Chair’s Message

by Wendie Cohick, Ph.D., Department Chair

Dr. Carol Bagnell and I “switched hats” in July 2014, and I’m now serving as Chair of the Department of Animal Sciences. I took over a strong and vibrant department thanks to Carol’s able leadership for the last six years, and we all appreciate her efforts on our behalf! Carol is now Director of the Graduate Program in Endocrinology and Animal Biosciences. We’re both happy that our graduate students are collaborating with others from Nutritional Sciences and Food Science to host a conference on “Health and Microbial Life” on April 14 featuring Dr. David Newburg of Boston College. Student talks and a poster session will showcase the diverse research at Rutgers.

We congratulate Dr. Dipak Sarkar on being named a Board of Governors Professor in December 2014. An internationally recognized authority in alcoholism research, and more specifically, in fetal alcohol spectrum disorders research, Dipak has garnered over $22 million in federal funding since joining the Rutgers faculty in 1999. He has mentored over 50 postdoctoral fellows, 10 graduate students, and 75 undergraduates. He and his lab investigate how chronic stress alters immune and reproductive functions and induces drug-seeking behavior, immune problems, and cancer. He teaches Neuroendocrinology to graduate and undergraduate students.

We enjoyed a June 2014 visit to campus by Margie Perry Gruber, daughter of Dr. Enos Perry, former Extension Specialist in Dairy Husbandry at Rutgers (1923-1956) for whom our department library was named. Dr. Perry passed away several years ago. Margie (pictured above) generously donated some memorabilia of her father’s, which will be displayed in the Perry Library (Bartlett Hall) in the near future.

It’s great to see alumni returning to campus! Several alumni are speakers in our 2015 “Careers in Animal Science” class: Michael Graziano, PhD, DABT (CC ’79), Daniel Stobie, DVM (CC ’90); Scott Willens, DVM, PhD (CC ’92); Kurt Roman (SEBS ’12), and Merrill Simpson (SEBS ’13). The Veterinary Science Club hosted a Halloween mixer featuring dinner and panel discussions during which alumni and faculty fielded questions from students regarding their personal career paths. I participated along with Gene Wefer, DVM (CC ’78), Gregory Reinhard, DVM, MBA, DACLAM (CC ’81), Michelle Stives, DVM (CC ’06), and Matthew Edson, DVM (CC ’07) and faculty members Carol Bagnell, Susan Becker, Kathleen Rahman, Sarah Ralston, and Carey Williams. Gene and Renee Wefer (CC ’79) brought their dog to join in the fun! Let me know how you’d like to become involved with us this year. Hope to see you at Ag Field Day on Rutgers Day, Saturday, April 25.

Animal Sciences Hits Social Media!

Our department now has a strong presence on social media, thanks to Dr. Kathleen Rahman. After joining our faculty in July 2014 as a Teaching Instructor, she developed an Animal Science Facebook page (facebook.com/rutgersanimalsciences), Twitter feed (twitter.com/RUAnimalSci), and YouTube channel (see link on our department homepage). The goal of these accounts is to strengthen connections between the student body, faculty, staff, and alumni as well as the general public.

Our Facebook page has several new posts each week, our tweets reach several hundred people at a time, and the YouTube channel features “How to” videos that students and faculty use for informational purposes. Student involvement in our social media outlets has increased. For instance, current Animal Science students are featured on the YouTube channel. Prospective students and their parents/guardians access these accounts for information on the department and the Animal Science major. Throughout the year we’ll be posting news items and videos that highlight our students, faculty, alumni, and four-legged friends. If you have material you’d like posted, please email Dr. Kathleen Rahman, our Social Media Manager (rahman@aesop.rutgers.edu).
Undergraduates Excel at NESA and in Lab
by Barry Jesse, PhD, Undergraduate Program Director, NESA Advisor and Carey Williams, PhD, Extension Specialist, NESA Advisor

We are both very pleased to say that our Rutgers Team brought home a yellow ribbon from the 2015 competition of the Northeast Student Affiliate (NESA) of the American Society of Animal Science and American Dairy Science Association. Of the 10 universities participating at Penn State, Rutgers placed 4th in overall school performance – thanks to all 28 students on our 7 teams, which is the most teams Rutgers has ever taken to a NESA competition!

Of the 46 teams, Rutgers Team D placed 5th overall, 7th in judging, and 9th in quiz bowl. Team D members Vipa Patel ’17, Patrick Varga ’18, Christina Kaye ’16, and Alexandra Moore ’16 are pictured in the middle photo on page 3, happy to go on to Round 3 of Quiz Bowl. Also placing well in judging were Team B (6th) and Team F (9th).

Of the 190 students, two individuals performed exceptionally well in judging. Christina Kaye ’16 placed 1st – and this is her first year doing NESA! Emily Layton ’15 placed 4th in judging (same finishing for her last year). Much of our success in livestock judging is probably due to the resurrection of the Animal Evaluation and Selection course, now in its second year. Every team had at least one student who had completed that course, and six of our teams placed in the top half of all teams, a feat we have never previously accomplished!

Brittany Wilhite ’15 placed 8th (out of 46) for her review paper presentation on weaning methods in beef cattle. Four Rutgers students gave independent research presentations: Ankita Gupta ’17 (Bello lab), who placed 1st; Lena Sena ’15, 2nd; Catherine Seeds ’15, 6th; and Alejandra Villalobos ’15, 9th. The three seniors presented their G. H. Cook honors research (advisors listed below).

Good luck to all eleven seniors currently in the G. H. Cook Scholars Program: Samantha Globerman (Cohick), Cheryl Harvey (McKeeever), Michelle Hernandez and Alejandra Villalobos (Roepke), Rebecca Joyce (Zama), Jessica Lovich and Nikesh Patel (Bagnell), Jennifer Rose and Lena Sena (Becker/Katz), Shira Rosenblum (Kahn, Biochem & Microbiology), and Catherine Seeds (Williams). After they complete their research and successfully defend their theses in April, they will graduate as G. H. Cook Scholars, Class of 2015.

Graduate Program Highlights
by Carol Bagnell, PhD, Graduate Program Director

Five students in the Graduate Program in Endocrinology and Animal Biosciences (EAB) completed their degrees this past year.

Ryan Avenatti studied the effects of age and exercise on heat shock proteins and mediators of inflammation and insulin signaling in horses. He completed his PhD project in the Equine Exercise Physiology Lab under the supervision of Drs. Malinowski and McKeever. Ryan is a Clinical Research Associate at Kindred Bio.

Arpita Bhurke (Uzumcu/Zama lab) investigated delayed and transgenerational effects of the endocrine-disrupting chemical DEHP on the ovary. She is now a PhD student in Comparative Biosciences at University of Illinois College of Veterinary Medicine.

Kathleen Rahman (née Ferio), Henry (Hank) Bignell, and Meredith Egger (née Camp) all researched various aspects of maternal programming of neonatal development in my lab.

Kathleen’s dissertation focused on the impact of nursing on the male reproductive system and global effects of nursing on the neonatal uterus. After her May 2014 graduation, she joined the Rutgers Department of Animal Sciences faculty as a Teaching Instructor and also manages our social media outlets (see page 1).

For his MS thesis research, Hank studied the maternal dietary effects of a glutamate supplement on the lipid profile of colostrum, milk, and neonatal adipose tissues. He is a County Extension Agent in 4-H Livestock and Small Farms at the University of Florida.

Meredith Egger’s PhD research centered on the age-sensitive uterine transcriptome and colostrum-borne factors targeting neonatal cervical development. Following her January 2015 graduation, she joined Kindred Bio as a Clinical Research Associate.

Three new students joined our program in Fall 2014, including two women from China and Turkey on government fellowships.

The Animal Science Graduate Student Scholarship (funded by a gift from Dr. Michael Graziano and Bristol-Myers Squibb), the Philip and Ann Aines Endowed Fellowship, the Hilda S. Foster Endowed Fellowship, and the White-Stevens Fellowship help to support EAB students in the final years of their program. The 2014-2015 recipient of these scholarships is Hillary Stires (Cohick lab), who is studying how prenatal alcohol exposure increases breast cancer risk in rats. If you would like to make a gift in support of graduate education, please consider contributing to our scholarship funds (see page 4).

Pioneers in Endocrinology

“Hormones and Cancer” was the theme of the 7th Annual Pioneers in Endocrinology Workshop held in September 2014. Almost 100 students, postdocs, faculty, and staff attended the daylong event, which featured morning talks by Dr. Suzanne Fuqua, Baylor College of Medicine, and Dr. Douglas Yee, University of Minnesota Medical School. An afternoon poster session highlighted endocrine research conducted in multiple departments across Rutgers University. For additional information and photos, go to the Endocrine Program website (endocrine.rutgers.edu).

Rutgers NESA team at Penn State: Ready for the livestock judging competition!
**Horse Management Seminar: Managing Your Pasture**

by Laura Kenny, Program Associate (pictured in top photo with An Le ‘16)

“Grazing Rewards and Concerns: How and Why to Manage Your Pastures” was the theme of the 2015 Horse Management Seminar held on February 8. Its morning agenda featured presentations by Stephen Duren of Performance Horse Nutrition and by Extension experts Bridgett McIntosh (Virginia Tech) and Amy Burk (University of Maryland). I participated in a panel discussion on recent and current grazing research with Drs. McIntosh and Burk.

After lunch, the management portion of the program included presentations by Bill Bamka (Burlington County Agricultural Agent) and Donna Fouk (Penn State). The 75 participants appreciated the day’s practical information. As the seminar coordinators, Carey Williams and I are very grateful to its sponsors: Triple Crown, Nutrena, Poulin Grain, Equi-Analytical, Wedgewood, Kentucky Performance Products, and Adequan.

**Rutgers University Teaching Herd (RUTH): Fostering Horses for Teaching and Outreach**

by Sarah L. Ralston, VMD, PhD, DACVN (pictured in bottom photo with “Bling”)

Creating a sustainable equine teaching program on a suburban university’s campus requires considerable ingenuity since keeping a horse on campus is very expensive. Maintaining a herd dedicated to teaching and outreach can easily cause a budget to go “in the red.” However, the Department of Animal Sciences came up with a creative solution, which involves “fostering” horses from equine rescue/placement programs and seeking sponsors to help pay for their per-diem costs. Some of the fostered horses will be available for adoption after the Ag Field Day Horse Show on Rutgers Day in late April, leaving a core herd of four horses for teaching and outreach throughout the year.

This exciting addition to our Equine Teaching program is called the Rutgers University Teaching Herd (RUTH): Fostering Horses for Teaching and Extension. The eight horses in RUTH will allow us to expand our students’ hands-on learning experiences and service in outreach. The horses will be dedicated solely to outreach endeavors, such as clinics and treadmill demonstrations, and teaching activities in classroom-based courses like Horse Management and Comparative Anatomy and experience-based classes including Horse Practicum and Animal Handling, Fitting and Exhibition. In the latter course, students learn how to groom and train horses for in-hand exhibition on Ag Field Day.

Of the eight horses in this herd during the Spring 2015 semester, five are “fosters” from equine rescue/placement programs in New Jersey, namely the Standardbred Retirement Foundation, Arabian Rescue Mission, and Second Call for Thoroughbreds. The other three horses, two aged Standardbred mares and a Mustang gelding, will be part of a permanent herd of four that will stay here year round. The fourth member of the permanent herd will be identified from the five fosters or will be a new horse from a rescue/placement program, if all five fosters find homes on Ag Field Day.

Would you like to sponsor a horse’s board while at the George H. Cook Campus Farm? Thanks to the generous donation of Square Meal Happy Horse total mixed ration (TMR) by Dr. Harlan Anderson of Cokato, MN, owner of Square Meal Feeds, sponsorship of a foster horse is only $750 for the Spring semester. Sponsorships of those in the permanent herd will be $2,000/horse to cover their costs year round. Sponsors will receive updates on their horse from students and will be invited to attend a “Meet RUTH” event in early April.

Would you like to adopt a foster horse? The rescue/placement organizations will have representatives at the Red Horse Barn after the Ag Field Day Horse Show (April 25, 2015) to screen and process adoptions of their horses. Foster horses that are not adopted or kept in the permanent herd will be returned to their parent organization. Sponsors and potential adopters are welcome to visit RUTH if they contact me or Dr. Carey Williams in advance so we can have students and faculty available to show them off.

The Rutgers Equine Science faculty are truly excited about this new “win-win-win” program, where our students’ learning experience will be greatly enhanced, the rescue/placement organizations will get greater exposure, and Bling and our other fostered horses will hopefully find new, forever homes.

Photo credits: Carey Williams (pp 2-3, all photos); Susan Becker (p 4, middle photo); Felicia Kleiman (p 4, right photo); and Kathy Manger, Newsletter Editor (all others)
Animal Science Update
The Department of Animal Sciences

Newsletter 2014-2015

Animal Practicum students Amanda D’Autrechy, Alexa Giarrataro, Seulah Kim, Natalie Henriques, Jaci Maher, and Monica Sutula

Animal Care Update
by Clint Burgher, MS ’91, Research Farm Manager

The Round House renovations are complete! The new window and cedar-siding installation was finished this fall. Stop by the Petting Zoo on Rutgers Day and see how great it looks. The Rutgers University Mounted Patrol continues their evening patrol of the campus and travelled to the University President’s house for the Family Fall Festival during Homecoming last year.

The Farm Tour Program, in its 5th year, continues to grow. We provided tours to approximately 5,000 people last year. The Farm Sales Program success continues, now in its 4th year. You can purchase local, campus-raised pork, beef, lamb, chicken, and goat meat anytime on the Farm, or find us at the Rutgers Gardens Farm Market May through November. With spring weather just around the corner, you can purchase composted manure for your garden.

The Farm Staff and students are eagerly looking forward to the end of the bitter-cold winter. Try to find time to stop by the Farm and see all the newborn animals.

Faculty, Students, and Alumni Featured in SEBS-NJAES Newsroom Stories

Dr. Kenneth McKeever was recently appointed to the Scientific Advisory Board of the Association of Racing Commissioners International (RCI), a top-tier committee of five leading scientists from around the world. This newly formed board will develop recommendations for the anti-doping programs conducted in the international equine and canine racing community.

PhD candidate Jessica Verpeut (Bello lab) was the North America 3rd Place graduate winner in the 2014 Alltech Young Scientist competition. Her paper highlighted her neuroscience research.

Catherine (Kit) Seeds ’15 received the Ernest C. Bell Scholarship for 2015 at the January 25th Annual Breeders Awards luncheon hosted by the NJ Department of Agriculture. The SEBS-NJAES Newsroom (sebsnjaesnews.rutgers.edu) has featured the above individuals in its stories during the past year, as well as alumni Scott Willens, DVM, PhD (CC’92) and Nora Jean Nealon ’13.

Don’t miss the January 2015 Newsroom story on Lord Nelson, the “Horse Personality of the Year!” Retired from the RU Mounted Patrol, he’s featured on Equine Science 4 Kids (see esc.rutgers.edu).

Please Make a Donation!

Yes, I wish to support the continued excellence of the Department of Animal Sciences and Graduate Program in Endocrinology and Animal Biosciences with a gift of (please circle): $10,000 $5,000 $1,000 $500 $100 Other ___________

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Dr. Wendie Cohick, Chair; Dept of Animal Sciences; Rutgers, The State University of New Jersey; 84 Lipman Drive, New Brunswick, NJ 08901-8525

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