

The Newsletter for Benefactors of Grayson-Jockey Club Research Foundation, Inc.

"EQUINE RESEARCH - OUR ONLY BUSINESS"

Grayson-Jockey Club Research Foundation in the 21st century

By Dr. D. Paul Lunn, Chairman Research Advisory Committee

The Grayson-Jockey Club Research Foundation Inc. has a long and storied history (http://www.graysonjockeyclub.org/). Simply put it is a non-profit charitable foundation committed to advancement of research to enhance the health and soundness of horses of all breeds. The Grayson-Jockey Club Research Foundation (GJCRF) goes about achieving this in a number of ways, including competitive evaluation of grant proposals, support of young researchers, and ongoing involvement with The Jockey Club in the Welfare and Safety of the Racehorse Summits.

Of all its activities, it is the annual competitive grants program for which GJCRF is best known around the world. This grant competition is perhaps the most important single source of research funding focused exclusively on helping horses in the world.

What the GJCRF accomplishes

The GJCRF awards research grants with the goal of improving the health and soundness of the horse. This principle drives all aspects of the grant competition, from the annual call for research proposals, through the competitive review and awards process, and on to annual assessments of the funded researcher's progress and studies of research outcome. Both the researchers and the Research Advisory Committee that judges the grants are held to the standard



Dr. D. Paul Lunn. Chairman Research Advisory Committee

of promoting grants that focus exclusively on equine problems, adhere to the best scientific standards, and carry the best chance for having a real-world impact on the horse's health and well-being.

This represents a unique opportunity for equine scientists, as there are few opportunities for funding of research targeting equine problems. A GJCRF grant has an impact on a researcher beyond the dollars in the award itself, as these grants play a critical role in developing research careers. These grants

are challenging to win, and success is a significant honor in the equine research community, as it makes clear that the successful researcher has convinced a jury of clinical scientific peers that their research is worthy of GJCRF support.

Universities judge faculty performance in large part based on the quality of their published research, and their success winning external competitive grant support. For all these reasons, equine researchers prize GJCRF grants as a coveted trophy. In research, as in life, past performance predicts future performance, and a GJCRF award strengthens a researcher's chances to win further awards and builds their reputation. For young researchers in particular, a GJCRF grant is an important step forward.

The outcome is that when the GJCRF supports a research project they are also selecting one of the best equine researchers for recognition and advancing their career. Taken together this doubles the impact, as these same researchers hold the best hope for the future of equine health.

How are the grants awarded?

While the GJCRF has been awarding research grants for many years, the present system dating from 1999 has been distinguished by a uniquely successful competitive



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process that has won the respect of researchers around the world. The genius behind this invention was Dr. Larry Bramlage, an equine orthopedic surgeon from Lexington, Kentucky. Working with vice chairman Dr. Gary Lavin, the GJCRF President, Ed Bowen, and the Board of Directors, Larry first took the step of creating a Research Advisory Committee that brought together clinical specialists from both the university and private practice environments. This meant that the committee was ideally equipped to evaluate the most sophisticated contemporary science, while at the same time expertly assessing the importance of the problems being studied and the prospects that the research might have an impact on that problem.

The Research Advisory Committee has proven very successful over the past decade and more, as it has been able to find a balance between scientific goals and real-world impact.

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The committee also includes representation from different regions of North America and from different aspects of the equine industry. This group has tackled complex and challenging questions about who to fund, and what kind of research is most critical for the horse. Its success and longevity is a testament to the strength of its design and the mutual respect that the members hold for each other.

The second critical invention that Larry Bramlage developed was the grant competition and evaluation process itself. The process has a number of key features. First and foremost, grant applications must prove they meet the standards of world-class scientific method, while at the same time promising genuine impact of equine health problems. By requiring both scientific quality and impact, the GJCRF grant competition established a principle that was some year's ahead of its time, and which has subsequently been adopted by other research bodies.

Secondly, the competitive assessment process compares grants to each other in a "head-to-head" process that leads to a ranking of all the grants submitted in any year that reflects the real quality and value of the research. The "head-to-head" part of the grant competition is still relatively unique in veterinary funding. Past and present members of Research Advisory Committee agree it is the best and most honest way to truly fund the most important research, even if it does lead to some vigorous debates!

The third critical component of the granting process is researcher accountability. All researchers receiving a GJCRF award are expected to publish their results in a peer-reviewed journal, to ensure the scientific credibility of the work and that it is shared with others. While a reasonable amount of time after the end of the awards is allowed to accomplish this, if the paper is not forthcoming then the researcher and in some circumstances their home institution can be excluded form further GJCRF funding until they meet this obligation.

These three key components of the GJCRF research grant competition have stood the test of time, and similar strategies are increasingly adopted by other funding agencies. This approach ensures that every research dollar counts, and has the best chance of making both a scientific and a practical impact on equine problems.

The unpaid Board of Directors, which makes the final decisions on funding, knows it can look to the recommendations of the Research Advisory Committee as expert and wise counsel.

How has the money been spent, and where?

Since 1983, Grayson-Jockey Club has provided more than \$17.1 million to fund over 270 projects at 37 universities in North America and overseas. Typically these awards were made for 1-2 year projects to investigators, often at veterinary schools or veterinary science departments, at prestigious universities in the United States. However foreign universities in Canada, Europe and Australia also have received GJCRF funding through the grant competition.

In addition, the GJCRF has sometimes funded collaborative ventures, for example when it took the support of several funding bodies to get a major project fully supported.

The new grant competition process has been running for over a decade, and the GJCRF recently reviewed how the money and awards have been made in terms of broad research subject areas. A summary and overview of the 12 annual grant cycles from 1999 – 2010 shows that

nearly \$11 million were awarded (Table 1.) We assigned the 154 grants awarded to a series of broad categories, including musculoskeletal disease, laminitis, non-infectious respiratory disease, infectious disease, reproductive studies, and a miscellaneous category that included a range of awards for topics like colic and GI disease, pain relief, and sepsis in foals. We included a series of grants studying the effect of racetrack

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construction on equine injury in the musculoskeletal category, as that seemed the best fit for the impact of those grants. We pulled out laminitis as a separate category, even though it is also a type of musculoskeletal disease, because of its enormous impact and importance.

What we found should perhaps come as no surprise. Slightly more than a third of all grants were given

for studies of musculoskeletal disease and laminitis (34% total), and a similar number for infectious disease studies, which includes studies of everything from equine herpesvirus to Strangles and beyond. These research areas are clearly critical for equine welfare and safety, and are targeted both by equine researchers and by the GJCRF funding. When laminitis is considered alone it garnered 8% of all research funding, making laminitis the single disease entity that has received the highest research funding from the GJCRF.

It is interesting to compare these GJCRF research-funding patterns with what equine veterinarians consider the most pressing areas needing research focus. The American Association of Equine Practitioners (AAEP) conducted an on-line survey of its members in 2003 and 2009 to determine equine research needs. Over 570 members responded in 2009, 88% of whom practice in the USA. The full results of the study can be fully accessed at www.aaep.com and deserve a careful reading, but the most important research categories were laminitis, colic, musculoskeletal diseases and racing injury, and infectious disease, followed by non-infectious respiratory disease and diseases of the foal.

(Table 1.)

Grant Funding By Year and Type

	Musculoskeletal		Laminitis		Respiratory		Infectious disease		Reproduction		Misc.	
	Grant		Grant		Grant		Grant		Grant		Grant	•
Year	#	\$	#	\$	#	\$	#	\$	#	\$	#	\$
1999	4	\$246,540	1	\$89,892	2	\$157,857	4	\$258,604	3	\$211,900	2	\$89,445
2000	3	\$268,672	0	\$0	1	\$16,884	4	\$321,889	1	\$23,102	1	\$35,037
2001	5	\$311,575	0	\$0	0	\$0	3	\$281,284	2	\$68,757	2	\$121,028
2002	1	\$101,254	1	\$44,089	2	\$98,248	3	\$304,080	5	\$222,938	2	\$76,655
2003	3	\$182,879	2	\$109,430	1	\$106,920	5	\$306,949	0	\$0	0	\$0
2004	2	\$133,960	1	\$51,258	1	\$54,000	6	\$462,782	0	\$0	1	\$46,730
2005	4	\$283,211	1	\$22,745	1	\$113,479	5	\$306,820	1	\$70,445	2	\$161,235
2006	3	\$246,752	0	\$0	2	\$249,248	4	\$289,541	2	\$197,739	1	\$14,152
2007	4	\$308,126	4	\$217,767	0	\$0	4	\$480,016	3	\$213,574	2	\$57,600
2008	2	\$230,460	1	\$137,269	1	\$124,644	4	\$359,476	2	\$284,455	3	\$101,361
2009	3	\$172,253	1	\$82,109	0	\$0	3	\$203,609	1	\$47,325	1	\$49,786
2010	3	\$323,096	2	\$161,355	1	\$131,596	3	\$174,881	1	\$95,360	5	\$257,437
Totals	37	\$2,808,778	14	\$915,914	12	\$1,052,876	48	\$3,749,931	21	\$1,435,595	22	\$1,010,466
% total		26%		8%		10%		34%		13%		9%
Avg / Study		\$75,913		\$65,422		\$87,740		\$78,124		\$68,362		\$45,930

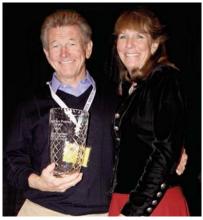
Perhaps the biggest difference between the priorities of the AAEP practitioners and the GJCRF funding history is in the field of colic, as a relatively small number of grants have been awarded in this area. We would speculate that the reason lies in the difficulty in studying colic using ethically acceptable equine models, while studies of naturally occurring colic are extremely challenging due to the high variability in the types and causes of this condition.

Nevertheless, when we consider the other research targets it is reassuring to see the close parallels between the priorities of AAEP equine clinicians, and the funding history of the GJCRF during the past decade.

Over its history the GJCRF has funded a wide variety of research, and in the future as in the past it is committed to being open to supporting any research in any area that can advance the health and welfare of horses.

Foundation Honored at Arizona Symposium

Grayson-Jockey Club Research
Foundation was named the 2010
recipient of the Clay Puett Award
presented during the University of
Arizona Racetrack Industry
Program's renowned Symposium
during December. The University
explains that the award is presented
to a person, persons, or an organization
"for their outstanding contributions
to the racing industry."



Joe Harper, a member of the Grayson-Jockey Club Research Foundation board of directors, accepts the Clay Puett Award from Wendy Davis of the Race Track Industry Program.

"Inaugurated December 9, 1994, the award is named for the late Clay Puett, an Arizona resident whose innovations, including the development of the mechanical starting gate, helped to revolutionize racing around the world." In the announcement, the UARTIP commented that the Foundation "is truly the champion for the horse."

Grayson-Jockey Club Research Foundation expresses its deep appreciation to the University of Arizona Racetrack Industry Program. It is particularly gratifying when one reviews the names of past honorees: Richard Duchossios, Jim McKay, Stan Bergstein, Jay Hickey and the American Horse Council, WinStar Farm, Trudy McCaffery, Cot Campbell, the John Mabee Family, Joe Hirsch, John R. Gaines, the Vessels Family, the Brady Family, the Hancock Family, the Phipps Family, Alan Paulson, and Clement Hirsch.

Rokeby Circle Members

In honor of the generosity to the Foundation by the late Paul Mellon, Grayson-Jockey Club designates inclusion in the Rokeby Circle for those donors/members at the \$10,000-plus level within the year. The honor is named for Rokeby Farm, Mr. Mellon's estate in Virginia. Current members of the Rokeby Circle as of January 2011.

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