
AWARDS OF THE SOUTH AFRICAN VETERINARY ASSOCIATION — 1997



Recipients of the 1997 awards. Left to right: Prof. J W A Coetzer, Dr N Fourie, Dr R G Bengis, Prof. R M Kirberger, Dr D F Keet

» Research Award

Dr Neil Fourie

The Research Award of the South African Veterinary Association is awarded to any member or group of members for the best scientific article or series of articles recently published in any scientific journal. The recipient of this award for 1997 is Dr Neil Fourie for his series of publications on *gousiekte*.

Dr Fourie became interested in *gousiekte* at the Onderstepoort Veterinary Institute, and turned his attention firstly to the situation in affected animals during latency. His experiments revealed that the elevation of the activity of the enzyme aspartate transaminase was the most reliable indicator of cardiac damage during this phase of the disease. Secondly, Dr Fourie investigated the possibility that *gousiekte* was an auto-immune disease. The results of his research, however, showed that while factors against heart muscle were present in some sheep during latency,

they were absent in others. Dr Fourie then set himself the daunting task of isolating the unknown toxin responsible for causing *gousiekte*. In collaboration with Mr G L Erasmus, a biochemist, *gousiekte* was induced in goats by the intravenous injection of an aqueous extract of *Pavetta harborii* (bride's bush). The toxin was extracted from the plant by ion exchange chromatography, separated by gel filtration and purified by absorption chromatography. *Gousiekte* was also induced by intravenous injection of the purified toxin into goats. The structure of this apparently novel toxin is currently being determined.

Dr Fourie is a meticulous, dedicated and organised researcher. His series of publications on *gousiekte* eminently qualifies him for the Research Award of the South African Veterinary Association.

» Lycaon Award

Dr Roy Gordon Bengis

The 1997 *Lycaon* Award of the Wildlife Group of the South African Veterinary Association, sponsored by the De Wildt Wildlife Research Centre, is awarded to Dr Roy Gordon Bengis

for his unstinting commitment to the conservation of African wildlife and his significant contribution towards veterinary ecology.

Roy Gordon Bengis qualified as a veterinarian at the Faculty of Veterinary Science of the University of Pretoria in 1971 and subsequently obtained a Masters Degree in Physiology and Pharmacology, as well as a PhD, at the University of Mississippi in the United States of America. As state veterinarian at Skukuza for the past 19 years, he has used every opportunity to unravel the secrets of veterinary ecology and to propagate the conservation message by extensive formal and informal lecturing, both nationally and internationally. Highlights of his career include proof of the non-involvement of the African elephant in the epidemiology of foot-and-mouth disease, his election as an executive member of the World Association of Wildlife Veterinarians, chairperson of the Wildlife Tuberculosis Study Group, and his election as African representative for wildlife diseases at

the Office International des Épizooties (OIE). He is senior author or co-author of 48 publications.

As head of the research laboratory at Skukuza, Kruger National Park, he is held in high esteem as an authority on infectious diseases of free-ranging African mammals. He has acted as external examiner for the Price Forbes Chair in Wildlife Diseases, and has been a co-presenter of wildlife immobilisation courses. Roy's willingness to share his knowledge, professionalism, enthusiasm and zest for life have made him an extremely popular lecturer. There is hardly a veterinary wildlife meeting of note in which he has not participated.

Dr Bengis is a respected and internationally recognised leader in the field of wildlife diseases and is a worthy recipient of the *Lycaon* Award.

» Young Veterinarian of the Year Award

Dr Dewald Francis Keet

The Young Veterinarian of the Year Award, sponsored by Intervet, is presented to a veterinarian who is a member of the South African Veterinary Association, is younger than 35 years or has not been registered for more than 10 years, and has made a significant contribution to veterinary science in his/her field of work. The award for 1997 goes to Dr Dewald Francis Keet.

After qualifying as a veterinarian, Dr Keet has spent the greater part of his career as state veterinarian in the Kruger National Park at Skukuza. During this time he received 3 merit awards as a civil servant and also attained the degree of M Med Vet (Wildlife Diseases) *cum laude* (Faculty of Veterinary Science, University of Pretoria).

Apart from his regulatory, control and administrative functions as state veterinarian, Dr Keet has already made a praiseworthy contribution as senior or co-author of 15 publications, most of which concern horsesickness, tuberculosis,

encephalomyocarditis infection, foot-and-mouth disease, parafilariosis and ulcerative pododermatitis in free-ranging wildlife species. In addition to this, he has been and still is involved in other projects such as the evaluation of locally manufactured etorphine hydrochloride, tuberculosis in free-living baboons and the epidemiology of foot-and-mouth disease in giraffes. He has already delivered papers by invitation on various occasions, for example papers on foot-and-mouth disease in giraffes at a conference of the Zimbabwe Veterinary Association and parafilariosis in buffalo during a symposium on buffalo as a ranch animal, where his paper was voted the best scientific presentation.

Dr Keet has performed exceptionally well as a young veterinarian, and is a worthy recipient of the Young Veterinarian of the Year Award.

» Gold Medal

Professor Jacobus Wynand Andries Coetzer

The Gold Medal of the South African Veterinary Association is awarded in recognition of exceptional scientific achievement and a significant contribution to the development of veterinary science. The Gold Medal for 1997 is awarded to Prof. Jacobus Wynand Andries Coetzer.

Professor Coetzer qualified as a veterinarian in 1973 and worked from 1974 to 1988 as researcher/diagnostician in the Pathology Section of the Onderstepoort Veterinary Institute, where he collaborated with Prof. T S Kellerman in researching various plant poisonings and mycotoxicoses, with emphasis on hepatotoxic plants and moulds. Other research fields that received his attention include the teratological effects, pathology and pathogenesis of Rift Valley fever and Wesselsbron disease viruses. As a result of his interest in virus-associated and toxic hepatic conditions he spent a year in 1980 at the Armed Forces Institute of Pathology in the United States of America, working under the guidance of Dr K G Ishak, a world expert on liver diseases of humans.

Professor Coetzer's contribution to the study and elucidation of the pathogenesis of *geeldikkop*, one of the most important toxicoses in sheep, deserves special mention. For the first time in decades, a new mechanism in the pathogenesis of secondary photosensitivity was discovered, namely that the crystalloid material in the bile ducts of sheep suffering from *geeldikkop*

constituted an important obstructive mechanism. The results are currently quoted worldwide as a mechanism for the damming back of phylloerythrin, the photodynamic agent that results in photosensitivity.

Professor Coetzer's research results have been published in 50 articles in local and overseas journals and books, and presented in 35 contributions to national and international congresses and symposia. The high standard of his research was recognised in 1982 when he received the Research Award of the South African Veterinary Association.

His broad experience and knowledge of plant poisonings, mycotoxicoses and infectious diseases of livestock resulted in his important role as co-editor of the following books: *Infectious diseases of livestock with special reference to southern Africa*, *Plant poisonings and mycotoxicoses of livestock in southern Africa* and *Progress in liver diseases*.

Apart from *Infectious diseases of livestock with special reference to southern Africa*, of which Prof. Coetzer is the senior editor, the only textbook dealing with a similar subject is one by Prof. W A Henning, published in 1932. After the death of Prof. Henning in 1962, the need arose for a replacement for his excellent book. Prof. Coetzer accepted the challenge, and as a result of his driving force and determination, the book *Infectious diseases of livestock with special reference to southern Africa* appeared.

It comprises 108 contributions from scientists representing 12 countries (South Africa, Australia, New Zealand, Belgium, The Netherlands, the United Kingdom, Germany, Israel, Kenya, Namibia and the United States of America).

The textbook is published in 2 volumes (1605 pages, 379 colour plates and 213 black and white illustrations), with a complete source list for the infectious diseases of cattle, sheep, goats and pigs. Some of the maps, diagrams and illustrations of insects are original works. Various aspects of the diseases, including aetiology, prevention and control, are fully discussed.

The demand for the book continues to be overwhelming. It has been presented to 11 international journals as well as to prominent scientists for evaluation, and without exception the book was very positively received and considered to be of high quality.

As further proof of the high quality of the textbook, Prof. Coetzer and his co-editors received the Bill Venter Literary Award for 1996. The award is made to staff members of universities in South Africa for outstanding scientific contributions published in book form. When handing over the prize, Dr Venter said that the book can be considered to be the best ever presented for consideration for the award, and as a result he increased the prize money from R25 000 to R40 000.

A great need existed for a replacement for Prof. Douw Steyn's book *The toxicology of plants in South Africa*, published in 1934, followed by *Vergiftiging van mens en dier*, by the same author, in 1949. The importance of toxic plants and moulds for livestock production in South Africa is emphasised by the fact that approximately 600 indigenous toxic plants occur here. Since the poisonings are mostly restricted to Africa, it is essential that researchers on this continent should publish information about endemic poisonings. Once again, Prof. Coetzer, in collaboration with Prof. T S Kellerman as senior editor and Prof. T W Naudé as co-editor of the book *Plant poisonings and mycotoxicoses of livestock in southern Africa*, played an exceptional role in making known not only their own experiences but those of other scientists available to the wider community. The great demand for the handbook is demonstrated by the fact that 2 impressions of the 1st edition are sold out. A 2nd edition is currently in production.

During Prof. Coetzer's sojourn in the USA (June 1980 – August 1981), he contributed to the book *Progress in liver diseases. Vol. VII* as co-author of a chapter titled 'Fevers with hepatic involvement: pathological aspects with clinical correlations'. Dr Ishak, the senior editor of the book, is a respected researcher in the field of virus-associated haemorrhagic fevers with liver involvement.

Since Prof. Coetzer's appointment as an Assistant Director at the Onderstepoort Veterinary Institute (1982–1988), then as Associate Professor in the Department of Infectious Diseases (1988–1994) and as Professor and Head of the Department of Veterinary Tropical Diseases at the Faculty of Veterinary Science, University of Pretoria (1994 to present), his primary task has become more academic and administrative. He has particularly concentrated on establishing links and promoting cooperation at national and international level. Numerous visits by Prof. Coetzer to veterinary and agricultural faculties in southern Africa (Zambia, Zimbabwe, Mozambique and Botswana) as well as in other parts of the world, including the USA and Europe, bear witness to this. Thus, for example, cooperation with the W K Kellogg Foundation in the USA has led to the establishment of a postgraduate training programme that will result in the upliftment of students from disadvantaged communities in South Africa and other southern African countries. Prof. Coetzer furthermore played a leading role in the establishment of a cooperation agreement between the veterinary faculty of the

University of Pretoria and the Wisconsin School of Veterinary Medicine for the exchange of staff and under- and postgraduate students. A short course titled 'Draught animal power' will be presented in 1998 in collaboration with the Centre for Tropical Veterinary Medicine of the University of Edinburgh, Scotland.

Professor Coetzer has played a prominent and definitive role in the creation of new courses, particularly at postgraduate level. A number of courses are already offered and there is considerable national and international demand for attendance. The course on African epizootic diseases, directed primarily at training veterinarians in the epidemiology, diagnosis and control of economically important diseases such as foot-and-mouth disease, African swine fever, rinderpest, lung sickness, Newcastle disease, anthrax, lumpy skin disease and Rift Valley fever, is largely sponsored by the Food and Agriculture Organization of the United Nations (FAO) and other overseas institutions. Funds are received annually from the FAO for bursaries to enable candidates from African countries to attend the course.

The series of courses on laboratory diagnostics is directed at training veterinarians and other scientists, as well as technical personnel, particularly those attached to diagnostic laboratories in the Southern African Development Community (SADC) in diagnostic techniques in bacteriology, mycology, parasitology, protozoology, helminthology, immunology, serology, virology and toxicology. The course also serves as a mechanism for cooperation between research, academic and diagnostic institutes in and outside South Africa.

Professor Coetzer played a cardinal role in establishing a diagnostic service for infectious diseases and parasites of horses. The Department of Veterinary Tropical Diseases, in collaboration with the Onderstepoort Veterinary Institute, launched a project titled 'Investigation into the infectious causes of abortion and respiratory conditions of Thoroughbred horses in South Africa', funded by the Equine Research Centre of the Faculty of Veterinary Science, University of Pretoria. Prof. Coetzer acted as coordinator for the initial 3 years of the project. As a result, a monitoring and diagnostic service for infectious and parasitic diseases of horses was established. Research projects in connection with important diseases such as horsesickness are carried out in conjunction with national and international institutions such as the Animal Health Trust, Newmarket, England, and Pirbright, England.

Various videos covering infectious diseases of southern Africa (e.g. lung sickness, foot-and-mouth disease and lumpy skin disease) have been produced by Prof. Coetzer to support under- and postgraduate training. The high standard of this training material has led international organisations such as the FAO to purchase these videos for international distribution.

Professor Coetzer has acted as chairman at many national and international congresses. He has served the veterinary profession and the South African Veterinary Association as a member of the editorial committee from 1982 to 1989, as chairman of the Pathology Group from 1982 to 1984, and as examiner and moderator for infectious diseases and epidemiology for the Veterinary Council. He serves on the following international committees: the Scientific Committee for the 8th International Congress for Infectious Diseases in Horses, the Dubai Awards Committee, and the International Committee for the Advancement of Tropical Veterinary Medicine.

The recognition that Prof. Coetzer enjoys at national and international level, his contribution to the advancement of tropical veterinary medicine, and his valuable service in many fields of the profession, render him a worthy recipient of the Gold Medal of the South African Veterinary Association.

» Clinical Award

Professor Robert Murco Kirberger

The Clinical Award of the South African Veterinary Association is awarded to any veterinarian or group of veterinarians who are members of the Association and who have excelled in applied veterinary practice. The award for 1997 goes to Prof. Robert Murco Kirberger.

Since qualifying as a veterinarian in 1971, Prof. Kirberger obtained a Diploma in Tertiary Education, a Masters Degree in Veterinary Radiology and has become a diplomate of the European College of Veterinary Diagnostic Imaging.

Professor Kirberger has built upon the sterling work done by his predecessors in the Radiology Section at the Faculty of Veterinary Science, University of Pretoria, and has developed the unit into one characterised by excellent service, professionalism and a high level of expertise. He leads from the front by being actively involved in small and large animal radiology and ultrasonography. He was the driving force in establishing the ultrasound facility, which has grown from a non-existent service to a very active and highly effective diagnostic unit. Similarly, he

has been the driving force behind the imminent installation of a Gamma camera and the establishment of a scintigraphy unit.

In addition to the clinical services provided by the Radiology Section, Prof. Kirberger has served the veterinary profession through the publication of numerous papers and the presentation of numerous lectures and short courses to interest groups concerned with both small and large animals. He also provides a highly professional consultation service to private practitioners and acts as a major hip-dysplasia evaluator for the Kennel Union of South Africa.

Through his inherent abilities and skills, Prof. Kirberger has established himself as a veterinary professional held in high esteem by both local and international communities. His stature as a leader in the field of radiology has grown by leaps and bounds over the last 10 years, and will continue to do so in the future.

Prof. Kirberger is an excellent choice for the 1997 Clinical Award.