Equine Research Hall of Fame inductee, Dr. Eugene T. Lyons University of Kentucky- August, 2012

The **University of Kentucky Gluck Equine Research Foundation** inducted **Eugene T, Lyons** into the UK Equine Research Hall of Fame Sept. 23 at Keeneland Race Course along with **George Allen**, a posthumous inductee formerly of UK's Gluck



Equine Research Center and Stepha**nie Valberg** of the University of Minnesota and

Eugene T. Lyons joined the faculty in the UK Department of Veterinary Science in 1963. In his more than 45-year career, Lyons' work continues to attract interest in the field of equine helminth infections. He was the first to demonstrate the transmission of helminth parasites in milk of mother seals to their offspring; this observation was later extended to a number of equine helminth infections and altered current thinking on the epidemiology of different endoparasitic diseases of the horse. Lyons is also recognized for the importance of his contributions to the field of acquired resistance of small roundworm infections

in the horse to various anthelmintic drugs.

"This is a great, and I personally feel, an undeserved honor for myself alone. It is unfortunate that the other team members, Sharon Tolliver and Sandra Collins, cannot be included as co-awardees," **Lyons** said. Gene Lyons was born in 1931 to a farm family near Yankton, South Dakota. He received a B.S. degree in Wildlife/Zoology/Agriculture in 1956 at South Dakota State University, a M.S. degree in zoology (parasitology) in 1958 at Kansas State University, and a PhD in 1963 in zoology (parasitology) at Colorado State University. Research for the M.S. degree was on internal parasites of the Black-tailed Jackrabbit in Kansas and for the PhD was on hookworms in Northern Fur Seals in Alaska. His academic career began at the Department of Animal Pathology (now Veterinary Science) at the University of Kentucky (UK) in 1958-1960 and restarted in 1963, continuing to the present (2012). He served in the United States Coast Guard from 1950-1953.

In collaboration with Hal Drudge, DVM, ScD for many years and continuing after Hal's retirement, Gene has done research on internal parasites of horses, cattle, and sheep. This included development of an innovative parasite control program of anthelmintic treatment of horses every 6-8 weeks. The program plus effective drugs, have been considered by some to be the main reason for the tremendous decline of the most pathogenic horse parasites (*Strongylus* spp). All of the commercial parasiticides for horses have been tested here as a neutral party. Resulting data are published in scientific journals, lay publications, and university bulletins allowing users access to unbiased information on a product. Drug resistance of small strongyles and ascarids has been studied intensely here, providing up to date findings for those involved with horses. Team work by many individuals, especially Sharon Tolliver and Sandra Collins who have worked a remarkable combined total of almost 90 years, has resulted in highly productive research.

In research for his PhD on hookworms in Northern Fur Seals with his mentor O.W. Olsen, Gene found a new form of parasite transmission. This was the first discovery of a larval helminth (nematode, fluke, tapeworm or acanthocephalan) passed in milk of the mother to her offspring in which the larva developed into an adult. After detection of transmammary transmission of hookworms in fur seals, here at the University of Kentucky we found it occurs with *Strongyloides* spp in horses, cattle and sheep and others established that it happens for several parasite species in a number of hosts.