### RUTGERS UNIVERSITY

### **EQUINE SCIENCE QUARTERLY**



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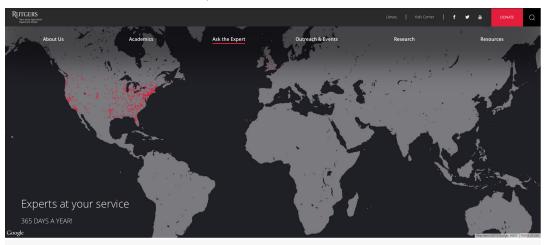


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Animal Science at Rutgers

# RUTGERS New Jersey Agricultural Experiment Station

### New Website Offers New Functionality: A more user-friendly format with new search abilities



The new "Ask the Expert" section allows users to see where questions are coming from in real time. The map is updated with a red dot every time a question is asked.

fter 14 years of providing the public with information on "all things horses," the Rutgers Equine Science Center has had a major facelift, launching its redesigned website to offer greater interactivity, new search functionality, plus a streamlined "Ask The Expert" section.

"With this facelift and integration, the Center will provide the public with a website that is not only friendly to use, but one which will remain unparalleled in providing science-based information to equine enthusiasts around the world," says Karyn Malinowski, director of the ESC.

The popular "Lord Nelson's Blog," whose four-legged author recently

received the "Horse Personality of the Year Award," will migrate from its current site to anchor a special "Kid's Corner" on the Center's new website. "Kid's Corner" will also feature the "Equine Science 4 Kids" education portal as well as link to the 4-H Horse Program in New Jersey.

"Kid's Corner' will give kids and teens a place where they can learn about horses, the science behind the Center and how they can get involved in the statewide 4-H Horse Program," says Malinowski.

The new search functionality will allow users to search, not only the site, but the PDF publications and brochures.

Specific sections, such as the blog and "Ask The Expert," ... Continued on pg. 13

### From The Clubhouse



Looking forward to upcoming events there are so many ways to visit with the Equine
Science Center

Dear Friends,

Spring is FINALLY here and I look forward to seeing many of you out on the "trail" as we shed our coats (both horses and humans) and embark on another season of equestrian activities.

I hope that you all have taken a look at the Center's newly redesigned website (esc.rutgers. edu). Center staff has worked tirelessly over the past several months to bring you "Everything Equine" in a more user-friendly, searchable format.

Post a question about horse care and farm management right on the "Ask the Expert" page and not only will you receive a science-based answer in timely fashion, but you will also be pinned on the map which currently displays the fact that the Center has received questions from all 50 states, 28 countries and 6 continents.

With the website's new search engine optimization features, we hope to increase our presence globally as we carry out our mission of "Better Horse Care through Research and Education."

Calling all alumni! You no longer have an excuse not to stay connected with us. The new website has a separate alumni section under outreach and events which provides you an easy way to stay connected with us and your classmates. We want to hear about some of your most memorable moments here at Rutgers and about where you are now and what you are doing. Uploading photos is a must!

Professor Lord Nelson has broadened his scope to have his own "Kids Corner" which features not only his infamous blog but also Equine Science 4 Kids and a link to the New Jersey 4-H Horse Program.

I'm looking forward to seeing many of you on Ag Field at Rutgers Day, Saturday, April 25. We've come a long way since the first animal shows and horse demonstrations that Diane Simoncini and I organized in 1972. Some of you may remember that we held an open horse show on the Friday before Ag Field Day in the field bordered by Route 1 and College Farm Road. Time flies when you're having fun!

We'll all be at the Red Barn on College Farm Road from 9:00 AM until around 3:00 PM. You won't want to miss the equine treadmill demonstration at either 1:00 or 2:00 PM. Get in line early, there will be standing room only!

The Center will also be present at the Jersey Fresh Three Day Event May 9-10 at the Horse Park of New Jersey and at the Open House, during the month of the horse, June 28, at Fair Winds Farm.

Our "Summer Showcase" open house will be July 8 from 1000-1200 at the Red Barn on College Farm Road. Use our events page on the website for further information.

Best, karyn

### **P**ARTNERS



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.



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.



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

### **UPCOMING 2015 EVENTS**

### Rutgers University 2015 Ag. Field Day

Saturday, April 25, 2015

Red Barn - Cook Farm Rutgers, The State University of New Jersey New Brunswick, NJ 08901

ESC@aesop.rutgers.edu

#### Best Bedding: Comparing Different Bedding Materials for your Horse

Wednesday, April 29, 2015

Horses in the Morning Radio Show with guests Dr. Westendorf & Dr. Fennell Listen Live @ 9:30a.m. on their website:

horsesinthemorning.com

### Jersey Fresh International Three-Day Event

May 9 & 10, 2015

Center Meet and Greet from 9:00am-5:00pm 626 Route 524 Allentown, New Jersey 08501

www.jfi3d.com

### Vaccinations: Who Needs What?

Wednesday, May 27, 2015

Horses in the Morning Radio Show with guest Dr. Fugaro Listen Live @ 9:30a.m. on their website:

horsesinthemorning.com

### Fair Winds Farm Open House

Sunday, June 28, 2015

74 Red Valley Road Cream Ridge, New Jersey 08514

fairwindsfarm31@verizon.net

### **Equine Science Center's Summer Showcase**

Wednesday, July 8, 2015

Red Barn - Cook Farm Rutgers, The State University of New Jersey New Brunswick, NJ 08901

ESC@aesop.rutgers.edu

#### 2015 Hambletonian Vet Conference: Wet Labs

Wednesday, August 5, 2015

Meadowlands Racetrack 1 Racetrack Drive East Rutherford, New Jersey 07073

gordon@firstchoicemarketing.us

### 2015 Hambletonian Vet Conference: Seminars

August 6 & 7, 2015

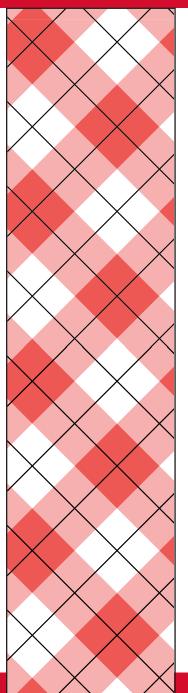
Hilton Meadowlands 2 Meadowlands Plaza East Rutherford, New Jersey 07073

gordon@firstchoicemarketing.us

# Student Voices: Catherine

# Seeds

# The story of how one pre-vet student came to Rutgers and fell in love with horses



s a child, I always had a large interest in animals, ranging from companion animals to marine animals to livestock to wildlife. Horses did not fall out of the range of my interests.

My first exposure to horses was very early on, although it was not very involved. My neighbor had a few horses that they took on trail rides in the surrounding woods.

Their paddock was located right at the end of my driveway and I always looked forward to going to school, largely because I was allowed to bring treats to the horses while I waited for the school bus. This became a daily ritual that lasted throughout my time before leaving for college.

When I began my time here at Rutgers University, I already knew that my goal was to go to veterinary school after graduation. With this goal in mind, it seemed natural to major in animal science.

In my first semester, I was assigned a work study job at the campus farm. I had never worked with large animals before (including horses, other than feeding the few that lived in the paddock next to my driveway). I did not know what it was going to be like, but as soon as I got there I fell in love! This was when my work

with horses really began.

It started out with just throwing some hay, but I wanted to learn more. I quickly realized how unique they are in many ways. They have unique personalities and require a very specific set of skills. In addition, they have unique anatomy and physiology.

I always interested in learning how they differ so drastically from other animals, and how they have their own set of veterinary requirements.

In my first year, I showed Lady for Ag Field Day and I had a great time! This was my first time learning exactly how to handle a horse, and I think that it set the foundation for the rest of my time here at Rutgers.

I continued to work with them, under the supervision of my boss Joanne Powell, slowly moving up in the ranks on the farm to my current position as a student supervisor in the large animal unit. Undoubtedly, most of my experience has come from working with the wonderful Dr. Carey Williams in a research setting. I have learned a lot about how research studies are designed and the role horses play in science and agriculture.

This year, I began working on a GH Cook Honors Project related to grazing and pasture. The purpose of the project is to compare effects of continuous vs.

### **Ernest C. Bell Memorial Scholarship**

Catherine Seeds, a senior at the Rutgers' School of Environmental and Biological Sciences (SEBS), is the recipient of the Ernest C. Bell Scholarship for 2015. Dr. Carey Williams, Associate Director for Outreach at the Rutgers Equine Science Center presented the award



Catherine Seeds recipient of the Ernest Bell Scholarship with one of the horses from the research herd, Cascade, in the pastures at the Ryders Lane Best Management Practices Demonstration Horse Farm.

rotational grazing systems on horse health and plant performance, collecting data for variables such as vegetative cover, herbage mass, sward height, species composition of the grasses, body weights, body condition scores, and body fat of the horses. I presented this research at NESA this year at Penn State and the Mid-Atlantic Nutrition Conference held in Maryland.

The thing that I find most rewarding about this project is that the results will have real life application for horse owners and will have a true effect on agriculture. In addition, I also serve as secretary in the Rutgers Society of Animal Science.

In the future, I hope to continue to work to benefit horse owners and farmers. I intend to attend the University of Florida College of Veterinary Medicine. My goal is to work with large animals, horses included.

I am very interested in surgery and hope to be able to help assist horse owners by providing quality veterinary care. Another goal of mine is to educate the public about animal health and the effect it has on human health; I think that education is one of the biggest things someone in this position can contribute to the industry. There is a lot of misinformation floating around out there, and I believe that it is our job to correct fallacies to improve the care and lives of these amazing animals.

Although I may be newer to the horse industry than many other people, I am very grateful to have been given the opportunities that I have been here, and hope to continue learning as much as I can about these animals and the equine world.

to Seeds for outstanding scholarship and commitment to the New Jersey horse industry.

The Ernest C. Bell Memorial Scholarship Fund was established to perpetuate Mr. Bell's memory and his ideals of courage and determination. The scholarship is awarded to a senior at SEBS who is majoring in Animal Science with an emphasis in Equine Science.

The recipient must be a New Jersey resident and demonstrate a high level of scholastic achievement, involvement with New Jersey's horse industry, and financial need.





ab Notes - Williams

Pasture Management

# From The Lab:

Collaborators from other Universities McKeever's Lab Malinowski's Horse Treadmill

TOP 5
TIPS FOR
MANAGING MUD

### **Remove All Manure and Feed From Ground In Muddy Areas:**

Organic matter acts like a sponge and holds water. Keep feed off the ground (use above-ground feeders or rubber mats) and clean regularly. Hay counts as feed!

Overseed:

Plant roots take up water and anchor soil in place. Remember that grasses will need 6 months or more to fully establish root systems before horses can be turned out on seeded area.

## Managing Mud on Livestock Farms

ud can be a problem in the wet spring, as it carries the potential for foot and skin problems for livestock. The best time to deal with mud is before it becomes a problem.

Managing mud has the added benefit of helping the environment through better water quality and reduced erosion.

Unfortunately, mud has no easy fix so it takes a lot of work to dry out an area. However, it is a good investment to improve the health of our animals and the environment.

### Why do we get mud?

A mud problem is generally due to a drainage problem. There is simply too much water and nowhere for it to go.

This could be due to heavily compacted soil, a high water table, a low spot in a field, or

broken drainage systems.

We often see a lack of vegetation in muddy areas; this could be a result of water flooding the plant roots, or it could contribute to the problem if there are no plant roots to take up excess water.

The lack of plants creates a secondary problem: erosion. Plant roots anchor soil in place, reducing erosion. Adding water to loose soil allows it to move via runoff and leave the farm.

If animals are loafing in the muddy area, the nutrients from their manure combines with the water and soil mixture, creating dirty runoff that can contaminate waterways.

To reduce mud on the farm, take a look at our top 5 Tips for Managing Mud below.

#3

### Install Heavy Use Area Pad:

Installed correctly, layers of geotextile fabric and different gravel sizes will keep the mud down and give water a place to go in areas that you just can't keep any vegetation alive (around feeders, gates, etc).

#4

### Designate "Sacrifice Lot" To Preserve Pasture Grass And Rotationally Graze Horses:

Keep horses in the sacrifice lot when grazing conditions are not ideal (too wet, drought, winter). Heavy use area pads are great in sacrifice lots! During grazing season, rotate horses through several smaller pastures, giving each pasture several weeks to rest and regrow. This keeps plant density high which reduces mud.

#5

### Redirect Surface Water:

Use gutters,
downspouts, berms, and
waterways to redirect
rainwater away from
turnout areas and into
an appropriate place to
infiltrate back into the
ground.
This also has the added

This also has the added benefit of keeping clean water clean!



# Animal Science:

Kathleen Rahman, after her first year as a teaching insturctor at the School of Environmental and Biological Sciences, shares some highlights of the graduating senior class.

Some of our senior students participate in the G.H. Cook Scholars Program each year.

The program is meant to act as an intensive capstone project for undergraduates seeking the challenge and experience of preforming their own independent research.

"Students are not constrained to the laboratory research fields and are free to propose projects and seek advisors in the disciplines of policy, public health, and many more," states the SEBS Honor Program's website, "this program is designed to encourage student interest in scientific research or other independent scholarly and creative endeavors."

Each student's project is an original and independent study conducted by the candidate, with direction and guidance provided by the designated faculty Project Advisor.



Catherine Seeds, winner of the Ernest C. Bell Scholarship, presenting on her equine related project during her thesis defense on Friday April 10, 2015.

Photo Courtesy of: Carey Williams

Animal Science Social Media



www.facebook.com/rutgersanimalsciences



www.twitter.com/RUAnimalSci



www.youtube.com/channel/UCwGx4pTtbrLHUpzSvw66QOw/feed

### George H. Cook Senior Scholars

### Samantha Globerman

Advisor: Dr. Wendie Cohick

**Cheryl Harvey** 

Advisor: Dr. Ken McKeever

Michelle Hernandez

Advisor: Dr. Troy Roepke

Rebecca Joyce

Advisor: Dr. Aparna Zama

Jessica Lovich

Advisor: Dr. Carol Bagnell

**Nikesh Patel** 

Advisor: Dr. Carol Bagnell

**Jennifer Rose** 

Advisors: Susan Becker & Dr. Larry Katz

Shira Rosenblum

Advisor: Dr. Peter Kahn

**Catherine Seeds** 

Advisor: Dr. Carey Williams

Lena Sena

Advisors: Susan Becker & Dr. Larry Katz

Alejandra Villalobos

Advisor: Dr. Troy Roepke



George H. Cook Senior Scholars pictured from left to right: Rebecca Joyce, Michelle Hernandez, Samantha Globerman, Catherine Seeds, Lena Sena, Alejandra Villalobos, Jessica Lovich, and Nikesh Patel.

Photo Courtesy of: Troy Roepke

### **Animal Science 2015 Graduates**

his has been a stellar year for Animal Science majors in the graduating Class of 2015! Thus far, 16 students were accepted into veterinary school, with the majority of those students admitted into more than one program.

In addition, a record nine seniors will be enrolling at the University of Pennsylvania.

This is just the beginning of our students' successes as veterinary acceptance notifications will be delivered through April!

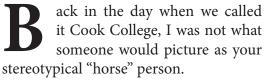
The Animal Science Departmental faculty are very proud of our students' accomplishments.

We wish the Class of 2015 success in all future endeavors!

# Alumni Voices: Zenithson

# Ng

### A Professor at the University of Tennessee College of Veterinary Medicine, Zenny's passion as an educator



I didn't grow up with them, didn't know much about them, and oh, by the way, I wasn't a girl, and I wasn't white.

While my other Asian male counterparts were making their parents proud by going off to college with aspirations of becoming "real doctors" (who worked on humans) and engineers, my parents shook their heads in shame, wondering where they went wrong when I said my dream was to become a veterinarian.

My parents still had a glimmer of hope that I would change my mind and major, but their dreams were crushed as soon as they saw the sparkle in my eyes as I stared out my Perry dorm window's perfect view of a pasture of horses.

At that moment, I knew this was truly the beginning of my dream.

Although I was drawn to those horses, I never could have anticipated the impact they would have on my life.

Having never touched a horse before, I was intimidated by the thought of getting kicked or bitten by them, by the knowledge and experience of my classmates, and by the sheer brilliance of my Equine Science Center professors who would think me a fool for getting involved with these creatures.

I quickly realized that my fears could not be further from the truth, as the horses were the most gentle giants to work with, my classmates were friendly and helpful, and my professors were the most influential and encouraging mentors I could have ever asked for.

After getting a taste of what it was like to stand right next to a horse galloping effortlessly at full speed on a treadmill, I was hooked.

I took every opportunity, be it early morning or late at night, the dead of winter or sweltering heat of summer, to jump that fence from my dorm to the farm to work with those horses, learn from the experts, and be on the front line of groundbreaking research.

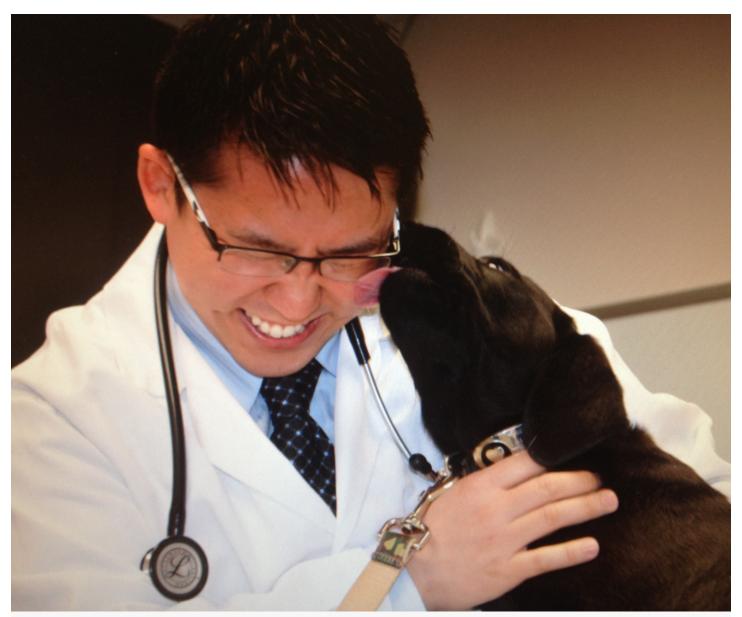
I went from novice horse handler to making some of the bossy mares recognize who was really in charge and was easily thrilled by drawing blood, hosing the sweat off the horses, and icing their hocks.

I immersed myself in this world and



Each alumni who fill out our new "Connect With Us" section, on the alumni section of the website will be entered in the drawing.

It's quick and easy, just don't forget to submit a picture of where you are/what you are doing now. That's it! That's all you have to do!



Zenithson Ng, Clinical Assistant Professor, Community Practice Service, Department of Small Animal Clinical Sciences at the University of Tennessee College of Veterinary Medicine, working with one of his four-legged patients.

fully embraced opportunities at the racetracks, breeding farms, equine hospitals, and riding facilities that catered to people with disabilities.

I never would have had these experiences had it not been for the ESC, which allowed me to find confidence in myself, start up an equine science club, defend an undergraduate thesis, and enthusiastically celebrate Horses 2003.

Despite not being the stereotypical "horse" person, I wouldn't be the veterinarian, researcher, and teacher I am today without my humble horse beginnings at Rutgers University.

### The Prize

These new power banks! Once charged, they act as a emergency source of power for your devices.

They are great for traveling, camping, weather emergencies, or just plain old forgetfulness!



cook farm college farm road new brunswick, nj watch a horse run on a highspeed treadmill and learn about the research and education conducted by the center



# ITELSON'S CORTER SPRING CLEANING!

... A CLEAN SHED IS A HAPPY SHED

So apparently people decided that once a year they would pick a day where they clean up their home and call it "Spring Cleaning". Why they only do this once a year I still don't understand! Could you imagine how my run in shed would look if I only cleaned it once a year? I don't think that HugMe Christi would like me very much!

Any way, I have decided that everyone shouldn't only focus on their homes, but they should focus on us horses as well. After all who is more important than your horse? After I did some complaining, the Equine Science Center agreed to create a bunch of tips called: "Spring Cleaning for a Happy Horse". They will not only talk about things to do for your farm, but also ways to pamper your equine friend (and I love being pampered!). Be sure to be on the look out for them soon on the Center's social media.

Also, have you seen their social media? They have a Facebook, Twitter, YouTube, and Pinterest. I'm still trying to find out what a selfie is... but I love pictures of myself so this sounds like a good thing...

Do you have any questions for me or any of the other horses at Rutgers? Send me an e-mail at: LordNelson@aesop.rutgers.edu.

Your pal, Lord Nelson

### New Website Offers New Functionality:

A more user-friendly format with new search abilities (Continued from pg. 1)

will have siloed search options "so that users will be able to search those sections, only getting search results that are pertinent to their topic of interest," adds Malinowski.

The "Ask The Expert" section will now allow users to ask horse-related questions directly on the page, says Malinowski. Questions will now require users to enter their location, which will in turn populate a real-time map displaying the locations from where the question originated.

Currently populated with the locations from previous questions, the map shows that over 2,000

questions have been posted from all 50 states in the U.S. 28 different countries and all 6 continents.

A live social media feed, comment section and constantly updated library are just some of the dynamic sections on the redesigned site.

Malinowski "is confident that the center's new website exemplifies its commitment to "Better Horse Care through Research and Education" by providing the horse community with access to our science-based research and education programs.



Karyn Malinowski

Director

**Equine Science Center** 

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Administrative Assistant

**Equine Science Center** 

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