## AN INTERVIEW WITH RENOWNED RESEARCHER DR. DOUG ANTCZAK



Dr. de Mestre and Dr. Antczak during the International Symposium Equine Reproduction (ISER) meeting in Cambridge, UK.

Dr. Doug Antczak recently was presented a Lifetime Achievement Award by the International Symposium on Equine Reproduction (ISER). Dr. Antczak has received several grants from Grayson-Jockey club Research Foundation to fund his projects at Cornell University, and he has served several terms on our Research Advisory Committee.

He was nominated for his recent honor by Dr. Mendi de Mestre, a faculty member of England's Royal Veterinary College and member of the ISER organizing committee. Dr. de Mestre has known Dr. Antczak since she was a summer intern in his laboratory, and she is quoted in Cornell's Baker Institute of Animal Health Annual Report, that "Over the ensuing 20 years. . . his energy and commitment to equine placenta research and generosity of spirit have not changed. Doug remains an incredibly modest and supportive colleague to work with, with supreme energy supporting equine reproductive research."

Dr. Antczak was interviewed by Edward L. Bowen, retired president of Grayson-Jockey Club Research Foundation

### Please provide basic info, date, place of birth, etc.

Born and raised in Waterbury, Connecticut, 19 December 1947. Father was a dentist with a very busy and popular practice. Mother was a homemaker who devoted her entire life to her five children. I was the oldest. In 2018 my wife Wendy and I celebrated our 40th wedding anniversary. We met

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when I was studying for my PhD at Cambridge University. At that time Wendy was a doctor working at the Addenbrooke's hospital in Cambridge.

We have two grown daughters, Lizzie and Harriet, who spent much of their early years on horseback, campaigning Welsh ponies on the East Coast circuit in the summers. Both girls learned to play polo as young teenagers, and both were accepted to Cornell University, where they earned starting varsity positions on Cornell teams that between them won five national women's intercollegiate polo championships.

I was quite chuffed about this, thinking that in additional to my own polo accomplishments as a young man, I was now also a polo player sire! However, the bubble soon burst when we learned that Wendy's cousin, Henry Brett, was named captain of the

English polo team



Polo coach Stephen Roberts, D.V.M. '38, with the 1968-1969 Cornell Polo Team varsity players. On horseback, left to right: Dan Ladd, Dr. Doug Antczak '69 and Bill Armstrong '70. Standing,

left to right: Paul Wilson and Jeff Springer '69.

as an 8 goal player. My daughters' success was probably due more to genes from the dam!

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Grayson-Jockey Club Research Foundation has announced a partnership with the Palomino Horse Breeders of America (PHBA) Amateurs that will be known as the Golden Horse Challenge Sweepstakes.

To participate in the Golden Horse Challenge Sweepstakes, which runs from March 1 through August 31, 2019, one must mention "GHCS" or "Golden Horse Challenge Sweepstakes" when:

- 1. Making a tax-deductible donation of any amount to Grayson-Jockey Club Research Foundation via **www.grayson-jockeyclub.org** by following the "Get Involved" link; -or-
- 2. Sending an email that also includes your name and address to **contactus@grayson-jockeyclub.org**. No purchase is necessary for email entry.

For more information and for the rules governing the Sweepstakes, please see the Official Rules. Eligible entries are limited to one per person.



Participants will be eligible to win prizes including a Bluegrass experience October weekend package, tickets to the 2019 Breeders' Cup at Santa Anita Park, a print from famed Thoroughbred artist Robert Clark,

a stallion halter, and a Grayson swag bag.

"The amateur association of the PHBA is excited to partner with Grayson to support research efforts that help our equine partners and companions," said Marleen Cowie, president-elect of PHBA Amateurs. "Diseases like colic and laminitis do not discriminate based on color or breed, and the Golden Horse Challenge Sweepstakes will enable us to give back to these animals that do so much for us."

Bill Casner, a longtime horse owner, is kicking off the Golden Horse Challenge Sweepstakes with a \$5,000 lead gift, and he is offering his box at Keeneland as one of the prizes for those who partake in the challenge. Casner recently

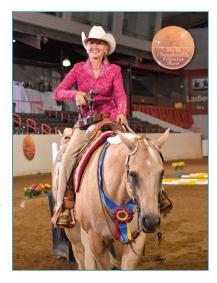


purchased a palomino horse, "Bet Hes Chrome," at the Fort Worth Stock Show.

"My love of all horses, from Thoroughbreds to palominos, has inspired my dedication to Grayson over the years," said Casner. "Discoveries from scientific research can and do make lasting impacts on generations of horses, and I am pleased to do my part to facilitate such studies through the Golden Horse Challenge Sweepstakes."

"Grayson aspires to improve the health and soundness of every type of horse, and we are honored to collaborate with PHBA Amateurs in pursuit of this goal," said Jamie Haydon, president of Grayson-Jockey Club Research Foundation. "We will also be engaging with other breed associations that register palomino horses to encourage additional support of the challenge."

The PHBA was founded in 1941 and maintains records on more than 88,000 horses and owners, more than 250,000 horse show entries, and more than 500 horse shows. PHBA provides recreational, financial, and competitive rewards for every age group, extending more than 900 approved classes for amateurs,



novice/amateur, youth, and open programs. Classes range from halter to jumping, horsemanship to driving, cutting to saddle seat, pole bending to reining, and barrel racing.

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# What were the influences that led you toward a career in equine research?

Mother's home was Syracuse, New York, where we spent most summers in a cottage on Oneida Lake. The author Walter Farley was an acquaintance of my mother's older brothers when they were young. This connection was a strong influence on my attraction to horses. I devoured all of Walter Farley's Black Stallion books as a boy.

My interest in equine research grew out of a lifelong desire for adventure and travel, and my career choice has not disappointed me in this regard. I imagine that I might have built a successful and happy alternate career as an equine vet, but research has brought different types of rewards compared to those of clinical practice.

### You introduced us years ago to your polo coach. How did he influence your time at Cornell?

In high school I was a competitive swimmer (All New England selection in my senior year), and an amateur, self-taught rider with a backyard horse in suburban Connecticut. By the time I graduated I was tired of putting my head in the water for four hours a day and ready to try another sport. Attending Cornell was wonderful for me, and also for my family because of our strong ties to upstate New York. Cornell also offered polo as an intercollegiate sport, and the coach, Dr. Steve Roberts, was also a professor in Cornell's veterinary college. This was a perfect match for me.

# What are you main subjects of interest in equine research?

My training as a veterinarian at the University of Pennsylvania



provided me with a broad understanding of biomedical science and an appreciation of how research advances clinical medicine and health, both for humans and animals. The environment at Penn was very encouraging for students who expressed an interest in academic careers, and I benefited greatly from this environment.

The scientific and clinical background that I acquired at Penn gave me the foundation to make substantial contributions in three distinct areas: immunology, reproduction, and genetics. This diversity of subject areas is rather unusual for a scientist, particularly in this current age of extreme specialization. I have been most fortunate to have a broad palette for my research inquiries.

# How do you feel about this latest honor and how was the news communicated to you?

The Lifetime Achievement Award in Equine Reproduction means more to me than any of my other honors and recognition. Reproduction is my favorite research area, and my colleagues in this field include many of my closest friends. The equine reproduction community is a particularly close-knit group. The members are great fun to be around – eccentric, colorful, outspoken, and even a bit ribald at times. The actual work in reproduction also by its nature keeps one very close to the horses; this is not always true in immunology or genetics.

I learned of the award through an email from Dr. Barry Ball of the Gluck Center. Barry was the chair of the ISER (International Symposium on Equine Reproduction) committee that made the selections.

You had a strong affiliation over the years with Grayson-Jockey Club both as a member of the Research Advisory Committee and as a recipient of funding. Can you put that into context in your overall career, and what are other mainstays of that career?

Not sure if this is correct, but I reckon that the Grayson-Jockey Club Research Foundation is the only national funding body that is exclusively dedicated to supporting equine research. And in fact, because the Grayson also funds projects outside of the United States, its reach is truly international. That sets Grayson apart from the USDA, Morris Animal Foundation, and the various equine research funding agencies that are limited to a single state or institution, or to a single breed.

I have been very lucky to have had grant support from many agencies during my career. In terms of absolute dollars, the US National Institutes of Health has provided the largest amount. However, support from organizations including Grayson, where research on the horse, for the horse is foremost, has been incredibly important.

# How would you describe the satellite campus Cornell has in Qatar and how have you been involved?

The Middle East region has been of interest to me for many decades, because of its relationship to the Arabian horse, and because one of its countries — Iran-- is also the ancestral homeland of polo. In 2011, Dr. Samantha Brooks, then of the Animal Science Department at Cornell, and I were invited to Qatar to participate in the biennial meeting of the World Arabian Horse Organization (WAHO), which is hosted by a different country every other year. We had just published our discovery of the mutant gene that causes Lavender Foal Syndrome in Arabian horses. We also developed a molecular test for carriers of that mutation. The test is now widely

used by Arabian breeders to avoid carrier-to-carrier matings. This gave us a bit of cachet in the Arabian horse community, and we enjoyed wonderful hospitality of our Qatari hosts on that trip.



About five years earlier, Cornell had established a Medical College in Qatar that was up and running. Sam and I met some of our Cornell colleagues and decided to apply for a grant from the Qatar National Research Fund to study Arabian horse genetics.

Our application was successful, and over the past five years I have spent a lot of time seeking rare strains of Arabian horses in many countries of the Middle East for our project.

The Cornell Medical College in Qatar offers the same curriculum that is taught at Cornell in New York City. Even the examinations are the same. It is a great experiment in education in a part of the world that is struggling in many ways. The Qatar facilities are excellent, and the students are very bright. I have had three of them working in my lab in Ithaca (Cornell) for summer research projects.

We are now writing up the results of our study and hope to publish a major paper in 2019. I continue to be involved in Qatar; I have just agreed to serve as chair of a grants review panel for the Equine Veterinary Medicine Center that has just opened in the Al Shaqab facility, which is adjacent to the Cornell Medical College in Qatar.

for It is really wonderful to see Dr. Doug Antczak receive this award, and well justified given his phenomenal record of accomplishment.

Over the course of four decades his research has revolutionized our understanding of equine reproduction, genetics and immunology.

Above all, his interdisciplinary approach has brought these three areas of biology together to give us an entirely new understanding of how reproductive biology is regulated. This has not only contributed hugely to comparative reproductive science, it has also made major contributions to equine clinical science.

#### Dr. D. Paul Lunn,

BVSc, MS, PhD MRCVS, Dip. ACVIM Dean, College of Veterinary Medicine North Carolina State University

## Are there other satellite campuses in other countries or elsewhere in the U.S.?

Cornell is developing a major high tech center on Roosevelt Island in New York City, just across the East River from the Cornell Medical College. Cornell's presence New York City is likely to grow in the future. What are the aspects of research that you are most optimistic about, including both the overall equine research field and any important steps of progress in specific areas that you think are in the offing?

Several areas of equine research are still very vibrant. One of them is genetics, and another is stem cell biology and regenerative medicine. Both of these areas continue to attract bright young scientists and clinicians. In my view, the potential of stem cell applications is still unproven, and debates within the field can be contentious. However, I think this is a sign of overall health of this area for future development.

Grayson has made some steps in supporting potential researchers for the future through Career Development Awards. Looking at the big picture, what are your thoughts on the likely strength of the research community of the future and are there steps you would like to see taken to insure it remains as vibrant and innovative as it is today?

Many of the major sites of equine research and advanced clinical medicine and surgery have been strong for several decades. You know the locations and the players: Colorado State, Texas A&M.



UC- Davis, Florida, Cornell, Penn, Washington State, the Gluck Center, etc. There are also other veterinary schools that have produced some outstanding programs and individuals, such as Ohio State, Wisconsin, and Georgia.

If past performance is the best indicator of future performance, you could well place a bet on a few of the institutions I have named. Without a strong institutional commitment to the horse, it would be very difficult for individual scientists or clinical investigators to build strong and lasting programs.

The leadership from Grayson can help preserve and strengthen sites of excellence in equine research by building and maintaining personal relationships with leaders of those veterinary colleges.

I am glad Grayson is reaching out to expand its donor base beyond the Thoroughbred industry. Owners of sport horses may have different motivations in providing financial support for equine research.

Dr. Doug Antczak embodies the mission of advancing scientific knowledge to improve the well-being of horses. Work in his laboratory has been instrumental in our understanding of equine reproductive physiology.

The magnitude and breadth of information provided through Dr. Antczak's work is staggering. It is no small wonder that many of the thought leaders in equine science, today, were borne out of Dr. Antczak's generous mentorship and tutelage. The term "life time achievement" modestly describes the significant contributions of Dr. Doug Antczak. ●●

**Dr. Margo Macpherson,**DVM, MS, DACT
AAEP Past President
Professor, Reproduction, Dept of LACS, CVM
University of Florida

Can you tell us about your summer home or however you describe it and where it fits into your life and career---helpful break for thinking time, whatever?

Since 1973 I have owned a share in a ranch in northern Colorado that is located on one of the finest wild rivers in the Rockies. The ranch has been an important retreat for my family over the years. I have learned to appreciate fly fishing for trout almost as much as I have enjoyed polo, and I can say for sure that fishing is easier on my aging body, and easier on the pocket-book than polo, too. There is a real magic in being away from the busy-ness of academic life – no cell phones, no internet, no television, no sounds at night except the coyotes.

#### PONY CLUB SCIENCE FAIR RESULTS AND PHOTOS



The foundation once again was the proud sponsor of the United States Pony Club Research Project Fair.

The 2019 USPC Equine Symposium & Convention was held January 30- February 3 at the Hilton Stamford Hotel & Executive Meeting Center in Connecticut.

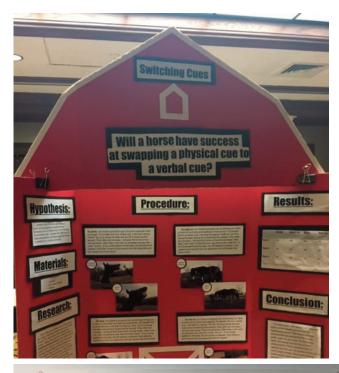
We dedicate this page to all participants and the winners. Complete results are available at *ponyclub.org* or

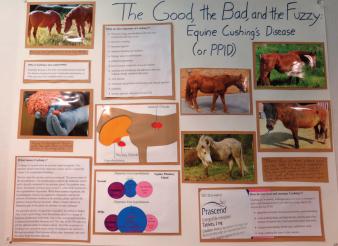
Click here for the complete results.



Each participant or group is required to verbally present their research findings.









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