

FALL 2013

Equine Science Center

UPDATE

“Better Horse Care through Research and Education”

Upcoming Events

An Evening of Celebration and Science

An Evening of Celebration and Science

Tuesday, November 19, 2013
G.H. Cook Campus Center
Rutgers, The State University of NJ
New Brunswick, NJ
cody@aesop.rutgers.edu

“Developing Future Leaders for the Equine Industry” short course

Tuesday, January 07, 2014
Thursday, January 09, 2014
Rick’s Saddle Shop
282 County Road 539
Cream Ridge, NJ
malinowski@aesop.rutgers.edu

Horse Management Seminar

Sunday, February 09, 2014
G.H. Cook Campus Center
Rutgers, The State University of NJ
New Brunswick, NJ
gladney@aesop.rutgers.edu

In an effort to constantly evolve and improve upon the ways in which to connect with key constituents and supporters, the Equine Science Center has retooled its annual year-end event. The “Equine Science Update”, will now be appropriately named “An Evening of Celebration and Science”. The name change signifies recognition of the celebratory aspect of the event. Mark your calendars to join the festivities on Tuesday, November 19 from 6:00 – 9:00 pm at the Cook Campus Center in New Brunswick, NJ.

During the event, the Center celebrates achievements and advancements in equine scientific research. The event also provides a platform to celebrate accomplished individuals and various organizations which comprise the unique equine industry in New Jersey. This includes veterinarians, farm owners, equine professionals, horse owners, educators, students, 4-H and pony club members, and any and all equine enthusiasts.

This year’s “Evening of Celebration and Science” will begin with a keynote lecture by equine scientist Raymond Geor, BVSc, MVSc, Ph.D., DACVM. Dr. Geor is a Professor at the College of Veterinary Medicine at Michigan State University and Chair of the Department of Large Animal Clinical Sciences. He is world-renowned in Equine Metabolic Syndrome and interactions between obesity, inflammation and insulin resistance, and how these conditions increase susceptibility to laminitis.

Dr. Geor’s presentation is a MUST hear for every owner of an old and/or obese horse and for the veterinarians who treat them.

The celebratory theme continues as several awards will be presented throughout the evening. The Equine Science Center is pleased to announce Nancy Jaffer as the 2014 recipient of the “Spirit of the Horse” award. The “Spirit of the Horse” award

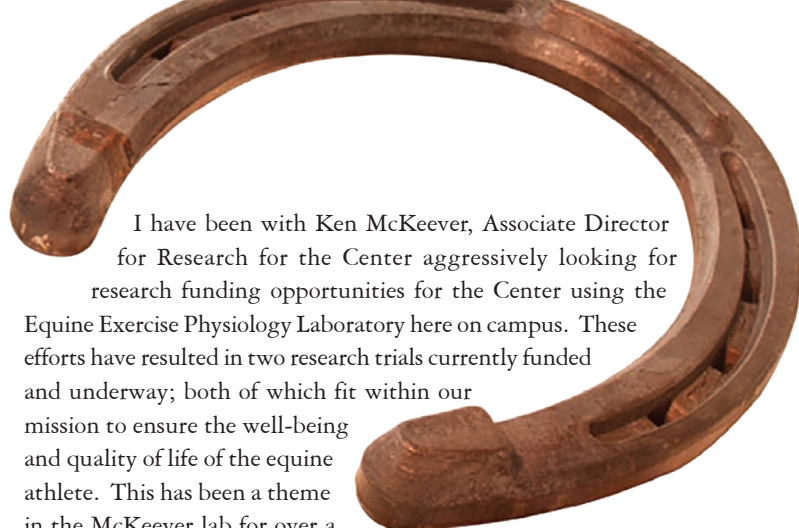
Continued on page 5



RUTGERS

New Jersey Agricultural
Experiment Station

From The Clubhouse



Dear Friends,

Welcome back to another beginning of the academic year. The summer passed much too quickly and I hope you all enjoyed quality time with family and friends (horses and pets included!). Lord Nelson has been VERY busy this summer posting blogs on our website esc.rutgers.edu on topics of importance to horse owners on horse care and management. He also hasn't

forgotten the fact that he almost escaped from his pasture and tests the chain on the gate every chance he gets! Read all about his adventures at LordNelsonsblog.blogspot.com.

Center faculty and staff were busy hosting programs here on campus as well as spreading the word of "Better Horse Care through Research and Education" at venues around the state. Examples of these events include: Our annual summer Open House with over 100 attendees (the biggest crowd ever!); the Hambletonian Veterinary Conference at the Meadowlands Racetrack; and the Open Space Pace held at Freehold Raceway. You can find event photos on our Facebook page esc.rutgers.edu/fb.

Over the summer I reached out to a handful of alumni to ask for help in assembling an active and fully engaged leadership committee to help me reconnect with all alumni who have had the privilege of working with horses here at Rutgers University and the Equine Science Center. We are excited about developing a new alumni program and can't wait to reveal details to you soon. We're asking all Cook College and SEBS alums to provide their contact info so we can make sure you get notified first! Stay tuned for details!

I have been with Ken McKeever, Associate Director for Research for the Center aggressively looking for research funding opportunities for the Center using the Equine Exercise Physiology Laboratory here on campus. These efforts have resulted in two research trials currently funded and underway; both of which fit within our mission to ensure the well-being and quality of life of the equine athlete. This has been a theme in the McKeever lab for over a decade. See Ken's discussion of supplements for horses on page six.

Finally, I want to make sure you all have Tuesday, November 19 on your calendar as we present, "**An Evening of Celebration and Science**". I am very pleased to announce that our keynote address will be presented by Ray Geor, BVSc, MVSc, PhD, DACVIM, chair of the Department of Large Animal Clinical Sciences at Michigan State University. Dr. Geor is a leading authority on Equine Metabolic Syndrome and the interactions between obesity, insulin resistance and laminitis. Because he possesses both a veterinary medicine and doctoral degree he brings the unique ability to review the latest research being conducted in the field and the clinical application as well. This lecture is a MUST for anyone owning an obese and/or old horse and for the equine practitioners who treat them.

Please don't forget to visit us on **Facebook**, where we are busy posting facts, news, equine information, and a little fun on a regular basis. Enjoy riding this fall and don't forget to visit us on campus on November 19 for the "An Evening of Celebration and Science".

Bestest,
karyn



Partners



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:

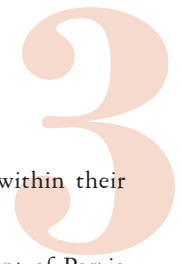
- Staff assistance on farming issues and regulatory problems.
- Educational workshops on topical issues such as farm labor, wildlife damage, and zoning.
- Weekly updates on legislation news and regulations affecting all aspects of farming.

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.



Developing Future Leaders Short Course



What does it take to become a leader?

Leadership skills are becoming increasingly important for students as they transition into professional careers, and professionals looking to grow within their chosen field. Well-developed leadership skills are applicable in every field, including the equine industry and agri-business.

To ensure that the horse industry in New Jersey continues to thrive, the Rutgers Equine Science Center is offering a two-day short course for students and adults who are committed to the future of the industry.

On Tuesday, January 7 and Thursday, January 9, 2014, the Equine Science Center will host the fourth cycle of its **“Developing Future Leaders for the Equine Industry”** course. Scheduled from 9:00 am to 5:00 pm on both days, class will be held at Rick’s Saddle Shop in Cream Ridge, NJ. Tuition is \$150.

The class will cover diverse topics that provide a broader understanding of leadership competencies, skills, behaviors, and characteristics such as: networking, decision-making strategies, building coalitions, marketing, conflict resolution, industry management, legal strategies, and the socio-economic value of the equine industry.

Karyn Malinowski and Emil Sadloch will team-up to present the course. Since its inception in 2001, Karyn Malinowski has positioned the Equine Science Center as an authority in the horse industry and equine-

related agribusiness. In a team effort, the Center produced the pivotal “New Jersey Equine Industry 2007: Economic Impact” report. The report continues to be widely-cited by legislators, equine businesspersons, and influential opinion leaders within equine communities throughout North America.

If students truly love the horse, they need to understand how decisions made on the federal and state level impacts the equine industry and their chosen field of study

Emil Sadloch, president of Sadloch Development Associates, and adjunct professor with the Center for Management Development, possesses deep experience in leadership development, training/learning, and human resource development. In work with clients, he provides services that yield visionary strategies, improve leadership and management skills, enhance communication in organizations, deepen engagement, and foster better team functioning.

As in previous cycles, the course will feature several guest lecturers who are accomplished

and highly-regarded experts within their respective fields.

Barbara DeMarco, vice president of Porzio Government Affairs, will present during the 2014 leadership course cycle. “If students truly love the horse industry, they need to understand how decisions being made on the federal and state level impacts their chosen field of study,” said DeMarco. “Further, the horse industry isn’t just about the horse. It is about open space and farmland preservation. It’s the broader impact of the equine industry that I often focus on as it is so integral and important to our quality of life here in New Jersey. Once you see the bigger picture, it drives you to advocate not only for the betterment of horses but also the preservation of the many ancillary benefits the equine industry brings to our state.”

The course is open to students, from Rutgers or other academic institutions, as well as equine enthusiasts and all adult learners. Current Rutgers undergraduate students completing their winter semester registration process online will need a special permission code to register for the leadership course. Please contact Karyn Malinowski to receive the code at malinowski@aesop.rutgers.edu.

Adult learners will be able to register for the course by contacting Tiffany Cody at the Equine Science Center at cody@aesop.rutgers.edu or 848-932-9419.



The New Jersey Department of Agriculture (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

The Rutgers Equine Science Center is going GREEN!

LEAVE THE TREES ON YOUR FARM — NOT IN YOUR MAILBOX!

By going digital, you will receive two additional newsletters and special invites to annual events!

Just scan the QR code on the right using your smart phone QR code reader app and enter your preferred contact information. Or, you can email Tiffany Cody at cody@njaes.rutgers.edu with your name and email address.

Thanks for helping us Go Green!



4 Open Space in New Jersey

Horses, and horse farms, contribute to the quality of life and scenic, picturesque landscape in the Garden State. Not only do horses enhance the overall aesthetic, they also play a crucial role in preserving open space in the most densely populated state in the nation.

The Equine Science Center's mission is "better horse care through research and education to advance the well-being and performance of horses and the equine industry."

The New Jersey equine industry benefits every resident in the state through its socio-economic influence, reflected in its positive annual economic impact and its role in the preservation of working agricultural landscape, which enhances the quality of life for all in the "Garden State."

Often forgotten are the complicated relationships that exist among various segments of the equine industry. Regardless of breed group, discipline, and sport, one major underlying factor plays an integral role in the sustainability of the equine industry: open space.

In 2007, The Center determined that the New Jersey equine industry is valued at \$4 billion, generating \$1.1 billion (\$780 million due to racing) annually in positive impact on the state economy. It is responsible for 13,000 jobs, more than half of which are generated by racing-related interests such as racetracks and horse breeding and training facilities.

Concerns over open space are not solely an equine issue. Of the 176,000 acres supporting equine facilities in New Jersey, approximately 96,000 acres are directly related to equine activities; with 46,000 additional acres producing hay and forage on non-equine-related operations. Equine-related acres represent more than one-fifth of the state's 790,000 acres remaining in agriculture. Add this to the non-equine related acres in production to grow food for New Jersey horses and one finds that almost 30% of the agricultural acres remaining, in the most densely populated state in the nation, are related to horses. Racing is responsible for 56,000 of these acres.

In 2009, an Equine Science Center analysis of preserved farmland in the state showed that only a small portion of this acreage is actually in equine-related activity. The analysis determined that only eight percent of the acreage in the Farmland Preservation Program is used for horse-related activities. This leaves potentially a vast number of agriculturally productive acres open to development.



Equine Science Center student and staff volunteers at the Open Space Pace event

The fact remains that horse racing is the economic driving engine of the entire horse industry in New Jersey and is extremely valuable to the quality of life in the form of agricultural working landscape that benefits all residents of New Jersey. If racing interests no longer find farming in New Jersey a viable option, they will seek alternative locations, taking with them their financial contributions and leaving in their wake joblessness and a scenic vista of preserved but unproductive land; a fiscal burden to the community that helped to preserve it.

Without a long-term vision for the sustainability of horse racing in New Jersey, owners, trainers, and breeders who currently are invested in its infrastructure will leave en masse for other locations. Recognizing that a mass exodus could be imminent, a group of concerned equine industry business professionals rallied to create the **Open Space Pace** organization.

The Open Space Pace was formed to highlight the relationship between the horse and open space in New Jersey. The organization hosts an annual celebratory event, the "Open Space Pace Parade and Festival" at Freehold Raceway in late September. Through the annual event and community involvement, the Open Space Pace seeks to raise funds to support non-profit organizations, such as the Rutgers Equine Science Center, involved in the equine industry and the preservation of open space. The organization strives to also increase awareness, educate the public, and stress the importance of open space in the Garden State.

As the official educational exhibitor for the event, the Equine Science Center presented information about the ways in which it supports the horse industry in New Jersey.

For more information about open space in the Garden State, please contact Karyn Malinowski at 848-932-9419 or malinowski@aesop.rutgers.edu.



Karyn Malinowski and Center volunteers accepting a donation from the Open Space Pace organization

Alumni – News you can Use!

Calling all Cook College and SEBS alumni! We have news for you coming down the pipeline soon!

The Equine Science Center, and a few of your fellow alumni, are working diligently behind the scenes on an exclusive new and exciting program just for Cook College and SEBS alumni! But before we make the announcement, we need to get in touch with you!

To make sure that you hear the news straight from the horse's mouth, please provide your email address and best contact number to me at gladney@aesop.rutgers.edu. We are making plans to launch this program in early January 2014. Trust me; you don't want to miss this!

Even if you think we already have your contact info, still send it anyway. Our contact info is only as good as the information we're provided. We want to make sure that you don't miss out on this announcement! Be sure to share this request to reconnect with your alumni friends.

Additionally, we would love to catch up with you to find out what you have been up to since graduating and hear stories about your college days working with the horses at the Rutgers Equine Science Center. Have you begun an exciting career in the equine industry? If so, just think for a second, "Where would I be without the ESC?"

In the meantime, feel free to browse the Center's website at esc.rutgers.edu to see what they have been up to lately. Don't forget to "Like" the Center on Facebook at esc.rutgers.edu/fb!

Happy trails,

Laura

Laura Gladney CC '08
Program Associate
Department of Animal Sciences
Rutgers University

Celebration (continued)

recognizes individuals whose lives have been profoundly changed because of their involvement with horses and who have acknowledged the impact by giving back to the horse industry.

The Equine Science Center, in partnership with the New Jersey Department of Agriculture and New Jersey Agricultural Experiment Station, will announce the winner of the 2014 Gold Medal Horse Farm award. The award gives recognition to outstanding equine farms for their dedication to environmental sustainability and management. It also underscores the efforts of the New Jersey equine industry to maintain the beauty of the Garden State.

Finally, the Center will celebrate youth equine education and programs as Kristen Johnson, National 4-H Roundup Public Speaking winner presents, "ImPACT".

To register for "An Evening of Celebration and Science," please visit esc.rutgers.edu. The event fee, which includes dinner, is \$30 for adults and \$15 for full-time students. For more information, please contact Tiffany Cody at cody@aesop.rutgers.edu or 848-932-9419.

NELSON'S CORNER

Hey Kids!



Since I've been working on **Equine Science 4 Kids**, I've noticed a few things: 1) most people are shocked to learn that I'm 40 years old (about 120 in "human years!"); 2) folks love to hear about my crazy daily antics on my blog, **Holy Hoofprints** – check it out at lordnelsonsblog.blogspot.com; and 3) horse kids are super smart because they like to ask questions!

My favorite sound, other than the dinner bell, is the *DING* alert I get when I receive new email in my inbox from one of my horse-crazy young fans. These kids always have cool and interesting questions for me. Some of them even send me pictures of their equine pals, too!

I've received questions about everything from Cushing's disease to equine vision. Sometimes, I'll mention your questions in my blog or my buddies at the Equine Science Center will post your questions on their official Facebook page at esc.rutgers.edu/fb.

If you'd like to see your question show up on my blog or Facebook, make sure you send me your horsey question at LordNelson@aesop.rutgers.edu.

And, in the meantime, don't forget to horse around on **Equine Science 4 Kids** esc.rutgers.edu/kids. Those who love hanging out in the paddock, check out the **"Fun on the Farm"** game! As you make your way around the Ryders Lane farm, you may think of a question to ask me!

You can also play the **Exercising HorsePower** game. This game is super cool – you can pick from three different horses, including yours truly. And, YOU operate the horse treadmill! Gallop on over to esc.rutgers.edu/kids and join the fun!



Testing the Efficacy of Feed Supplements

Before spending money on supplements for horses ask yourself three questions: Is it safe? Is it legal? And does it work? Dr. Kenneth McKeever, associate director of research at the Rutgers Equine Science Center has been asking those very same questions. He has been studying the efficacy of natural food products as well as dietary supplements and other performance-altering products for over a decade.

Research has flourished to establish the validity of these supplements that claim to alter metabolic pathways to improve nutrient utilization and to ultimately enhance performance. Unfortunately, these supplements rarely have a scientific basis for their assertions and use testimonials as proof instead of testing for efficacy, legality, and safety in a laboratory setting. Dr. McKeever's lab has been doing just that.

One area that he has investigated is the racing industry's use of "milkshaking" or administering alkalinizing agents to decrease the acidity of the blood during high-intensity exercise, which can negatively impact the horse's health. Dr. McKeever has tested numerous electrolyte and dietary supplements for alkalinizing ingredients. Most products tested did not have an alkalinizing effect, but Dr. McKeever warns that "trainers and owners are cautioned to examine the ingredients on the label of any product they may give to their horses."

In addition to supplements, the research team has examined the effects of therapeutic and non-therapeutic drugs. For example, clenbuterol, which is used to treat respiratory disorders, was tested to determine if it had performance-altering effects. Using clenbuterol in healthy horses can cause structural abnormalities in the heart, including enlarging the aorta and thus increasing the risk of it rupturing and sudden death. Administration of these drugs for the sole purpose of winning a competition can have detrimental effects on the horse's health, even at low, therapeutic doses.

On a brighter note, Dr. McKeever's lab, in conjunction with Food Science at Rutgers University, has experimented with natural food extracts such as cranberries, oranges, ginger, and black tea for their anti-inflammatory properties. These extracts can safely reduce

Is it Safe?

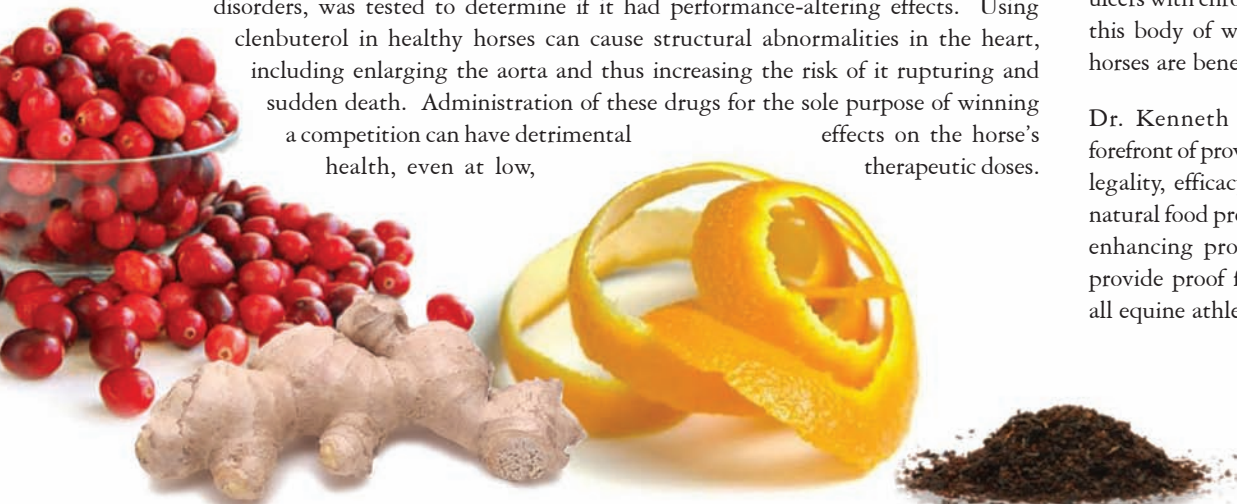
Is it Legal?

Does it Work?

inflammation and recovery time after exercise and thus reduce the need to use non-steroidal anti-inflammatory drugs (NSAIDs) to relieve muscle soreness, which can cause stomach ulcers with chronic use. The great thing about this body of work is that both humans and horses are benefiting from the results.

Dr. Kenneth McKeever has been at the forefront of providing scientific evidence for the legality, efficacy and safety for supplements, natural food products and other performance-enhancing products. And he continues to provide proof for future products to protect all equine athletes and the equine industry.

Natural food products used for anti-inflammatory properties



Our Horses, Our Heroes



Join Our Herd Become a **Horse Hero** Sponsor

Mares in the research herd at the Rutgers Equine Science Center are Horse Heroes because they serve as participants in the varied research initiatives which positively benefit the greater equine community.

You can sponsor a horse 3 different ways:

Become a '**Super Hero**' by donating \$2000 per year

Become a '**Champion**' by donating \$1000 per year

Become a '**Hero**' by donating \$500 per year

Thank you to Horse Hero Sponsors: Pat Colbert & Kate Steenberg, Jeanine McKay, Autumn Ridge Pony Club, New Jersey Region Pony Club, Somerset Hills Pony Club, Gloucester County 4-H Equine Science Club

“Community of ‘50’” Welcomes Brad Benson Hyundai and UMH Properties



Sam Landy leading the Open Space Pace 2013 parade

The Equine Science Center is pleased to announce two new members to the “Community of ‘50’ for Equine Excellence,” Brad Benson Hyundai and UMH Properties.

“Brad and the Landy family of UMH Properties have direct ties to horses and I know that they are committed to continued growth within the equine industry,” said Ryck Suydam, Chair, Rutgers University Board for Equine Advancement. “On behalf of the faculty, staff, and students at the Equine Science Center, I welcome them to the “Community of ‘50.’”

The “Community of ‘50’ for Equine Excellence” is an endowment campaigned aimed at raising \$3 million to support the programs of the Rutgers Equine Science Center. To accomplish the endowment, the Rutgers University Board for Equine Advancement (RUBEA), the advisory board for the Equine Science Center, endorsed the creation of the “Community of ‘50.’”

Individuals and organizations become members of the “Community of ‘50’” by pledging \$50,000 through the Rutgers University Foundation. The pledge is made with annual gifts of \$10,000 over the course of five years. In addition to becoming a member of the “Community of ‘50’” with the Equine Science Center, those who make

the pledge are also recognized at the President’s Council level of giving through the University Foundation during each year of the pledge term.

Brad Benson Hyundai and UMH Properties will join an illustrious group of people and organizations that understand the importance of supporting scientific research and also want to have a voice in policy-making as it affects horse farms and the horse industry in the Garden State.

Brad Benson, former NFL New York Giants football

player, is a businessman and operates the Brad Benson Auto Group in South Brunswick. He also owns Brad Benson Hyundai in South Brunswick and Rainbow Run Farm, a 350 acre world-class cutting horse facility in Hillsborough.

“Thanks in part to my daughter Destini’s love of horses, I have long ties to the equine industry in New Jersey,” said Benson. “It is truly an honor to be able to support the academic and research programs of the Equine Science Center.”

UMH Properties is a New York Stock Exchange company that owns and operates manufactures homes and communities in seven states, including New Jersey. UMH Properties was founded by Eugene Landy in 1969 and began operating as a public company in 1985.

For the Landy’s, which includes Eugene Landy, and Sam and Laurie Landy, the love for all things equine is a family affair. Eugene Landy and Sam Landy, founder and president & CEO, respectively, of UMH Properties, have established themselves as firm supporters of

equine farms and open space in New Jersey. In 2012, Sam rallied a group of professionals to create the Open Space Pace organization to increase awareness, educate the public, and emphasize the importance of open space in the Garden State. Laurie is the executive director of Special Strides Therapeutic Riding Center in Monroe Township.

“Joining the ‘Community of ‘50’” was an easy decision for UMH Properties,” said Sam Landy. “The Equine Science Center has been championing the sustainability of the equine industry, which includes farm land preservation and open space, for well over 12 years and now they need help. Supporting the organization that supports land issues in New Jersey just makes sense.”

The “Community of ‘50’” campaign will establish an endowed chair which will ensure that the Equine Science Center lives on in perpetuity at the university.

Current members of the “Community of ‘50’” include the Standardbred Breeders and Owners Association-NJ, New Jersey Farm Bureau, Dr. and Mrs. Stephen P. Dey, II, Fair Winds Farm – Mark and Laura Mullen, Liz Durkin, Pamela Arena Weidel, past RUBEA chair Sandy Denarski, Center director Karyn Malinowski and individuals from all walks of the equine community who believe in the work of the Equine Science Center and what it does for horses and the horse industry.



For more information about joining the “Community of ‘50’” or how your gift can make a difference at the Center, please contact Karyn Malinowski at 848-932-9419 or malinowski@aesop.rutgers.edu, or Kelly Watts, associate dean and director of development, at 848-932-3576 or watts@aesop.rutgers.edu.

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Equine Science Center

Better Horse Care Through
Research and Education



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