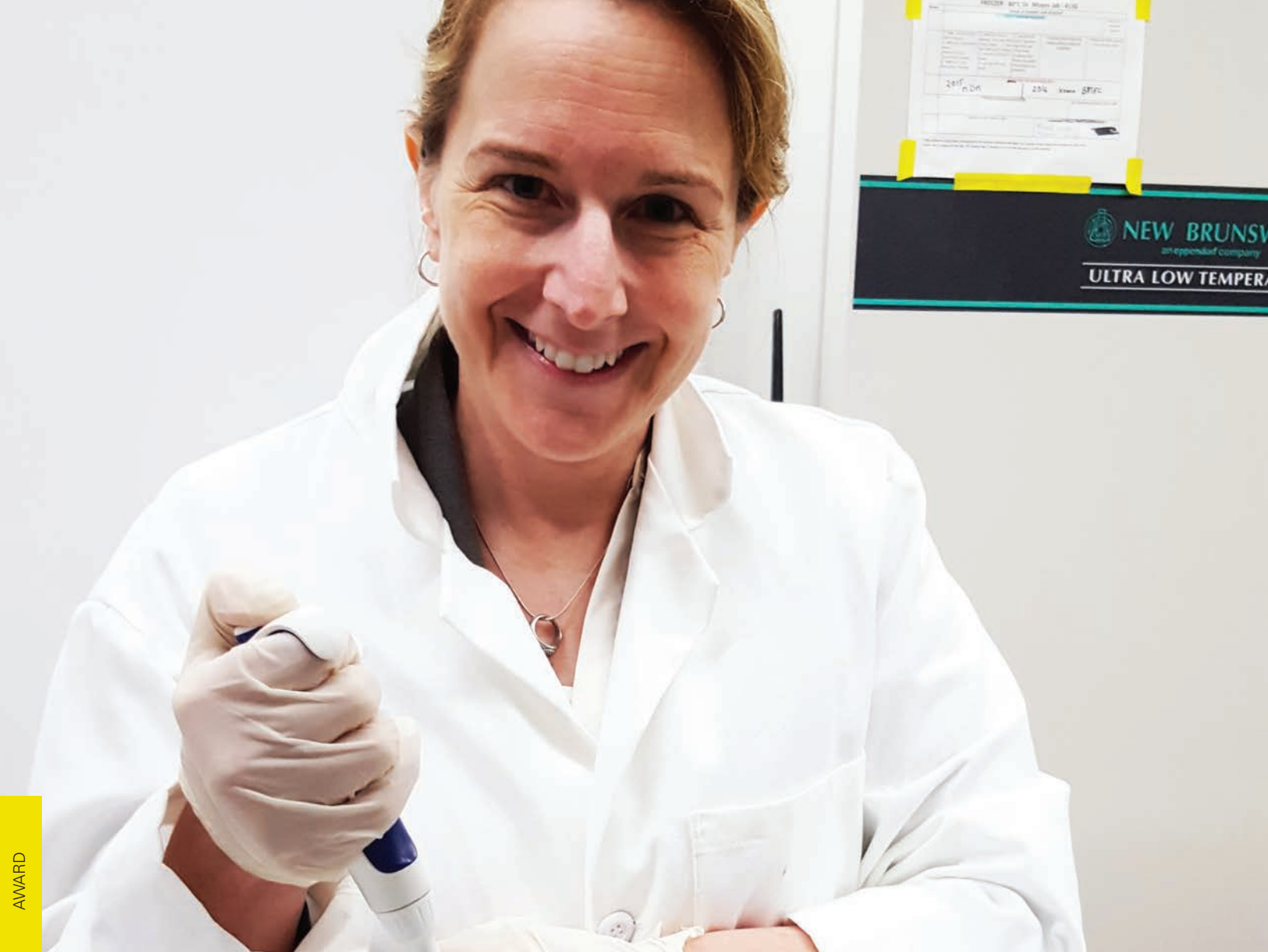




DEPARTMENT OF  
ANIMAL &  
AVIAN SCIENCES

FALL 2016





AWARD

# Kasey Moyes Receives Young Scientist-Research Award

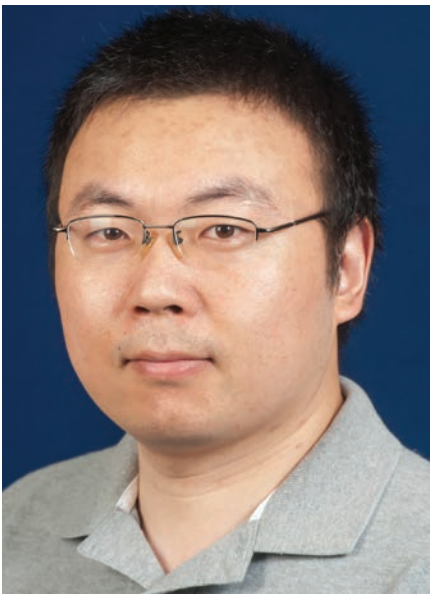
Dr. Kasey Moyes has been named the recipient of the 2016 Young Scientist – Research Award by the Northeast Section, American Society of Animal Science, and the Northeast Section of the American Dairy Science Association®.

Dr. Moyes has developed an active and vibrant research program in nutrition immunology of dairy cattle including numerous collaborative efforts with scientists all over the world. In support of her developing research program at Maryland, Dr. Moyes has secured more than \$250,000 in external and intramural funding.

Dr. Moyes currently has two Ph.D. students and one post-

doctoral associate working under her direction. Moreover, numerous undergraduate students work in her laboratory. Dr. Moyes has given 15 invited presentations at national and international conferences.

The results of her research have been published in 35 refereed journal articles, 40 abstracts, and 6 extension publications. Dr. Moyes is a member of the American Dairy Science Association and the National Mastitis Council, currently serves as a director-at-large for the American Registry of Professional Animal Scientists, and is an assistant editor for the Journal of Dairy Science.



*Dr. Li Ma.*

### NIFA GRANT

Dr. Li Ma was recently awarded a USDA-NIFA grant entitled “Se-quence-Based Big Data Genomic Discovery and Application to Improve Dairy Fertility” for \$350,000 over 3 years. The overall goal of this research is to discover causal/tightly linked genes and genetic variants, and to use these genomic discoveries to improve dairy fertility.

For the past 50 years, dairy production continued to increase but fertility experienced severe declines. The antagonistic relationship between milk production and reproduction indicates the impact of genetics that contributed to a large portion of these changes. Using millions of already genotyped and phenotyped dairy cattle, Dr. Ma and his colleagues plan to conduct large-data genomic analyses to find the genes and variants underlying dairy production and reproduction. The genomic discoveries will then be applied to current genomic selection to increase both traits. The expected outcomes include an increase in dairy reproductive performance, breakthrough understanding in the genetic mechanism of dairy fertility and related traits, and a decreased cost in the genomic evaluation of fertility traits.



*Dr. Monica VanKlompberg*

### NEW LECTURER

Dr. Monica VaKlompberg joined the department this Fall as an Animal Science Lecturer. This semester she is teaching ANSC444/644 Domestic Animal Endocrinology and in the spring, she will teach ANSC452 Avian Physiology and ANSC 262 Commercial Poultry Management.

She grew up on a small farm in Michigan where she raised goats, cattle and poultry. Monica was an active 4-H member and worked at a local educational farm. She obtained her B.S. in Animal Science from Michigan State University in 2008 where she was a member of Block and Bridle and participated in undergraduate research. Monica received her Ph.D. in Animal Biology from the University of California, Davis in the laboratory of Dr. Russell Hovey in 2013. Her graduate work focused on understanding endocrine control of mammary gland and vascular development during pregnancy and lactation using the pig as a model. After her Ph.D., Dr. VanKlompberg was a Postdoctoral Scholar with Dr. Jenifer Proserpi at Indiana University School of Medicine, South Bend where her work focused on understanding chemotherapeutic resistance in breast cancer.



*Tricia Rowlison.*

### PAT CONCANNON AWARD

Tricia Rowlison, graduate student of Dr. Mary Ann Ottinger and Dr. Pierre Comizzoli, has been awarded the Patrick Concannon Award at the 8th International Symposium on Canine and Feline Reproduction which was held in Paris, France.

Tricia was selected as the best young, emerging scientist conducting fundamental carnivore research based on her abstract and oral presentation entitled, “Deciphering the mechanisms involving cenexin, ninein and centriolin in sperm maturation during epididymal transit in the domestic cat”. She is completing her project focused on assisted reproductive techniques for wild felid species at the Smithsonian Conservation Biology Institute of the National Zoo in Washington, DC. The aim of her project is to characterize mechanisms involving the sperm’s centrosome development and identify related sources of male infertility. Tricia received her Bachelor of Science degree at the University of Missouri-Columbia, and her Master of Science at Mississippi State University in conjunction with the Memphis Zoo.



# GLENNS GO GLOBAL

**ANNA GLENN ATTENDED UMD COLLEGE OF AGNR FROM 2008-2012 AND DUAL-DEGREED IN ANIMAL SCIENCE AND AGRICULTURAL SCIENCE AND TECHNOLOGY. WHILE AT UMD, ANNA WAS AN ACTIVE MEMBER OF AGNR STUDENT COUNCIL, SIGMA ALPHA PROFESSIONAL SORORITY, BLOCK AND BRIDLE, AND CRU. NATHAN GLENN ATTENDED AGNR FROM 2007-2012 AND DOUBLE-MAJORED IN ANIMAL SCIENCES AND SECONDARY EDUCATION. WHILE AT UMD, NATHAN GLENN WAS AN ACTIVE MEMBER OF ALPHA GAMMA RHO AGRICULTURAL FRATERNITY, AND THE DAIRY JUDGING TEAM. NATHAN AND ANNA MET THROUGH CLASSES AND THEIR INVOLVEMENT WITH CLUBS IN AGNR.**

## **AFTER GRADUATION WHERE DID YOU BOTH GO? WHAT ARE YOU DOING NOW?**

After graduation, Anna moved to College Station, Texas where she attended Texas A&M University and pursued a Master's Degree in Agricultural Leadership, Education, and Communications with a focus on international agricultural development. After moving back to Maryland in 2014, Nathan and Anna Glenn were married. Anna now works for University of Maryland Extension as a Horticulture Faculty Extension Assistant which entails many different responsibilities such as doing educational outreach at schools, community events, and fairs, helping clientele with recommendations for diseases/fertilization for their gardens, and coordinating a group of 175 volunteers called the Master Gardeners whose mission is to educate residents of Baltimore County about safe, effective, and sustainable horticultural practices. After graduation, Nathan was offered a job at Clear Spring High School as

an agriculture teacher and FFA advisor. While at Clear Spring he taught classes such as horticulture science, greenhouse management, pre-vet science, biotechnology, small and large animal management, etc. After Anna and Nathan were married, they moved to Harford County where Nathan accepted a position as the Animal Science teacher in North Harford High School's Natural Resources and Agricultural Sciences Magnet program. For the past two years he has been teaching classes such as foundations of agricultural, animal anatomy and physiology, animal management science, and helping to manage the campus farm, and coaching/mentoring students with their SAE's (supervised agricultural experiences), FFA judging teams, and senior capstone research projects.

## **WHAT IS AGRICORPS? WHERE WILL YOU EACH BE? WILL YOU BE ABLE TO KEEP IN TOUCH OR SEE EACH OTHER?**

AgriCorps is a PeaceCorps type

organization that takes American college graduates of agriculture and places them in developing countries to teach agricultural education in schools and local communities.. Their mission is to “connect American agriculture volunteers to the demand for experiential, school-based agricultural education in developing countries” and to accomplish this they will help to create opportunities for increased agricultural education during and after school through experiential learning associated with 4-H and FFA models. Currently, the organization works in Ghana and Liberia though they are hoping to expand in the future. Nathan and Anna Glenn have been placed in Kakata, Liberia at the Booker Washington Institute (a vocational high school). Some of their responsibilities will include teaching agricultural classes, teaching classes on educational pedagogy, supporting the local 4-H clubs, helping to supervise the FFA programs, conducting farmer trainings, and supporting agricultural entrepreneurship and life skills development. They will work on projects independently as well as engage in many joint projects, a new opportunity for which they are excited!

### **HAVE YOU EVER TRAVELED ABROAD BEFORE?**

Anna’s first international experience was in 2007 when she traveled to Belize with her church youth group. It was on this trip that she discovered her love of traveling, exploring new countries, immersing herself in other cultures, and agricultural development. In 2009 she traveled to Bahamas on another mission trip where she worked on repairing homes for a community of intellectually and physically disabled citizens. In 2011, she travelled to Botswana for 5 weeks where she worked in an orphanage and doing other community development work in the capital, Gaborone. During her Masters studies, Anna

travelled to Haiti for 2 weeks and worked with small-scale rabbit farmers on improving production practices and she worked in Guatemala for 2 months with elementary school students teaching agricultural science and life skills through a 4-H curriculum. Recently, in January-February 2016 Anna travelled to Tanzania with the USAID Farmer-to-Farmer program where she worked with rural farmers in teaching good agricultural practices in order to help them increase their horticultural yields.

Nathan, though not having done as much international travel as Anna, has learned a lot about the need for improved agricultural education and youth development programs in developing countries and is excited to take this next step and use his skills and passion for agriculture internationally.

### **WHAT DO YOU HOPE TO ACCOMPLISH?**

We hope to be able to come alongside our new community and work with them to address their needs for higher agricultural education classes as well as training in educational pedagogy, experiential learning, and youth development. We also hope to use our experience in agricultural education (both as teachers and as learners) in order to help strengthen the existing 4-H and FFA programs within the community. These programs have done so much for youth in the US and many other countries abroad so we hope that they will have the same impacts in Liberia. By helping to support the youth, we will be helping to support the future of the agricultural industry and thus the overall outlook for food security in Liberia.

### **HOW DIFFERENT ARE AGRICULTURAL PRACTICES IN LIBERIA?**

Liberia’s unique climate and poor economy make their agriculture practices vastly different. Liberia has a wet season and a dry season, and most of their crops are grown during the wet season, in almost tropical rainforest-like conditions. Their top food crops are rice and cassava (a root crop much like sweet potatoes). The overwhelming majority of Liberians practice subsistence farming, which means they are farming to stay alive by feeding themselves and their family, but not necessarily to profit. The primary production system is slash-and-burn farming, where forest lands are cleared, burned and upland rice is cropped together with other crops. In subsistence agriculture, slash-and-burn typically uses very little technology.

### **WHAT ADVICE CAN YOU GIVE TO STUDENTS AND OTHER ALUMNI THAT MAY BE CONSIDERING AGRICORPS OR OTHER SIMILAR PROGRAMS, BUT ARE NOT READY TO MAKE THE COMMITMENT?**

Do it! Now is the perfect time in your life to have this adventure. Traveling changes you in so many ways! It challenges you, it forces you out of your comfort zone, it helps you to find your own inner strength, it gives you a new outlook and perspective on life, it helps you to experience new cultures, food, language, and sights, and it is a great way to make new friends. Don’t just do it because it will look good on your resume, do it because you truly want to grow as a person, get outside of your box, and connect with the world.

*Learn more about Anna and Nathan’s experiences in Liberia at [glennsglobal.wordpress.com](http://glennsglobal.wordpress.com)*

# Maryland State Fair

ANNUAL EVENT



## THE STATE FAIR BIRTHING CENTER DELIVERED AN EXCELLENT EDUCATIONAL OPPORTUNITY

*At the MY Maryland State Fair, presented by Toyota, in Timonium, the Birthing Center offered a great opportunity for fairgoers to ask questions and learn more about agriculture, one of the most important industries in Maryland, August 26 - September 5.*

The Birthing Center featured eye-level displays of litters of piglets and baby chicks as well as birthing areas where cows and sows gave birth. Located in the Cow Palace behind the Dairy Bar, the Birthing Center provided the opportunity for fairgoers to witness the miracle of the birth of calves, litters of piglets and hatching chicks. In addition, live video cameras coupled with big screen televisions were in place to ensure that everyone had a good view. University of Maryland agriculture students, predominantly from Animal and Avian Sciences, along with the Maryland State Fair Veterinarian were with the animals at all times to oversee and assist with the deliveries and narrate the birth events that occur during Fair hours. The students also used Twitter (#statefairbirths) and an answering machine to communicate with interested fairgoers when labor had begun. Video presentations were available when live births were not taking place. “While many people might understand the vital role of Maryland’s food and fiber industries to its economy, most folks don’t get a chance to see first-hand what goes on at the farm,” said ANSC’s Associate Professor Emeritus Dr. Tom Hartsock, who runs the Birthing Center each year. “We hope fairgoers, and especially children, walk away from the Birthing Center with a greater appreciation of the farm animals that provide so much of our nutritious food.”

## STATE FAIR DAIRY AND BEEF TEAM

*Each year, the College of Agriculture takes dairy cattle from the Central Maryland Research and Education Center to the Maryland State Fair in Timonium for a milking and educational exhibit.*

New this year was the addition of three beef heifers. Under the direction of Brian Spielman, Dairy Program Manager, student interns from Animal and Avian Sciences help and prepare these animals to go to the fair and took care of them while there, all while answering questions from the general public. This large animal experience gives them a broad overview of how a dairy farm operates. The training includes how to work around cattle, as well as how to properly wash and clip the animals for show and how to select a good dairy cow or heifer.



*Newborn calf at State Fair Birthing*



*Steve DaSilva washes cows.*



*Piglets born at the State Fair Birthing Center*



*(From left to right) Steven DaSilva, Maggie Hines, Claudia Gomez, Emily Davis, Kelsey Hoffman, Emily Solis, and Laura Tompkins.*

# Catching Up with the Campus Farm

An article written by ANSC alum **Caroline Speiker** was featured in the September issue of *The Equiery*. **Caroline,**

**who was an intern in the UMD Equine Breeding program reported:**



Our year started strong with the sale of our two 2015 Thoroughbred foals

for a combined \$11,500 in January, along with the acquisition of two new broodmares, and then continued like clockwork with the births of two new healthy colts in April.

This year came with a twist, however; our first ever Warmblood/Thoroughbred cross was born! We are excited to be able to continue to expand our program and we anticipate future success.

## TODAY'S BREEDING PROGRAM

Our breeding program herd currently has four Thoroughbred broodmares and two foals. Our mares include previously donated Daylight Lassie and Runaway Pearl. This year we were fortunate to gain two additional mares, Liberty Bay (donated by Northview Stallion Station), and Old Grey Square (donated by Mr. Edward Hunt). It's tough to make it into our herd because not only do the mares have to have good conformation and good pedigrees, but they must have good manners so they can be handled easily by students. These two new mares fit the bill!

Our Thoroughbred colt, nicknamed "Axel," is by Nicanor out of Daylight

Lassie. Nicanor, who stands at Shamrock Farm in Woodbine, has won over \$147,000 and is a full brother to the 2006 Kentucky Derby Winner Barbaro. Axel is as handsome and muscular as his father and famous uncle and he's definitely easier to work with than some of the other high-spirited colts we've raised.

Our Thoroughbred/Warmblood colt, nicknamed "Calvin," is by Contucci out of our mare Runaway Pearl. Contucci is a renowned dressage stallion standing at Hilltop Farm. Calvin is our first-ever Warmblood foal at the University and he quickly became a barn favorite. His easygoing and lovable demeanor won over the hearts of many and he's even helped to further educate the general public about the Maryland horse industry. It's exciting to inform those who visit about other breeds and riding disciplines. Even students, myself included, have gained more knowledge about the sport horse industry as a result of breeding a Warmblood cross. Navigating our way through the sport horse world has been a great learning experience and we are looking forward to seeing where our first foal goes!

A huge thanks to Shamrock and Hilltop Farms for donating breedings to their successful stallions!

## LOOKING FORWARD TO 2017

As for the future of our program, we will continue to breed both Thoroughbreds for racing and Warmblood crosses for showing since our first year of doing both has been such an exciting journey. Currently, all four of our Thoroughbred broodmares have been confirmed preg-

nant and scheduled to foal a week apart in April 2017. Liberty Bay was shipped to Northview Stallion Station and covered by Buffum, a stallion with over \$261,000 in total earnings. Buffum was also the sire of our 2015 colt, Blazing Terp, out of Daylight Lassie, who turned out to be one of the top 10 yearlings sold in the January Midlantic Winter Mixed Fasig-Tipton sale.

Runaway Pearl also went to Northview but was bred to Bandbox, a new stallion for us, who has a total of over \$390,000 in earnings. Pearl's first foal with us was the Warmblood colt, so we are excited about seeing her Thoroughbred foal next year.

Daylight Lassie was third in line and headed out to be bred to Street Magician standing at Heritage Farm in Chesapeake City. He won \$245,000 and is a great match for our mare. This will be Daylight Lassie's fifth foal with us and we are happy to have such a reliable mare and good mother as a part of our herd.

Finally, our newest mare, Old Grey Square, is in foal to our next Warmblood sire. Dr. Kenneth and Selma Garber generously donated a breeding to their Dutch Warmblood stallion Vallado, who stands at Hilltop Farm. Vallado, aka Praise, has numerous wins as a show hunter and he competed in jumpers as well. Our 2016 Warmblood foal's sire, Contucci, is known for his success in dressage, so furthering our experience by beginning our involvement in the hunter/jumper world will be another fun learning experience for everyone involved!

AGNR AWARDS

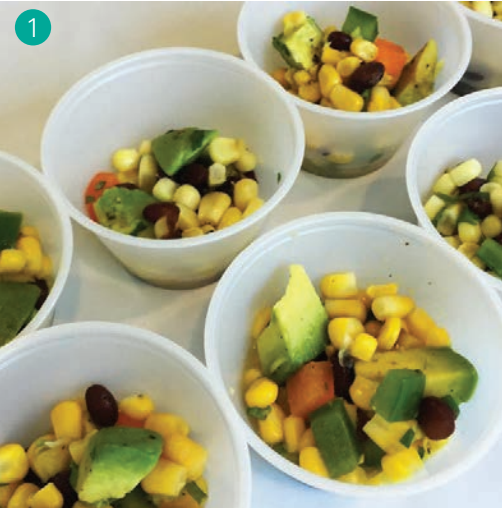


## Maryland's Best Is a Winner

**Our very own colt, Maryland's Best, born at the Campus Farm on February 12, 2014 is now a winner!**

He was known around the barn as Pax due to the snowstorm Pax that occurred the night of his foaling. He is by Rock Slide out of The Best Sister (Bess). Pax took first place on September 10 at Laurel Park in a 5 ½ furlough race. The win is significant for the breeding program because breeders of MD-bred horses that come in 1st-3rd in Maryland races receive "breeder incentive funds." These funds will go directly into supporting the operation of the program.





# FACULTY/STAFF COOKOFF



On September 22, twelve cooks competed for the coveted ribbons. Undergraduate, graduate students, and visitors came by to taste the entries and cast their voting marbles. Here are the 2016 Cookoff winners:

### MAIN DISH

#### First Place

- ▶ Veggie Lasagna: So good it doesn't need meat!
- ▶ Kasey Moyes

#### Second Place

- ▶ Bibimbap
- ▶ Byung Kim

#### Third Place

- ▶ Honey Balsamic Pork Tenderloin
- ▶ Bob Peters

### SIDE DISH

#### First Place

- ▶ Beautiful Food
- ▶ Zhengguo Xiao

#### Second Place

- ▶ Sandra's Spicy Snaps
- ▶ Sandra Nola

#### Third Place

- ▶ Most Beautiful Food
- ▶ Chad Stahl

### DESSERT

#### First Place

- ▶ Sopapilla Cheesecake
- ▶ Libby Dufour

#### Second Place

- ▶ Pumpkin Spice Dip
- ▶ Jennifer Reynolds

#### Third Place

- ▶ Buckeyes
- ▶ Sandra Nola



ANNUAL EVENT

1. Dr. Xiao's Beautiful Food. 2. Libby Dufour serving her Sopapilla Cheesecake. 3. Byung Kim and his Bibimbap. 4. Voting bins. 5. Jen Reynolds and her Pumpkin Spice Dip. 6. Ribbon winners: Bob Peters, Wei Zhang for Chad Stahl, Jen Reynolds, Libby Dufour, Kasey Moyes, Sandra Nola, Byung Kim and Zhengguo Xiao. 7. Chad Stahl serving his Most Beautiful Food. 8. Crowd enjoying the free tasty eats.