



OP News

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Soccer fun league

a 2010 highlight

The soccer fun league, which was initiated to coincide with the World Cup, became so popular at the Faculty of Veterinary Science that it may become an annual institution.

The soccer fun league ended on a high note when the semi-finals and final were played from 12:30 to 14:00 on Wednesday, 9 June. The team from the Department of Companion Animal Clinical Studies – the CACS Kings – was eventually crowned as the league's champions when they beat the Department of Veterinary Tropical Diseases (DVT) 1–0 in a fiercely contested final. The two teams were awarded gold- and silver-plated medals. An invitational challenge between the Dean's Team and the winner of a play-off between the Onderstepoort Veterinary Institute (OVI) and Onderstepoort Biological Products (OBP), the other two institutions in the so-called Onderstepoort Veterinary Complex, was also played. The Dean's Team defended bravely against the OVI, who won their match against OBP, but eventually succumbed to a 0–1 defeat.

Twelve teams competed in the six-week-long league. With its own special rules, such as eight-minute games, no goalkeeper and two women on the field at all times, and teams such as the Anatomy Skeletons, the CACS Kings and the Young Brazilians, the league was destined to be a special fun-filled event. The outcome was beyond expectations. After fierce competition between the teams, one student team, one support services team and two academic department teams ensured the top spots in two groups.

The finals were preceded by an opening ceremony and a parade. The 2010 World Cup was a novel event for our country and the faculty seized this opportunity to lend its voice and enthusiasm to the growing spirit in the country. This opening ceremony was designed so that everybody could contribute their personal energy to the tournament and showcase

the close-knit family quality that is shared at the Faculty of Veterinary Science. A welcoming speech by the dean, Prof Gerry Swan, and the hoisting of the South African flag, accompanied by a recital of the South African National Anthem, also formed part of the opening ceremony. During the soccer matches, diski dancing took place, while boerewors and sosaties were provided.

Every African country that participated in the World Cup was represented during the parade as follows: Algeria (Phytomedicine), Ghana (Biomedical Research Centre), South Africa (Veterinary Tropical Diseases) Nigeria (Production Animal Studies), Cote d'Ivoire (Anatomy and Physiology) and Cameroon (Companion Animal Clinical Studies).



The soccer fun league was enthusiastically supported by staff and students alike.



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Faculty of Veterinary Science

From the Desk of the Dean

The year 2010 has already reached its halfway mark. The World Cup has come and gone, and left us in awe of this global extravaganza. We are extremely proud of our country's achievement in presenting one of the best events the world has ever experienced, in true African fashion.



As a nation and continent, we were united in ensuring its success, but at the same time enthralled with excitement as we watched game after game. The event put South Africa squarely in the centre of the world's attention and has given many people a new perspective of our wonderful country and its people. Congratulations and heartfelt appreciation goes to Danny Jordaan and his team that put the event together. Now it is important that we build on the positive energy and unity that we experienced over the duration of the World Cup.

In much the same way we, as a faculty, strive to achieve local acknowledgment and international recognition through excellence and the quality of our veterinary training and research. Our infrastructure and facilities can be compared to the best in the world and, as with the World Cup, we are capable of competing and delivering at the highest level as long as we are united in our resolve.

To position ourselves as a national and global player, the faculty needs to periodically revisit its strategic goals and objectives, and to determine if these are still applicable and viable, that we are on the right track and that we are able to live up to the expectations of our stakeholders and our own vision and mission. It also means that, where necessary, changes have to be made in cases where those expectations are not met. Our plans also need to take account of and adapt to the new

institutional direction and priorities expressed by our newly appointed Vice-Chancellor and Principal, Prof Cheryl de la Rey.

Occasions where some of these strategic issues are discussed include the annual retreat of the faculty executive that took place from 25 to 27 January at Loskop Dam this year. At the bosberaad, it was again acknowledged that the faculty aspires to be widely recognised for the quality of its staff and graduates, unique postgraduate opportunities, and groundbreaking and impacting research, and that it wants to strengthen its partnerships and collaborations. At the same time, it strives to meet national imperatives. Similarly, the faculty plan (2007–2011) is fully aligned to the institutional strategic plan and objectives of the University of Pretoria.

Reflecting on the performance of the faculty in 2009, some highlights include the fact that the faculty qualified a record number of veterinary graduates, earned the largest number of research publication units, and obtained approval for the introduction of a new core-elective curriculum in 2011. Other noteworthy achievements were the Department of Veterinary Tropical Diseases, together with its consortium partners, being approved as a World Organisation for Animal Health (OIE) Collaborative Centre for Training in Livestock and Wildlife Management in the Southern African Development Community (SADC), and the University of Pretoria's

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participation in the deans' workshop and seminar on veterinary education in southern Africa, with the theme *Matching supply and demand*, which was organised by the OIE regional office in Arusha, Tanzania, from 2 to 4 September 2009.

However, certain challenges remain and should be part of the focus in 2010 and beyond. One of the crucial aspects deserving the faculty's continued attention is the increase in the number of African veterinary and veterinary nursing students. Existing awareness and recruitment initiatives have to be strengthened and revisited, and additional measures should be implemented where necessary. At the same time, and in future planning, the faculty has to take into account the possible influences on the future provision of veterinary services, including changes in the environment of veterinary science brought about by changes in society through major demographic, political, environmental, disease, technological and economic influences.

The emergence of new diseases and the increase in new pathogens, the effects of global warming, immunodeficiency, drug resistance, food security issues, population growth, poverty and hunger, and the speed of global travel and disease transmission are some of the factors that will have a definite influence on the future provision of veterinary services. It is thus important to be aware of these changes and to adapt to the changing landscape and management change. A leading faculty, and any organisation for that matter, is one that recognises and acknowledges change, adapts to it and plans its strategic direction and path accordingly. However, in an environment of continued change, it is also important to stick to values and basic principles.

Against this background, it is also important to give special attention to the following matters:

Community engagement can differentiate the faculty from others and the University of Pretoria can become a world leader in this respect. Community veterinary services should create role models for the community and, in so doing, build capacity for the faculty in terms of African students. Veterinary community clinics and their integration into teaching and learning are thus important.

A network of deans in the region should be established and regional collaboration should be promoted. It is important for the faculty to effect harmonisation with the SADC countries and eventually reach a point where they can utilise each other's structures in training. Talks are currently taking place in this regard between the deans of veterinary institutions in the region. The OIE seminar was a good starting point. Several resolutions and recommendations were formulated, promoting regional cooperation in veterinary and paraprofessional training and professional regulation in the region.

An increase in the awareness and interest in postgraduate training and research among undergraduate students is a critical issue. Postgraduate students with the potential to become academics must be encouraged to



The dean, Prof Gerry Swan, and Prof Thoko Hove, Dean of the Faculty of Veterinary Science in Zimbabwe, engaged in discussion during the OIE workshop for deans from the SADC region that took place from 19 to 23 July 2010 at the Onderstepoort Campus.

complete their PhDs and, in the case of clinicians, to register as specialists. The faculty must continue to develop and manage relevant national and international contacts and collaboration with appropriate institutions, research organisations, industry, government and the community through liaison and effective marketing.

An increase in quality research outputs and the encouragement of active researchers must be undertaken, while steps must be implemented to increase the number of NRF-rated staff members and to improve staff ratings in the faculty.

The smooth transition and phasing in of the new curriculum should be ensured, and the minimum standards should be internationally acceptable. The faculty must also ensure and verify the readiness and success of students admitted to the programme.

Its staff and students are the faculty's most important resources. The development of staff and a culture of staff and students being valued are therefore important. Staff should value each other, while students' commitment to the profession should be stressed. Staff must be able to grow, and the faculty has to attract, develop and retain excellent academic staff, researchers and support staff.

I believe in this faculty's ability to not only do all of this, but in its notion of being a leading and renowned institution that is more than just capable of being globally competitive and locally relevant. The faculty has a lot to offer through its expertise, its high standard of training, research and service delivery.

The secret of success consists of six magic factors: sincerity, integrity, modesty, decency, wisdom and kindness. We must also be true to a clear and meaningful goal. Don't dream up thousands of reasons why you can't do what you want to; find one reason why you can. Let us build on the positive energy of a successfully hosted World Cup to also make this a successful year for the faculty. I wish you all of the best for the remainder of 2010.

Two decades of research on giraffes are bearing fruit

G Mitchell, JD Skinner

In 1990, John Skinner, then professor of Zoology and Director of the University of Pretoria's Mammal Research Institute (MRI), and currently Professor Extraordinaire at Onderstepoort, decided that further investigation into giraffe biology should be pursued as an aim of the MRI. Previously, between 1974 and 1980, Skinner and his brilliant students Anthony Hall-Martin and Errol Ackermann had taken advantage of a very large giraffe cull in the Timbavati Game Reserve to study the thermoregulatory anatomy of giraffe coat patches (Ackermann) and giraffe body composition, diets, and foetal and reproductive anatomy (Hall-Martin). The result was a series of publications that remain primary references.

However, apart from the pioneering work of Robert Goetz at the University of Cape Town in the early 1950s on the giraffe's cardiovascular system, and one or two isolated case studies on the respiratory system, no studies of giraffe physiology had been made. The partnership, which started in 1990 and investigates adaptation in giraffes resulting from their extraordinary shape, is resulting in great progress in understanding the physiology and functional anatomy of this species. Skinner, an eco-physiologist by training, asked Graham Mitchell, a physiologist at the University of the Witwatersrand (Wits), to collaborate on further studies. Together with outstanding help from Roy Bengis, state veterinarian in the Kruger National Park, and Mark Nijland and Liz Rickards, two students at Wits, they made the first measurements in what has become a very fruitful research programme and research collaboration. The early projects focused on giraffe cerebrovascular resistance, a controversial issue. It had not been measured before, but was important for unraveling the problem of fainting in general, especially in fighter pilots who are subjected to enormous gravitational changes to blood flow, but also for explaining why giraffes do not faint when they suddenly lift their heads from, say, ground level. Following the Krogh principle, giraffes are likely to have any general mechanism exaggerated, which makes it easier to identify and describe. Contrary to popular opinion of the time, which argued that giraffes must have a siphon system of some kind sucking blood up to the brain when their heads are upright, the research

showed that giraffes actually have a unique blood vessel anatomy that joins the main artery to the head (the carotid) to a main artery going to the brain (vertebral), thus affording a plentiful blood supply despite enormous gravitational effects induced by postural changes. Humans do not have this arrangement and so a different solution to "blacking out" in pilots had to be found.

Then followed thermoregulatory measurements verifying the remarkable research of Ackerman. He had established that under each patch there was a rete mirabile, enabling the giraffe to effectively dissipate heat, obviating heat stress. At the same time, an attempt was made to measure brain temperature to discover whether giraffes, like virtually all other artiodactyls, have a brain temperature that can be much lower than body temperature by virtue of a carotid rete mirabile. This was pioneering baseline research and showed, first, that the hairskin patches did indeed act as thermal windows and brain temperature was indeed 2°C lower than body temperature. It was carried out at the Hans Hoheisen Research Station, which in August will be inaugurated as a centre under the jurisdiction of the University's Centre for Veterinary Wildlife Studies.

After Skinner's retirement from the MRI and his subsequent appointment at Onderstepoort, he and Mitchell identified the skeleton, cardiovascular system and respiratory system of giraffes as the focus of their future research, as it is these three aspects of their physiology that are altered by their shape. In addition, they decided to include in the general aim of the project the nurturing of the abundant but often unexpressed intellectual talent to be found in veterinary students by stimulating their research interests.

An outstanding first recruit was Louis van Schalkwyk, who obtained an MSc (*cum laude*) for his study of the anatomy and chemistry of the giraffe skeleton, which is the most rapidly growing skeleton of any land mammal. The aim of his research was to understand how the slender, gracile skeleton of giraffes could support a massive body weight. He compared a dicotyledon exclusive browser, giraffes, with a monocotyledon exclusive grazer, buffaloes. Contrary to expectations, Van Schalkwyk found that giraffe bones do not contain more calcium and phosphate than is found in buffaloes, but that the strength of the bones comes from their shape and, in particular, the thickness of the



bone walls of the leg bones. Nevertheless, the rate at which calcium and phosphate must be accumulated suggested that giraffes must have special sources of these minerals. An obvious candidate was bones, as giraffes display osteophagia, the bizarre habit of chewing bones, more frequently than any other ruminant. It is especially prominent in mature pregnant female giraffes and when browse nutritional levels are low between May and September. The hypothesis that bones are the source of minerals was studied by Ian Bredin, who was awarded an MSc for his work. He studied the entirely logical proposition that ingested bones are dissolved in the chemical environment of the rumen, thus freeing the minerals for use by the giraffes. However, Bredin showed for the first time that bones do not dissolve in the rumen and so this source of minerals is not available to giraffes nor, probably, to any other ruminant either. Another conclusion was that the source of minerals most likely is *Acacia* sp, which appears to have co-evolved with giraffes. However, ecological research remains to establish the validity of this idea and the connections that might indicate co-evolution between giraffes and acacias, especially with regard to the importance of nutrition.

An ambitious sequel to these studies has been a quite outstanding attempt by Brand van Sittert to describe the growth patterns of giraffe bones, a study which on completion will earn Van Sittert a PhD. This project has been made possible by the extraordinarily generous support of the personnel of the Bubye Valley Conservancy in southeast Zimbabwe, where giraffes have to be culled for management purposes each year. Since 2006, this conservancy has been the giraffe research programme's source of research material and the key to its ongoing success. Van Sittert has collected and analysed in meticulous detail the anatomy of each vertebra (the axial skeleton) and the leg bones (the appendicular skeleton) obtained from 50 giraffes ranging in age from foetuses to mature adults. It is a monumental study that is unlikely to ever be repeated. Van Sittert argued against a recent suggestion that the giraffe has eight cervical vertebrae and agreed with previous workers that the elongated neck is achieved within the mammalian constraint of seven cervical vertebrae. This is achieved through a significantly higher growth rate in cervical vertebrae and the function of the seventh cervical vertebra being incorporated into the first thoracic vertebrae, effectively 'adding' a vertebra that can contribute to neck elongation. He also found that elongation of cervical vertebrae follows a unique pattern and is triggered at birth by an unknown mechanism, as prior to birth their growth rate is the same as all the other vertebrae.

Another outcome of this study was to show that the sexual selection theory for the origin of the giraffe's long neck is false. This theory proposed that a long neck is the result of selection for long strong necks in male giraffes who use them to obtain reproductive dominance. An analysis of the data collected for the

skeleton study has shown very clearly that there is no difference between the growth patterns of the neck in male and female giraffes and that the necks of female giraffes in fact grow faster and are longer than they are in males, although not as heavily muscled. This study was highlighted in *BBC Earth News* in May 2009.

At the same time that the skeletal data was being collected, a number of other students – in particular Carl-Heinz Moeller, David Roberts and Kyle Pears – were gathering extensive data on the structure of the giraffe's heart and blood vessels and the trachea (windpipe) and lungs. An analysis of the data has resulted in a publication that has defined the anatomy and functions of the jugular valves in giraffes. Another analysis resulted in the most comprehensive description to date of how the structure of the walls of the heart change as the neck elongates in order to provide the high blood pressure necessary to ensure adequate blood flow to the brain. This research was featured in *BBC Earth News* in November 2009. The mechanism that controls the blood pressure of giraffes was further elaborated on in collaboration with Prof Julian Paton at the University of Bristol and Prof John Dickinson at the University of London in the UK. This analysis suggested that a single unifying thesis for the origin of the physiological high blood pressure in giraffes and the pathological hypertension in man was that a central blood pressure sensor existed in the brain and regulated blood pressure to ensure adequate brain blood flow. Many new possible causes and avenues for the treatment of human hypertension have been opened up by this synthesis of ideas.

Similarly, the data has allowed the description of the changes undergone by the respiratory system as giraffes grow. Clearly, the long neck imposes complications for the flow of air to the lungs, and the shape of the giraffe's thorax (arising from the need to provide a stable platform for the articulation of the neck) results in much smaller lungs than expected. Giraffes appear to have overcome these difficulties by having a much narrower trachea than expected, thereby reducing the amount of air caught up in the trachea at any moment, and by having unique lung properties that allow adequate gas exchange despite a relatively small volume of lung.



These changes seem to impose limitations on exercise, as airflow is restricted by a narrow windpipe.

Another current project that is nearing completion is related to whether a selection pressure for a long neck in giraffes is to improve vigilance. Giraffes' vigilance is unequalled by other ruminants and is legendary in game ranger talk, and the team is examining vision biology by measuring the structure of skulls in giraffes and comparing these with those of wildebeest and buffaloes. The eyes are also being examined histologically to determine if there are any retinal differences between the species. It seems from these earlier comparisons that giraffes may well have an advantage provided by skull structure, enabling a much broader scope of vision in giraffes than in the grazers that are much closer to ground level.

While further study of giraffe biology continues, the programme is expanding into new directions under the enthusiasm of new students coming into it. Similar studies to those done on giraffes are underway on wildebeest and buffaloes to show not only the growth patterns of those animals, but also how they differ from those in giraffes. More ambitiously is the possibility of studying okapis. Okapis are the nearest living relatives of giraffes, but also have the anatomy of a giraffe ancestor that lived 12 million years ago. In other words, okapis are "living fossils". Studying okapis could therefore open a window into how giraffe physiology may have evolved in a way that is not possible in any other mammal.

The programme continues to attract bright enthusiastic students who are the essential ingredient of any successful research programme. The success of the giraffe research programme is shown by the more than 40 publications that have resulted, the 10 students who have so far obtained higher degrees by studying giraffe biology, and the several more who are



obtaining or are in the process of obtaining higher degrees. It is safe to say that the programme represents the largest single store of giraffe expertise to be found anywhere in the world.

An important feature of the giraffe research programme is its ability to attract young veterinarians into research. So far the programme has produced two MSc graduates. Dr Van Sittert was awarded a Maberly Scholarship and is now registered for a PhD. He is studying the growth patterns of the giraffe skeleton. His first publication on this topic will appear in 2010.

Research articles appeared in nine accredited publications in 2009, including *Transactions of the Royal Society of South Africa*, the *South African Journal of Wildlife Research* and the *Journal of Zoology* (London).

World-renowned genetics expert presents a special lecture at the Faculty of Veterinary Science

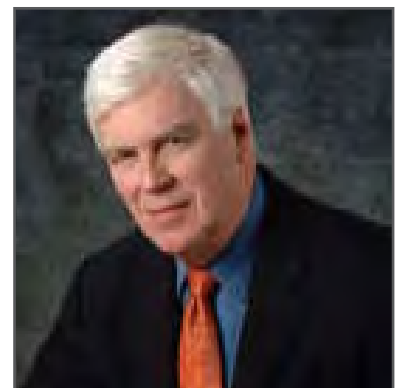
Dr Stephen J O'Brien, Head of the Laboratory of Genomic Diversity of the National Cancer Institute in the USA, presented a special lecture at the Faculty of Veterinary Science on 9 July 2010. The title of the lecture was *A moving landscape of conservation genetics in mammals*.

Dr O'Brien, who visited the faculty at the invitation of the head of the faculty's Veterinary Genetics Laboratory, Dr Cindy Harper, is recognised for research contributions in human and comparative genetics, evolutionary biology, HIV/AIDS, retrovirology and species conservation.

He is the author and co-author of over 650 publications, including the highly acclaimed book *Tears of the cheetah: and other tales from the genetic frontier*. Some of his noted achievements include the

description of the first human gene to influence HIV-1 infection and AIDS progression, annotation of the feline genome, documenting the epidemic prevalence of FIV among wildcat species, defining new species of orangutan, clouded leopard and elephant, and developing the

discipline of conservation genetics by describing the remarkable genetic uniformity of the African cheetah, a prelude to the genetic assessment of endangered species.



Veterinary education in South Africa: The classes of 1938 & 1939

RD Bigalke

Secretary: Veterinary History Committee of the South African Veterinary Association

The Class of 1938

The photograph of the Class of 1938 (on page 8) is the customary pregraduation one on which the presumed Acting Dean, Prof Dr G de Kock, and head of the hostel, HPA de Boom, feature with five of the six graduates. At this stage Prof Dr PJ du Toit was the dean of the faculty. His absence can probably only be ascribed to one of his many overseas visits.



Johannes Fuch Fick was born on 10 September 1914 in Christiana and obtained his BVSc degree in 1938. He subsequently spent his entire career in the civil service, first with the Division of Veterinary (Field) Services and then doing duty as a state veterinarian at East London and Umtata. However, in 1994

he decided to join the British Colonial Veterinary Service and was posted to Swaziland as government veterinary officer. In 1958, he was transferred to Bechuanaland (now Botswana) where he was promoted to divisional veterinary officer and placed in charge of the Western Division, stationed at Maun and Lobatsi. He retired from the Colonial Service in 1962 to rejoin Field Services stationed at Kokstad, but was transferred to Umtata in 1963, where he served until 1965. From there he was transferred to East London. He died in service on 26 June 1972 at the age of almost 58.

Christiaan Frederick Beyers (Hoffie) Hofmeyr was born on 15 August 1916 in Pietersburg (now Polokwane). After qualifying as a veterinarian, he joined the Division of Veterinary (Field) Services as a state veterinarian and was posted to Umtata in the Transkei, where he met his future wife Brenda (née Munro). They had three sons and a daughter.

After a transfer to Rustenburg, Hoffie opened a private practice in Pretoria. Over the next 15 years he developed his practice into one of the finest in this country. Even as a practitioner, he specialised in surgery, raising the discipline to a professional level not reached by any of his predecessors or contemporaries. While still practising, he ran the ambulatory clinic of the Onderstepoort faculty on a part-time basis.

Hoffie was appointed professor and Head of Surgery at the faculty in 1958 and built up his department to one that could compete with the best in the world. In 1969, he became part-time dean of the faculty and in 1976, he was appointed as its first full-time dean. He was instrumental in introducing

postgraduate, specialist, mainly clinical MMedVet and BVSc(Hons) degrees in a large number of disciplines, as well as a very successful diploma course in veterinary nursing. He was a great protagonist of the faculty's incorporation into the University of Pretoria, which was realised in 1973.

His postgraduate qualifications included an MMedVet (Chir) and a DVSc degree (*cum laude*). He was also awarded a DVSc degree (*honoris causa*) by the University of Pretoria in 1990 and an honorary doctorate by the University of Asuncion, Paraguay, in 1980. He was author or co-author of more than 100 scientific publications and also wrote a popular book on the life of a veterinary surgeon. After retiring, the Hofmeyr couple moved to George, but later returned to Pretoria, where he died on 14 January 2004 at the age of 88.

Pieter Rabe Mansvelt was born on 27 August 1916 in Parys and matriculated with honours at the Ermelo High School in 1933. He was the first recipient of the much-coveted Theiler Medal as top student in his class. His first appointment was at the Onderstepoort Research Institute, where he was sent to East Africa to help run a vaccination campaign against a serious epidemic of rinderpest. On returning to Onderstepoort, he experienced a personality clash with one of the senior officials, which resulted in his transfer to the Division of Veterinary (Field) Services as a state veterinarian at the Louis Trichardt office, where he stayed for 18 years. Here Pieter married Marion (Maisie) McGregor and the couple had three children, a daughter and two sons, the youngest son dying in infancy. In 1958, he was promoted to regional director of the Transvaal Veterinary Region, transferring to Pretoria. He was finally promoted to Director of Veterinary Services of South Africa in 1972 and retired in 1976 at the age of 60. Shortly after retiring, the Mansvelts moved to East London, where he died on 7 February 1988, aged 72.

Pieter showed a great interest in Nguni cattle, working closely with local animal scientists such as Manie Eloff and Jan Bonsma on the Mara experimental farm where the Bonsmara breed of beef cattle was developed.

Dr GL (Laurie) Muller was born on 27 January 1917 and matriculated at Grey College, Bloemfontein, in 1933. Although he was a member of the 1938 class at Onderstepoort, he apparently had to write a supplementary examination because he only registered as a veterinarian with the South African Veterinary Board (now SAVC) on 31 August 1939. He married Hester Aletta Morgenthal on 5 October 1940 and the couple had four daughters and a son.



The pregraduation photograph features Prof De Kock as acting dean (centre) and Mr De Boom (seated far right), head of the hostel, together with five of the graduates (back from left): Pieter Mansvelt, Laurie Muller, Hoffie Hofmeyr and Buffel Steenekamp, and (front left) George Turner. Johannes Fick is absent.

Having joined the Division of Veterinary Services as a state veterinarian, he was posted to various places in South Africa, such as Kokstad, Umtata and Worcester, as was customary in those days. In 1959, the family moved to Mossel Bay, where Laurie conducted valuable research on the seasonal occurrence of helminth infections in sheep in the George district under the guidance of Dr (later Professor) Richard (Henk) Reinecke of Onderstepoort, obtaining a DVSc degree in 1968 for a thesis based on these studies. In 1967, he was promoted to regional director of the Western Cape Veterinary Region. He resigned from the government service in the early 1970s to concentrate on pig farming and the experimental production of methane from their dung on a property in Agter Paarl. This enterprise was, however, not sustainable and he rejoined the government service in 1988. On his retirement, he moved to Hanover in 1996 to run an ostrich farm until 2001, when he and his wife Hester moved to a retirement village. Laurie was also involved in the activities of his profession, serving as chairperson of the Western Cape branch of the South African Veterinary Medical Association (SAVMA) in 1965. He died on 16 June 2008 at the ripe old age of 91.

NCF (Buffel) Steenekamp was born on 23 February 1915 and matriculated at the Barkly East High School. After qualifying as a veterinarian, he joined the government service for his entire career. He served as a state veterinarian in Kokstad (from 1939), Grahamstown (from 1943), Hoopstad (from 1945), Gobabis (from 1950), Outjo (from

1958), Otjivarongo (from 1960), where his main activity was the control of foot-and-mouth disease in northern South West Africa (now Namibia), and Kroonstad (from 1971). He finally retired in 1984 at the age of 69, having been reappointed after reaching the customary age of retirement and receiving a special award for long-term government service. He died on 27 September 1995 at the age of 80.

He married Dora (Theodora Susanna Ferreira) on 1 November 1941 and the couple had four children.

Sidney George Turner was born on 29 December 1911 in Port St Johns, educated at Dale College and qualified at the Onderstepoort faculty at the end of 1939, having had to repeat one of his final-year subjects. After he qualified, he joined the Division of Veterinary (Field) Services as a state veterinarian. However, in 1944 he decided to go into private practice, joining Dr Jack Boswell in Johannesburg. Later he moved to Pietermaritzburg as a partner to Dr AF Tarr, soon to be joined by Dr BT Paine. George then started a satellite practice in Howick for the Pietermaritzburg consortium before moving to Port Shepstone in 1953 to set up a very large, one-man mixed practice. He was joined at the end of 1967 by his son, Vincent Turner, who had just qualified as a veterinarian. George was married to Natalie Moorhouse. He died in harness, two years after his son joined the practice, on 12 November 1969 at the age of 58.

The Class of 1939

There is no official photograph of the Class of 1939, which consisted of four students. Is it a mere coincidence that 1939 was also the year that World War II broke out?



Andries Adriaan Louw (Pierre, Albert or Boks) Albertyn was born in Aliwal North on 16 December 1917 and matriculated in Phillipolis in 1934. After qualifying at Onderstepoort, he joined the Division of Veterinary (Field) Services as a state veterinarian in charge of districts, in which he had to deal with one or more of the then rampant important scheduled stock

diseases such as East Coast fever, nagana, foot-and-mouth disease, tuberculosis and anthrax. In 1947, he was transferred to the Pathology Department at the Veterinary Research Institute, Onderstepoort, as a research officer.

At the end of 1948, however, he decided to devote himself to public health work, eventually serving this discipline of the veterinary profession with distinction for the greater part of his career. He first joined the municipal service of Johannesburg. His main duties involved the health and hygienic aspects of the 500 dairy farms supplying milk to the city, and safety and quality control of the final product in the laboratory. In 1953, he moved to Cape Town as head of the city's milk control branch. In 1968, he was promoted to Director of the Cape Town Municipal Abattoir in Maitland, one of the largest and most productive abattoirs in South Africa. He was director until 1977, when he retired from municipal service. He was very strict and meticulous in applying the Animal Slaughter Act and its regulations, thus running a well-managed abattoir. His contribution to public health was suitably awarded when he was elected a Fellow of the Royal Society of Health in 1965.

In 1977, he was appointed head of the Provincial Animal Centre in Kuils River. This was a new experimental animal breeding facility that supplied the medical faculties of Cape Town and Stellenbosch with laboratory animals for research purposes. Boks retired to Delft in 1987. He took an active interest in SAVMA matters. He was honorary secretary of the Cape Western Branch of the SAVMA from 1958 to 1960. In 1961, he was elected chairman, serving until 1965, when he was replaced by Dr GL Muller. Boks married Esmé Harvey in 1948 and the couple had three daughters. He died in Cape Town on 20 October 2000 at the age of 83.



Paul Hornidge Brown was born at Trail in Canada on 1 November 1916. In 1924, his parents emigrated to South Africa, where he attended St John's College in Johannesburg. After qualifying, he immediately joined the Division of Veterinary (Field) Services as a state veterinarian and was stationed at Port Shepstone (1939–1940), Umtata (1941–

1942), Bedford, (1943), Flagstaff (1943–1945), Aliwal North (1946–

1948) and Port Elizabeth (1948–1951). He married Lindrea Swift Shone of Bedford, Cape, in 1943 and the couple had two daughters, Pauline and Verrall. In March 1952, Paul transferred to the British Colonial Veterinary Service as a government veterinary officer to the Basutoland Government and was stationed at Maseru. Part of his duties was to improve the livestock in that area, taking a particular interest in the local horses. He was presented with an Arab stallion, Silver Eagle, by the Basutoland Government for his services in improving the Basuto Pony. He left Lesotho in 1963 to practise until 1967 on a part-time basis with his erstwhile 1939 classmate, George Turner, in Port Shepstone. He died on 8 August 1978 at the age of 62.



PP (Piet) Hugo was born on 15 September 1916 in Pietersburg (now Polokwane). He matriculated at the Pietersburg High School. After qualifying at the Onderstepoort faculty, he joined the Division of Veterinary (Field) Services as a state veterinarian and was stationed at Allerton Laboratory near Pietermaritzburg, after which Upington and

Worcester followed. Here he developed a keen interest in horses, doing studwork in the vicinity of Rawsonville.

In 1950, he was transferred to Eshowe, after which he was transferred on promotion to Vryheid. His last position as state veterinarian was at Vryburg. In 1964, he was transferred to Potchefstroom on being promoted to regional director of the Highveld Veterinary Region. Here he was involved in the planning and finalisation of the erection of the local regional veterinary laboratory.

Piet met his wife, Geesje Marie Jansen van Rensburg, while working at Allerton Laboratory and they married on 5 January 1943 at Babanango. The couple had two sons – one dying in infancy – and two daughters. He retired in 1976 at the age of 60 to farm with cattle in the northern Transvaal (now Limpopo). He died in Potchefstroom on 25 July 1994, aged 78.



Walter Heinz Gerhard Schatz was born in Usakos on 4 March 1914 and was educated in Germany, but returned to South West Africa (now Namibia) and matriculated at Swakopmund in 1934. After qualifying from Onderstepoort, he joined the Division of Veterinary (Field) Services in 1940 and was first stationed at the Allerton Laboratory at

Pietermaritzburg from March 1940 to September 1943, when he was transferred to Windhoek. In 1947, he was transferred to Omaruru, but returned to Windhoek in 1956.

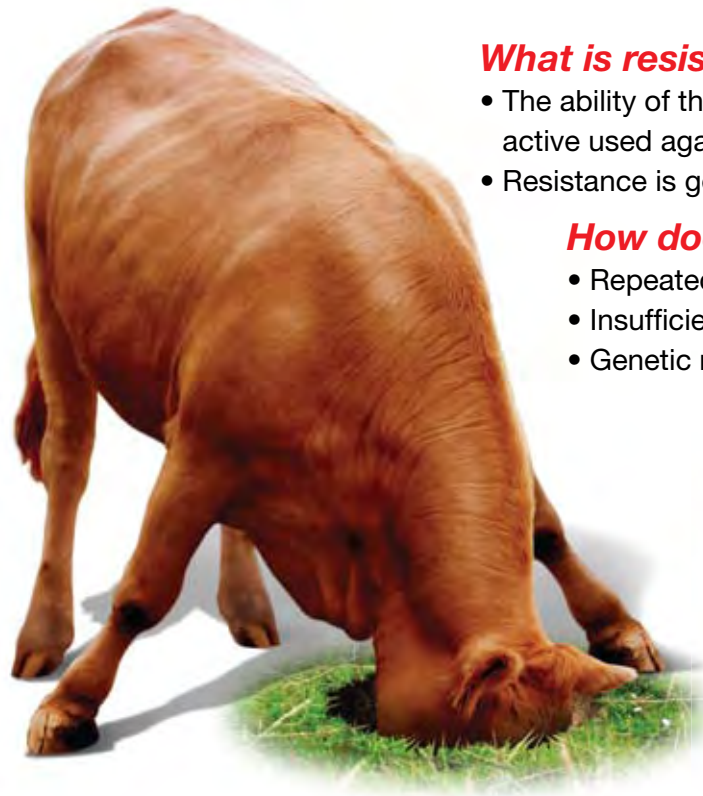
During 1959 he developed a serious illness, which was treated in Germany and later again in Pretoria. However, due to persisting ill health he was transferred to Cape Town, where he died on 16 September 1962 at the age of only 48. He married Liselotte Scherer in 1944 and the couple had three daughters and one son.



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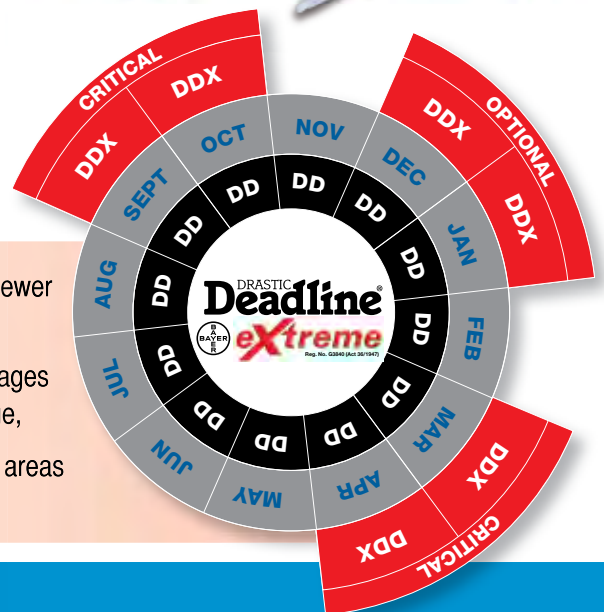
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- Resistance is genetically inheritable

How does resistance develop?

- Repeated use of a specific chemical
- Insufficient strength of a dip mixture
- Genetic mutations of the parasite

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- **September/October - Critical**, more larvae and nymph stages are treated and are prevented from reaching the adult stage,
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OPVSC's "I want to be a vet" initiative a huge success

Nicola Barnard: OPVSC Chairperson 2009/10

The "I want to be a vet" initiative was started by the Onderstepoort Veterinary and Paraveterinary Student Committee (OPVSC) to extend awareness of veterinary science and its related fields to learners from previously disadvantaged communities right across South Africa.

With the assistance of Hills Pet South Africa and the dean of the Faculty of Veterinary Science, Prof Gerry Swan, Florida Veterinary Clinic and Dalvet Veterinary Clinic, the first weekend of this nature was a huge success, and 19 learners from eight provinces participated.

The learners arrived at the Onderstepoort Campus on Friday 16 April and were treated to a typical Onderstepoort sport experience, after which they attended the opening function. The function was also attended by various dignitaries, including the president of the South African Veterinary Council (SAVC), Dr Rebone Moerane, a representative from the Black Veterinary Forum (BVF), the dean of the faculty and numerous faculty departmental representatives. The broad sphere of talent of the veterinary students that spreads much further than the academic field, was portrayed as both the Onderstepoort Choir and Onderstepoort Serrie Girls entertained the guests. The participants were then enlightened on the role of a veterinarian in South African society.

On 17 April, participants were introduced to the skills of basic animal handling in different species of animals, which included dogs, cattle, sheep and horses. The learners were also exposed to the anatomy dissection

of a dog, which forms a large part of the general knowledge veterinary students are expected to have under their belt after the completion of their first BVSc year.

Many of the participants had had limited interaction with animals, especially such a wide variety, before the event and could go back home having ridden a horse for the first time, knowing how to train a dog to sit, being able to effectively identify sheep in the appropriate manner and how to best approach cattle without causing injury to the animals or to themselves.

The purpose of the weekend was to stimulate the prospective students' interest in the veterinary science profession and increase the number of students of colour to ensure that the student body will ultimately reflect national demographics.

After the success of the initiative, it will now become an annual event on the OPVSC and faculty calendar. Through the support of the faculty and other role-players, it is hoped that the initiative will become bigger and that more pupils from across the country will be exposed to the amazing field that is veterinary science.



Postgrad Paraclinical Sciences students **become techsmart**

It was time again for the Department of Paraclinical Sciences' annual postgraduate student meeting and social function on 14 April. This function has become a regular event that is eagerly attended by the postgraduate students from the Pathology, Pharmacology and Toxicology, and Veterinary Public Health sections, along with students enrolled in the Phytomedicine Programme.



Supervisors and students from the Department of Paraclinical Sciences.

In the past, the event was presented in different formats, such as progress reports by the students and presentations by experts on subjects such as effective PowerPoint presentations and scientific writing.

This year, a day-long computer-based workshop, Biomedical Data Analysis in Excel 2007, was presented by Prof Vinny Naidoo and Dr Leon Venter and was attended by 47 postgraduate students. It was held in the computer laboratory in the Sir Arnold Theiler Building.

The aim of the workshop was to demonstrate, hands-on, the basic features of Microsoft Excel 2007 and how to manipulate data in this software environment. Lunch in the cafeteria was followed by an introduction to the basic statistical tests used in biomedical research and analysis of data sets.

The workshop was not only attended by postgraduate students, but even some of the supervisors and senior academic staff members got stuck in behind the workstations!

The Department of Paraclinical Sciences hopes to present this workshop again in the future to interested members of the academic staff and students of Onderstepoort.



Students and supervisors alike coming to grips with Excel and statistics.



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OP's got culture!

Michaela Randall: Culture HK



The Serrie Girls of 2010: Dancers in blue and band members in red.

This season's cultural activities started out with a Spring Day beagle and greyhound walk. The students hit it off around Kaalplaas enjoying the fresh spring air and the sound of panting beagles as they broke in their new collars sponsored by Rogz. The next big event was Serrie, which took place on 28 April. A fantastic team of 44 dancers and a band of six members took the main campus by storm with its weather girls-themed performance. It consisted of a 10-minute mash-up of songs to which the girls sang and danced. This was performed 11 times in one evening for all the men's residences. Despite great feedback from the judges, they unfortunately did not make it through to the finals that took place later that week. Despite this upset, the girls all did a fantastic job showcasing the immense talent that OP students have.

Next on the agenda was the art exhibition, which took place on 11 May. An awesome range of artwork was on display this year, and the external judges could not believe that vet students found the time or energy to produce work of such a high standard. An awesome evening was had by all, with the OP Choir and an external band keeping the audience entertained. If you missed these... not to worry, as OP culture has much more to come this year, so keep your eyes and ears peeled!



Matthew Kopke giving a lift to a beagle in need.



The new faces of OP men's hockey

Onderstepoort has always been known to field competitive sports teams and the men's hockey team is no different. The year 2007 was a season of transition with many new players coming through the ranks and experienced campaigners leaving. The team did not make it to the semi-finals for the first time in a few years, but 2008 was going to be different.

With just one glitch to Taaibos on the road to the knock-out rounds, the semi-final was particularly memorable and showed true OP fighting spirit as the first-time goalkeeper saved three penalty flicks in extra time and helped secure OP a place in the final. The final was narrowly lost 2-1 against an experienced and unbeaten Taaibos side.

Due to the team's performance in 2008, expectations for 2009 were high and again, the team was more than ready. The path to the play-off games was perfect, winning every game without conceding a single goal. In a closely contested semi-final, OP came through in extra time to beat Olienhout, and was faced with playing Kollege in the final, which promised to be a humdinger. The sea of green filling the stands showed how proud OP was of the team's achievements over the past two years. OP fought hard against a very well-polished Kollege team, but unfortunately lost 2-0. The team would like to acknowledge all its supporters, as well as Merial for its generous sponsorship of the team. Without these, the team would not have achieved as much as it has.

More soccer fun...



Faculty convenes inaugural Advisory Board meeting



Some of the members of the faculty's Advisory Board during their visit to the faculty. From left: Dr Clive Marwick from the South African Veterinary Association, Mr Nico Schutte from AgriSA and Dr Ndebele from the Black Veterinary Forum.

A first meeting of the newly commissioned faculty Advisory Board took place on 8 July 2010 in the telematic facility of the faculty.

This very successful meeting, chaired by the Vice-Principal for Teaching and Learning of the University of Pretoria, Prof Nthabiseng

Ogude, was attended by 13 members or representatives. Apart from the dean, Prof Gerry Swan, the deputy dean, Prof Morkel Terblanche, and departmental heads, the board consists of representatives from the Department of Agriculture, the South African Veterinary Association (SAVA), the Agricultural Research Council (ARC), the Black Veterinary Forum (BVF), AgriSA, Wildlife Ranching South Africa (WRSA) and private practice.

The meeting acknowledged the fact that this faculty is a national asset and that it is the only veterinary faculty in the country. It was generally accepted that the advice of the board should be directed towards the strategic direction of the faculty by ensuring frank and constructive debate, serious introspection and finding ways to address the concerns, if any, of stakeholders. Serving diverse needs, food safety and transformation in general were also emphasised as points of departure for the board, while the development and growth of the faculty in terms of sustainability and alignment of priorities and affordability are ultimately seen as crucial elements in serving this notion.

According to the dean, the appointment of the Advisory Board is a very important milestone in the history of the faculty and by its very nature represents important stakeholders that will provide the faculty with relevant advice in terms of its endeavour to be locally relevant.

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• Police Pretoria North	6022	10111
• Ambulance: - Rosslyn	6003	012 541 3421/6
- Pretoria	6002	012 326 0111
• Fire Brigade (Wonderboom)	6024	012 543 0335
• Tygerberg Poison Centre	6179	021 931 6129
• Emergency Medical Help: OP		
- Sr Amanda Hamman (VAH)	8064	083 269 8874
- Prof Frik Stegman (VAH)	8279	8148 (operating theatre)
- Mr Chris Neetling (Feed Store)	8004	8004 (roving phone)
- Prof Ken Pettey (Ethology/Physiology)	8449	082 882 7356
- Psychologist at OP (Wednesday), Voula Samouris	8243	083 754 5427
- Psychologist - Main Campus, Rina Buys	6127/6151	082 908 3688
• 24-hour University crisis line		0800 00 64 28
• Head of OP Residence:		
- Dr Jan Myburgh	8350	082 392 2534
- Mrs Susan Myburgh		083 235 6778

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