dom to meet those challenges. In the challenge there is a blurring of boundaries hetween professions and disciplines and the "one medicine" approach, which has been a key issue in research in the School of Veterinary Medicine, will, I believe, prove to be the appropriate method.

This blurring of boundaries implies also that we, as a profession, must compete in the scientific market place for research and funding and perform at the same high level as other professions and disciplines while retaining our responsibility to address the issues pertaining to animals.

Considerations of animal health and productivity must loom large in the future. Already intensification of livestock management and improvement in productivity have produced remarkable results, but political direction has also produced surpluses of remarkable size in a world where hunger and famine are daily occurrences. Livestock production will need to respond to dictates of the political scene as well as the changing pattern of human nutrition where the consumption of livestock products may change markely owing to new findings of dietary associated disorders.

More and more, the profession will need to consider the issues of animal welfare in the production of food and fibre for man's use. It is an area about which we know little, but we must know more and one in which the veterinary profession must accept leadership. It is no longer permissable to avoid issues such as "stress" in animal production systems or the question of "animal rights" in man's exploitation of animals or the parallel existence of "human nature" with "animal nature" in considerations of animal welfare.

The University of Pennsylvania has been the leader in the field of companion animals in society; interest has spread rapidly and now many western countries pay particular attention to this field. It is a field dismissed by many in our profession as of concern only to the medical profession, but not us—be that as it may, interest is growing in this field and if we do not respond to this growing interest, others will.

While we in the Western World perceive the tasks ahead as applying the new technologies, let us not forget the other parts of the world—the Third World. There the needs differ somewhat

and survival is a key issue. The W.H.O. has declared an aim as "Health for All by the year 2000" and health is defined as a state of physical, mental and social well-being and not merely the absence of disease and infirmity.

Animals inextricably are a part of this total health picture in the Third World. The veterinary profession has played a very significant role already in the gaining of this goal—though at times it has received precious few thanks for it. Control of animal infectious disease by vaccination has been outstandingly successful to the extent that the major scourges are now absent from major areas. Entities such as contagious pleuropneumonia, Rinderpest, African Swine Fever etc, have been controlled in the majority of tropical countries but problems of international finances and the indigenous politics of several countries threaten the international animal disease control scene at this time.

Various international authorities have called for vigorous steps to raise the efficiency of meat, milk and egg production in developing countries. The animal, especially the ruminant, can convert the most inhospitable flora into useful products, but as well as providing food, animals provide power and draft animals such as the ox, zebu, buffalo, horse, camel, yak, llama, elephant etc,

still provide 80% of the world draft power, despite the advances in design of the internal combustion engine and of electrical power. To the peasant farmer in so many countries, the draft animal is critical for family survival. Should the animal go sick or die, then disaster faces that family. The veterinarian is an essential person in a society so precariously balanced between survival and calamity.

I am particularly pleased to note that the School of Veterinary Medicine of the University of Pennsylvania is increasingly concerned with the Third World and its problems. These countries are our neighbours and, what happens there, is of importance to all.

As science expands and the needs of society grow, I believe the veterinary profession will be presented with great opportunity and great challenges. Shall we be able to contribute in a meaningful way? We must do so!

In its modern context, veterinary medicine, has responsibility for the health and welfare of all animals except one, man. Within this context I believe the art and science of veterinary medicine must flourish, and I can think of no more appropriate place to look for leadership in this than at the University of Pennsylvania School of Veterinary Medicine.

CONGRATULATIONS

I am pleased to send my warm greetings to the students, faculty, and alumni of the School of Veterinary Medicine of the University of Pennsylvania as you celebrate the centennial of your distinguished institution.

The founding of your school one hundred years ago was a noble response by a private university to a critical need of our country. At a time when our growing urban population was overtaxing traditional local food supplies and demanding both qualitative and quantitative increases in food production, your university recognized the necessity of applying the methods of medical science to the raising and care of livestock. Since that time, the School of Veterinary Medicine has remained at the fore-

front of scientific and educational programs in the effort to protect and improve America's food supply and public health.

Nancy and I send our congratulations as you celebrate this important anniversary, and we offer you our best wishes for another century of outstanding achievement.

Ronald Reagan

The School also received a congratulatory message from Dr. Shuichiro Kubo, dean of the veterinary school at Hokkaido University, Japan.

Congratulatory scrolls were presented at the Centennial Medal ceremony. They came from the Royal Veterinary College, London, Royal (Dick) School of Veterinary Studies, University of Edinburgh, and the Tierarztliche Hochschule, Hannover, Germany.

"Duncan's Horses"

rofessor Lance Lanyon of the Royal Veterinary College, University of London, presented a maquette of "Duncan's Horses" to the School during the convocation ceremony. The sculpture of three fiery horses is by Adrian Jones, a 19th century British veterinarian. The huge original can be seen at the Royal Veterinary School Field Station near London.

The plastercast of the group was given to the College by Jones in 1938 and it has been on display since 1967. When the piece was first exhibited in 1892 at the Royal Academy a great controversy erupted. Jones, a self-taught painter and sculptor who entered the art world after twenty-three years in the British army, was accused of having hired another sculptor to produce the work. Adrian Jones attributed his fellow artist's accusations to jealousy and the fact that his abilities developed through field work and not through studies in studios or art schools. He continued in his new career as a sculptor and was commissioned to create the "Peace Quadriga" atop Wellington Arch as well as many other works.



"Duncan's Horses" was exhibited at the Crystal Palace and remained there until fire destroyed the building in 1936. When Jones gave the piece to the Royal Veterinary College, plans were made to cast it in bronze. Jones' death in 1938 and the outbreak of war foiled these plans. The sculpture lingered in a warehouse until the sixties when casting it in bronze was contemplated once more, However, costs had risen dramatically and it was determined to coat the work with fiberglass and polyester resin to preserve it and to make it impervious to the elements. Unfortunately, this method of preservation did not work and the sculpture began to deteriorate almost to the point of no return. In 1982 it was determined that the piece should be saved; it was temporarily restored and in 1983 a fund drive was launched to raise £30,000 to make a bronze casting. Dean Robert R. Marshak has been active in the effort to save the Jones sculpture. The work will be preserved thanks to donations by British veterinarians and an anonymous American donor.

The maquette of "Duncan's Horses" will be displayed in the Jean Austin duPont Library at New Bolton Center.