility markers for boar semen, and the superiority of realtime ultrasonography for pregnancy diagnosis. He helped develop and win approval of three main pharmaceuticals to control reproduction in swine. In his current research, he has demonstrated the importance of the neonatal environment on adult reproductive function in both replacement gilts and boars. Dr. Flowers

has authored. or co-authored, nearly 700 publications, 117 in peer reviewed publications. He has won nearly 3 million dollars in funding for his academic program, and has received a dozen awards and honors for

(I-r) Dr. Alan Grant, Dean of the College of Agriculture and Life Sciences, Dr. Billy Flowers, and Dr. Dave Gerrard, Head of Animal and Poultry Sciences



# **Outstanding Alumni Awards**, continued

his exemplary teaching and scholarship. Dr. Flowers credits his successes to the enthusiasm and support he has gleaned from his students and industry alike.

Dr. Flowers was an outstanding scholar at Virginia Tech; he was interviewed for a Rhodes Scholarship in 1981 and graduated summa cum laude. In North Carolina, he serves as an ambassador for Virginia Tech helping recruit students to the Dairy Science program. He contributes to the University mission through his outstanding service to swine research and production.

### **Outstanding Recent Alumni Award**

Dr. Melinda Cep received her B.S. in Animal and Poultry Sciences at Virginia Tech in 2005. She then continued to the Virginia-Maryland Regional College of Veterinary Medicine (VMRCVM), completing a degree of Doctor of Veterinary Medicine in 2009, with an additional emphasis on public and corporate veterinary medicine. In 2009, Dr. Cep became a Legislative Fellow in the Office of Rosa DeLauro of Connecticut, U.S. House of Representatives. Dr. Cep's responsibilities focus on agriculture, food safety, public health as well as appropriations.

As an undergraduate student in the

Department of Animal and Poultry Sciences, Dr. Cep's passions for public policy issues, and her strong leadership skills, were clear early on. During the 2004-2005 academic year, she

was appointed the undergraduate student representative to the Board of Visitors, serving as a liaison between Virginia Tech students and the Board. Over that same timeframe, as a research assistant with Bush to Base Bioinformatics, LLC, she assisted in creating computer-based educational modules (READ-IT), and was engaged in their integration into the curriculum of the local public school system.

Dr. Cep also actively contributed to the mission of the University and College through global outreach during her undergraduate degree. She was a Summer Intern at the Universidad Austral de Chile, Instituto de Medicina Preventiva Veterinaria, and a Summer Exchange Student at the Tamil Nadu Veterinary and Animal Sciences University in India. Beyond gaining an awareness of animal health priorities internationally, she contributed to public health research investigating interrelationships among human, livestock and rodent diseases, and water contamination.

Dr. Cep's strong 'public mindedness' continued throughout her studies at the VMRCVM. She was a Summer Intern for U.S. House of Representatives Committee on Agriculture, and a Student Extern in the Animal Welfare Division of the American Veterinary Medical Association (AVMA). Latterly, she was a Student Extern with the Food and Drug Administration with the National Antimicrobial Resistance Monitoring System, and with the Virginia Department of Agriculture and Consumer Services in the Division of Animal and Food Industry Services.

At the completion of her studies, Dr. Cep won one of two prestigious 2009-2010 AVMA Congressional Science Fellowships. The AVMA fellows provide science-based knowledge and information to the public policy making process, learning how federal public policy is made and influencing its outcomes.

(I-r) Dr. Alan Grant, Dean of the College of Agriculture and Life Sciences, Dr. Melinda Cep, and Dr. Dave Gerrard, Head of Animal and Poultry Sciences



# **2011-12 APSC Scholarship Recipients**

Litton Sheep Industry Student Leader Scholarship Kayleigh Mize

Ralph Hunt Beef Industry Student Leader Scholarship

Ben Cockerille

Lou Dixey Beef Industry Student Leader Scholarship Kaitlyn Meadows

Fred Campbell Horse Industry Student Leader Scholarship

Anna Norwood

Denver D. Bragg Poultry Science Student Leader Scholarship

Callie Pierce

Rocco Lamb Farms Student Leader Scholarship

Isaac Nelson

Animal and Poultry Sciences Scholarship

Akash Patel

A.L. "Ike" Eller Scholarship

Sarah Burczynski Katie Knight Stacy McPaters Andrew Sahol

E.A. & H.H. Livesay Scholarship

Rosella Harris

Ashe-Lockhart Scholarship

Amber Rosser Sarah Schneider Owen Thomas, Jr. Memorial Scholarship

Margaret-Katherine Jeter Andria Laib Lelia Tench

Michelle Thompson

Tom and Christine Marlowe Freshman Scholarship

Kelsey Kirschnick

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

Jimmy Shatt

George G. Green Scholarship Erica Davis

**Harry Wyatt Scholarship** 

Camilla Hughes Rosalie Petrone

**Lou Dixey Scholarship** Chris Duffey

William Earl Browning Scholarship

Mollie Blythe Kathryn Lacy

Ralph Hunt Scholarship

Marti Helbert Scott Neil

Virginia Pork Industry Scholarship

Erin Deliere Karen Park Mindy Thorpe

Mary Howe diZerega Memorial Scholarship

Ashley Ulmer

Arden N. Huff Scholarship

Kaitlin Gastrock Sarah Williams **Delano Scholarship** 

Ju Me Park Melissa Sampson Katy Shepard Casey Tignor

Jack S. Copenhaver Scholarship

Brian Cromer Skyler Dowell Kate Holsinger Morgan Paulette Kristen Ulmer

**Charles W. Thomas Memorial Scholarship** 

Brittany Neal Maria Rittenhouse Brittany Sholes

C. Gordon Thornhill Scholarship

Lauren O'Neil Emily Vincent Sarah Wysor

Emily Jane Hilscher Memorial Scholarship

Kathryn Slaughter

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



# **Dean's List, Spring 2010**

Michelle Aguilar Elizabeth A. Alexis Jackson T. Ames Christopher M. Andrews Jessica E. Barlow Morgan L. Bell Michelle L. Berry Christina M. Blatcher Laura A. Bradley Veronica H. Brennan Alvssa B. Brooks Jerilyn T. Brooks Sabrina N. Brooks Britni M. Brown Colleen M. Buckley Sarah E. Burczynski Anne C. Carrington Julia L. Carrington Lindsey R. Caudle Allyson D. Chase Hannah S. Cheng Chelsie F. Church Garrett L. Compton Ariel N. Cookson Bethany R. Correa Caitlin M. Cossaboom Geoffrey R. Cowan Darcy E. Crain Carrie V. Davis Megan M. Dayton Erin N. Deliere Rachel R. Dialectos Elle K. Donnini Sarah M. Donovan Adriana M. Durastanti Caitlin M. East Heidi R. Eberly Melanie M. Eldred Christine A. Evans Emma K. Evans Laura L. Faris Alison M. Fechino Elizabeth L. Feuerstein Caitlin M. Flint

Kathryn E. Foster Danielle L. Garman Ashley E. Gaston Julia E. Gibson Jacquelyn E. Greiner Katherine E. Hanley Martha A. Helbert Amber L. Hickman Patrick C. Hilson Tara S. Irwin Kaitlin N. Jacobs Christine S. Jones Katherine E. Jones Saki Kadotani Leah W. Kerner Alexander J. Kilgore Quentin D. King Lauren E. Kinter Katherine D. Knight Nicole A. Knoebel Adrienne L. Koegel Kathryn A. Lacy Diane E. Laurie Caitlin M. Leith Ashlie B. Lindsey Julie K. Majka Brendan J. Martin Ellen L. Messerly Julie A. MicKey Jay F. Miles Michael J. Minovich Rachel A. Morris Ashley D. Myers Rebecca M. Naramore Clara R. Nelson Jennifer N. Norman Anna B. Norwood Kathleen M. O'Laughlin Sarah C. Olmstead Chaelee A. Park Karen M. Park Meredith K. Park Akash P. Patel

Callie S. Pierce

Shauna R. Prasse Crystal M. Prom Christopher E. Quinones Devon N. Reed Heather F. Reeves Samantha J. Renalds Ashley C. Roberts Erin L. Rockwell Lauren R. Ross Amber L. Rosser Kristina M. Ruffner Jaime K. Rutter Lauren M. Ryalls Jessica G. Sakiewicz Mary Louise S. Sanders Abigail E. Schmidt Audrey G. Schmidt Taylor L. Scott Lauren M. Sheehan Justine H. Sherer Lauren M. Singer Farah-Dale S. Siodmok Laura M. Snow Wesley L. Spangler Colette M. Spillane Allison J. Spivey Karen E. Stump Priya A. Subbarayan Shannon A. Swank Emily S. Tanner Lelia M. Tench Andrea D. Teter Riley E. Traywick Brittany L. Trexler Laurita F. Turner Jessica L. Tussing Lindsay R. Vega Cassandra M. Washington Amanda L. Weakley Sarah E. Weaver Marilyn M. Wheaton Janice M. Wheeler Clarice D. White

Sarah E. Williams

# **Dean's List, Fall 2010**

Whitney L. Abraham Elizabeth A. Alexis Jackson T. Ames Christopher M. Andrews Chelsea D. Banning Christine M. Barton Kaleb Bekele Morgan L. Bell Michelle L. Berry Mollie P. Blythe Chester G. Boutelle Amanda E. Bowen Amy M. Brandon Alyssa B. Brooks Sabrina N. Brooks Britni M. Brown Caleb K. Brown Lauren M. Burnett Sarah E. Burczynski Allyson D. Chase Hanah S. Cheng Chelsie F. Church Garrett L. Compton Ariel N. Cookson Bethany R. Correa Elizabeth G. Cory Elena C. Cox Carrie V. Davis Lindsay J. Deacon Erin N. Deliere Rachel R. Dialectos Elle K. Donnini Adriana M. Durastanti Andrew C. Echols Kayla B. Eckard Cristie L. Edwards Melanie M. Eldred Kari A. Estes Laura L. Faris Alison M. Fechino Shawnee L. Felts Kathryn E. Foster Andrew A. Foy Danielle L. Garman Alumbria R. Gates Jessica M. Gilbert Emily B. Grabarek Rachel K. Grant

Jacquelyn E. Greiner Rachel I. Grosse Meredith L. Hale Christina S. Hall Martha A. Helbert Brittany L. Hendrix Hanna J. Herdegen Emily J. Hilburger Julie A. Holdridge Maureen E. Howren Katie L. Huffman Camilla Hughes Sarah E. Hylton Tara S. Irwin Kaitlin N. Jacobs Margaret-Katherine Jeter Saki Kadotani Quentin D. King Erin. E. Klingensmith Katherine D. Knight Adrienne L. Koegel Kaylee S. Kohlhass Kathryn A. Lacy Andria E. Laib Diane E. Laurie Billi E. MacFarlane Jessica M. Mautone Colleen R. McIntyer Stacy A. McPaters Kaitlyn R. Meadows Melodie J. Messer Ellen L. Messerly Paige N. Messick Jay F. Miles Kristin L. Nelson Jennifer N. Norman Anna B. Norwood Kathleen M. O'Laughlin Chaelee A. Park Karen M. Park Akash P. Patel Morgan R. Paulette Kaitlyn S. Peden Callie S. Pierce Shauna R. Prasse Devon N. Reed

Heather F. Reaves

Jessica D. Repep

Corbyn E. Riddell Jeremy B. Ridenour Maria C. Rittenhouse Ashley C. Roberts Linda L. Robertson Amber L. Rosser Kristina M. Ruffner Jaime K. Rutter Melissa A. Sampson Courtney V. Scarborough Sarah M. Schneider Taylor L. Scott Charlotte E. Scrivani Colby T. Sheets Kathryn A. Shepard Emma P. Shirey Brittany L. Sholes Alysha E. Simmons Farah-Dale S. Siodmok Lauren M. Singer Michele Sizemore Kathryn M. Slaughter Meagan E. Snoots Allison J. Spivey Shannon A. Swank Sarah M. Swisher Emily S. Tanner Lelia M. Tench Emily L. Thomas Michelle K. Thompson Dee-Marie T. Tormon Brittany L. Trexler Lindsay R. Vega Maarit N. Vonkutzleben Courtney M. Walski Cassandra M. Washington Mary E. Weatherman Marilyn M. Wheaton Clarice D. White Elizabeth A. Williams Sarah E. Williams Brittany F. Willing Meaghan K. Wilson Brittany N. Wilt Andrea L. Wolkoff Sarah L. Wray Abigail L. Zezeski

# **Graduate Student Awards and Recognitions**

Allison Echols receives 2011 Graduate Student Teaching Award from North American Colleges and Teachers of Agriculture

### by Michael Sutphin

The North American Colleges and Teachers of Agriculture (NACTA has recognized **Allison C. Echols** of Gap Mills, W.Va., with the 2011 Graduate Student Teaching Award. She is a master's degree student in the Department of Animal and Poultry Sciences in the College of Agriculture and Life Sciences at Virginia Tech.

The NACTA Graduate Student Teaching Award recognizes and rewards graduate students who excel as teachers in the agricultural disciplines. To qualify, a graduate student must be a member of NACTA and must have participated in classroom instruction for at least a year. Award winners will receive a plaque at the 57th annual NACTA conference at the University of Alberta in Edmonton, Alberta, Canada, on June 14-17.

Throughout her graduate studies at Virginia Tech, Echols has taught more than 200 students as a teaching assistant for Introduction to Animal and Poultry Sciences, Livestock Management and Handling, and Beef/Sheep Production classes. Her students describe her as "enthusiastic," "approachable," and "fair."

Emily Tanner of Eldersburg, Md., a sophomore double majoring in animal and poultry sciences and dairy science, wrote that Echols was able to make her lab "interesting and exciting."

"By loving what she does and portraying that through her teaching, [Allison] was able to gain the interest and respect from her classes that she rightfully deserves," Tanner said. "When it came to teaching the class, she was always confident and was able to relay the information extremely well. Anyone that has ever taken a class that Allison has taught knows that she demands a great deal from her students, and does so in order for her students to completely know the information and to be able to do their best."

Brendan Martin of Mount Solon, Va., a junior majoring in animal and poultry sciences, wrote that Echols cares for each student in her classes.

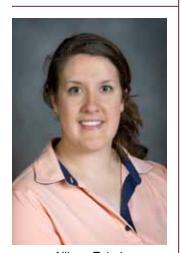
"Since she grew up on a large farm and enjoys working with livestock, Allison brings with her knowledge and strategy when it comes to working with animals," Martin said. "Allison sets herself apart from other graduate teaching assistants because she understands production agriculture and can relay the information to students in a way that is concise, enjoyable, and well-organized."

According to Scott Greiner, associate professor of animal and poultry sciences, Echols has not only excelled in her teaching and academic responsibilities but also contributed to Virginia Cooperative Extension's adult and youth programs by providing educational seminars and assisting with events and workshops. She has demonstrated her scientific acumen and proven herself an effective writer through her research on the relationship among lifetime measures of body weight and frame size in beef cows.

This spring, Echols received a Certificate of Merit for Graduate Teaching from the Virginia Tech Graduate School. In addition to NACTA, she is a member of the American Society of Animal Science; the Davis College of Agriculture, Natural Resources, and Design Alumni Association; the American Angus Association; the West Virginia Cattlemen's Association; and Gamma Sigma Delta.

Echols completed a bachelor's degree in animal and nutritional science and a minor in agribusiness management from West Virginia University in 2009.

Nationally ranked among the top research institutions of its kind, Virginia Tech's College of Agriculture and Life Sciences focuses on the science and business of living systems through learning, discovery, and engagement. The college's comprehensive curriculum gives more than 2,400 students in a dozen academic departments a balanced education that ranges from food and fiber production to



Allison Echols

# **Graduate Student Awards and Recognitions, continued**

economics to human health. Students learn from the world's leading agricultural scientists, who bring the latest science and technology into the classroom.

### **Outstanding M.S. Student Award**

The Outstanding M.S. Student Award, established to recognize annually the outstanding M.S. degree student in the Department of Animal and Poultry Sciences, was awarded to **Adrienne S. Bhatnagar**. Please see accompanying article about Adrienne in this newsletter on page 19.

### **Outstanding Teaching Assistant Award**

The Outstanding Teaching Assistant Award, established to recognize annually the outstanding M.S. or Ph.D. degree student in the Department of Animal Sciences who has excelled in teaching, was awarded to **Allison C. Echols**. Please see accompanying article about Allison in this newsletter on page 14.

# E. T. Kornegay Outstanding Ph.D. Award

The E. T. Kornegay Outstanding Ph.D. Award, established to recognize annually the outstanding Ph.D. degree student in the Department of Animal and Poultry Sciences, was awarded to **Tracy L. Sheffler**.

Tracy received her undergraduate education at Michigan State University prior to her M.S. program in Animal Sciences at Purdue University. Tracy has maintained an exemplary academic record throughout her degree program.

Tracy began her PhD program at Purdue in January 2007 with research interests in the regulation of energy metabolism in skeletal muscle of growing and mature animals, and its relationship to health, disease, and meat quality development. Current research focuses on the impact of AMP-activated protein kinase on glucose transport and fatty acid oxidation in

muscle, and investigating the role of the phosphagen system in pork quality development.

Tracy's teaching efforts in Meat Science at Purdue earned her the Featherstone Outstanding TA award. While at Purdue, Tracy was heavily involved in youth activities and as well as adult-oriented programs. "She embodies the ideal student we strive

to educate in a progressive animal sciences department. She is engaged, motivated, productive, well-balanced and personable."

Tracy has authored or co-authored seven journal articles and eight abstracts and has helped in the writing of a number of grant proposals.



Chasity Cox received the 2010 Richard B. Rimler Memorial Paper Award presented by the American Association of Avian Pathologist (AAAP) in recognition of excellence in poultry disease research by a graduate student. The 2010 Certificate of Excellence for Best Poster Presentation (Immunology & Pathology section) was presented to Chasity at the annual meeting of the Poultry Science Association in Denver.

Allison Echols received the Beef Improvement Federation Travel Fellowship to attend the 2010 BIF Annual Research Symposium and Meeting in Columbia, Missouri. The 2011 NACTA Graduate Student Teaching award will be presented to Allison at the 57th Annual Conference at the University of Alberta, Edmonton, Canada, in June. Please see accompanying article about Allison in this newsletter on page 14.



Adrienne Bhatnagar

# Graduate Degrees

### Fall 2010

MS
Adrienne Bhatnagar (Splan)

PhD
Hui Deng (Smith)
Susan Speight (Estienne)
Jessica Suagee (Wong)

### Spring 2011

PhD
Marissa Smith (Denbow)
Pingwen Xu (Denbow)

### **Expected Summer 2011**

MS
Heather Albrecht (Lewis)
Kachine Dixon (McCann)
Allison Echols
(Greiner/Wahlberg)
Erinn Higgins (Wood)
Jackie Speier (Wong)
Lindsay Stuard (Dalloul)
Laura Wittish (Estienne)

PhD Sungwon Kim (Dalloul)

# **Graduate Student Awards and Recognitions, continued**

Kimberly Fisher was one of the winners in this year's American Society for Nutrition Energy & Macronutrient Research Interest Section student-postdoctoral abstract competition. This award came with a \$500 check.

**Regina Lehman** was nominated in March to join Gamma Sigma Delta, the Honor Society of Agriculture.

Laura Wittish received an American Society of Animal Science Joseph P. Fontenot Student Travel Scholarship for the Southern Section Meeting in Corpus Christi, TX, in Spring 2011. **Departmental recognitions** 

**Erinn Higgins** received an E. T. Kornegay Memorial Graduate Scholarship in summer 2010.

In summer 2010, **Laura Wittish** received an E. T. Kornegay Memorial Graduate Scholarship.

Summer 2010 Graduate Travel Scholarships to present papers at professional meetings were awarded to:

> Sungwon Kim Lance Leachman Hanbae Lee Diego Paiva Kathryn Price Lidan Zhao

Clockwise from top left: Chasity Cox, Kim Fisher, Erinn Higgins, Laura Wittish, Tracy Scheffler, Regina Lehman













# **Highlights of the 2010 Hokie Harvest Sale**

By Dr. Dan Eversole, Dept. of Animal and Poultry Sciences

The 2010 Livestock Merchandising Class at Virginia Tech entertained a standing-room-only crowd of over 500 supporters and friends in the Livestock Judging Pavilion at the 16th Annual Hokie Harvest Sale on Friday, October 29th. As many of you know, the Hokie Harvest Sale has developed a significant reputation for selling high quality horses, swine, and beef cattle. This year's sale grossed \$79,250 and featured 53 lots of purebred and commercial beef cattle and eight commercial swine. Since the equine warmblood program moved to the Middleburg Agricultural Research and Extension Center last December. there were no horses offered in the 2010

student-run sale. This was the first year since 1995, which was the inaugural year of the Hokie Harvest Sale, that there were no horses offered at public auction.

There were 157 registered buyers from Missouri, Ohio, Indiana, Tennessee, South Carolina, Pennsylvania, North Carolina, West Virginia, and Virginia, who attended either the silent auction of swine or the beef cattle sale, which was broadcasted live over the internet by Cowbuyer LLC of Mt. Airy, NC. The beef cattle sale featured 35 head of commercial cattle and 34 animals representing three different

purebred breeds – Angus, Hereford, and Simmental. In the cow/calf division, Lot 6 sold with a GAR Game On heifer calf and was the top seller at \$2,625. This Angus cow is a daughter of the full sister to B/R New Frontier 095 and Lemmon Newsline C804. She ranks in the elite 2% among current dams for \$B at \$60.36 and records a progeny IMF ratio of 2 @ 105. This highly-valued four-year-old cow sired by Rito 2V1 sold to George Stovall of Stuart, VA.

In the Hereford division, Lot 8 commanded the highest bid at \$2,650. This first-calf heifer, sired by VPI Limited Edition J921, ranks in the elite 2% of active dams for Marbling and sold to Bob Kube, Fauquier Farm, of Broad Run, VA. Her World Class daughter (Lot 8A) went out-of-state to Robert Mench of Wilkinson, IN.

Flush brothers (Lots 18 and 20) topped the breeding-age bull division at \$2,700 each. These Angus yearling bulls are sired by CA Future Direction 5321 and out of the all-time, record-selling female, VT 1407 New Design B4, selected by Clifton Farms, Berryville, VA at \$41,000 in 2007. Both bulls ranked in the elite 1% on RE EPD and the upper 2% on \$G among non-parent Angus sires. John Saville of Blacksburg, VA and Paul Kiser of Lebanon, VA are the new owners.

John Hedrick of Wayside, WV purchased the top selling Simmental bull (Lot 28) at \$2,100. This SimAngus bull is sired by SVF Star Power S802 (Simmental) and out of the foundation Angus donor female, Whitestone Beauty 501R.

The 24 lots of commercial cows, mostly Angus-sired, drew considerable interest among cattlemen and averaged \$1,198. Moreover, the three boars and five pregnant gilts grossed \$2,000 at this year's sale.



Ag Tech student Willie Elgin registers a 'repeat customer' (Charles Shorter, Blacksburg) for the Hokie Harvest Sale.



A standing-room-only crowd in the Pavilion bids on the top-selling Hereford cow/calf lot.

# **Hokie Harvest Sale, continued**

The 76 students did a superb job of preparing for the sale. They gained 'hands-on' experience in sale management, budgeting, cataloging, advertising, livestock photography, clerking, and health requirements. Special thanks are extended to Col. Ken Brubaker of Brubaker Sales and Marketing, Harrisonburg, VA for serving as the sale consultant and beef auctioneer. Students Crystal Founds, Floyd, VA; Christopher Harrison, Madison, VA; Richard Preisser, Madison, VA; and Robert Strickler, Madison, VA served as bid-takers for the beef cattle sale while Trevor Whiteside. Queenstown, MD and Daniel Reynolds, Smyra, DE worked the ring. Jennifer Norman, Warrenton, VA served as the clerk 'in the block'.

The Food and Beverage Committee, with assistance from the Block and Bridle Club in the Department of Animal and Poultry Sciences, served a complimentary BBQ dinner to over 500 guests. Their support and cooperation are greatly appreciated.

Interest in the Hokie Harvest Sale continues to be overwhelming in favor of hosting future student-run livestock sales. However, purebred animal inventory numbers have dwindled in recent years that make it difficult to



Auctioneer Ken Brubaker, beef manager Chad Joines, and student clerk Jennifer Norman are ready for the sale to begin.

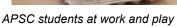


Vet-school bound Kaitlin Jacobs has feeding duty for the Lot #2 boar.

continually offer quality livestock at public auction. We are hopeful to host the 17<sup>th</sup> Annual Hokie Harvest Sale on October 28, 2011.









# An Update from the MARE Center, Middleburg, VA

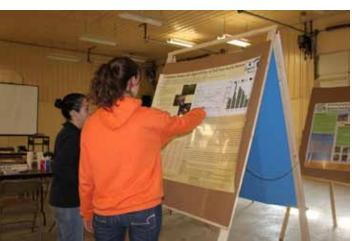
Adrienne Bhatnagar named outstanding Master's student

Adrienne "Adria" Bhatnagar, who recently completed her Master of Science degree in the field of equine genetics, has been named the Outstanding Master's Graduate Student for both the Department of Animal and Poultry Sciences and the College of Agriculture and Life Sciences.

Adria's thesis work represents the first genetic evaluation of sporthorses in North America, and is one of the few studies worldwide to investigate heritability of performance-related traits measured in growing foals. During her time in Blacksburg, she also led major projects investigating bone remodeling in foals and genetic variability in minor horse breeds. Advised by Dr. Rebecca K. Splan, Adria completed her degree with three first-author peer-reviewed publications, and five abstracts presented at national and international meetings.

In addition to her academic and scholarly success, Adria demonstrated outstanding capacity as an educator. She was a graduate teaching assistant for six courses in two years, and mentored undergraduate researchers and interns in the equine sciences on campus and at the Middleburg Agricultural Research

and Extension (MARE) Center. She also served a kev role in several departmental and 4-H events. Building on her work at Virginia Tech, she has recently begun a doctoral program at the University of Nebraska-Lincoln.



Students discuss a study's findings at the first annual Equine Science Undergraduate Research Symposium held at the Virginia Tech MARE Center.

MARE Center hosts first annual VT-PSU Undergraduate Equine Science Research Symposium

In early April, Virginia Tech and Penn State University joined forces to produce the first-ever Undergraduate Equine Science Research Symposium, hosted at Virginia Tech's Middleburg Agricultural Research and Extension (MARE) Center.

The event, designed to foster a collaborative atmosphere of scientific discovery and sharing among students with a passion for the health and wellbeing of the horse, drew more than 50 students and several faculty from both universities. Participants discussed findings from undergraduate, graduate and faculty research at their respective schools, and met with veterinarians and local horse owners who have incorporated the latest research findings into their equine operations and practices.

The keynote speaker for the event's dinner reception was Dr. Nathaniel A. White II, DVM, Director of the Virginia Tech Marion duPont Scott Equine Medical Center and recent past president of American Association of Equine Practitioners. Dr. White discussed current and future directions in equine research, and highlighted recent or ongoing work by several Virginia Tech equine scientists.

The symposium was the first-ever event of its kind for undergraduate students interested in a career in equine research in a veterinary, academic or industry setting. Program organizers expect the event to grow each year as more students and additional university programs join the effort.

# Demand for summer equine internship reaches new heights

Faculty and staff at the Middleburg Agricultural Research and Extension (MARE) Center knew their Summer Sporthorse Breeding Internship was popular, but they had no idea the

# **MARE Center**, continued

overwhelming response the program would generate for Summer 2011! Over 70 applications were submitted, more than any year previously.

Now in its sixth year, the internship helps prepare undergraduate students for careers in the horse industry, academia or the biological and veterinary sciences. Students experience an immersive learning environment and an unparalleled combination of scientific instruction and practical training during their time at the 420-acre breeding farm, research center and outreach facility. The program is unlike any other offered in North America.

Students enrolled at any university may apply, and enrollment is limited. This year, students from more than 30 schools and from as far away as Puerto Rico and parts of Europe applied for the internship.

Selecting this year's participants was extremely difficult, but MARE Center personnel were delighted to see the depth of talent and true passion for equine science evident among the applicants! The internship runs from May 15 to August 15 each year.

For more information about our internship program, please visit: http://www.arec. vaes.vt.edu/middleburg

# MARE Center partners with British Equestrian Federation

Capitalizing on the high demand for their summer internship, faculty at the Middleburg Agricultural Research and Extension (MARE) Center recently expanded the program to serve an international group of students. In a new,



In just six short years, the Summer Sporthorse Breeding Internship has become one of the most popular equine internships in the country. Pictured are the 2010 interns at the Virginia Tech MARE Center.

landmark collaboration, the MARE Center has teamed up with the Research Division of the British Equestrian Federation to create a competition for undergraduate students from across the United Kingdom. Eligible students submit research papers and application materials online and are then interviewed by a panel of equine scientists and industry representatives. The top student chosen by the panel wins the opportunity to complete an internship and associated research project at the Middleburg facility. As of the writing of this newsletter, applications for 2011 have been submitted, and the selection process is well underway!

This is an exciting new development that highlights Virginia Tech's role as an international leader in under-graduate equine science education!







APSC students at work and play

## **Block and Bridle Club Activities**

Article and pictures by Claiborne Hammond

Virginia Tech's Block and Bridle Club has experienced great success during the 2010-2011 school year. As a club we annually host many different events for the youth in Virginia to increase scholastic learning about animal science. Block and Bridle is also very active on campus and began the fall semester of 2010 providing BBQ free of charge to students at the College of Agriculture and Life Sciences Picnic. Selling BBQ is the club's main fundraiser and the greatest event is the Virginia State Fair where club members serve BBQ with sides starting

on September 23<sup>rd</sup> and running until October 3<sup>rd</sup>. Many members and pledges sacrificed valuable time to cover all the shifts during the week and two weekends. This dedication paid off with earnings of \$52,862.75. BBQ chairs Christie Edwards and Amaris Wilbanks had a large role in making this year's fundraiser successful at State Fair. Many other BBQ's this year included: Hokie Harvest, National Ag day on the drill field, VT Western Show, Little All American, Little International, and the Emily Jane Hilscher Memorial horse show.

Every year Block and Bridle has a national convention where outstanding chapters and members are recognized for different awards. This year's convention was held at Michigan State University from October 14-16th 2010. Ten Block and Bridle members were accompanied by advisor Dave Linker on the ten-hour drive from Virginia to arrive in time for the opening ceremony. Many tours were attended including Michigan State's organic dairy farm, a winery, and a trout farm. Other entertainment included a dinner and dance at the University's Equestrian Center, many lectures on various agricultural topics, and the international draft horse show. This was a very successful trip and many friends were made from other schools.

The club's first major event was the annual horse judging clinic which took place on November 13th 2010 for youth in 4-H and FFA. Live demonstrations were performed involving hunter under saddle, western pleasure, and halter. Smaller groups were formed to review specifics of conformation including balance, muscling, and correctness. Reasons were also given, and all of the youth walked away with greater knowledge about horse judging to prepare for the horse judging contest which was held on March 19, 2011, also at the Alphin-Stuart Arena. These events ran smoothly with the help of the VT horse judging team, contest chair Tracey Maier, and also numerous



Group picture after Fall formals.



Block & Bridle teams compete at Harvest Havoc

# **Block and Bridle Club, continued**

B & B members who worked behind the scenes.

On Friday March 18, 2011 the Hippology Contest was held at the Alphin-Stuart arena. This event had youth participants from all over Virginia who competed on teams with their 4-H or FFA club. Participants completed a written test with many identification stations to test their knowledge. This event ran smoothly with the hard work of contest chair Alexandra Northcutt along with reliable B&B members.

March 25-26, 2011 was a busy weekend with the Stockmans, Meats Judging, and Livestock Judging Contests. These contests were also held for Virginia 4-H and FFA youth and tested knowledge in livestock. The meats judging contest included: a written knowledge test, identifying retail cuts of lamb, pork, and beef, and also judging classes of wholesale and retail carcasses. Contest chair Dana Gochenour once again helped the contest run smoothly.

The Stockman's contest also ran smoothly under contest chair Julia Collett. In this contest participants were quizzed on information pertaining to various livestock, feed information, and equipment information. Several classes were presented to be judged as well. The Livestock Judging Contest concluded this busy weekend. It is through these contests that Block and Bridle is able to influence the youth and future of agriculture in Virginia, and it would not be possible without active members, diligent advisors, and adult volunteers, of whom we gratefully thank.

Despite all the hard work by Block and Bridle members this year, there was still time to provide many social events for club members. These included group tailgates before football games, a ski trip, potluck dinners, and our annual "Country but Classy" formal. Block and Bridle also had three teams compete at Harvest Havoc, a philanthropic event hosted by Alpha Gamma Rho and Sigma Alpha to benefit the Heifer International Program. Block and Bridle is also active in intramural sports including volleyball, basketball, and softball. The Block and Bridle Club at Virginia Tech looks forward to another busy and successful year!



Corbyn Riddell, Meghan MacGhee, Marti Helbert, and Ashley Ulmer serve BBQ at the CAL's Welcome Back Picnic.



Members Morgan Roberts, Maggie Gregg, Taylor Richardson, Aubrey Lowery, Gabriel Mastromano and Devan Buck work hard scoring results for a contest.

# **VT Horse Judging Team Activities**

By Kelsey Pecsek and Julia McCann

The Virginia Tech Horse Judging Team broke out of the gate this spring with several accomplishments and a bright outlook on the fall season. With a talented team of students mostly new to the competitive world of horse judging, the VT team represented the East Coast well in two national contests.

TENNESSEE MILLER COLISEUM

MTSU 2011 Spring Team (left to right): Kate O'Laughlin (assistant coach), Aubrey Lowrey, Maggie Gregg, Liz Feuerstein, Kaja Baum, Brooke Lampert, Ali Chisholm, Justin Blair, Brittney Neal, Kat Slaughter, Marilyn Wheaton, Amanda Bradberry, Kelsey Pecsek, Courtney Walski, Sherri McLendon, Kody Jones, and Tracey Maier (assistant coach). Photo by Julia McCann.



The 2011 Hokie Texas Team (left to right): Kody Jones, Maggie Gregg, Marilyn Wheaton, Kaja Baum, Courtney Walski, Kelsey Pecsek, Ali Chisholm, Brooke Lampert, Liz Feuerstein, and Kat Slaughter. Photo by Julia McCann.

In March, a team of 15 traveled to Murfreesboro, TN for its first official contest at Middle Tennessee State University. After touring Southwestern VA farms - Kyle Hughes Quarter Horses and Mack McPherson's arena - for quality hunters and reining horses, the team worked its way to the contest via Red Gate Quarter Horses and Bobby Richards Walking Horse barn in Franklin, TN. In a very competitive contest, the Hokies finished second in performance and fourth and fifth overall. The Black Hawk Team won the competition, followed by the Purdue Team. The 2010 team members Tracey Maier and Kate O'Laughlin traveled as assistant coaches on the Tennessee trip.

After a successful journey full of experiences in TN, the team spent an intense 12 days practicing and studying at home in Blacksburg. On April 7, the team of 10 flew out of Roanoke, bound for Fort Worth, TX and the APHA Spring Sweepstakes Horse Judging Contest, which draws a nationwide set of 32 teams in the senior division.

Upon arrival, the team traveled across the state for four days, touring the best Quarter Horse and Paint Horse farms, such as Carol Rose Quarter Horses. Reata Ranch, High Point Performance Farm, and Jordan Larson Reining horses. They were also quests for a tour of Valor Farms, the establishment that raised and raced Triple Crown winner, Alysheba. In total, the team visited 15 farms in three days, having the opportunity to evaluate and appreciate many world champion horses! This diligence and experience not only broadened the breadth and depth of the judgers' eyes, but prepared them well for the contest ahead of them.

Yet, unforeseen were the events to occur in the wee morning hours in Alvarado, TX, where a little more team bonding occurred than expected. A tornado warning complete with howling winds, rain, hail, a leaking roof, flooded floors, broken windows, displaced AC units and no power in the La Quinta motel created a night to remember in the first floor closet

# **VT Horse Judging Team Activities**, continued

of the hotel. A very short night of sleep made for a very long day of judging in the contest that spanned from 8 a.m. until about 9 p.m. The last reasons were given in the headlights of vans! Power was never available at the judging venue, which created challenges for all, including owners trying to get horses to the contest with many roads closed.

The Hokies stayed strong and completed the day with many accomplishments. The two teams finished just out of the top five; Hokie Team A was one point behind, earning them sixth overall and just 10 points ahead of Team B in ninth place. Team A also placed third in performance judging, which spanned hunters, western pleasure, reining, western riding, horsemanship, equitation, and trail. VA Tech was the only school to have two teams place in the top ten overall in the competition.

Among the 175 contestants, Marilyn Wheaton placed 9th overall and 10th in individual performance. Courtney Walski was 8th in individual performance. Among the top 20 individuals were Kaja Baum, Ali Chisholm, Maggie Gregg, Brooke Lampert, and Kelsey Pecsek.

The VT Team is grateful for the support of many VA, TN, and TX horse owners who shared their horses and time with the team. With a spring full of experiences, friendships, and team spirit second to none, the summer and fall will surely be rewarding with plans to compete at the All American Quarter Horse Congress, and perhaps one other contest that is vet to be determined. Graduating seniors Kelsey Pecsek and Sherri McLendon will be missed. The team is coached by Dr. Julia McCann. Financial contributions are appreciated as high travel costs have made the team's journeys somewhat of a challenge. Previous donations have helped to escalate this group large in number and heart to represent VA Tech well at every venue.

VT Horse Judging Team Lends Helping Hands for Long Time Supporter: The Kyle Hughes Family and Quarter Horse Farm

### by Julia McCann

News traveled fast after the tornados hit Pulaski and Washington Counties in the month of April. The devastation was beyond belief for these western Virginia mountainous communities. The APSC Department took up collections for those in the Pulaski disaster zone. On Thursday morning, April 28, there was a desperate story evolving from a farm the Horse Judging Team had visited a month earlier on their travels to Tennessee. The folks from this farm also brought nationally ranked halter Quarter Horses to the Block and Bridle Contest in February and have supported the judging teams since the days of Dr. Arden Huff.

A tornado reduced the main barn structure at the Kyle Hughes Quarter Horse Farm to rubble with many top show horses inside. Some of the horses had already qualified for the World Show. Two show horses and two broodmares either died or were humanely destroyed in the wake of the storm and others had to be walked



Pictured (left to right) front row-Brooke Lampert, Tracey Maier, Meagan Snoots, Brittney Neal, Mathew Hughes; Back row: Bailey Smith, Courtney Walski, Marilyn Wheaten, Ashley Clark, Celeste Crisman, Marilyn Hughes, Laura Hughes, Ali Chisholm. Also helping but not in the photo: Liz Feuerstein, Kelsey Pescek, Amber Workman, and several other Hokie friends that joined in the effort on Friday and Saturday. (Photo by Julia McCann).

# **VT Horse Judging Activities**, continued

over a mile to get to friends waiting with trailers to take them to safer areas or to veterinarians for treatment. All the farm fencing was destroyed and many roads into the Meadowview community were impassable. The Hughes' threehorse slant load trailer was found over a second hill, shredded into a small mound and separated from its axle. Metal barn roofing was wrapped around the tops of shredded tall trees in the distant view. The hay field was full of debris, making it impossible to cut without extensive cleaning. Quarter Horse Congress medals won in the past were strewn in the fields along with many other belongings because the house suffered severe damage, but the house was still standing slightly off the foundation so that many belongings could be salvaged. Most importantly, the entire family emerged from the basement without physical harm, but heart broken with all that faced them in the hours, days, and months ahead.

The VT Horse Judging Team took the news rather hard because, as the real

family they have become in a few short months this spring, they are intensely supportive of each other and the horsemen that have supported their learning adventure. Within hours, the group rallied 14 team members and friends to go the next day with food, drinks, much needed boxes, packing materials, and willing spirits to do whatever was needed. As it turned out, the team packed up much of the house contents on Friday and moved it and furniture to vehicles bound for a nearby empty house where the family had moved. A second crew traveled the next day to finish the removal of house contents. While it was traumatic to see the lovely farm destroyed and the family in pain of losing their home and high quality horses, lending the helping hands needed to deal with the tragedy was an honor and memory none will ever forget. Team members were weary but energized from providing help to those in need, the Horse Judging Team will continue to help the family restore order in their lives.



APSC students at work and play

# Virginia 4-H Horse Judging Reigns in 2010!

By Celeste Crisman

The four senior members of the 2010 Virginia State Horse Judging team were Shelley Brown of Gloucester, Krystal Saint James of Powhatan, Taylor Walters of Fluvanna and Sarah Schobert of Botetourt. First-year team members were Hannah McDonald of Frederick, Jules Sudol of Fluvanna and Megan Wilson-Bost of Gloucester.

The first competition of the year took place at Southern Regionals in Clemson, SC where the Virginia Team of Shelley, Taylor, Sarah and Megan won High Team Overall. From there the teams went straight to American Quarter Horse Youth Worlds in Oklahoma where the Virginia Team A was Reserve Highpoint Team Overall. The third contest was at Quarter Horse Congress in Columbus, Ohio,

where the Virginia team finished 3rd High Team overall.

In October, the teams flew to Tulsa for the Arabian Nationals contest where the Virginia team consisting of Megan, Sarah, Shelley and Taylor swept the honors bringing home the 1st Place Team Overall and 2nd, 3rd, 4th and 5th High Individuals. In November, the four senior team members (Shelley, Krystal, Taylor and Sarah) finished their 4-H Horse judging careers by competing at Eastern Nationals 4-H competition in Louisville.

This determined team finished as the 1st Place Team Overall with Krystal winning the contest as High Individual Overall and Sarah placing as Reserve High Individual Overall.



At Arabian nationals: (I-r) Megan Wilson-Bost, Taylor Walters, Sarah Schobert and Shelley Brown



At ENR: (I-r) Sarah Schobert, Taylor Walters, Shelley Brown and Krystal Saint James

# Paige Johnson Joins Virginia Tech as New 4-H Livestock Specialist

Paige A. Johnson of Ferrum, Va., will join Virginia Tech's College of Agriculture and Life Sciences on June 1 as Virginia Cooperative Extension's new 4-H livestock specialist. Johnson will be responsible for leading Virginia's dynamic youth livestock programs, which impact more than 15,000 youth annually. She will provide leadership to youth livestock and poultry programs and will be responsible for coordinating and teaching at state youth livestock events. She will also contribute to Virginia Tech's undergraduate education program in the Department of Animal and Poultry Sciences.

"Virginia Cooperative Extension looks forward to Dr. Johnson providing vision and leadership to our historically strong, state youth livestock programs," said Cathy Sutphin, associate director for 4-H youth programs. "Her background, experience, training, and enthusiasm for youth development and her interest in working with parents, volunteers, specialists, and Extension agents to implement innovative youth livestock programs will be a great asset."

"We are excited to have Dr. Johnson join our faculty. Paige is very skilled as a teacher and instructor, and her industry background and communication skills provide a solid foundation for continued excellence in youth programs and will allow her to make contributions to a number of our departmental missions," said David Gerrard, head of animal and poultry sciences.

Johnson received her bachelor's degree in agriculture and master's degree in educational leadership, both from Kansas State University, and earned a doctorate in animal science from Texas Tech University.

Johnson most recently served as an assistant professor of animal science at Ferrum College, where she taught undergraduate students and conducted research related to heritability of factors influencing tenderness in beef cattle and heritability of production-related metabolic diseases in dairy cattle. She has also worked for EduKan, the Western Kansas Community College Virtual Education Consortium, where she served as an adjunct professor in the mathematics and science department. She taught classes in biology, anatomy and physiology, and statistics - in both traditional and online learning environments.

In addition, Johnson served as the agricultural and natural resources Extension agent in Haskell County, Kansas, where she provided primary leadership in the development, dissemination, and implementation of research-based information and education programs for agricultural issues.

Johnson is replacing Mark Wahlberg, who retired in June 2010. Wahlberg led the Extension livestock youth programs since 1982.





APSC students at work and play



Dr. Paige Johnson

# **Outstanding Senior**

Julia Carrington of South Boston, VA is the 2011 Outstanding Senior for the Department of Animal and Poultry Sciences. Congratulations, Julia!!



Caption: (I – r) – Dr. Susan Sumner, Dean of Resident Instruction; Julia; Dr. Dave Gerrard, Head, Animal and Poultry Sciences; Dr. Alan Grant, Dean, College of Agriculture and Life Sciences. (photo courtesy of Lori Greiner)

# **Senior Reception**

Best wishes to all our graduates. We will miss you and hope that your future endeavors are wonderfully successful. Please stay in touch so we know what you are doing.



Special thanks to Wanda Grubb and Shannon Winters who work in the Undergraduate Advising Office. Wanda and Shannon are shown at the reception that they organized in honor of the graduating seniors on Saturday, May 14, 2011. The graduates and their families came directly from the college ceremony in Cassell Coliseum and shared fellowship and food with APSC faculty and staff before leaving Blacksburg and Virginia Tech.

# May 23 First summer session classes begin June 30 First summer session classes end July 5 Second summer session classes begin August 11 Second summer session classes end August 22 Fall Semester classes begin October 7 Fall Break October 18-25 Course request for Spring 2012 November 19-26 Thanksgiving Holiday December 7 Classes end for Fall Semester December 16 Fall Commencement Ceremonies (University & Graduate)

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| Block and Bridle Club                     |                 |
| Mark McCann                               | 231-9153        |
| Dave Linker                               | 231-9154        |
| Equestrian Club                           |                 |
| Teresa McDonald                           | 231-3555        |
| Poultry Club                              |                 |
| Audrey McElroy                            | 231-8750        |
| Pre-vet Club                              |                 |
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| Facilities Contacts                       |                 |
| Farm Supervisor, Dave Linker              | 231-9154        |
| Beef Center                               | 231-6280        |
| Sheep Center                              | 231-6988        |
| Smithfield Horse Unit                     | 231-4366        |
| Swine Center                              |                 |
| Poultry Center                            |                 |
| Turkey Center                             | 231-6283        |
| Campbell Arena                            | 231-3555        |
| Judging Pavillion                         | 231-9150        |
| Alphin-Stuart Arena                       | 231-9150        |

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# **Department of Animal & Poultry Sciences**

# **Update Your Information**

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