



7-1-1987

Dr. Brinster Elected to National Academy of Sciences

Rosettes & Ribbons

Dr. Darryl N. Biery, professor of radiology, and chairman, Department of Clinical Studies (Philadelphia), received the 1987 AAHA Annual Award at the organization's annual meeting in Phoenix, AZ.

Dr. Kenneth C. Bovee, Corinne R. and Henry Bower Professor of Medicine, and chief, Section of Small Animal Medicine, has been elected representative of the faculty constituency of the Senate Executive Committee and the University Council.

Dr. Charles Newton, professor of orthopedic surgery, and chief, Section of Surgery, received the Lindback Foundation award for excellence in teaching.

Dr. Robert E. Davies, Benjamin Franklin and University Professor of Molecular Biology, has been elected to the 1987/88 University Council Steering Committee.

Dr. Gerhard Schad, professor of parasitology, traveled to Shanghai and Hangchow, China, with Dr. Michael Philips from the Medical School and Dr. George Davis from the Philadelphia Academy of Science to explore the organization of a collaborative venture in infectious disease research. In July, Dr. Schad lectured on parasites at the School of Veterinary Medicine, Federal University of Bahia, Salvador, Brazil. The trip was sponsored by the Latin America Visiting Professor Program, sponsored by the American Society for Microbiology.

Dr. Ralph E. Werner (V'68) has been elected president of the New Jersey Veterinary Medical Association.

Dr. Stuart Porter (V'74), professor of veterinary technology at Blue Ridge Community College, Weyers Cave, VA, received the 1987 Outstanding Faculty Award from Virginia Governor Gerald L. Baliles.

Dr. James W. Buchanan, professor of medicine (cardiology), presented papers on bioprosthetic heart valve calcification at the Academy of Surgical Research in Clemson, SC. in November; the International Association for Cardiac Biologic Implants in Chicago, IL, in April; and the Society for Biomaterials in New York, in June. He also presented three papers on heart surgery in animals at the European Society for Veterinary Cardiology meeting in Rome, Italy, in May.

Dr. Lin V. Klein (V'70), associate professor of anesthesia, participated as an invited speaker in a research meeting held in association with the International Symposium *Clinical Neuromuscular Pharmacology: 1987* in Palm Springs, CA.

Dr. Judith A. Rutkowski, resident in surgery at New Bolton Center, presented a paper entitled *Xylazine/butorphanol: Effects on cecal arterial blood flow, cecal mechanical activity* at the American College of Veterinary Surgeons meeting in San Antonio, TX, in February.

Dr. Gary Smith, assistant professor of population biology and epidemiology, presented the keynote address at the 32nd Annual Meeting of the American Association of Veterinary Parasitologists in Chicago, IL, in June.

Dr. Robert Kenney, professor of animal reproduction, received a special diploma of appreciation from the Academy of Agriculture in Krakow, Poland, as well as a medal awarded in memory of Professor Ladislai Bielanski.

Dr. Alan M. Beck of the Center for the Interaction of Animals and Society is on the planning committee of the NIH Assessment Workshop on the Health Benefits of Pets. He and **Dr. Aron Katcher** will present papers during the conference. The Center received a grant of \$45,000 from Geraldine R. Dodge Foundation to study *The influence of human-animal interaction on learning*. The foundation also provided a challenge grant of \$35,000 for the project *Veterinary and education strategies for the control of rabies in domestic animals and humans*. This grant was matched by the Department of Public Health, City of Philadelphia. The Pet Industry Joint Advisory Council awarded two grants of \$17,710 each to the Center for the study of *The ferret, ferret owner and person-ferret interaction* and for *The role of the pet in the single parent home*. Dr. Beck will be the principal investigator for these two studies.

Dr. Wilfred T. Weber, professor of pathology and chairman, department of pathobiology, was one of the editors of *Avian Immunology, Progress in Clinical and Biological Research*, Vol. 238.

Dr. Mark M. Smith (V'82) attained diplomate status in the American College of Veterinary Surgeons.

Dr. Brinster Elected to National Academy of Sciences

In April, 1987, the outstanding work of Dr. Ralph Brinster on gene transplantation was recognized by his election to the National Academy of Sciences. Many scientists consider election to the Academy as an honor second only to the Nobel Prize.

Essentially, Dr. Brinster and his principal colleague, Dr. Richard Palmiter, through their pioneering work with gene transplantation have demonstrated that genes can be moved from one mammalian species to another and that the genes can function in the new animal. Dr. Palmiter is a nuclear biologist at the Howard Hughes Medical Institute at the University of Washington. In 1982, the Brinster-Palmiter team achieved national attention when they successfully transferred a human growth hormone structural gene which caused mice to grow to twice normal levels.

While this procedure was a scintillating breakthrough, its potential value in medical research is even greater. For example, the researchers have been able to transplant individual oncogenes into mouse eggs and produce mice that develop specific types of cancer. This approach enables scientists to identify exact DNA coding sequences in animal genes that cause cancer and target it to specific cells.

The gene transplantation technique offers exciting possibilities in animal industry, such as the production of animals that grow larger, produce more milk, and gain weight more efficiently. Further, there is the possibility that animals receiving transplanted genes may become "gene farms" to grow valuable human sub-



stances such as blood factor 9, which is vital to blood clotting.

Dr. Brinster received his V.M.D. degree in 1960 and immediately began postgraduate work in the Graduate School of Arts and Sciences, being awarded his Ph.D. degree in physiology in 1964. Six years later he became professor of physiology, and in 1975 he was named the Richard King Mellon Professor of Reproductive Physiology. He developed an early interest in studies on embryonic death, followed by research on embryo differentiation, fertilization, and regulation of gene action.

The National Academy of Sciences was established by a congressional act in 1963, and on request it acts as the official advisor to the federal government on scientific matters. It currently has 1,523 living members.

Charlotte Newton Sheppard

Mrs. Charlotte Newton Sheppard, Chairman of the Board of Hanover Shoe Farms, died April 18, 1987, at age 88, following a long illness. Since the death of her husband, Lawrence B., in 1968, Mrs. Sheppard had devoted most of her energies to perpetuating his dream of making the vast Pennsylvania Standardbred nursery one of the greatest breeding farms in the world.

The most famous race horse bred and raced by Mrs. Sheppard was Triple Crown winner Ayres (3.1:56.4). A stake winner in this country and Europe, her great race mare, Elma, also became a very productive broodmare as the dam of Texas, Jappa, and Super Elma. Another outstanding member of Mrs. Sheppard's stable was the fine pacing mare, Pretty Hanover.

Just as her husband did in 1967 when he endowed a Chair in Veterinary Surgery, Mrs. Sheppard established the Charlotte Newton Sheppard Professorship in Veterinary Medicine. This endowed Chair is held by Dr. Donald Patterson, a renowned medical geneticist.

Mrs. Sheppard played a leading role in managing the Hanover Shoe Farms, a valued supporter of the University of Pennsylvania School of Veterinary Medicine New Bolton Center campus.

Mrs. Sheppard is survived by three daughters, Charlotte, Patricia, and Alma.