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Symposium for the Biomedical and Agricultural Industries

Botulism, the silent killer

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maintains strict control on who uses the vaccine. Farm managers and horse owners in that state are required to sign a waiver absolving Kentucky from any responsibilities should complications develop.

Dr. Whitlock feels the vaccine is safe and that its use would prevent the disease in the highest risk group, the foals. "After the initial three shot series, mares need an annual booster to keep up the protection," he said. "Botulism, like tetanus, can produce clinical disease, yet recovery is not

associated with any immunity. The amount of toxin necessary to cause disease is so small it will not stimulate an antibody response.

Botulism studies continue at New Bolton Center. Dr. Whitlock's team is in search of better diagnostic methods and a test which can confirm the presence of the toxin quickly as time is of the essence when treating a patient with the disease.

"Botulism is a disease of man and animals we have to be aware of," he said. "It is costly and better means of diagnosis will facilitate earlier treatment, helping to save lives. While the largest number of patients here are horses, we also see it in other animals. Recently we treated a herd of

cattle and managed to save some animals by giving the horse antitoxin to the cattle. This will only work once. If those cattle get botulism again they cannot be treated in the same manner because of immune reactions," Dr. Whitlock's group recently helped the owner of a pack of hounds which had botulism.

While botulism is of concern in this country, it is of greater frequency in Third World countries where it affects livestock contributing to the loss of valuable food resources.

The vaccination study at New Bolton Center was funded by the Equine Medicine Research Fund at New Bolton Center.

H.W.

Symposium for the Biomedical and Agricultural Industries

Representatives of 24 biomedical and agricultural companies attended the first symposium held at the School on April 16 on this topic. An overview of the research work at the School was given by 28 faculty members. The object of the program was to foster relations between the research enterprise in the School and industry. Short papers in medical genetics, oncology and virology, development and metabolism, cardiology and hypertension, respiration and sleep, cellular immunology, epidemiology and parasitology were given to acquaint the symposium participants with the scope of work in progress. The program was received well and the chairmen of the event, Dr. Leon Weiss and Dr. Kenneth Bovee, hope to organize another such symposium in 1987.



The Grand Champion Award for Sama Gertrudis at the Houston Livestock Show and Rodeo was presented by Dean Robert Marshak. He and Mrs. Marshak are shown here with the winning entry.

Sheltie Skin Syndrome

Shetland sheepdog clubs from coast to coast have contributed about \$5,000 for a study of "Sheltie Skin Disease" here at the School.

"Shetland sheepdogs, as a breed, have skin conditions which have not been diagnosed," said Dr. William Miller, Jr., assistant professor of dermatology. "These conditions really should not be called 'Sheltie Skin Disease', rather they should be termed Sheltie Skin Syndrome.

"Shelties, like other breeds, can have skin problems such as mange, ringworm, and conditions caused by allergies. But frequently they have a condition which still has to be identified. The dog has crusty, scaly patches around the face,

tail and feet and the severity of the disease varies from animal to animal."

Dr. Miller explained that three major diseases are thought to be the cause of Sheltie Skin Syndrome: lupus, dermatomyositis and epidermolysis bullosa. All three have a gross similarity of symptoms and at first glance appear to be the same disorder. However, they are different. Epidermolysis bullosa and dermatomyositis occur when the dog is between age eight weeks and one year. Manifestation of symptoms varies; some animals just show a few crusty, scaly patches while others have a multitude of sores. Lupus, which has the same symptoms, should appear when the animal is older.

"We want to find the frequency of Sheltie Skin

Syndrome and determine which disease we are dealing with," said Dr. Miller. "We also want to develop a test so that animals can be identified quickly and treatment can be instituted." He explained that dermatomyositis and epidermolysis bullosa are thought to be genetic. "There is a similar syndrome in the collie which has been proven to be dermatomyositis. In that breed it is a dominant trait with varied expressivity."

Dr. Miller is looking for severely affected dogs for the study and development of tests. "We have some of the funding for the study but lack the animals to do the study with," he said. "The work is important because if these are genetic diseases the frequency of occurrence can only be controlled through selective breeding."



Mrs. James H. Higgins of Sewickley, PA, has been elected to a three-year term on the Board of Overseers of the School of Veterinary Medicine. Mrs. Higgins, here with Overseers Chairman Charles S. Wolf of York, PA, is the delegate of the Pembroke Welsh Corgi Club of America to the American Kennel Club. She is a graduate of Sarah Lawrence College and is active in civic affairs in Pittsburgh.

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