



Grayson-Jockey Club Research Foundation

# RESEARCH SPOTLIGHT

Fall Edition 2021

## GROWING THE NEXT GENERATION OF EQUINE RESEARCHERS

*Grayson offers two Career Development Awards each year, the Storm Cat Career Development Award and the Elaine and Bertram Klein Development Award. Both of these programs are designed to promote development of promising research investigators by providing a one year salary supplement.*

*The Storm Cat Career Development Award was inaugurated in 2006 as a \$15,000 grant. It has been underwritten annually by Mrs. Lucy Young Hamilton, a Grayson-Jockey Club Research Foundation board member whose family stood the retired champion stallion Storm Cat at Overbrook Farm.*

*The Elaine and Bertram Klein Development Award is named in memory of a renowned horsewoman and her late husband, a Thoroughbred owner and breeder. The first grant was in 2015 and was funded for \$15,000 with donations by the Klein family.*

*Preference is given to post-residency fellows and PhD Students nearing completion of their program with a record of publication and production. In addition, it is important that the proposed program have sufficient importance and impact that the continuation of study by the recipient shows promise for a long term research career. The Foundation's Research Advisory Committee reviews applications and makes recommendation as to the best candidate to the Foundation's full Board of Directors.*

*The deadline each year for applications is November 1st, and the recipient is usually announced in March of the following year.*

*Grayson is proud to have played a part in the research careers of the individuals highlighted in our newsletter and wishes each continued success in reaching their career goals.*



### Storm Cat Award Recipients



#### **Dr. Jonathan Cheetham**

*Cornell University • 2006*

Received his PhD at Cornell in 2008 where he is an Assistant Professor of large animal surgery and continues his research dealing with the upper respiratory tract. Dr. Cheetham received a grant from Grayson in 2011 as the Principal Investigator (PI) on a study addressing laryngeal neuropathy and is currently on the Grayson research advisory committee.



#### **Dr. Christianne Magee**

*Colorado State University • 2008*

Received her PhD from Colorado State University and maintains the "Magee Laboratory", an active research facility where she studies the role of kisspeptin in the horse and collaborates with others to study several aspects of neuroendocrinology, including a 2017 Grayson funded project.



#### **Dr. Martin Vidal**

*Louisiana State University • 2007*

Received his PhD in 2009 from LSU and moved to UC-Davis where he did research in somatic stem cells. Dr. Vidal received a grant from Grayson in 2010 for a stem cell research project. He is now in private practice in Phoenix, Arizona.



#### **Dr. Melissa King**

*Colorado State University • 2009*

Received her PhD from Colorado State University and works as the assistant professor in the Gait and Equine Sports Medicine and Rehabilitation Department of the CSU orthopedic research laboratory.



## Storm Cat Award Recipients

*Continued*



### **Dr. Catherine Radcliff Hackett**

*Cornell University • 2010*

Received her PhD from Cornell and worked in the stem cell research lab of Dr. Lisa Fortier for 2 years before establishing a referral and consultation practice in Ithaca, New York.



### **Dr. Kyla Ortved**

*Cornell University • 2011*

Received her PhD from Cornell in 2014 and worked in orthopedic surgery and research. Dr. Ortved currently works in the “Ortved laboratory” at the University of Pennsylvania in gene-research and orthopedics and received funding from Grayson on her Robotic project in 2019.



### **Dr. Alice Stack**

*Michigan State University • 2012*

Received her PhD from Michigan State University in 2014 and served as a research associate in Exercise-induced pulmonary hemorrhage research with Dr. Fred

Derksen in the Robinson Respiratory Lab. Currently works as a consultant in Ireland.



### **Dr. Brandy Burgess**

*Colorado State University • 2013*

Received her PhD from Colorado State University in 2014. Dr. Burgess currently works as an Assistant Professor of Epidemiology and Infection Control Director at the University of Georgia. Her project, “Environmental origins of equine antimicrobial resistance,” is currently being funded by Grayson. She is currently on the Grayson research advisory committee.



### **Dr. Erin McConnachie Beasley**

*University of Georgia • 2013*

Received her PhD from University of Georgia in 2014. She is now a Clinical Assistant Professor of general medicine at the University of Georgia.



### **Dr. Daniel Youngstrom**

*Virginia Tech • 2013*

Received a Fulbright Fellowship and spent a year in Latvia studying crossover stem cell research human/equine. Currently working as Assistant Professor of Orthopedic Surgery in the Department of Orthopedic Surgery at the U-Conn Health Musculoskeletal Institute.



### **Dr. Katarzyna Dembeck**

*The Ohio State University • 2014*

After finishing her PhD under Dr. Ramiro Toribio, Dr. Dembeck began researching critically ill foals and steroid / neurosteroid dynamics asco-PI on a grant funded by Grayson in 2015. She is a Temp Health Science Professional at North Carolina State University.



### **Dr. Brad Nelson**

*Colorado State University • 2014*

Completed his PhD studies as a clinician in the Orthopedic Research Center at Colorado State University. He is an Assistant Professor at CSU and a co-investigator with Dr. Chris Kawcak on a project funded by Grayson, “Contrast Enhanced CT for Detection of Cartilage Injury.”



### **Dr. Heidi Reesink**

*Cornell University • 2014*

Completed her PhD studies at Cornell in stem cell therapies under Dr. Alan Nixon. The “Reesink Laboratory” at Cornell University is researching pathophysiology, epidemiology and treatment of orthopedic disease—osteoarthritis and fracture. Grayson is funding her project, “Bisphosphonates and Fatal Musculoskeletal Injury.” She has served on the Grayson research advisory committee.



### **Dr. Aimee Colbath**

*Colorado State University • 2015*

Completed her PhD at Colorado State University. She worked with Dr. Laurie Goodrich at CSU to develop allogeneic stem cells that can be used in any horse without fear of rejection. This project is funded by Grayson. She is currently Assistant Professor at Michigan State University CVM.



**Dr. Elaine Norton**

*University of Minnesota • 2016*  
After completing her PhD on Comparative and Molecular Biosciences, at the University of Minnesota, Dr. Norton continues her career at University of Minnesota at the Leatherdale Equine Center.



**Dr. Sherry Johnson**

*Colorado State University • 2020*  
She is currently working with Dr. Melissa King, (the 2009 Storm Cat Award recipient) and Assistant Professor of Equine Sports Medicine & Rehabilitation at CSU, on the project “Validation of Blood Flow Restriction Training in Horses.”



**Dr. Shavahn C. Loux**

*University of Kentucky • 2017*  
Dr. Loux is a Postdoctoral and Visiting Scholar at Gluck Equine Center, at UK with Dr. Barry Ball on in reproductive health on a project using MicroRNAs as markers of placental health in the mare.



**Dr. Callum G Donnelly**

*University of California-Davis • 2021*  
Currently working on the project, “Proteomic investigation of equine spinal ataxia,” with Dr. Carrie Finno, Associate Professor of Veterinary Genetics.



**Dr. Stephanie Bond**

*University of Calgary • 2018*  
Bond earned a veterinary degree in 2013, and is received her PhD under the supervision of Dr. Renaud Léguillette, associate professor and Calgary Chair in Equine Sports Medicine.

The project researched respiratory function in racehorses. She is currently in private practice in Nicholson, Victoria, Australia.



**Dr. Holly Stewart**

*Colorado State University • 2019*  
Post Doctoral Researcher in Musculoskeletal CT working with Dr. Chris Kawcak, Professor and Director of Equine Clinical Services at CSU, on the project “Optimization of dual-energy CT for equine imaging.”



**Dr. Lynn Pezzanite**

*Colorado State University • 2019*  
Currently an Assistant Professor at Colorado State University Veterinary Teaching Hospital. She worked on the project, “Antimicrobial and immunomodulatory properties of

TLR ligand activated mesenchymal stem cells,” with Dr. Laurie Goodrich, Professor Equine Surgery at CSU.

**Career Award Facts**

- 27 Awards** Since 2006
- 23** Still Working in Research or at Universities in Equine Medicine
- ★ **\$325,000** Awarded for the Storm Cat Award Since 2006
- ★ **\$95,000** Awarded for the Elaine and Bertram Klein Development Award Since 2015





## Elaine and Bertram Klein Development Award



### Dr. Sophie H. Bogers

*Virginia Tech's Marion duPont  
Scott Equine Medical Center • 2015*

Dr. Bogers' research focused on using stem cells to treat osteoarthritis in horses with specific aims of optimizing the anti-inflammatory properties of equine bone marrow-derived mesenchymal stem cells. Dr. Bogers currently serves as an Assistant Professor at Virginia Tech.



### Dr. Jessica M. Gilbertie

*North Carolina State University • 2018*

She received her Masters at Virginia Tech, her DVM at Iowa State University, completed her fellowship at University of Pennsylvania, and her received her PhD from North Carolina State University, assisting in Dr. Lauren Schnabel's lab. She is currently Assistant Professor of Microbiology and Immunology at Edward Via College of Osteopathic Medicine.



### Dr. Amanda L. Ziegler

*North Carolina State University • 2016*

Dr. Ziegler currently works as a Research Assistant Professor at the Gastrointestinal Physiology Lab at North Carolina State University with Dr. Anthony Blikslager.



### Dr. Sian Durward-Akhurst

*University of Minnesota • 2019*

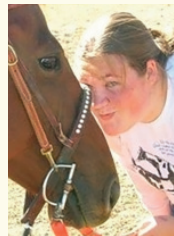
Dr. Molly McCue, Professor and Interim Associate Dean of Research at the University of Minnesota is supervising Sian on the project entitled, "Tools for Precision Medicine in the Horse."



### Dr. Sarah Jacob

*Michigan State University • 2017*

She was mentored by Drs. Helene Pazak and Molly McCue. Jacob's research project was the "Metabolomics allows for insight into metabolic alterations and perturbations associated with dietary carbohydrate profiles, aging, and insulin dysregulation in horses. She is currently working as a Assistant Professor in Pathobiology and Diagnostic Investigation at the Michigan State University.



### Dr. Aileen Rowland

*Texas A & M University • 2021*

She is working as the Clinical Trial Coordinator on the project, "Efficacy of xenogen-free MSCs for osteoarthritis" with Dr. Ashlee Watts, Associate Professor at Texas A & M University.

*\*In 2020 no applicants met the criteria for the award*

## RESEARCH AT WORK

Visit the video section of our website to review videos from many of our researchers detailing their work.

VET CHATS and other videos are also available.



**Grayson-Jockey Club  
Research Foundation**

821 Corporate Drive • Lexington, KY 40503 • 859 224-2850  
40 E. 52nd Street • New York, NY 10022 • 212 521-5327  
grayson-jockeyclub.org • [contactus@grayson-jockeyclub.org](mailto:contactus@grayson-jockeyclub.org)