

RUTGERS UNIVERSITY EQUINE SCIENCE QUARTERLY



From Our Stable To Yours
Summer 2021

Inside the Issue:



05

**Equine
Science
Center Shines**



06

**From The Lab:
Behavior
Assessment**



08

**Animal Science
Major Kamila
Cieslik**



Equine Science Center staff, students, and alum take a "group photo" as a part of the Rutgers Alumni Breakfast during the second day of the symposium.

Equine Science Center Visits The 2021 Equine Science Society Symposium

The Equine Science Center was very busy during June, the "Month of the Horse" in New Jersey.

Both staff and students attended the 2021 Equine Science Society's virtual meeting on June 2nd-4th where they had a great time connecting with long-time friends, getting updates on the most recent equine research, and even had time to have a virtual alumni breakfast (pictured above).

The Center also was actively


pronounced and recognized during the symposium.

Founding Center Director, Karyn Malinowski, was named a Fellow of the Equine Science Society during the closing ceremony.

The Fellow of the Equine Science Society Award recognizes distinguished service to the horse industry and to the Society over an extended period of time.

Graduate candidates Jennifer Weinert and Ellen Rankins placed first and second, respectively, in the

From The Clubhouse



Join us in
celebrating the
Equine Science
Center's 20th
Anniversary this
year!

Dear Friends,

I hope you all are staying healthy, safe, and are enjoying a much-needed summer with horses as compared to this time last year. While we are still holding our events virtually, we hope to be able to see you again in person real soon!

We once again participated on April 24 in a virtual Rutgers Day which highlighted our video of a horse running on the treadmill in the Equine Exercise Physiology Lab. Dr. Williams also offered videos of the socially distanced Ag Field Day Horse Show which was done according to university Covid-19 precautions and was judged by PhD candidate Jennifer Weinert.

In early May we kicked our recruiting efforts into high gear for PhD candidate Ellen Rankins' dissertation project involving Equine Assisted Services and veterans with PTSD.

As you can read in the feature stories, Equine Science Center faculty, students, and staff had a lot to be celebrating about during the Month of the Horse in June.

*We all enjoyed "seeing" each other at the Equine Science Society Symposium, and hearing some of the great talks given by colleagues from all over the world. For the full story, including some of the great history of the Equine Science Society, take a look at the **Front Page!***

*We also participated in the New Jersey Department of Agriculture's All Breed Awards Program on June 16, which was held outside at the Horse Park of New Jersey. Take a look at **Page 5** for some great pictures of the event.*

Our From the Lab section features the research of one of our undergraduate students, Ms. Kamila Cieslik, whose work focused on behavior assessment on horses put into potentially stressful situations.

*As we were preparing the newsletter, we were surprised (but not shocked) to find out the SEBS/NJAES Newsroom at Rutgers did a full feature story on Kamila and the success that she has had both working with horses, but also as a star volleyball player this year. To learn more about her story, visit **Page 8**.*

Congratulations to PhD candidate Jennifer Weinert and her fiancée Jared Nelson who tied the knot on June 12. While unable to attend the wedding itself, I wish them a lifetime of happiness, good health, and success. Congrats to you both!

On July 14 we held our second Virtual Summer Showcase. While our attendees were with us virtually, the Equine Science Center team was live at the Equine Exercise Physiology Lab where we live-streamed the horse treadmill demo, the use of some new equipment from the lab, a great anatomy lesson with Dr. Williams and RU Wishbone, and ended with a fun-filled Kahoot game! The competition was pretty tough!

We hope to see many of you at this year's Hambletonian which will be held August 7 at the Meadowlands Racetrack, and at the 21st Annual Hambletonian CE Seminar on October 30 at the Meadowlands Hilton, this year held in conjunction with the Breeders Crown Races that evening. Stay tuned for more information.

We also are planning our Evening of Science and Celebration on November 11. At this event we present the Center's "Spirit of the Horse" and Gold Medal Horse Farm awards. We will let you know if this will be live or virtual.

Enjoy the rest of the summer!

*All the Best,
karyn*

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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:

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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



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UPCOMING 2021 EVENTS

Choosing Supplements for Your Horse Wisely Webinar

Tuesday, August 3, 2021

Click Here To Register

cawilli@sebs.rutgers.edu

21st Annual Hambletonian CE Seminar

Saturday, October 30, 2021

To learn more, go to:

Gordon@firstchoicemarketing.us

Evening of Science & Celebration

Thursday, November 14, 2021

Save The Date

esc@njaes.rutgers.edu

For more events, visit our website @ esc.rutgers.edu

Equine Science Center Attends The Equine Science Society's 2021 Symposium

Continued from Pg. 1

Production and Management Graduate Student Competition.

Ms. Weinert's presentation was titled "Pasture Production in Integrated Warm-and Cool Grass Rotational Systems" and Ms. Rankins' presentation was titled "A Survey of Horse Longevity and Retirement in the Equine Assisted Services Industry".

Ms. Rankins also completed her two- year term as the graduate student representative to the society and was applauded for her efforts in organizing virtual meetings with other graduate students in support of their efforts to connect, publish, and look for jobs in the future.

One of the Center's undergraduate students, Kamila Cieslik, presented her first paper at a conference, titled, "Combining Quantitative and Qualitative Behavior Assessments to Measure Equine Stress.

The Center's Public Relations Specialist, Kyle Hartmann, was invited by the society to give a speed talk on "Successful Fundraising During Covid-19", which was followed by Mr. Hartmann leading a group discussion on the topic.

Dr. Bob Coleman from the University of Kentucky, who serves as Executive Director of the Equine Science Society, offered his thoughts about the society's history which originally was called the Equine Nutrition and Physiology Society (ENPS).

"When ENPS was starting it was a focus for those looking at horse nutrition and physiology. For some of the early research, this group was the source for the results of that early research which was being conducted at a time when horses were not seen as a "livestock" species by many animal science departments, and certainly not by federal granting agencies" stated Dr. Coleman.

"Much was yet to be published in journals

such as the Journal of Animal Science, so getting the ENPS proceedings was the way for equine scientists to see what other colleagues were doing. The leaders of the society at the time were open and inviting and saw ENPS as a way to expand the circle of those involved".

"The original leadership was very inviting and the size in the early years allowed people to meet others who were looking into the science of horse nutrition" Dr. Coleman continued.

"I had found a reference to a paper in the 3rd ENPS proceedings which led to a conversation with Dr. Baker at the University of Kentucky who not only helped me get the reference but invited me to the 1977 Symposium in St. Louis. His encouragement and the encouragement of others led me to be a member ever since".

"The transition to the Equine Science Society (ESS) was for some a challenge but with the increase in areas of research involving horses it was a reasonable move. The addition of Reproduction, Teaching and Extension, Production and Management, Genetics, and Bioscience sections has given a wider offering of those involved in the science of horses" said Dr. Coleman.

"What a great opportunity for those who have an interest in horses to come together and learn new information and new ways to get that information to the horse owning public" added Dr. Coleman.

"The meetings are a source of open discussions on the results of research, developing a network of people for future collaborations and lifelong colleagues with the common interest in the horse".

This year marked the 27th symposium held by the Equine Science Society and was held virtually for the first time.

The objectives of ESS are to: 1) promote quality research on equine nutrition and physiology;

2) establish effective communication among researchers; 3) conduct periodic symposia; and 4) cooperate with other organizations having similar or related interests.

These objectives have stayed the same since the society's constitution was first published in 1975.

ESS is known as a great place for new graduate and undergraduate students to present their work because student participation is looked upon favorably by the society and the attendees are usually very accommodating of young scientists who are just starting out in equine research.

Equine Science Center Shines During The New Jersey “Month Of The Horse”

The Center received proclamations from both the Governor's office, and from the New Jersey Senate and General Assembly, recognizing the Center's 20th anniversary.

The joint resolution, sponsored by Senator Thompson and Assemblymen Dancer and Clifton, was presented by Senator Thompson at the New Jersey Department of Agriculture's All Breed Awards Program on June 16th at the Horse Park of New Jersey, part of the “Month of the Horse” celebrations throughout the month.

“The Rutgers Equine Science Center has been the leading voice in advancing the quality of horse care in the state over the past twenty years” said Assemblyman Ronald S. Dancer - Monmouth & Ocean County.

“Senator Thompson, Assemblyman Clifton and I are pleased to formally recognize the excellent work of the center and its dedicated staff during that time. May the Center's research and education efforts in the equine industry continue well into the future.”

Governor Phil Murphy's proclamation recognized that dedicated faculty members facilitate research, projects, and initiatives that serve to find solutions through science-based inquiry and by exploring the relationship between horses and humans.

One of the Department of Animal Science seniors, Gemma Parente, was the recipient of the

2020 Ernest Bell Memorial Scholarship which is awarded to a Rutgers senior, majoring in Animal Science who demonstrates outstanding academic scholarship, financial need, and involvement in the equine industry.



Senator Thompson delivers the joint resolution and governor's proclamation to the Rutgers Equine Science Center.



Gemma Parente (center) with Dr. Karyn Malinowski, Dr. Carey Williams, and Secretary Douglass Fisher (from left to right).



Dr. Helio Manso holding a horse on a tapped-down tarp to measure muscle tension as the horse interacts with the tarp.

Lab Notes - Malinowski

From The Lab:

Behavior Assessment:
Understanding the
stress-related
behavior of horses.



THE TOP 5 TAKE-A-WAYS

#1

The specific behaviors of vocalization, kick, head tossing, head shake, pawing, rear, head movements, and total behaviors were correlated to horses in isolation; meanwhile blowing/snorting and sniffing behaviors were correlated to horses exposed to a novel object.

#2

Qualitative behavior assessment allows observers to use their own terms and interpretation of behavior to describe what they see: our observers agreed on terms that ranged from "Calm/Patient" and "Agitated/Stressed" to "Curious/Investigative" and "Inactive/Content."

This study tested the combination of two behavior assessment methods to get a deeper understanding of stress-related behavior in horses.

Quantitative assessments provide information on the number of times a horse may perform a behavior, while qualitative assessments allow an observer to describe in words the behaviors a horse is exhibiting.

We placed eight horses in each of the four treatments: standing control in a stall, exposure to an unfamiliar object, electric clippers near the head and neck, and isolation from companion horses in the barn.

For the quantitative assessment, trained observers used an ethogram, a tool that lists specific stress-related behaviors, to count the frequency of each behavior during the four treatments.

The results revealed that horses in the isolation treatment showed significantly more stress-related behaviors than in the control treatment.

For the qualitative assessment, observers wrote down unique terms to describe each

horse in all treatments. Observers had a high level of agreement and described horses as "Calm/Patient," "Agitated/Stressed," "Curious/Investigative," and "Inactive/Content."

When we combined the data from these two assessments, we found that horses in the isolation treatment were usually described as "Agitated/Stressed" while horses exposed to an unfamiliar object were "Curious/Investigative," and horses displayed behaviors that corresponded to both situations.

Since the qualitative assessment allowed observers to use their own terms to describe horses, each individual was able to consider the context of the treatment and the horse's total body language.

In contrast, the quantitative assessment only allows observers to count the number of a predetermined behavior.

This study supported the hypothesis that combining quantitative and qualitative behavior assessments would result in agreement between observers and provide a more complete understanding of horse behavior.

#3

The horses in isolation were described by observers primarily as "Agitated/Stressed," while horses exposed to an unfamiliar object were described as "Curious/Investigative."

#4

These findings support the combination of assessment methods for future use in welfare, monitoring routine care, or establishing criteria for selecting horses (either for personal enjoyment, good fit for a lesson horse or new to the herd, or for equine-assisted activities and therapy environments).

#5

Quantitative behavior assessment methods are good at providing a concrete but incomplete picture of a horse's behavior by evaluating how many times a horse performs a specific behavior: in our study, horses in isolation presented more total stress-related behaviors compared to control.



Animal Science Major Kamila Cieslik (SEBS'22) To Finish COVID-interrupted College Volleyball Career This Fall

Original Story by the SEBS/NJAES Office of Communications, published in the "Newsroom"

When Kamila Cieslik (SEBS'22) entered her senior year in September 2020, the world was in the middle of a pandemic. Navigating this world meant lots of screen time (which started after spring break the previous semester.)

For athletes like Kamila—a member of the Rutgers women's volleyball team—it also meant

putting off the season until the spring and then finding a way to participate safely.

The Newsroom caught up with the George H. Cook Scholar, majoring in Animal Science, shortly after she scored a career high goal this past spring, to ask her about her SEBS experience on and off the court.

Newsroom: Tell us what it was like when campus shut down.

Cieslik: I was originally scheduled to graduate in the spring of 2021, but when COVID hit, our fall volleyball season was postponed to the spring after a few months of uncertainty.

It was kind of like an extra season, because normally we play in the fall. After all that waiting, it was a very successful season for us. We made some good strides. We'll start pre-season training in the summer.

Then I'll have my final season in the fall (which is bittersweet). And I am excited for the regular fall season. I might be luckier than some students in terms of being involved in a sport. We were all doing classes virtually, and the team was in its own bubble.

So when we started to travel during the season—of course we wore our masks and tested every day—but being in our own cohort allowed us a little bit of freedom among all this craziness.

We didn't have to worry so much about COVID when we were around each other and were able to focus on training. We were also lucky enough to not have to wear masks when we played since we kept testing negative.

Newsroom: Tell us about that career-high goal.

Cieslik: It was 12 kills for a match which was a high score for me. And that was at our first game vs. Michigan State.

A kill is a third touch. First touch is a pass and the second touch is called a set. The setter will set the ball up and that's when I overhand hit it and it either goes straight to the ground for a point or off of someone for a point. Pass, set, kill!

It was a very emotional, but fun, last two games. We were fighting hard. It was good volleyball and really fun and great to end on those two wins.

We were really proud; it was such a team effort! Our coach was also very proud of us. Caitlin Schwehofer is our coach. It's her first year here.

She came last spring, actually, and she's made a lot of changes in one year and we're super excited to have a whole new staff. We're really gelling, working really well, so it's looking very positive for the program.

Newsroom: What was it like balancing volleyball with academics?



The Rutgers Scarlet Knights women's volleyball team take on the Indiana Hoosiers on 1/29/21 in Piscataway. Photo: Ben Solomon, Rutgers Athletics.

Cieslik: I've actually met all of my requirements, except for one class which I purposely left for this coming semester so I would have a reason to stay and play that 'fifth year.'

Since COVID messed up everyone's schedules, the NCAA granted every athlete another year of eligibility, giving me a chance to finish out my college volleyball career. It means a lot to me to be able to stick around for one more season.

Newsroom: You've done very well academically, will graduate with a degree in Animal Science-Equine Concentration, and have been part of the George H. Cook Honors Program. Tell us more about that.

Cieslik: My George H. Cook Honors Scholar Thesis was Combining Quantitative and Qualitative Behavior Assessments to Measure Equine Stress; it's somewhat related to my future ambition.

It's part of a bigger project run by PhD candidate Ellen Rankins. She is combining that aspect of stress and coordination between the animal and the human.

She's working with veterans with PTSD and monitoring some other stress levels and interactions between humans and the horse with regards to equine assisted therapy.

Ellen works at Special Strides Equine therapy center and I have volunteered there as well. I've done volunteering of that sort throughout my whole life actually.



Kamila Cieslik in action on the volleyball court.

That is what is leading me towards occupational therapy as a career. Ellen's project is really diving into that; it's very exciting.

Newsroom: Have you always been involved with horses?

Cieslik: Yes, I grew up riding horses. For my eighth or ninth birthday, my parents took me to a barn for a lesson and ever since then I've been involved. I've always loved horses and wanted to work with them, be around them. That's a big reason why I came to Rutgers.

On my unofficial visit for volleyball—they were recruiting me—they said 'hey we have a great Equine Science Center (ESC).' Karyn Malinowski is really one of the main reasons I came to Rutgers...meeting her, seeing what they do here at the ESC. I just fell in love...

combining the academics and volleyball with Equine Science.

Newsroom: They recruited you for volleyball and was this the cherry on the cake?

Cieslik: It was the main course for me! All of it together was great.

Newsroom: You thankfully spent the majority of your undergraduate career in person. How has it been doing online classes?

Cieslik: There's definitely something great about being in person, being able to learn from a professor during a lecture. Luckily I've been taking one online class almost every semester since I got here.

Being on the volleyball team and traveling, they recommend you take online courses so you don't fall behind in credits. You can take one or two online classes to keep up, so I've had that base experience of knowing how to handle online and in-person classes.

And having that tough schedule makes you prioritize time management—being focused, getting things done—that's helped me.

I think it also depends very much on the class and the professor, if they're able to make the online course engaging.

For example, last semester I had a lot of synchronous courses; you have to log in and have a live zoom with the professor and your classmates. I really enjoyed that because you were still able to interact with the professor and classmates and have discussions.

During this past spring semester, my classes were asynchronous so sometimes I felt like I was almost teaching myself!

Newsroom: As far as your career goes, is there something that stands out for you as being particularly inspiring—a teacher or a moment, something that really changed your life?

Cieslik: I would say meeting with Dr. Malinowski and having her full heartedly wrap up anyone who is willing and eager and take them on this ride of equine science and share her passion.

She gives us the freedom & courage to explore and is a joy to learn from her. That's what really got me here

was seeing her passion and how easily she shares that with others.

That and our new coaching staff this past year; it has really turned volleyball around for me. Those two things are really stand out moments for me in my career.

The people you meet along the way that have little impacts on you—teammates and classmates and adults—are also enormously important.

Newsroom: What are you going to miss the most when you graduate in the fall?

Cieslik: That's a hard one. I would miss the team obviously and the coaches and the great thing that we're building here. But I know they will continue that on their own.

But also I will miss—as weird as this sounds—I'll miss going to lectures and seeing people in person

because I really miss that.

I'm sure I'll stay in touch with Dr. Malinowski and Ellen Rankins. I will miss them as well.

Newsroom: What are your plans for the future and will it include volleyball?

Cieslik: Not professionally. I have enjoyed it very much and am grateful for the opportunity to play here but I am excited and ready to get into the workforce and see what I can do without volleyball in my life.

I'm thinking about getting into occupational therapy so I'd like to do some internships in the fall and even after graduation. So I get more of a feel for that, then potentially I get a job and go into graduate school.

I am so grateful for everything that's happened along the way: the opportunities that have been presented to me, and the people I've met along the way.



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