

NEW PERSPECTIVES IN VETERINARY PHARMACOLOGY AND THERAPEUTICS

PROCEEDINGS

of the

Fifth Biennial Symposium of:

THE AMERICAN ACADEMY OF VETERINARY PHARMACOLOGY AND THERAPEUTICS

Held at

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Edited by:

J. Alan Allert and H. Richard Adams

PREFACE

The American Academy of Veterinary Pharmacology and Therapeutics sponsored its Fifth Biennial Symposium in the continuing tradition of creating an interactive forum for veterinary pharmacologists and clinicians from academia, industry, regulatory agencies, and private practice. The Academy is committed to the advancement of knowledge and understanding about drug actions in animal species, and gathers formally every two years to address timely and important issues in veterinary pharmacology and therapeutics.

The central theme for the Fifth Biennial Symposium was "New Perspectives in Veterinary Pharmacology and Therapeutics". Emphasis was focused on a variety of newly emerging concepts and futuristic projections relevant to numerous key facets of veterinary pharmacology/therapeutics. Separate sessions were devoted to: smooth muscle pharmacology; the calcium channel blocking drugs; the continually growing family of the eicosanoids; and the new and almost explosive interest in oxygen free radicals. Additional topics addressed: molecular biological advances and related future trends in the pharmaceutical industry; educational directions over the next decade in veterinary pharmacology, including critical analyses of both basic and clinical limbs of the discipline; and, finally, selected research topics reflecting investigative interests represented in the Academy of Veterinary Pharmacology and Therapeutics.

ACKNOWLEDGEMENTS

The Academy gratefully expresses its appreciation and thanks to the following sponsors whose generous financial support made this year's symposium possible.

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Our sincere gratitude also goes to Marsha Murray of the University of Missouri Continuing Veterinary Education Department for her extensive efforts and the members of the Department of Veterinary Biomedical Sciences for their hosting of the symposium.

The editors are particularly indebted to Becky Mohr, June McCubbins and Barbara Bremer for their invaluable assistance in the preparation of these proceedings.

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WELCOMING REMARKS

Dr. William L. Jenkins, President, A.A.V.P.T.

It is indeed my distinct pleasure and privilege as President to welcome you to the 5th Symposium sponsored by the American Academy of Veterinary Pharmacology and Therapeutics.

Our Academy's objectives as stated in the Constitution are as follows:

1. To support and promote education and research in comparative pharmacology, clinical veterinary pharmacology and other aspects of pharmacology of interest to the veterinary profession.
2. To sponsor a periodic Journal of The Academy which will publish reviews, summaries and original treatises on all aspects of veterinary pharmacology and therapeutics.
3. To sponsor and conduct workshops, symposia or other scientific and educational meetings in veterinary pharmacology and therapeutics.
4. To enhance the exchange of educational materials and ideas among veterinary pharmacologists.
5. To organize committees of experts to research and make recommendations to the profession on current problems in veterinary therapeutics.

We have striven to meet these objectives in part by organizing biennial symposia which in the past have been held at academic institutions. The first was held at Louisiana State University in Baton Rouge in 1978, the second at the University of Pennsylvania in 1980, the third at The Ohio State University in 1982, and the fourth at Texas A&M University in 1984.

As we gather here at the Lodge of the Four Seasons on the Lake of the Ozarks for the Fifth Symposium, we are experiencing a first. It was our Council's decision to perhaps experiment with a venue geographically removed from a College of Veterinary Medicine and there is little doubt that the site that Richard Adams selected is superb in every respect. We should all enjoy a wonderful few days in these environs.

The program that Richard and his Program Committee have organized for us once again reflects our Academy's objectives and for this they need to be congratulated. The offsprings on current topics of interest in various fields of pharmacology, the diversity of research reports, the futuristic glimpse at developments in the pharmaceutical industry and an over-due introspective examination of where our teaching of veterinary pharmacology and therapeutics is headed during the next decade, all represent most appropriate subjects for an AAVPT Symposium.

To plan and organize a symposium such as this takes a collective effort by a number of people and on behalf of the Academy I would like to thank each and everyone who has played a role. Again special

thanks to those at the University of Missouri for their many contributions, and to the Program and Finance Committees of AAVPT for their endeavors in this regard.

I have a few special "thank yous". We greatly appreciate and acknowledge the generous financial support that the pharmaceutical industry provided to help us meet the expenses associated with this Symposium. The companies that contributed will be acknowledged and listed in the printed proceedings of this Symposium but let me formally recognize them at this time -

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We are also very grateful for all the assistance that the Office of Veterinary Continuing Education at the University of Missouri has provided in the organization of this 5th Symposium.

I would like to record our Academy's sincerest appreciation to all the speakers as well as the participants for your willingness and efforts to be here to share this time together for what I am sure will be for the mutual benefit of all. I do wish to acknowledge a special participant. Dr. Peter Lees of the Department of Physiology, the Royal Veterinary College, University of London, is with us for this symposium. Peter is co-editor together with Charles Short of our journal, the Journal of Veterinary Pharmacology and Therapeutics. It is a distinct pleasure to have him here in the United States.

Finally, I would like to thank Dean Robert Kahrs for being with us this morning to welcome us to Missouri. We appreciate your taking time out of a very busy schedule to join us on this auspicious

occasion and are especially grateful for your sponsorship of the informal reception.

I am certain that you are all looking forward, as much as I am, to the scientific program as well as the social events that have been planned. So once again a warm welcome to you all on behalf of the American Academy of Veterinary Pharmacology and Therapeutics and a final word of thanks to Richard Adams and his staff for making this event possible.

Thank you.

