

# RUTGERS UNIVERSITY

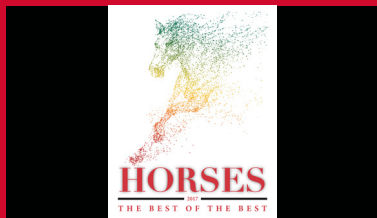
# EQUINE SCIENCE QUARTERLY



From Our Stable To Yours

Winter 2017

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## “Horses2017: The Best of the Best” A Conference For Equine Enthusiasts Of All Levels

In conjunction with title sponsor, Merial Animal Health, the Center is excited to host “Horses 2017”, a weekend long equine extravaganza to be held on March 18 and 19 from 8-5 at the Livingston Student Center in Piscataway.

As the Center comes to a close in celebrating 15 years of excellence in delivering “Better Horse Care through Research and Education, it wanted to end its anniversary with an educational program and vendor show that all equine enthusiasts won’t want to miss!

Over the course of two days, attendees will have eight session slots in which they can choose from 26 different workshop options.

The March 18 morning keynote address will be delivered by Wendy Williams, world-renowned scientific journalist and author of *The Horse: The Epic History of Our Noble Companion*, whose

work has appeared in the Boston Globe, Wall Street Journal, and New York Times.

On Sunday March 19, Dr. Jeff Thomason from the University of Guelph, Canada, will present his latest research on assessing footing surfaces from the horse’s perspective.

Featured speakers have been selected by the Center to speak on a variety of topics throughout the weekend, including basic veterinary care, equine behavior, equine dentistry, footing, shoeing, equine osteoarthritis, diet fads, and manure & pasture management. For a full list of workshops, visit the conference website at <http://esc.rutgers.edu/horses-2017>, or go to [page 5](#) for the conference brochure.

“The ‘Horses’ format, which includes a vendor trade show has not been held in the Northeast since the Center hosted it last in 2009” says Center

Continued on pg. 4

# From The Clubhouse



Join us for  
“Horses 2017:  
The Best of the Best”  
a once in a lifetime  
event!

Happy New Year!

Wishing you and yours the best for the coming year. May you and your horses be well – healthy and successful! Please take a moment to read the Center's **2015-16 Annual Report**. This is our gift to you as we share the research and outreach efforts of our faculty, students, and staff.

The fall semester was busy as usual. I also had the crazy idea to host Horses: 2017, a weekend long equine extravaganza. Remember the last time we did this? Horses: 2009 was a huge success with over 300 attendees over two days. This year's event looks to be even more spectacular as we showcase the BEST topics and speakers, as communicated to us over the past 15 years by all of you. See the feature story on **Page 1**. I look forward to seeing you all there!

The Center continued the celebration of its 15 year anniversary by participating in and hosting a variety of events. The Evening of Science and Celebration was held on November 17 featuring a keynote lecture by Dr. Kristine Urschel from the University of Kentucky. The lecture, “Protein Needs for Equine Athletes” was sponsored by Mid-Atlantic Equine Medical Center.

We received updates about research funded by the Center by Ken McKeever and a fact-filled

fun presentation by Carey Williams on Equine Diet Fads. Highlights of the evening included a presentation from Somerset County 4-H Horse Project member, Madison Whiting – “What’s for Dinner?” - yes horses do eat meat!; and the presentation of the 2017 Spirit of the Horse award and the Gold Medal Horse Farm award.

Jeanne Vuyosevich from Sunset Meadow horse farm received the Spirit of the Horse award, and the Gold Medal Horse Farm award was received by Hidden Hills Farm – the Neinart family. See the story on **page 14**.

I also had a busy fall doing professorial things. I lectured to the freshman class at Centenary University and lectured in two SEBS classes – Animal Science 142 and Companion Animal Science. I still seem to be able to relay my passion for horses and the equine industry to students.

I was honored to serve as an external examiner for the University of Kentucky's Department of Veterinary Science and the Gluck Equine Research Center. It was a busy three days spent visiting with faculty, staff and students. It's always great to see my dear friend and colleague Dr. David Horohov but I spent very little time with him!

Congratulations to one of the Center's strongest supporters, Stella Almeida who was recognized on January 29 by the New Jersey Equine Advisory Board as Horseperson of the Year. Stella has been a 4-H Horse Project leader in Monmouth County for decades and also serves on the board of the American Youth Horse Council and as Chair of the New Jersey State 4-H Championship Horse Show. Way to go Stella!

In closing, I hope that you all will support Horses 2017 by attending the conference. Early bird registration ends March 3. Take a look at the website, <http://esc.rutgers.edu/horses-2017>, to view the conference brochure and to learn how to register. Don't be left out of this once in a lifetime event! See you on March 18-19!

All the Best,  
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](http://www.njfb.org).



UMH Properties, Inc., is a real estate investment trust that owns and operates manufactured home communities in seven states throughout the north-east.

UMH has been in business since 1968, operating as a public company since 1985. Owning a portfolio of over 90 manufactured home communities, housing approximately 15,700 home sites.

In addition, owning over 810 acres of land for the development of new sites. It is our mission as a company to provide the best quality affordable home for the hard working residents of Pennsylvania.

UMH communities are perfect for residents of all ages, let us help up you find your dream home today.

For more information about UMH Properties, Inc., please visit: [www.umh.com](http://www.umh.com)



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](http://www.nj.gov/agriculture)



Merial recognizes that diseases pose a significant threat to the health and well-being of horses, and that's why Merial is at the forefront of supporting horse owners and veterinarians in their efforts to keep horses healthy.

In addition to providing a wide array of vaccines and pharmaceutical products for horses, Merial engages veterinarians and horse owners in educational programs and online tools to build a greater awareness of diseases and the importance of prevention.

These resources, along with industry-leading products enable us to help veterinarians and horse owners keep horses healthy.

## UPCOMING 2017 EVENTS

### Horses 2017: The Best of the Best

*Saturday, March 18, 2017*

Livingston Student Center  
84 Joyce Kilmer Ave.  
Piscataway Township, NJ 08854

[kylehart@njaes.rutgers.edu](mailto:kylehart@njaes.rutgers.edu)

### Horses 2017: The Best of the Best

*Sunday, March 19, 2017*

Livingston Student Center  
84 Joyce Kilmer Ave.  
Piscataway Township, NJ 08854

[kylehart@njaes.rutgers.edu](mailto:kylehart@njaes.rutgers.edu)

### Junior Breeders Symposium

*Saturday, April 1, 2017*

Former NJ Agricultural Museum  
Cook College Farm - Rutgers University  
College Farm Road,  
New Brunswick, NJ 08901

[cawilli@sebs.rutgers.edu](mailto:cawilli@sebs.rutgers.edu)

### Ag-Field Day Part of Rutgers Day

*Saturday, April 29, 2017*

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

[ESC@njaes.rutgers.edu](mailto:ESC@njaes.rutgers.edu)

For more events, visit our website @ [esc.rutgers.edu](http://esc.rutgers.edu)

# “Horses 2017: The Best of the Best” A Conference For Equine Enthusiasts Of All Levels (continued from the front page)



Pictures from Horses 2009

Director, Karyn Malinowski. “It is fitting that the Center conclude celebrating its 15 year anniversary by putting on an extravaganza that is sure to benefit all horse lovers and horse farm owners.”

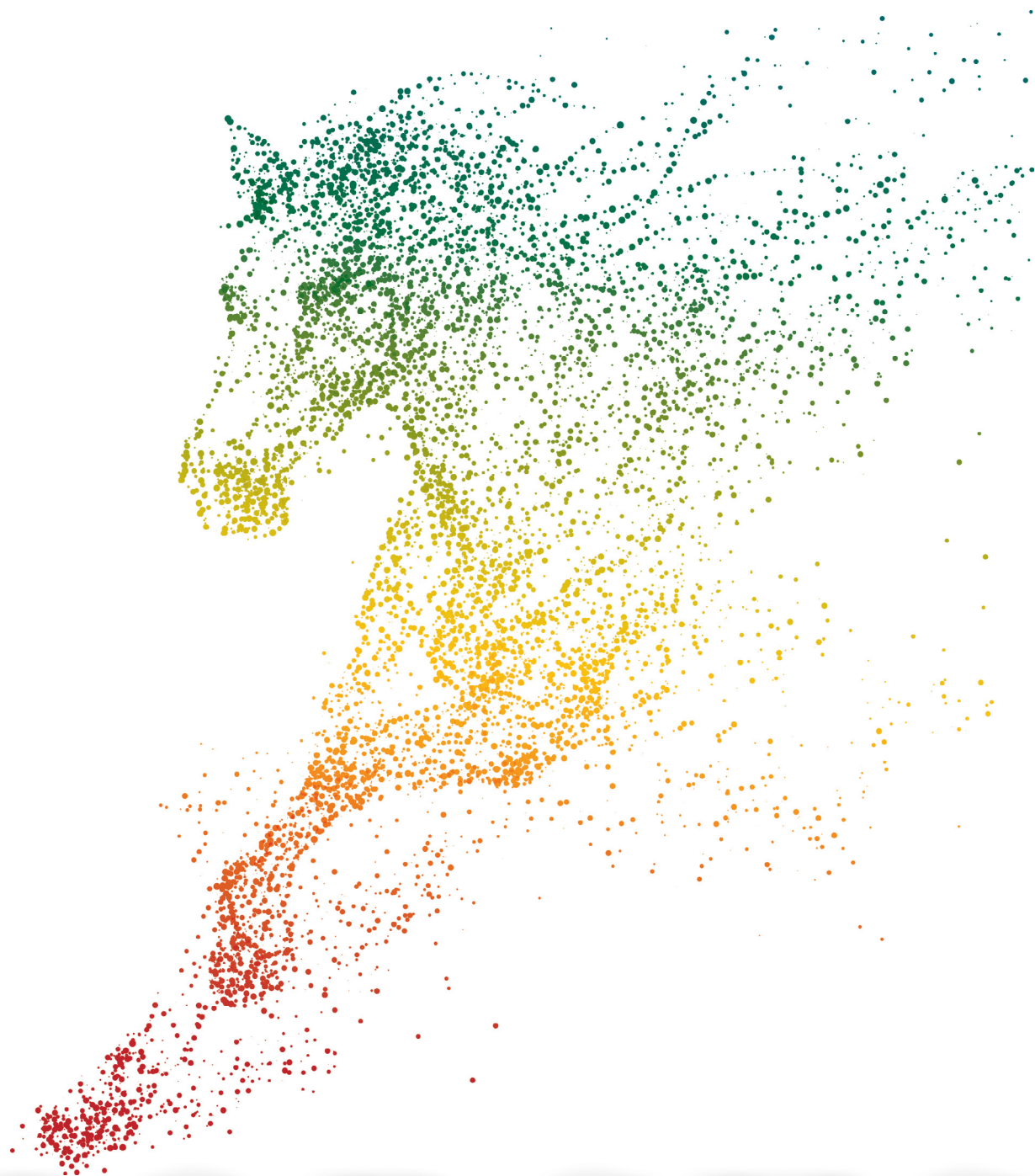
For the first time, the Center will offer Saturday workshops for students at the 4-H, Pony Club, FFA and college levels, covering topics like “The Importance of Ethics & Good Sportsmanship”, “What Can I Do in the Horse Industry?: A Career Path for Equine Enthusiasts”, and “Real Vet Student Stories: What To Expect”. These workshops will aim to educate students on ethics during competition, provide a panel of industry professionals to speak about their careers within the equine industry, and a panel of veterinary students to speak about applying to vet schools and what

students can expect once attending.

Each day will conclude with speakers coming back to participate on a question and answer “Ask the Experts” panel. Attendees will have the opportunity to ask the experts specific questions via note cards distributed at the end of each session, as well as through social media options.

In addition to these workshops, the weekend will feature a trade show in which attendees will be able to visit with sponsors and vendors to learn about new and upcoming products and advancements.

Registration is currently open, and “Early Bird Registration” ends on March 3. Visit the [conference website](#) for a list of current sponsors and information regarding sponsorship and vendor opportunities.



# HORSES

2017

THE BEST OF THE BEST

SATURDAY MARCH 18 - SUNDAY MARCH 19, 2017

Rutgers University - Livingston Campus Center - Piscataway NJ



# HORSES 2017 AT RUTGERS UNIVERSITY

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## WELCOME

We are celebrating our 15 Year Anniversary, and while we thought about throwing a birthday party... we think that we have come up with something a little better...

We cordially invite you to join us for "Horses 2017: The Best of the Best"! After over 7 years we have decided to bring back this truly one of-a-kind event. Take a look through the following pages to see the phenomenal speakers that we have lined up to bring you the most current information about the equine world.

Throughout the conference you will be able to visit with sponsors and vendors to learn about new products and technologies for horses and horse farms.

Finally, each day will end with an "Ask The Experts" panel. Here we will bring together some of the speakers that you will see throughout the day, as well as professors from our staff, to answer questions about everything equine. More information about how to submit your question will be posted on our Facebook Page in the coming days.

We hope that you are as excited as we are, and it only with your help that we will truly make this an event to remember and a celebration worthy of our 15 years at Rutgers University.

We can't wait to see you there!

## REGISTRATION

Registration fee includes continental breakfast, lunch, coffee breaks throughout the day, as well as all conference materials. Event registration is through an on-line portal, as well as through the last page of this brochure.

To register on-line for the event please go to: <https://goo.gl/W9l9aA>

Registration Prices		
Adult	Early- Bird*	Regular/Door Price
Saturday March 18	\$65	\$80
Sunday March 19	\$65	\$80
Weekend	\$100	\$125
Student	Early- Bird*	Regular/Door Price
Saturday March 18	\$35	\$45
Sunday March 19	\$35	\$45
Weekend	\$60	\$80
*Please note that the cutoff for Early-Bird Registration is Friday March 3, 2017		

## WEBSITES

Equine Science Center: [esc.rutgers.edu](http://esc.rutgers.edu)  
Horses 2017: [esc.rutgers.edu/Horses-2017](http://esc.rutgers.edu/Horses-2017)

## LOCAL HOTELS

### **Best Western**

101 New World Way  
South Plainfield, NJ 07080  
(908) 561-4488  
[www.bestwestern.com](http://www.bestwestern.com)

### **The Heldrich Hotel**

10 Livingston Ave.  
New Brunswick, NJ 08901  
(732) 729-4670  
[www.theheldrich.com](http://www.theheldrich.com)

### **Hilton East Brunswick**

3 Tower Center Blvd.  
East Brunswick, NJ 08816  
(732) 828-2000  
[www3.hilton.com](http://www3.hilton.com)

### **Holiday Inn**

4 Tower Center Blvd.  
East Brunswick, NJ 08816  
(732) 247-6800  
[www.ihg.com/holidayinnexpress](http://www.ihg.com/holidayinnexpress)

### **Hyatt Regency**

10 Livingston Ave.  
New Brunswick, NJ 08901  
(732) 873-1234  
[www.newbrunswick.regency.hyatt.com](http://www.newbrunswick.regency.hyatt.com)

### **Red Carpet Inn**

2070 US-130  
Monmouth Junction, NJ 08852  
(732) 305-7880  
[www.redcarpetnj.com](http://www.redcarpetnj.com)

# CONFERENCE SESSIONS

Horses 2017 will offer multiple sessions throughout the conference. This allows us to bring more speakers from a wide array of backgrounds and specialties, and will permit attendees to choose the session that fits them best. If you are registering electronically at <https://goo.gl/W919aA> please make sure click on the "[Session Preference Form](#)" to fill out which sessions you would like to attend. If you will be mailing in hard copies, please make sure that you check off the session (one from each Workshop Session) that you would like to attend. Please make sure that you print or photocopy the following pages for each person that you are registering, and attach it to the corresponding registration form found on the back of the next page.

## SATURDAY MARCH 18, 2017

SESSION	DESCRIPTION	TIME
<b>REGISTRATION</b>	Registration, Continental Breakfast, and a Vendor Fair	7:30 AM
<b>WELCOME</b>	<b>Welcome Address</b> by Dr. Karyn Malinowski, Director of the Equine Science Center - Rutgers University	8:30 AM
<b>KEYNOTE</b>	<b>"Can Horses Read?"</b> by Wendy Williams, Author of "The Horse: The History of our Noble Companion"	8:40 AM
<b>BREAK</b>	Coffee Break	9:25 AM
<b>WORKSHOP SESSION 1</b>	<b>"Keeping Your Horse Healthy: Basic Veterinary Care"</b> by Dr. Michael Fugaro, Mountain Pointe Equine & Dr. Elias Perris, Perris Equine Veterinary Associates <input type="checkbox"/>	9:40 AM
	<b>"It's How Much?: Can I Afford To Own A Horse?"</b> by Dr. William Day, SUNY Morrisville <input type="checkbox"/>	
	<b>"Cheaters Never Win: The Importance Of Ethics &amp; Good Sportsmanship"</b> by Dr. Karen Waite, Michigan State University <a href="#">*Recommended Student Track</a> <input type="checkbox"/>	
<b>VENDOR FAIR</b>	Vendor Fair	10:25 AM
<b>WORKSHOP SESSION 2</b>	<b>"Why Does My Horse Do That?: Basic Equine Behavior"</b> by Dr. Carissa Wickens, University of Florida <input type="checkbox"/>	11:40 AM
	<b>"What's For Dinner?: Basic Nutrition For The Healthy Horse"</b> by Dr. Carey Williams, Rutgers University <input type="checkbox"/>	
	<b>"What Can I Do In The Horse Industry?: A Career Path For Equine Enthusiasts"</b> by Panel of Industry Professionals <a href="#">*Recommended Student Track</a> <input type="checkbox"/>	
<b>LUNCH</b>	Lunch At The Livingston Dining Hall	12:25 PM
<b>WORKSHOP SESSION 3</b>	<b>"How To Become A Horse Whisperer: Training Theory 101"</b> by Angelo Telatin, Delaware Valley University <input type="checkbox"/>	2:00 PM
	<b>"To Deworm Or Not To Deworm: Thoughts On Parasite Control"</b> by Dr. Hoyt Cheramie, Merial - Equine Specialist <input type="checkbox"/>	
	<b>"Real Vet Student Stories: What To Expect"</b> by Panel of Current Veterinary Students <a href="#">*Recommended Student Track</a> <input type="checkbox"/>	
<b>BREAK</b>	Coffee Break	2:45 PM
<b>WORKSHOP SESSION 4</b>	<b>"When To Call My Vet: Equine Emergencies &amp; First Aid"</b> by Dr. Michael Fugaro, Mountain Pointe Equine & Dr. Elias Perris, Perris Equine Veterinary Associates <input type="checkbox"/>	3:00 PM
	<b>"Could Your Horse Have Heartburn?: Equine Gastric Ulcer Syndrome"</b> by Dr. Hoyt Cheramie, Merial - Equine Specialist <input type="checkbox"/>	
<b>BREAK</b>	Coffee Break	3:45 PM
<b>KEYNOTE</b>	<b>"Ask The Experts" Panel</b> Moderated by Dr. Carey Williams with panelists from sessions throughout the day	4:00 PM
<b>CLOSING</b>	<b>Closing Address</b> by Dr. Karyn Malinowski, Director of the Equine Science Center - Rutgers University	4:45 PM

# SUNDAY MARCH 19, 2017

SESSION	DESCRIPTION	TIME
<b>REGISTRATION</b>	Registration, Continental Breakfast, and a Vendor Fair	7:30 AM
<b>WELCOME</b>	<b>Welcome Address</b> by Dr. Karyn Malinowski, Director of the Equine Science Center - Rutgers University	8:30 AM
<b>KEYNOTE</b>	<b>"Step On It: Accessing Footing Surface Properties From The Horse's Perspective"</b> by Dr. Jeff Thomanson, University of Guelph	8:40 AM
<b>BREAK</b>	Coffee Break	9:25 AM
<b>WORKSHOP SESSION 1</b>	<b>"WIDTH: The Objective Way To Decide If Your Horse Needs Shoes"</b> by Steve Kraus, College of Veterinary Medicine - Cornell University	9:40 AM
	<b>"Why Does My Horse Do That?: Basic Equine Behavior"</b> by Dr. Carissa Wickens, University of Florida	
	<b>"The No Carb Diet: The Impact Of Human Diet Fads On Equine Nutrition"</b> by Dr. Carey Williams, Rutgers University	
	<b>"Is The Grass Green?: Pasture Management Basics"</b> by Laura Kenny, Pennsylvania State University - Cooperative Extension	
<b>VENDOR FAIR</b>	Vendor Fair	10:25 AM
<b>WORKSHOP SESSION 2</b>	<b>"When Good Joints Go Bad: Equine Synovitis/Osteoarthritis"</b> by Dr. Hoyt Cheramie, Merial - Equine Specialist	11:40 AM
	<b>"Straight from the Horse's Mouth: Updates in Equine Dentistry"</b> by Dr. Amelie McAndrews, Garden State Equine Veterinary Dentistry	
	<b>"No Hoof No Horse: How Conformation Affects Performance &amp; Soundness"</b> by Steve Kraus, College of Veterinary Medicine - Cornell University	
	<b>"Rotating Your Thoughts On Grazing: Creating A Pasture Management Plan"</b> by Laura Kenny, Pennsylvania State University - Cooperative Extension	
<b>LUNCH</b>	Lunch At The Livingston Dining Hall	12:25 PM
<b>WORKSHOP SESSION 3</b>	<b>"Born To Run: Veterinary Management Of Limb Conformation In The Developing Horse"</b> by Dr. Janik Gasiorowski, Mid-Atlantic Equine Medical Center	2:00 PM
	<b>"Ouch!: How To Properly Fit A Saddle"</b> by Beth Rera, Journeyman Farm	
	<b>"Equine Pain, Some Things to Think About"</b> by Dr. Hoyt Cheramie, Merial - Equine Specialist	
	<b>"The Scoop On Poop: Manure Management Basics"</b> by Dr. Michael Westendorf, Rutgers University	
<b>BREAK</b>	Coffee Break	2:45 PM
<b>WORKSHOP SESSION 4</b>	<b>"Overcoming Equine Injuries: Diagnosis, Treatment, and Rehabilitation"</b> by Dr. Sarah Gold, B.W. Furlong & Associates	3:00 PM
	<b>"Saddle Fit: The Mechanics"</b> by Beth Rera, Journeyman Farm	
	<b>"Black Gold: Creating A Manure Management Plan"</b> by Dr. Michael Westendorf, Rutgers University	
<b>BREAK</b>	Coffee Break	3:45 PM
<b>KEYNOTE</b>	<b>"Ask The Experts" Panel</b> Moderated by Dr. Carey Williams with panelists from sessions throughout the day	4:00 PM
<b>CLOSING</b>	<b>Closing Address</b> by Dr. Karyn Malinowski, Director of the Equine Science Center - Rutgers University	4:45 PM

# SPONSORS



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If you are interested in becoming a sponsor or vendor for "Horses 2017: The Best of the Best" there is still time! Please contact Kyle Hartmann at 848-932-9419 or [kylehart@njaes.rutgers.edu](mailto:kylehart@njaes.rutgers.edu). Special rates for non-profits!



# HORSES 2017 REGISTRATION FORM

*Checks are the only form of payment that we are accepting by mail.*

## **Contact Information:**

Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Address: \_\_\_\_\_

E-Mail: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_ Zip Code: \_\_\_\_\_

*Please select the day(s) for which you wish to register. A separate form must be filled out for each person being registered (please photocopy or print extras as needed) and signature must be from each attendee. If attendee is under 18 the signature must be from the attendee's guardian. If you wish to register multiple people at the same time, please go to: <https://goo.gl/W9l9aA> to register electronically.*

Registration Prices			
Adult	Early- Bird*	Regular/Door Price	
Saturday March 18	\$65 <input type="checkbox"/>	\$80	<input type="checkbox"/>
Sunday March 19	\$65 <input type="checkbox"/>	\$80	<input type="checkbox"/>
Weekend	\$100 <input type="checkbox"/>	\$125	<input type="checkbox"/>
Student	Early- Bird*	Regular/Door Price	
Saturday March 18	\$35 <input type="checkbox"/>	\$45	<input type="checkbox"/>
Sunday March 19	\$35 <input type="checkbox"/>	\$45	<input type="checkbox"/>
Weekend	\$60 <input type="checkbox"/>	\$80	<input type="checkbox"/>
*Please note for Early-Bird Registration the Registration Form and payment must be received by Friday March 3, 2017.			

*By registering for the event and signing below, you give Rutgers permission to record your image and/or voice and grant Rutgers all the rights to use these recordings or photographs in any medium for educational, promotional, advertising, or other purposes that support the mission of the Equine Science Center. If attendee is under 18 the signature must be from the attendee's guardian*

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Attendee  
or check box if same as "Printed Name" ☐

\_\_\_\_\_  
Signature

Please make your check payable to:  
**The Rutgers University Equine Science Center**  
and send your completed order form, session preferences form, and check to:

Rutgers Equine Science Center  
Administrative Services Building II  
57 US Highway 1, South  
New Brunswick, NJ 08901

For any questions regarding registration,  
please contact:

Kyle Hartmann  
Public Relations Specialist  
848-932-9419  
[kylehart@njaes.rutgers.edu](mailto:kylehart@njaes.rutgers.edu)



Dr. Williams at the 2016 Evening of Science & Celebration presenting on "Diet Fads"

Lab Notes - Williams

# From The Lab: Human Diet Fads and Their Effect on Horse Nutrition

**W**hen feeding horses, owners sometimes like to use their own dietary knowledge to guide how and what they feed. The number one 'fad' is related to 'no carb' or 'no starch' diets for horses.

First, there is no such thing as a 'no starch' feed for horses. Carbohydrates make up the majority of all animal feeds including forages and the major soluble carbohydrate in many of these feeds is starch. Starch is an easily digestible chain of glucose molecules. Some grain-based products are formulated to have lower starch and/or sugar by not using molasses and replacing grains with forage such as legume or grass hays or high fiber ingredients like beet pulp. Low sugar or starch diets are definitely appropriate for certain horses or classes of horses. For example the metabolically challenged horse or the horse with Equine Metabolic Syndrome (EMS).

Tying-Up problems or Exertional Rhabdomyolysis is also a metabolic disease that requires the horse to be fed as few sugars and starches in the diet as possible. Typically these horses are highly exercising horses that do require extra energy. In these cases special diets have been formulated with as much fat in the diet as possible to be used for energy instead of soluble carbohydrates.

As in human diets, horse owners want a supplement to be their magic pill to cure or solve all their horse's problems. Horses or ponies that are on a well-balanced diet

## TOP 5 FACTS ABOUT DIET FADS

### #1

Not all horses need low carbohydrate or low starch diets. Horses that have metabolic problems might need these special diets, but highly exercising horses need to have starch in their diet to provide them with enough energy.

### #2

Health conscious humans also want to feed their horses 'whole grain' diets or 'unprocessed feeds' this is okay to do, but there are points of clarification and concern that might require the advice of a nutritionist to help formulate that diet.

shouldn't need anything extra in their diet; when owners start mixing in a lot of supplements one risks throwing the diet out of balance. Many supplements have no scientific research to back up their efficacy, therefore if you decide to try them, the key is to use it for several months before deciding if it is working or not. None of the intended effects happen overnight, especially with hooves.

Horses require a dietary source of both linoleic acid (omega-6) and alpha-linolenic acid (omega-3) due to their lack of the appropriate enzymes necessary for the synthesis of these required fatty acids. Any oil, if used properly for the appropriate reasons, will be oxidized for energy and incorporated into cell membranes as required.

If a horse is on a poor quality forage diet and needs more energy to maintain its weight, it might not be a bad idea to invest in some high quality fat supplement like flaxseed or fish oil with high omega-3's. However, if the horse is already on good quality pasture or eating a cool-season grass hay harvested at early to mid-maturity, it already is consuming a low ratio of omega-6's to omega-3's and spending money on an expensive supplement might not be worth it.

There are a few concerns when feeding herbal products in general, horses or humans. 1) Some herbal products are actually parts of plants that are toxic to horses. Horsetail is a toxic plant that can cause weight loss, diarrhea, and various nervous conditions including lack of coordination if fed in large amounts. 2) Some herbal products have been found to negatively interact with other dietary products and medications; consult with your veterinarian in this case.

3) Many herbal products are on the banned substance list for some show organizations or racing circuits. If your horse is showing, make sure to check the 'banned substance' list. 4) Research on most herbal products has not been conducted in

horses. There are very few herbal products that have actually been tested in horses (echinacea, garlic, and various poly-herbal products) and many of these have not been found to be beneficial or have the same proven benefits as in other species.

Eating non-processed food is quite popular among health-conscious humans. Feeding home-made muesli mixes (mixing ingredients such as barley, wheat bran, nuts, flax seed, garlic, peppermint leaves and other things) as a substitute for processed pellets is all the rage. While there may be some benefits to doing this (easier to remove ingredients for an allergic horse or more economical if feeding in bulk), there are many complex considerations that go into creating a nutritionally balanced ration. Additionally, most ingredients are processed to increase digestibility and for very specific reasons, some of which are mentioned below.

First, most horses that are not exercising, pregnant or growing could probably maintain their weight on pasture and/or hay alone without any grain products necessary. This is possible if the forage is of high quality and fed at the rate of 2 to 2.5 % of body weight. If the horse is exercising or a hard keeper, grain may be necessary to provide extra calories. In this case the best bet for a truly unprocessed grain that is appropriate for horses, is oats. Oats are the most common cereal grain fed to horses. They are higher in fiber than most grains (corn and barley particularly) and are not too high in sugars and starches (unlike corn).

If the forage being fed is low in protein (exercising horses need about 10-12%), a good ingredient is alfalfa. This will provide protein along with extra calcium. Another good protein source is soybean meal. Balancing rations is very complicated and requires the guidance of an equine nutritionist to be done correctly. This is why most people pay for the well-researched formulations in commercial horse feeds.

**#3**

**There are no magic pills or supplements that will cure or correct all problems. Supplements are not necessary if a horse has a well-balanced diet.**

**#4**

**Holistic supplements need to be purchased with caution as there is very little equine research done on these products.**

**#5**

**Horses have a naturally high supply of Omega-3 fatty acids in their diet if they have access to pasture or are on a good quality grass hay.**

**To learn more about these diet fads come see Dr. Carey Williams' presentation at Horses 2017!**

# The 2016 Evening of Science & Celebration

The Evening of Science & Celebration, which was held this year on November 17, 2016, is an opportunity to unite equine professionals, horse owners, farm owners and barn managers, educators and students, 4-H members, and all equine enthusiasts for the purpose of learning about current projects and ongoing research initiatives being conducted at the Equine Science Center.

Kristine Urschel, Ph.D. delivered the keynote presentation titled, "Protein Needs for Equine Athletes". Dr. Urschel is an Associate Professor of Equine Science in the Animal & Food Science Department at the University of Kentucky. Her research focuses on studying protein and amino acid requirements and metabolism in horses of all ages and physiological states, especially during and after exercise.

The Equine Science Center presented the 2017 "Spirit of the Horse" award to Jeanne Vuyosevich to recognize her tireless effort over several decades to never give up on ANY horse. Jeanne Vuyosevich's Sunset Meadow horse farm in Farmingdale, NJ is a sanctuary for horses in need of care, treatment or a good home. Jeanne was nominated by Dr. Cathy Ball, who was supported by over a dozen letters from friends and clients who echoed Dr. Ball's sentiments. "Jeanne is a consummate professional horsewoman," says Dr. Ball, "She has an innate



feeling for a horse and what it needs to be happy."

The 2017 winner of the Gold Medal Horse Farm award is Hidden Hills Farm, owned and operated by the Nienart Family. Hidden Hills Farm, located in Hillsborough Township, New Jersey, is situated on 40 acres of grassy land. The facility boasts a large outdoor (and attached indoor) arena, as well as an ample turnout. The Nienarts have made a commitment to conservation and worked with the Natural Resource Conservation Service (NRCS) for planning, technical assistance, and grants to make their idea a reality and developed a comprehensive nutrition management plan, developed a soil erosion / water reclamation plan, and use "rotational grazing" to make sure that their farm is not only aesthetically pleasing, but an example of environmental sustainability and management.



To view more pictures from the event, please visit our [FACEBOOK PAGE](#).

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