# Equine Science Center

"Better Horse Care Through Research and Education"



# New Jersey Agricultural **Experiment Station**

# For the Love of Horses Celebrating the Equine Science Center's Anniversary

On August 4, the Rutgers Equine Science Center officially commemorated its 10th anniversary with the most celebrated team to ever play on the diamond - the New York Yankees.

Brian Cashman, General Manager and Senior Vice President of the New York Yankees, delivered the keynote address during "For the Love of Horses - A Pre-Hambletonian Celebration." The gala was held in honor of the Equine Science Center at the Commissioner's Club in the new MetLife Stadium.

The invitation-only event, which was hosted by the Standardbred Breeders and Owners Association of New Jersey (SBOANJ), was an opportunity to celebrate a decade of achievements and accomplishments by the Equine Science Center and to raise awareness of its need for future support.

"Superb leadership and financial support are two vital components needed in order to build an organization on a standard of excellence," said Cashman. "With Karyn Malinowski at the reins, I am completely confident that the Equine Science Center can maintain its status as a world-class research center. My goal in lending support is to ensure that others recognize the necessity of a financially sound Center; it is crucial to the sustainability of the entire horse industry in New Jersey."

Guests were enthralled as Mr. Cashman recounted rising up the ranks at the Yankees organization and his memorable experiences with the late George Steinbrenner. He credited working on his father's standardbred breeding farm in Kentucky for providing him the wherewithal to deflect and manage the finicky New York media landscape. Specifically, Mr. Cashman said that he was already used to shoveling manure.

The celebrity of Mr. Cashman coupled with the prominence of the Equine Science Center resulted in attendance by a proverbial "who's who" of leaders in the equine industry.

"The celebratory gala was a tremendous success. With the generous support of our sponsors, host, and Mr. Cashman, we raised over \$50,000 to support the research of the Equine Science Center," said Karyn Malinowski, Center director. "This event was the hottest ticket in town during Hambletonian week. One of our guests initially made plans to travel into Manhattan to entertain clients but decided to sponsor and attend our gala instead!"

The gala opened with master of ceremonies Sam McKee, Director of Simulcasting and Track Announcer at the Meadowlands Racetrack, welcoming guests for the evening. Robert M. Goodman, Executive Dean, School of Environmental and Biological Sciences, Executive Director, New Jersey Agricultural Experiment Station at Rutgers University, acknowledged the 10th anniversary of the Equine Science Center and lauded the efforts of its faculty and staff. Thomas Luchento, president of the SBOANJ, informed guests of the Equine Science Center's vital role in agribusiness, public policy and equine health and well-being.



Celebrating the success of the Equine Science Center! Back row, left to right: Sandy Denarski, Robert Goodman. Front row, left to right: Brian Cashman, Thomas Luchento, Karyn Malinowski

Continued on page 4

## From The Clubhouse



Dear Friends,

I sincerely hope that you and your human and animal family members are well after Hurricane Irene. My family and I fared well; as did my equine friends - Lord Nelson survived another "big one!" Equine Science Center faculty, students and staff feel like the entire spring and summer resembled a hurricane as we continued the whirlwind celebration of ten years of excellence on behalf of the Center and its work. The fall semester is

now upon us and the holidays will be here before we know it.

On July 12, the Equine Science Center hosted an Open House in conjunction with the Career Summer Institute (CSI) at the Equine Exercise Physiology Laboratory. The CSI is a program of the Rutgers School of Management and Labor Relations, designed to develop career assessment and exploration through interactive workshops for high school students from New Jersey. I had the pleasure of addressing approximately 100 students about the diverse and nontraditional career opportunities available in the equine industry, and the importance of developing leadership skills. On July 28 we hosted the Harness Horse Youth Foundation Camp. Fifteen young harness racing enthusiasts learned the "science" behind driving a horse and had the opportunity to experience "Equine Science 4 Kids" as well. To see pictures from both events, visit the Center's Facebook page at: esc.rutgers.edu/fb.

We rolled into the dog days of summer with an extremely busy first week of August. Our partner, the Standardbred Breeders and Owners Association of New Jersey hosted a VIP, invitation-only gala in honor of the Center's 10th anniversary at the Commissioner's Club in the new MetLife Stadium on August 4th. Brian Cashman, General

Manager and Senior Vice President of the New York Yankees, delivered the keynote address during this Pre-Hambletonian Celebration. The event was sponsored by corporate and private donors including Sandy Denarski, Hanover Shoe Farms, Showplace Farms, Pfizer Animal Health, and over a dozen additional supporters. Thanks to the SBOANJ, Brian Cashman, sponsors and attendees we have raised over \$50,000 in support of research at the Center. View the photo gallery on our website at esc.rutgers.edu and click "For the

I kicked off Hambletonian week by presenting "The Importance of Quantifying the Equine Industry" during the opening session of the 22nd World Trotting Conference. Equine Science Center student workers, Ryan Avenatti and Tim Manzi, had the distinct honor of attending each session and serving as scribes throughout the entire conference. Please turn to page 4 for a full review of the conference.

We closed the week with participation at the annual Hambletonian Continuing Education Veterinary Conference on August 5. The Center's very own Sarah Ralston presented "NMR-based Metabonomic Analyses of Horse Serum: Detection of Metabolic Markers of Disease" as a lecture during the conference. Equine Science Center student workers Melissa Koger and Kelly VanDemark hosted a booth in Paddock Park at the Meadowlands Racetrack on Hambletonian Day. Check us out on page 6.

In closing, I would ask that each and every one of you consider recognizing the accomplishments of YOUR Rutgers Equine Science Center by making a gift to the Center in celebration of its tenth anniversary. No donation is too small and every gift helps ensure that we can continue to deliver the research-based information that you need to keep your horses well. To learn more about giving, visit us at esc.rutgers.edu or call at 848-932-9419.

All the Best, karyn

Love of Horses."





New Jersey Farm Bureau's primary purpose is to represent the overall interests and improve the financial well-being of farmers and our \$800 million industry. NJFB

activities are supported through voluntary membership and annual dues. Members have access to:

- Staff assistance on farming issues and regulatory problems.
- Educational workshops on topical issues such as farm labor, wildlife damage, and zoning.
- Weekly updates on legislation news and regulations affecting all aspects of farming.

It pays to be a NJ farm Bureau member! For a full list of membership levels and benefits, or to sign up, visit www.njfb.org.

Established in 1961, the Standardbred **Breeders & Owners Association** of New Jersey [SBOANJ] has a membership comprised of horse breeders, drivers, trainers, owners, and backstretch personnel, and its mission is to support and promote the standardbred industry in New Jersey. The Board of Directors authorizes stallion, mare and foal registrations, negotiates with track management, actively oversees and administers a benefits program, and advances legislation favorable to the horse racing industry. For more information, please visit www.sboanj.com.

# Investing in the Future

The Equine Science Center is proud to recognize the following Rutgers University students as recipients of the Doris C. Murphy endowed scholarship for academic year 2011-2012: Alex Broomell, Rebecca Freiday, Melissa Koger, Rachel Walter, and Samantha Washington. This year, two seniors, a junior, and two incoming freshmen, earned the financial award.

"It is my absolute honor to reward these outstanding young women with a scholarship that will provide financial assistance toward their academic careers," said Karyn Malinowski, director of the Equine Science Center. "The selected students demonstrate exceptional academic achievement, dedication to the study of animal sciences, and above all, unwavering passion to succeed in their specific career."

My dream is to work with horses every day while using the most innovative and cutting-edge medicine available.

The Doris C. Murphy Endowed Scholarship in Equine Science was created to honor the memory of a woman who loved animals. Ms. Murphy was born in Jersey City and worked for the Ford Motor Company in Newark. She and her husband had no children, and shortly before her death in

1998, she contacted her financial advisor, Kate Sweeney of Smith Barney's downtown New Brunswick office, and expressed her desire to support animal studies. Ms. Sweeney, a Cook College alumna, suggested the equine science program as an appropriate beneficiary. Ms. Murphy was also very supportive of women's education; the endowed scholarship is offered to women students majoring in Animal Sciences with an equine science interest. Thus, the scholarship reflects Doris C. Murphy's love of animals and her deep interest in encouraging young women to complete their academic studies.

"It is my goal to be very successful at Rutgers so that I will be accepted into a competitive veterinary school. My dream is to work with horses every day while using the most innovative and cutting-edge medicine available," said incoming freshman Samantha Washington. "This scholarship will be very helpful to me in continuing my education and in helping me achieve my dreams."

Since 1999, Kate Sweeney has facilitated the scholarship disbursement on behalf of the Doris C. Murphy estate. Sweeney, Malinowski, and Carol Bagnell, chair of the Department of Animal Sciences, meet annually to review the scholarship applications and determine the award recipients.

"Each year, I am amazed at the academic caliber of the Doris C. Murphy scholarship applicants; simply stated, these young women are impressive," said Sweeney. "I feel confident knowing that the legacy of Ms. Murphy lives on in perpetuity through the achievements of these brilliant students. Doris would have loved getting to know the 'Murphy girls' each year. For me, playing an active role in helping them chart the course for their future truly is a humbling experience."

The scholarship is reserved for students who are New Jersey residents and enrolled-in or are incoming freshman at Rutgers University. Up to six \$1,000 awards are available annually. For more information about the Doris C. Murphy scholarship, please contact Tiffany Cody at cody@aesop.rutgers.edu or call 848-932-9419.



The New Jersey Department of Agriculture NEW JERSEY (NJDA) is an agency which oversees programs that serve virtually all New Jersey citizens. One of the Department's major priorities

is to promote, protect and serve the Garden State's diverse agriculture and agribusiness industries. In addition to the programs we offer to support production agriculture, NJDA also manages programs that feed schoolchildren, distribute surplus federal foods to soup kitchens and pantries that serve our needy citizens, conserve precious soil and water resources, protect farmland from development and preserve it for future agricultural use, expand export markets for fresh and processed agricultural products, and promote our commercial fishing industry, and administer the complete program of agriculture, food and natural resource education, which includes the State FFA Association. For more information about NJDA, please visit www.nj.gov/ agriculture/index.shtml

Sandy Denarski – Chairwoman of the Rutgers University Board for Equine Advancement (RUBEA) RUBEA's mission is to assist the Rutgers Equine Science Center in its decisions regarding its equine teaching, research, and outreach; and to promote and support these activities through fund-raising and advocacy efforts. "Horses have empowered me to lead a happier, healthier and more enriched life. They are my passion and my inspiration. I can think of no better way to repay these magnificent animals than to invest in their health and well-being by becoming a donor to the Equine Science Center."



# The 2011 World Trotting Conference

by Ryan Avenatti

The New Jersey equine industry received international attention during the 2011 World Trotting Conference, held in Jersey City, NJ from August 4 – 9, 2011. Providing the meeting with a strong start, and prominent among the invited speakers and panel discussions, Dr. Karyn Malinowski, director of the Equine Science Center, gave a lecture titled "Quantifying the Importance of the Industry." During her talk, Dr. Malinowski discussed the methodology, findings, and significance of the oft cited report The New Jersey Equine Industry – 2007 (Gottlieb et al, 2007), and the 2009 white paper Impact of Slot Machines/Video Lottery Terminals (VLTs) on the Economy, Horse Racing and Breeding Industry, Agriculture and Open Space in States/Provinces where they Exist: Why is this Important for New Jersey? (Malinowski and Avenatti, 2009).

Both works were regarded as sound and proven examples of how the equestrian sporting segments and greater equine industry should demonstrate the scope and importance of equine-related activities to the general public and policy decision makers. Also acknowledged was the ongoing effort of the Equine Science Center to emphasize the integral role of the equine industry in maintaining agri-business and open space in the Garden State. The lessons learned from recent debates regarding the future of horse racing in New Jersey were carefully noted by the international observers in attendance. Additionally, Jeff Gural, real-estate mogul and harness-racing venue operator, discussed the future of the Meadowlands Racetrack in a talk titled "The Meadowlands Plan."

The biennial meeting, sponsored by the International Trotting Association (ITA), is held to encourage cooperation and create consistency between breed registries from around the world. The 2011 meeting covered a wide range of topics relating to the challenges and

triumphs of harness racing across the globe. Each day of the meeting had a different theme: The State of the Industry, Integrity and Regulation, Racing at its Finest, Marketing and Promotion, and Equine Welfare. Delegates and observers from 15 countries had a productive exchange

of ideas in order to promote and improve harness racing.

Throughout the conference, the New Jersey equine industry received significant recognition from the international racing community. Delegates attended the 4th leg of the World Driving Championship and the 86th Hambletonian



Working hard during the conference Ryan Avenatti, Karyn Malinowski, Tim Manzi

at the Meadowlands Racetrack, a

tour and demonstration at the Standardbred Retirement Foundation in Hamilton, and a tour of Perretti Farms of Cream Ridge. The next World Trotting Conference will be in 2013 in France.

For more information about the 2011 World Trotting Conference, please visit www.ustrotting.com or the International Trotting Association page on Facebook.

### Love of Horses (continued)

"Thanks to the work of the Equine Science Center, we know how important horses are to New Jersey, we understand the role of horses in the maintenance of open space in this state and we have the data related to the economic impact of the equine industry," said Luchento. "The

SBOANJ is proud to be a financially supportive partner of the Center and we encourage others to do the same."

Chairwoman of the Rutgers University Board for Equine Advancement, Sandy Denarski, urged guests to consider making a meaningful gift to the Equine Science Center in honor of its tenth anniversary.

"Horses have empowered me to lead a happier, healthier, and more enriched life. They are my passion and my inspiration. I can think of no better way to repay these magnificent animals than to invest in their health and well-being by becoming a donor to the Center," said Denarski.



Back Row, Left to Right: Kelly VanDemark, Cindy Gadek, Kenneth McKeever, Melissa Koger, Carey Williams, Tim Manzi Front Row, Left to Right: Ryan Avenatti, Karyn Malinowski, Sarah Ralston, Tiffany Cody

She emphasized the fact that she is not in the "business" of horses. She does not race, breed, nor does she participate in equine competitions. As a casual horse rider, Ms. Denarski supports the Center because she appreciates and values the services it provides by focusing on areas of concern which greatly impact the entire equine industry such as: horse health; the right to farm and cost of farmland; land use and environmental stewardship; the integrity of equestrian sport; the

vitality and sustainability of the horse industry; and economic growth and development.

Karyn Malinowski closed the gala by graciously thanking guests for helping the Center celebrate its major milestone. She also stressed the importance of team work by recognizing the contributions of the Equine Science Center associate directors, Kenneth McKeever, Sarah Ralston, and Carey Williams.

For more information about the Pre-Hambletonian Celebration and to see pictures from the gala, please visit "For the Love of Horses" at esc.rutgers.edu.

# NE1041 Project: Horses and the Environment

July 14-15, 2011; Hammond, Louisiana

In July, three Equine Science Center members traveled to Louisiana for the annual NE1041 meeting. Michael Westendorf, Extension Specialist in Livestock Management, Carey Williams, Extension Specialist in Equine Management, and Laura Gladney, Program Associate, are members of the regional project which coordinates environmental research as it pertains to horse farms across the Northeast. The ultimate goal of the project is to use the best existing data to minimize negative environmental impacts of equine operations. Karyn Malinowski, Extension Specialist and director of the Rutgers Equine Science Center, and Stephen Komar, NJAES Agricultural Agent for Sussex County, are also project members but were unable to attend the meeting. In addition to NJ, the project includes participants from VT, CT, MA, PA, MD, NC, MN, SD, KY, and LA.

The meeting opened with a welcome from Bobby Fletcher, director of the Louisiana State University Hammond Ag Center, who offered insight into how his Center is coping with reduced state funding. Michael Westendorf then introduced the project's goals and objectives before beginning the state reports. Representatives from each state summarized their recent research projects. Some research topics included Protection of Environmental Resources through Implementation of Feed Management, Best Management Practices on Equine Farms, Rotational Grazing Trials, Forage Variety Trials, a Round Bale Feeder Trial, and Dietary Protein Affects Nitrogen and Ammonia Excretion in Horses. Extension programs included Pasture Walks and Workshops, free or fee-based Pasture Management Programs, Renovating Model Horse Farms, and the production of educational materials.

During the last part of the meeting, future goals of the project were discussed. Future research priorities include a regional Best Management Practices (BMP) survey, a national NRCS grant looking at BMPs on small livestock farms, demonstration farms to showcase BMPs (similar to Rutgers' BMP Demonstration Horse Farm at Ryders Lane), pasture renovation and rotational grazing projects, a water-extractable phosphorus project, manure disposal/composting and use as energy, and horse farm certification programs. The production of quality literature reviews in relevant topics is ongoing.

After the meeting, the group toured Oak Hill Ranch, a premier Danish Warmblood breeding facility in Folsom, LA. This farm has been working with NRCS to minimize the negative environmental impacts of caring for more than 50 horses. The annual meeting was very successful. Next year the NE1041 Project will be held in Vermont and hosted by Equine Specialist, Betsy Greene.

# NELSON'S CORNER

Hi Friends,

From what I've been told by my buddies at the Equine Science Center, the question on everyone's lips is: "When is Lord Nelson going to make a guest appearance and

Lord Nelson going to make a guest appearance and hang out on campus?"

Let me start by saying, I'm thrilled that so many of my adoring fans want to see my beautiful (and fuzzy) face! It warms my 8 lb heart to know that you want to visit with your old friend Lord Nelson. Unfortunately, I just have too much to do at home - daunting tasks such as taking a nap in the afternoon shade, luxuriating in bubbles during one of my routine baths, going for invigorating morning

runs with my gal pal Hugme Christi, and perhaps the most challenging of them all, figuring out a way to get my hooves on some delicious doughnuts and tasty peppermint treats!

While I try to pencil-in a visit to New Brunswick on my calendar, don't forget that there are 24 horses on campus that would love a little dose of extra attention. These awesome

mares are collectively known as "Horse Heroes!" (what a fantastic title!). Check out their individual profiles on the Equine Science Center website: **esc.rutgers.edu**.

They are considered "Horse Heroes" because they participate in the many research initiatives which positively benefit the greater equine community - that even includes yours truly! As a matter of fact, most of the scientific information found on Equine Science 4 Kids - healthcare & nutrition, exercise physiology, and

Pixie

Lucky

horses & the environment - was conducted with the help of the "Horse Hero" mares. For more information about how you can be a hero too, contact my buddy Carey Williams at **cwilliams@aesop.rutgers.edu** or **732-932-5529**.

Until next time friends! Lord Nelson

# Hambletonian Veterinary Conference

by Kelly VanDemark

The Equine Science Center was notably present at the 12th annual Hambletonian Continuing Education Seminar for equine veterinarians, held on August 5th in East Rutherford, New Jersey. Throughout the day, veterinarians and equine science professionals attended lectures, wet labs, seminars, and visited vendors at the trade show. Karyn Malinowski, Sarah Ralston, and Carey Williams represented the Equine Science Center faculty.

"I look forward to the Hambo Vet Conference every year," said Williams. "This is the perfect opportunity to network with peers, learn about new products and feed formulas, and attend diverse equine science classes and workshops."

Center staff members and several current students were also in attendance. "I fully encourage and support student workers attending the Hambo Vet Conference as representatives of the Equine Science Center," said Tiffany Cody, public relations specialist at the Center. "It is a chance for them to meet and engage with equine pharmaceutical reps, various scientific vendors, and best of all, they get to connect with former Rutgers Animal Science students who now work in exciting equine professions."

Sarah Ralston, Associate Director – Teaching at the Equine Science Center, was invited to deliver a presentation during the Hambletonian Vet Conference titled, "Nuclear Magnetic Resonance-Based Metabonomic Analyses of Horse Serum: Detection of Metabolic Markers of Disease". The talk described the results of a three year study that tested the hypothesis that: metabonomic analysis - the quantitative measurement of dynamic and complex metabolic profiles by use of Nuclear Magnetic Spectroscopy (applied to Standardbred yearlings with and without a history of osteochondrosis (OCD) lesions) - would reveal a unique metabolic profile associated with affected horses.

The results showed consistent metabolic differences in horses that have developed OCD lesions versus closely-related horses that have not developed lesions (despite common management and environment) both as nursing foals before lesions were detected, and past 18 months of age when they are no longer at risk of developing new lesions. The consistent differences in metabolic profiles may help in detection of the genetic defect that will provide better understanding of the fundamental biochemistry leading to the development of OCD to identify horses that are at risk, and design feeding strategies to prevent it.

Ralston also presented this talk on July 15, 2011 at the Recent Advances in Animal Nutrition Conference in Armidale, New South Wales, Australia.

For more information on Sarah Ralston's research, please contact ralston@aesop.rutgers.edu or call 732-932-9404.



Sarah Ralston presenting a lecture during the conference



### **Equine Science Update**

Thursday, December 8, 2011
Cook Campus Center
Rutgers, The State University of New Jersey
New Brunswick, NJ
Call 848-932-9419

**Future Leaders of the Equine Industry** 

Tuesday, January 10, 2012 and Thursday, January 12, 2012 Showplace Farms 505 Rt-33 Millstone Township, NJ 08535 Call 848-932-9419

**Horse Management Seminar** *Saturday, February 4, 2012*Cook Campus Center
Call 732-932-5529



# Student Voices: The Path Toward Becoming a Scientist

by Melissa Koger

While applying to colleges during my senior year in high school, I never envisioned Rutgers University as the right school for me; I thought it was just too big - but I was mistaken. Initially, I did not realize what great opportunities the Animal Science Department in the School of Environmental and Biological Sciences at Rutgers had to offer. I spent my first two academic years at the Richard Stockton College of New Jersey (RSCNJ) as a Biology major with a concentration in Pre-Veterinary medicine. As I progressed in my academic studies, I realized that RSCNJ could not offer me the hands-on research experience that I knew would be beneficial to my career. That's when I decided to take a closer look at the programs of study at Rutgers University.

I transferred to Rutgers in the fall semester of my junior year as an Animal Science major with a Pre-Veterinary and Research option and a minor in Endocrine Physiology and Health Sciences. I immediately knew that this was the best decision I had ever made.

My first exploration into equine science was as a work study student assisting Dr. Kenneth McKeever. He suggested that I become actively involved in equine research at the exercise physiology laboratory and introduced me to Ph.D. candidate Ryan Avenatti. The thought of drawing blood from a horse, although in a controlled scientific environment, did not appeal to me. After spending time in the lab with Ryan and working with the research mares, I quickly got over my fear of drawing blood. At that point, I finally realized what being a scientist is all about.

Pleased with the quality of my work, Dr. McKeever and Ryan recommended that I assist Dr. Karyn Malinowski and Tiffany Cody with various tasks at the Equine Science Center. I knew of Dr. Malinowski and was vaguely familiar with the Center; still, I did not know what to expect when I walked in the door the first day.

They put me to work immediately! While at the Equine Science Center, I gained valuable insight about what is needed to manage a research center efficiently. In addition to the routine tasks of answering the telephone and sending faxes, I also helped plan and organize events, drafted correspondence letters, and learned to manage a database. I also progressively gained knowledge about horses and the equine industry as a whole.



Representing the Equine Science Center at the Hambletonian Veterinary Conference! Melissa Koger, Kelly VanDemark, Karyn Malinowski



Future scientist in the making!

Within a few short months, I had helped with several treadmill demonstrations including one at Ag Field Day. I also attended the Hambletonian Veterinary Conference as a student representative for the Equine Science Center and helped organize the Pre-Hambletonian Celebration at the new MetLife Stadium on August 4th. The opportunities and experiences I have had thanks to the Equine Science Center are invaluable. If someone told me I would be doing all of this a year ago, there is no way I would have believed them.

Ironically, I never considered working with horses as a career. In fact, winter 2010 was the first time I had ever even touched a horse. The extent of my horse knowledge was Mr. Ed and "Old McDonald had a Farm". However, the spirit and love of horses at the Equine Science Center is infectious! My fascination and respect for horses has grown exponentially in the short period of time I have been around them. Dr. Malinowski may be the strongest advocate for equine science; and she can be quite convincing.

Before working at the Center, my primary career aspiration was to become a large feline veterinarian. Now, my path has become slightly distorted as I am open to other possibilities. However, I do know for certain that the experience I gained at the Center, and working with Dr. McKeever and Ryan, will benefit my career regardless of which animal I choose to work with - whether it be horses, lions and tigers, or bears, oh my!

Rutgers and the Equine Science Center continue to provide me with the worldly and hands-on experience that I wholeheartedly believe will be beneficial to my career. By Dr. Malinowski taking me under her wing, I have truly learned what it means to be a scientist. I get excited thinking about the prospect of becoming Dr. Melissa Koger. Whether I am an equine veterinarian or large cat veterinarian is still unknown; but I do know that I will be a great scientist and I have all those in the Animal Science Department and the Equine Science Center to thank for that.

# esc.rutgers.edu

Equine Science Center

Better Horse Care Through Research and Education





### Please Note!!

The Equine Science Center has a new area code! We are now **848**-932-9419!





It's easy! Simply click below and provide your email address.

SIGN ME UP!

### Karyn Malinowski

Director

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### Kelly Lankau Watts

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### Tiffany J Cody

Public Relations Specialist Equine Science Center Phone: 848-932-9419

Email: cody@aesop.rutgers.edu



# You are invited...

The Equine Science Update, open to all horse enthusiasts, highlights the Equine Science Center's work in advancing equine health, horse management practices, and solutions to equine industry issues.

### **Equine Science Update** Thursday, December 8, 2011, 6 - 9 p.m.

### **Schedule:**

6 to 7 p.m. – Light Supper

■ "Code Red" - Julie Vence, Warren County 4-H Horse Program and winner 2010 Eastern National 4-H Roundup - Individual Presentation Competition

### 7 to 9 p.m. – Equine Science Update

- Highlights of Center Activity
- Metabonomics: the New "omic" Tool
- "Shocking" New Research on Oxidative Stress and Inflammation
- "Love Your Horse, Love the Environment" Keeping it Green

### **Optional Tours:**

- 4:00 p.m. Meet the "Horse Heroes!" Treadmill Laboratory
- 5:00 p.m. Equine treadmill demonstration Treadmill Laboratory

### ★ Location ★

Cook Campus Center, 59 Biel Road, New Brunswick, NJ 08901 • (732) 932-7617 (Information for directions is available on the Equine Science Center website. Due to ongoing construction, please do not rely on GPS or navigation systems.)

To register for the event, print and mail the **registration form** or contact Tiffany Cody at cody@aesop.rutgers.edu or call 848-932-9419.