Funding Research To Build Better Equine Health Since 1940



Grayson-Jockey Club Research Foundation

Building Awareness In 2022 Publications, articles, events and ads with links to the complete online versions.

2022 Project List Research Spotlight Equine Research News

Welfare & Safety of the Racehorse Summit Videos
Grayson Interviews

Grayson Gazette

Equine Trade Magazines & Features

Press Releases

Weekly Stewardship Communications

Tribute Program

Rider Program

Jockey Checkoff

Annual Report & Stewardship

Events, Outreach & Building Awareness

Dine-Out & Old Kentucky Chocolates

Sponsorships

Social Media

Grayson Ads



Grayson-Jockey Club Research Foundation 2022 Funded Projects

Grayson-Jockey Club Research Foundation has authorized expenditure of \$1,661,180 to fund 15 new projects at 16 universities, 10 continuing projects, and three career development awards worth \$20,000 each. Since 1983 to more than \$32.1 million to underwrite 412 projects at 45 universities with the 2022 slate.

NEW PROJECTS

Persistence Of Antimicrobial Resistance In Horse Farms

Laura Huber, Auburn University

This project will determine the effect of antimicrobial pressure on multidrug resistant -R. equi persistence in the soil of horse breeding farms in a 5 year period.

Evaluating EVs from Equine Fetally Derived MSCS

Fiona Hollinshead, Colorado State University

This project will be evaluating extracellular vesicles (EVs) from equine fetally-derived mesenchymal stem cells as an endometritis therapeutic.

Development Of A Palmar Osteochondral Disease Model

Chris Kawcak, Colorado State University

The goal of this proposal is to develop an experimental model of palmar osteochondral disease in horses to better study disease progression and facilitate development of improved treatment strategies.

Development Of A Vectored Vaccine To Equine Rotavirus A

Mariano Carossino, Louisiana State University

A novel viral vectored vaccine against equine rotavirus A (G3 and G14), the leading cause of foal diarrhea, will be designed and evaluated in mares and a neonatal mouse model as proof-of-concept.

Immunomodulation And Exosomes To Enhance Tendon Healing

Sushmitha Durgam, The Ohio State University

This study aims to characterize M1 and M2 macrophage-derived inflammatory factors and assess their impact on superficial digital flexor tendon tenocyte activities while examining the potential of extracellular vesicles/exosomes to enhance tendon healing.

Pharmacokinetics Of Oral Mycophenolate Mofetil In Horses

Gwendolen Lorch, The Ohio State University

This proposal will evaluate the pharmacokinetics of orally administered mycophenolate mofetil as a safe, effective and inexpensive immunosuppressant drug for management of equine immune-mediated disease.

Novel Strangles Vaccine Using CD 40-Targeted Delivery

Luc Berghman, Texas A&M University

This project will be targeting bacterial components of Streptococcus equi spp. equi to the horse's immune surveillance cells (the APCs) that will result in a fast and strong immune response that will protect against strangles.

Trained Immunity In Foals

Angela Bordin, Texas A&M University

This project will study how giving oral live bacteria protects foals against infection by Rhodococcus equi, the cause of severe and debilitating pneumonia in foals, for future development of a vaccine.

Immunogenicity In Foals Of An Mrna Vaccine For R. Equi

Noah Cohen, Texas A&M University

This study proposes to develop an mRNA vaccine delivered by inhalation to protect foals against pneumonia caused by Rhodococcus equi.

Does Antibiotic Treatment Change The Microbial Resistome

Paul Morley, Texas A&M University

This research will compare four antibiotic treatments to these protocols that can be selected to treat bacterial infections while also lessening the risks for promoting antibiotic resistance.

Equine Placentitis: New Approaches To An Old Problem

Pouya Dini, University of California Davis

The goal of this study is to identify pathogens involved in placentitis and investigate their interaction with the placenta using bioinformatics and in vitro studies to develop better diagnostic and treatment methods.



Motion Of The Proximal Sesamoid Bones On Uneven Footing

Susan Stover, University of California Davis

This study proposes to determine how hoof conformation, shoeing, and uneven racetrack surfaces could contribute to fetlock breakdowns.



Influence Of Vitamin D And Cortisol In R. Equi Infection

Kelsey Hart, University of Georgia

This study will investigate how blood levels of cortisol and vitamin D are related to the development and progression of Rhodococcus equi pneumonia in foals after natural exposure.

Fentanyl Matrix Patches In Horses

Rachel Reed, University of Georgia

The aim is to show that fentanyl administered via patches placed on the skin is well absorbed and represents a promising means of providing clinically relevant continuous pain relief to horses.

Sirolimus For The Control Of Insulin Dysregulation

Andrew Van Eps, University of Pennsylvania

This study will evaluate the drug sirolimus (a potent suppressor of insulin production) for the treatment of insulin dysregulation (the most important cause of laminitis) in horses.

CONTINUING PROJECTS

Asthma, Performance And Omega-3s In Racing Thoroughbreds

Laurent Couetil, Purdue University

The main purpose of the study is to investigate the variability of asthma severity in horses racing across the US, its effect on performance and determine if omega-3 PUFA supplementation is beneficial.

Mitigation Of Equine Recurrent Uveitis Through SOCs

Joseph Larkin, University Of Florida

This project seeks to design a topical eye drop, using a natural protein, which helps to prevent pain and blindness associated with equine recurrent uveitis.

Environmental Origins Of Equine Antimicrobial Resistance

Brandy Burgess, University Of Georgia

This study will elucidate how antimicrobial resistance and virulence determinants are shared among horses and hospital environment, as well as the role antimicrobial exposure plays at this interface.

Treatment Of Joint Injury With Mesenchymal Stromal Cells

Thomas Koch, University Of Guelph

This projects deals with the evaluation of equine umbilical cord blood-derived mesenchymal stromal cells to treat joint injuries in horses.

Optimizing Bone Growth To Reduce Equine Fracture

Mariana Kersh, University Of Illinois Urbana-Champaign

Reduction in distal limb fractures through exercise in young horses would have a significant positive impact on horse welfare and the economics and public perception of the horse industry.

New Generation Equine Influenza Bivalent-VLP Vaccine

Thomas Chambers, University Of Kentucky

This study proposes to create a novel, safe and effective vaccine for equine influenza based on the 21st-century technology of noninfectious virus-like particles produced in plant.

Injury Prediction From Stride Derived Racing Load

Chris Whitton, University Of Melbourne
By studying patterns in bone fatigue accrual over time in racehorses, this project will help better, and earlier, identify horses at risk of limb injury, facilitating timely evidence based preventative strategies.





Predicting Exercising Arrhythmias With Resting Eggs

Molly McCue, University Of Minnesota

This project will use at rest ECGs to identify horses with irregular heart rhythms at exercise that can cause sudden cardiac death (SCD), allowing for increased monitoring and improved understanding of SCD.



Understanding And Preventing Supporting Limb Laminitis

Andrew Van Eps, University Of Pennsylvania

The aim of this study is to make supporting limb laminitis preventable through analysis of archived model tissues, a multi-center limb motion study of horses at risk, and development of a prototype therapeutic device.

Diagnosis Of Incipient Condylar Stress Fracture

Peter Muir, University Of Wisconsin–Madison
This study will save the lives of racehorses by establishing screening using fetlock CT for diagnosis of horses with a high risk of imminent serious injury for personalized clinical care.





CAREER DEVELOPMENT AWARD WINNERS

Storm Cat Career Development Awards

Rosemary Bayless, *North Carolina State University, mentor - Dr. Katie Sheats* "Cell-Free DNA as a Biomarker in Equine Colic Patients."

Sarah K. Shaffer, *University of California-Davis, mentor - Dr. Susan Stover* "Linking Training to Stress-Reactions in Racehorse Bones."

Elaine and Bertram Klein Career Development Award

Bruno C. Menarim, *Gluck Equine Research Center, University of Kentucky, mentor - Dr. James MacLeod* "PPAR-y Activation in the Treatment of Joint Inflammation."

RESEARCH SPOTLIGHT



Spring Edition Click for this issue

- Announcement of Grant Projects Funding for 2022
 - New Projects for 2022
 - Second Year Projects for 2022
 - Career Development Award Winner

Fall Edition Click for this issue

- Development of PET Technology for the Equine Athlete
- 10th Welfare & Safety Of The Racehorse Summit Focuses on the Impact of Data
 - Interview with a Pony Club Research Fair Participant



Development of PET Technology for the Equine Athlete



In 2015, Grayson-Jockey Club Res the first research project that performed positron emission tomography (PET) scans on equine athletes. Grayson followed that up with additional research funding in 2019. Now, this cutting additional research, will assist cutting-edge research will assist vets coast to coast in identifying lameness problems that are hard

The 2015 study validated the safety and practically of a PET scanner specifically designed to image the distall limb in standing horses. After several years and improvements, the PET scanner has an openable ring of detectors specifically designed to image the distal limb of standing horses. The goals of this prospective, preclinical, experimental, methods comparison study were to validate the safety of the scanner, assess image quality, and optimize scanning protocols.

The PET device is now being manufactured and installed at several clinics. Rood & Riddle Equine Hospital announced March 16 the installation of a PET scanner at its Lexington location. Rood & Riddle is the fourth location for this standing PET scanner for horses globally and is the site of the first installation at a private practice.

"We are excited to introduce this new technology for our patients," said Dr. Katherine Garrett, Rood & Riddle's director of Imaging. "PET scans will increase our ability to detect bony injury in horses, which will hopefully lead to improved

Grayson has been a longtime supporter of research on the efficacy of PET scans in diagnosing injuries in horses, said Jamie Haydon, president of Grayson. "We are proud to have contributed to the development of a technology that will help countless horses at Rood & Riddle and other clinics

Along with Rood & Riddle,

Along with Rood & Riddle,
PET scanners have been
installed at Penn Ver's New
Bolton Center in Kennett
Square, Pennsylvania;
Santa Anita Park in Arcadia,
California, under the management of the Southern California
Equine Foundation; the World Equestrian Center in Ocala,
Florida, under the management of the University of Holdow
Veterinary College of Medicine; and the University of Medio
Veterinary College of Medicine; and the University of Nethor
Comine Centre in Werrbee. Australia, in nearnership with Equine Centre in Werribee, Australia, in partnership with Racing Victoria.

EQUINE RESEARCH NEWS



Click for this issue

The Annual Stallion Durability and Soundness Statistics -

- 2021 Sires by Lifetime Starts per Starter
- 2021 Sires by Lifetime % of Foals of Racing Age Started
- Top 2021 Sires of Stakes Winners 4 Years Old & Up
- Breed Averages Stats

THE GRAYSON GAZETTE

Click for this issue

Our first Tabloid Mailer featuring a reprint of an article on Grayson from The Plaid Horse along with

- New Projects for 2022
- Second Year Projects for 2022
- Career Development Award Winner
- PET Technology
- Why We Support Grayson
- Dining Out for Grayson participants



WELFARE & SAFETY OF THE RACE HORSE SUMMIT X VIDEOS



Equine Injury DatabaseDr. Tim Parkin
Head of Bristol Veterinary School University of Bristol



Building A Thoroughbred "Two-Year-Old" For RacingDr. Larry Bramlage
Surgeon and Partner, Rood & Riddle Equine Hospital



Equine Safety and Welfare- A California Perspective
Dr. Dionne Benson
Chief Veterinary Officer, The Stronach Group Racing and Gaming
Dr. Ryan Carpenter
Surgeon, Equine Medical Center



Jockey Weights, Wellbeing and Fitness – Supporting the Athlete Dr. Jerry Hill Chief Medical Adviser, British Horseracing Authority



Equine Wearable Technology

Moderator - Joe Appelbaum

President NYTHA

Will Duff Gordan

Chief Executive Officer Total Performance Data

Dr. Scott Palmer

Equine Medical Director New York State Gaming Commission

Valentin Rapin

Managing Director & Co-Founder Arioneo



Regulatory Veterinarian Panel

Moderator - Dr. Mary Scollay-Ward

Ex. Director & COO Racing Medication and Testing Consortium

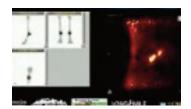
Dr. Jaclyn Bradley
Prairie Meadows

Dr. Will Farmer

Equine Medical Director, Churchill Downs

Dr. Lynn Hovda

Chief Commission Veterinarian, Minnesota Racing Commission



Positron Emission Tomography: Knowledge Gained From Over 1,000 Racehorse Fetlocks

Dr. Mathieu Spriet

Associate Professor Surgical & Radiological Science

University of California, Davis



Racing Surfaces Testing Laboratory

Dr. Wayne Mcllwraith

Founding Director, Orthopaedic Research Center, Colorado State University



The Importance Of Welfare And Safety To Youth Entering The Thoroughbred Industry

Hosted by: Amplify Horse Racing, Moderator - Annise Montplaisir

Equine Education Coordinator, KEEP Fnd & President, Amplify Horse Racing Hayley Amoss

Manager of Communications & Social Media, Breeders' Cup

Hallie Hardy

Executive Director, Horse Country

Ferrin Peterson

Jockey & Veterinarian

Eric Resendiz

Student at BCTC Equine & former Amplify Horse Racing Mentee

Deja Robinson

Pre-Vet Student, Internships through Ed Brown Society



Keeneland & the InCompass Programs Including the Thoroughbred Training Center

Dr. Stuart Brown

Vice President of Equine Safety, Keeneland

Chris Dobbins

Senior Vice President, InCompass

GRAYSON INTERVIEWS

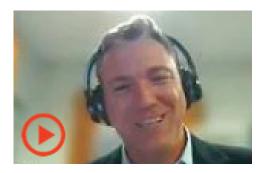


Sirolimus for the control of insulin dysregulation
Dr. Andrew Van Eps
Researcher
University of Pennsylvania

Study to determine if sirolimus will be an effective and safe therapy for controlling insulin dysregulation and preventing endocrinopathic laminitis in horses.

US Eventing Association Research Partnership Rob Burke Chief Executive Officer US Eventing Association

A discussion with President Jamie Haydon on the partnership of US Eventing in helping to fund equine research.







BISPHOSPHONATES STUDY UPDATE
Dr. Heather Knych, University of California Davis



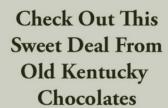
OPTIMIZING BONE GROWTH TO REDUCE EQUINE FRACTURE Dr. Mariana Kersh, University of Illinois Urbana-Champaign



OF DEVELOPING SUDDEN CARDIAC DEATH
Dr. Molly McCue & Dr. Sian Durward-Akhurst, University of Minnesota



ASTHMA, PERFORMANCE AND OMEGA-3S IN RACING THOROUGHBREDS Dr. Laurent Couetil, Purdue University



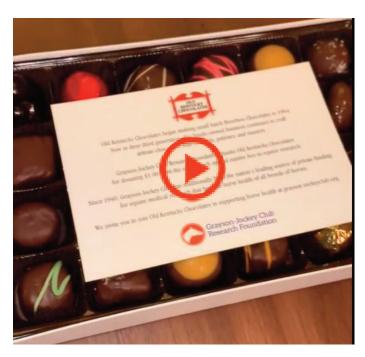






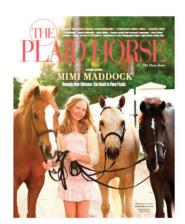
Old Kentucky Chocolates partnership with Grayson

Julia Kirkpatric & Jamie Haydon
Interviews at local TV stations in Lexington Kentucky
discussing the special partnership with OKC's special equine box.
Click on each photo for the video link.



Old Kentucky Chocolates Equine Box Unwrapping Video

EQUINE TRADE MAGAZINES AND FEATURES













2022 PRESS RELEASES

View the entire press release by clicking on the title

News releases issued by the Foundation, listed by most recent



Central Kentucky Restaurants to Participate in "Dine out for Charity" for Grayson



Old Kentucky Chocolates Now Offering Specialty Chocolate Gift Boxes to Benefit Grayson



Grayson Grass Challenge Returns to Horseshoe Indianapolis



10th Welfare and Safety of the Racehorse Summit Focuses on the Impact of Data



Welfare and Safety of the Racehorse Summit to be Available via Live Stream



Dell Hancock to Receive Dinny Phipps Award at Belmont Stakes Charity Celebration



Grayson-Jockey Club Research Foundation Board Approves Funding for 2022



Welfare and Safety of the Racehorse Summit to Return to Keeneland

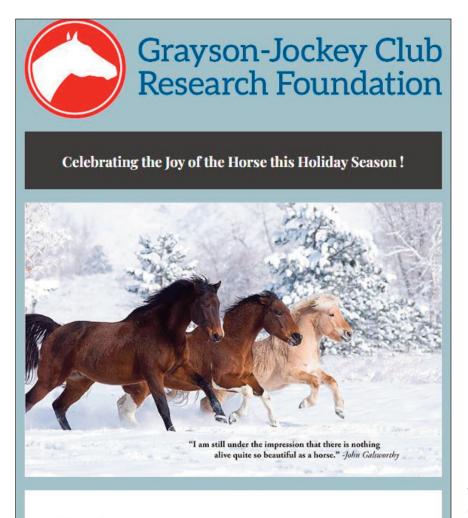


Grayson-Jockey Club Research Foundation to Again hold Photo Contest to Celebrate Healthy Horses



Grayson-Jockey Club Research Foundation calls for Research into Equine Herpes Virus Vaccine

WEEKLY STEWARDSHIP COMMUNICATIONS



While there are many laudable efforts being made to improve the health, welfare, and safety of horses, scientific research has the potential to protect the largest number of **all breeds** and disciplines today, tomorrow, & into the future.

WE NEED YOU!

Mail Chimp has been an effective tool in getting our message to donors for activities, to solicit donations or to inform our audience of advances in research



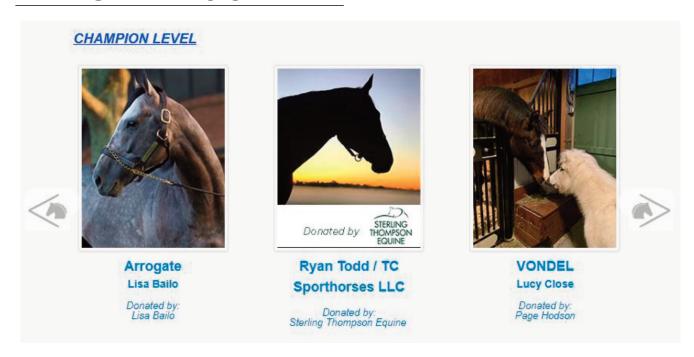


What is Equine Asthma?

Asthma describes a chronic noninfectious, inflammatory obstructive lower airway disorder.

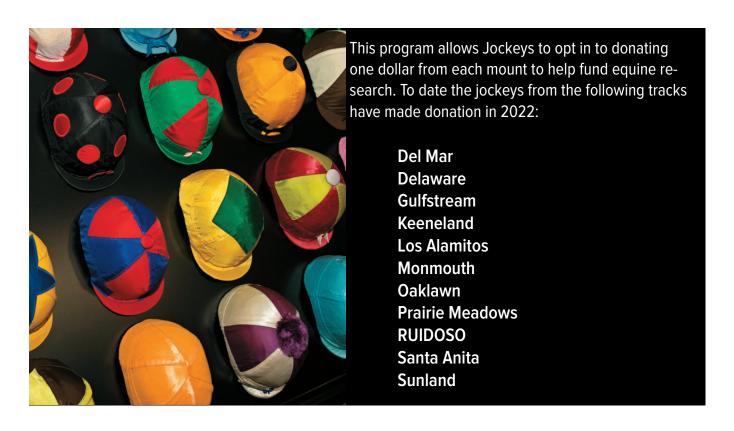
"In a nutshell, this means that smalldiameter airways deep in the lungs become chronically inflamed, which obstructs the flow of air in and out of the lungs," says Laurent L. Couetil, DVM, PhD, professor of Large Animal Internal Medicine and director of Equine Research Programs and the Equine Sports Medicine Center at Purdue University's College of Veterhary Medicine, in West Lafayette, Indiana.

TRIBUTE PROGRAM



The tribute program allows recognition of a horse in their honor or memory. In 2022 gifts have been made by Sterling Thompson Equine in memory of their client's horses, as well as gifts from owners, fans and friends of the horses being recognized.

JOCKEY CHECK-OFF



RIDER AMBASSADOR PROGRAM

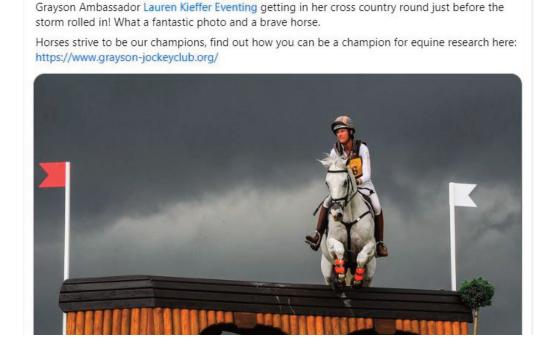




Grayson-Jockey Club Research Foundation
Published by Holly White - Baumhover ② · July 9 · ③

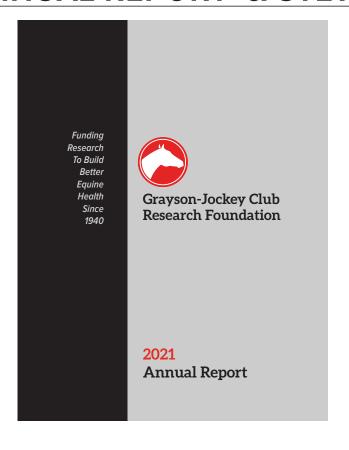


Grayson Ambassador Lauren Nicholson Eventing gives Vermiculus aka Bug a pat after dressage.



USA Eventing

ANNUAL REPORT & STEWARDSHIP MAILINGS



The 2021 Annual Report

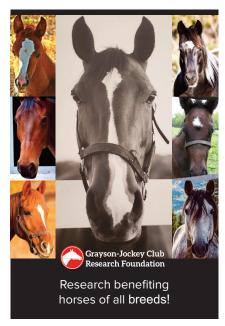
Details of Activities click here

Financials click here

2022 Stewardship Mailings









LANDROVER

The official charity for the Land Rover Kentucky Three-Day Event



It's almost time! Grayson is the official charity of the Land Rover Kentucky Three-Day Event and the competition kicks off in just 🗻 🗗 days! Be sure to stop out and visit us at our booth and learn more about how we are protecting the health of your very own horse!



In just 👔 🖪 days, we're back for the return of the legendary Land Rover Kentucky Three-Day Event presented by Mars Equestrian! If you haven't purchased your ... See more





Official Charity Dinner with Live and Silent Auction

Official Charity Booth







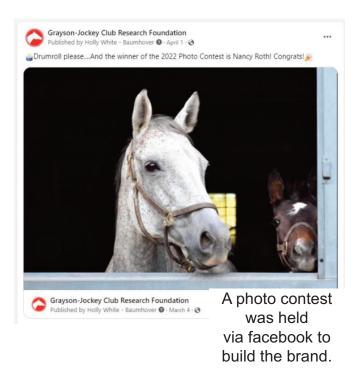






Online Auction Items From the Riders at the Event proceeds to research

EVENTS, OUTREACH & BUILDING AWARENESS



Third Annual Grayson Grass Challenge at Horseshoe Indianapolis





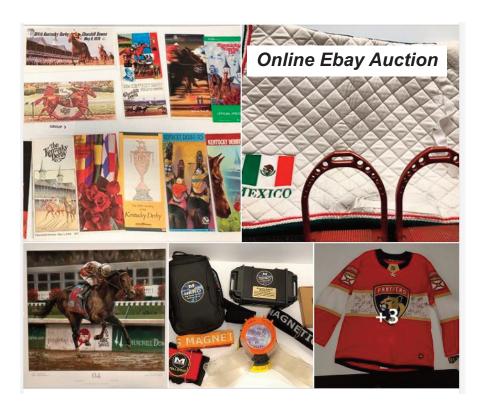
Sponsoring the United States Pony Club Science Fair

EVENTS, OUTREACH & BUILDING AWARENESS

Dell Hancock Accepts Dinny Phipps Award at Belmont Stakes Charity Celebration

"Our families have always shared a common bond and common dedication to the horse, and I think that is what has kept us striving in that same direction toward equine health over all those generations and years," said Ogden Phipps II, who presented the award. "[Dell's] work has resulted in innumerable contributions, not just to Grayson and the Thoroughbred industry, but the entire equine industry."... See more







DINE-OUT & OLD KENTUCKY CHOCOLATES











Benefiting Equine Research

From October 26 through November 29, 2022 participating restaurants in Central Kentucky will be donating a portion of sales to Grayson-Jockey Club Research Foundation, a 501C-3 non-profit organization. We are dedicated to funding excellent equine research for all breeds of horses worldwide from the racetrack, to the show arena, to your very own backyard.

We encourage you to visit the participating restaurants.

Be sure to mention you are "DINING OUT FOR GRAYSON."

Participants include:

















With the purchase of this box you are not only getting a sweet taste of the Bluegrass with Old Kentucky Chocolates, but you are also supporting equine research.

\$1.00 from each box will go to Grayson-Jockey Club Research Foundation





We invite you to join Old Kentucky Chocolates in supporting horse health at oldkycandy.com

SPONSORSHIPS



United States Pony Club Research Fair • January



Land Rover Kentucky Three Day Event



April • Kentucky Horse Park, Lexington KY



The Premier Sires Show

May 27-June 4 • Kentucky Horse Park Lexington, KY



Junior League Charity Show

July 11-16 • Kentucky Horse Park • Lexington KY



Rood and Riddle Hats Off Day

July 30 • Kentucky Horse Park • Lexington, KY



USHJA Green Hunter Incentive National Championships

August 16-18 • Kentucky Horse Park • Lexington KY



US Equestrian - US Dressage Festival of Champions

August 22-August 28 • Lamplight Equestrian Center • Wayne, IL

Sallie B. Wheeler, USEF, USHJA Hunter Breeding National Championship East Coast at Virginia Young Horse Festival August 27 • Virginia Horse Center • Lexington, VA



USHJA Young Jumper Championships

September 7-11 • Traverse City, MI

Sallie B. Wheeler, USEF, USHJA Hunter Breeding National Championships Central at Texas Rose Classic September 14-18 • Texas Rose Horse Park • Tyler, TX



All American Quarter Horse Congress

September 25-October 23 • Ohio Expo Center • Columbus OH



TIP Championships: 2022 T.I.P. Championships at Stable View & East Coast Dressage Championships October 6-9 • Stable View • Aiken, SC

Western Championships at the 2022 Thoroughbred Makeover & Central Dressage Championships October 12-15 • Kentucky Horse Park • Lexington, KY



Retired Racehorse Project

October 12-15 • Kentucky Horse Park • Lexington, KY



National Horse Show

October 26-November 6 • Kentucky Horse Park • Lexington, KY



USDF - US Dressage Finals

November 10 -13 • Kentucky Horse Park • Lexington, KY



United States Eventing Association Annual Meeting and Convention

December 7-11 • Savannah, GA

SOCIAL MEDIA

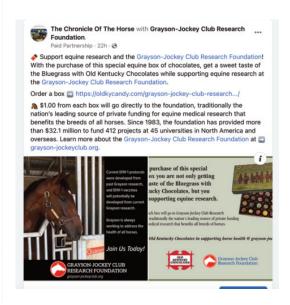


Grayson funds research for ALL breeds of horses, check it out a https://www.grayson-jockeyclub.org



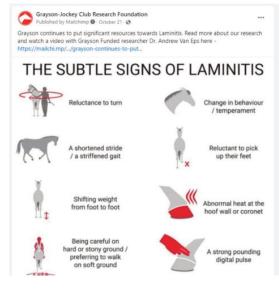
Grayson-Jockey Club Research Foundation

Published by Mailchimp 💿 · August 24 · 🚱









SOCIAL MEDIA





Grayson-Jockey Club Research Foundation
Published by Holly White - Baumhover ♥ - September 30 - ❤



Lakeside Arena Grayson-Jockey Club Research Foundation Hunter Challenge Day









Grayson supports horse health for all breeds of horses competing in all disciplines. Check out one of our newest partnerships supporting young horses bred for Hunter competition.

Find out more here: https://www.ushja.org/competition/hunter/sallie-b-wheeler. Sallie B. Wheeler / USEF / USHJA National Hunter Breeding Championships

Sallie B. Wheeler / USEF / USHJA National Hunter Breeding Championships



A special thanks to Grayson-Jockey Club Research
Foundation for your support of Sallie B Wheeler & young
horse programs at USHJA



Melanie Mader > Sallie B. Wheeler / USEF / USHJA National Hunter Breeding Championships

Grayson-Jockey Club Research Foundation is proud to be sponsoring 3'/3'3" Platinum Performance/ United States Hunter Jumper Association - USHJA Green Hunter Incentive Championship.

Lovely to see all these young horses doing what they do best and exemplifying the health of an equine athlete!

Find out how you can support your own horse's health by funding the very best equine research here: https://www.grayson-jockeyclub.org/default.asp





Grayson-Jockey Club Research Foundation

Published by Holly White - Baumhover ② · December 6 at 10:17 AM · ❸

Julia Kirkpatrick of Old Kentucky Chocolates, LLC & Jamie Haydon, President of Grayson-Jockey Club Research Foundation share a special partnership this Holiday Season! Go pick up your chocolates at Old Kentucky Chocolates, LLC and support equine research!

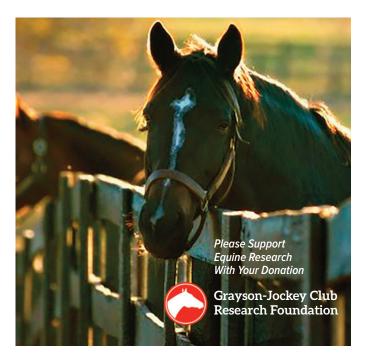
Visit Old Kentucky Chocolates at oldkycandy.com



YOUTUBE,COM

Julia Kirkpatrick & Jamie Haydon - Grayson Jockey Club partnership with Old Ky Chocolates













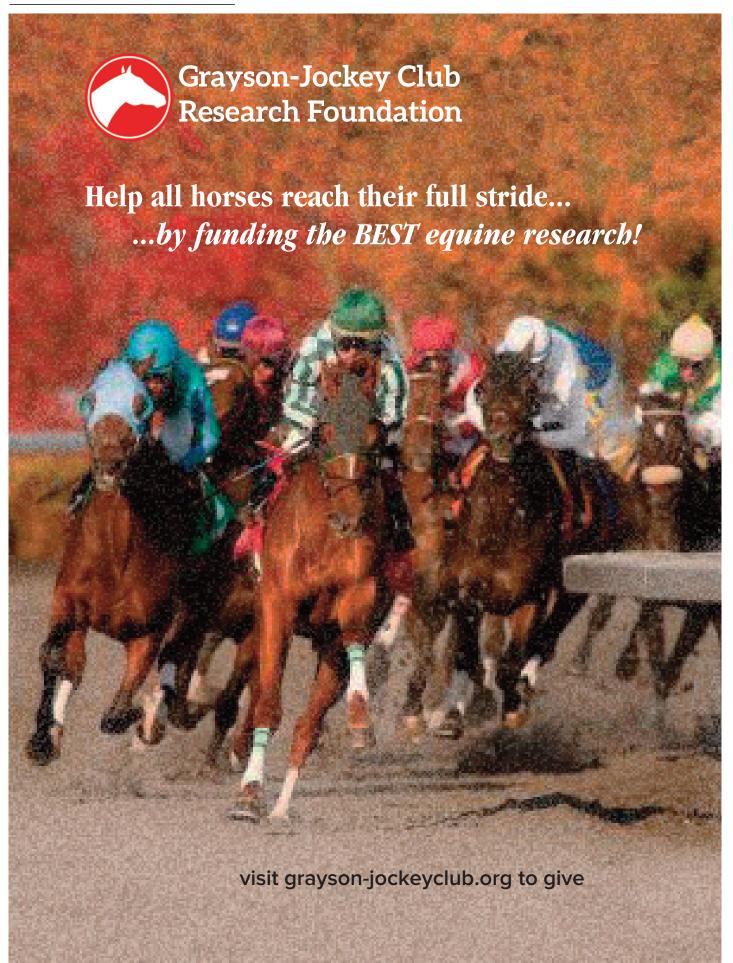
Current EHV-1 protocols were developed from past Grayson research, and EHV-1 vaccines will potentially be developed from current Grayson research.

Grayson is always working to address the health of all horses.

Join Us Today!







October 26 through November 29, 2022

Participating Restaurants in the Lexington Area will be Donating a Portion of Sales to **Grayson-Jockey Club Research Foundation.**

If you are in Lexington during this time period, we encourage you to visit the participating restaurants.

Be sure to mention you are "DINING OUT FOR GRAYSON."

Some of our participants include:







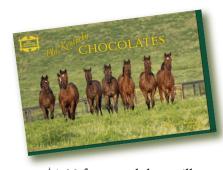








For a complete list of restaurants visit grayson-jockeyclub.org



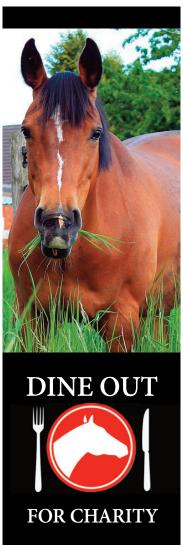
With the purchase of this box of OLD KENTUCKY CHOCOLATES, you are not only getting a sweet taste of the Bluegrass but you are also supporting EQUINE RESEARCH.

\$1.00 from each box will go to Grayson-Jockey Club Research Foundation

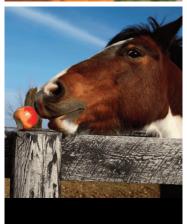


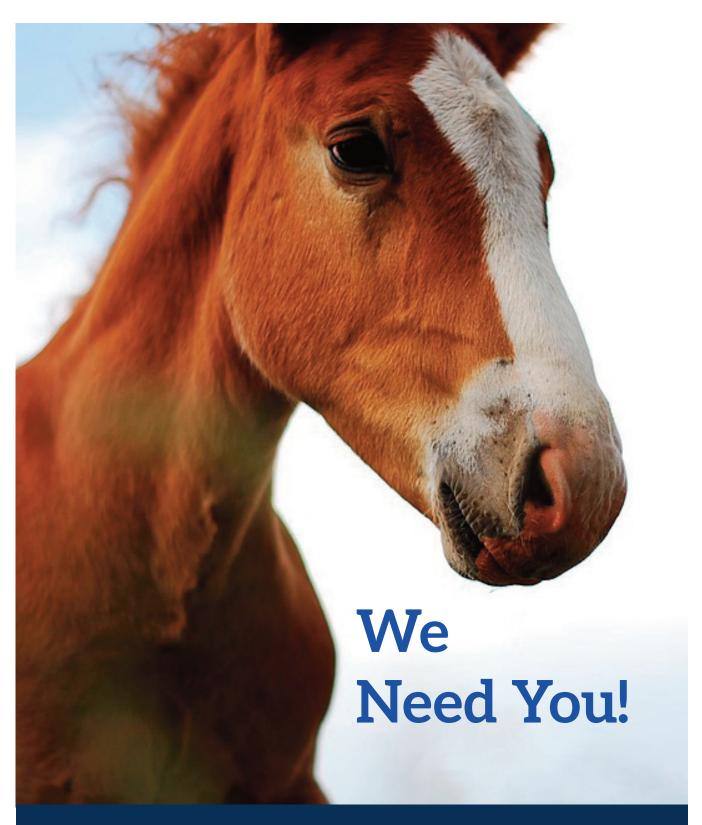
We invite you to join
Old Kentucky Chocolates
in supporting horse health at
oldkycandy.com











Donate to Grayson to fund the best equine research.

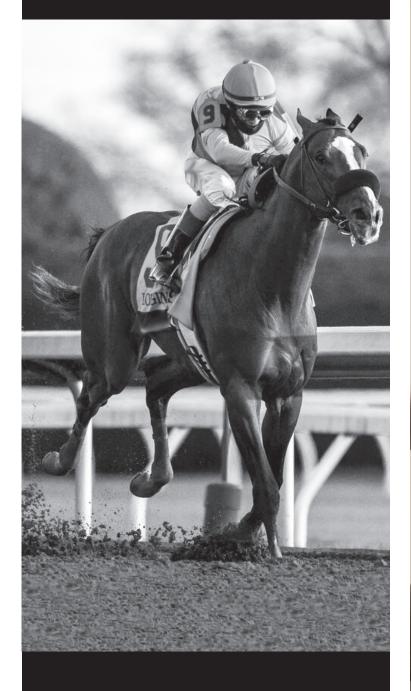




Donate to Grayson to fund the best equine research.



Funding Equine Research
To Help ALL Horses
Live Healthier Lives!



GRAYSON-JOCKEY CLUB RESEARCH FOUNDATION



Research benefiting horses of all breeds!

