Innovation and Leadership

Professor Reuben Rose,
Dean, Faculty of Veterinary Science

Just before Christmas, the class of 1950 met for their 50 year reunion and it was a privilege for me to share their memories and hear their stories.

This was the first large graduating year (more than 100 graduates) after the Second World War, with many ex-servicemen as part of the post-war intake. At that time, the Sydney Faculty was the only veterinary school in Australia or New Zealand and the 1950 graduates went on to have a huge influence on animal health in Australia. Graduates of the 1950 class were actively involved in initiating the brucellosis and tuberculosis eradication schemes, providing academic leadership in veterinary schools and setting up practices in rural and urban areas where veterinary services had not previously existed. As I heard about the important roles played by this group of veterinarians, I was struck by an unstated but what I regard as extremely significant role for our Faculty: to foster and develop leadership and innovation in veterinary science.

In the business community there is now widespread recognition that the development of leadership skills is an essential business strategy. Leadership development and innovation are two of the critical areas of investment for our Faculty, as we adapt to a very different higher education environment. Our future success and that of the profession will depend on our ability to compete globally and adapt our traditional skills to new areas. Our new curriculum, which emphasises a broader range of abilities than the former curriculum, has been enthusiastically endorsed by Year 1 students, who have confronted a range of complex communication and planning issues early in their course. We have also initiated a leadership development program for senior veterinary students, supported by Pfizer that emphasises areas such as the capacity to work in teams, strategic thinking, communication and project management. These skills also are being actively developed within the Faculty itself.

At a recent workshop that I facilitated at the annual meeting of Rural Land Protection Board veterinarians, these types of skills were identified as crucial ones for veterinarians working with production animals in the future. There was agreement that future success would depend on veterinarians having a holistic view of agriculture, epidemiological and business skills, knowledge of information systems and their application to production animals, communication, extension and conflict resolution skills, understanding of economics and production systems applied to world trade and an understanding of key environmental issues. In the information age, the ability to adapt to change, provide leadership and innovation will be core competencies.

Our Faculty seeks a leadership position in the key areas of animal health and welfare to provide a new context for veterinarians seeking roles in the global knowledge economy as well as the emotional health of society. We need to continually examine trends and lead and adapt our undergraduate and graduate programmes.

In 2000, the Faculty and the Veterinary Science Foundation has done extensive strategic thinking to plan for the future. 2001 is the sesquicentenary (150 years) of the University of Sydney and 90 years of continuous production of internationally recognised graduates of our Faculty. I believe that it is time to look forward to position the Faculty and the veterinary profession for the next 100 years. It is clear that simply relying on government support will not allow the Faculty to continue the spirit of knowledge creation and innovation in veterinary science, essential for the future of the profession.
Innovation and Leadership (continued from front page)

The revitalised Veterinary Science Foundation will assist our strategy of leadership and innovation via six major initiatives identified as a result of our planning. These will require substantial external funding and support and we intend to embark on a major fundraising campaign in 2001. In summary our major projects include:

• A new Small Animal Medical Centre at the Sydney Campus. This project, our number one priority, seeks to develop a new world-class small animal centre to promote education and training focused on high quality care of companion animals. Initiatives will include building of a specialist feline centre, a critical care centre, a radiation/oncology centre, a surgical skills centre and an upgraded diagnostic imaging centre, with CT or MRI capabilities.

• A new Large Animal Medical Centre at the Camden Campus. This initiative seeks to develop a state-of-the-art equine centre providing diagnostic and treatment facilities to support the horse industry via education, postgraduate training and knowledge creation.

• Development of a Teaching Innovation Unit - facilities and personnel to develop innovative teaching and learning material, including material delivered "on line", to support student learning and curriculum improvements.

• Establishment of a Wildlife Health and Conservation Centre. This new centre will enhance knowledge, understanding and medical treatment of native animals. The Centre will be based at the Camden Campus.

• Development of a Production Animal Health Unit. Key issues facing the production animal industries in the future will revolve around certification of quality of product and freedom from disease. This unit will position the Faculty for new opportunities in feed safety, epidemiology and international trade.

• Support for a Veterinary Research Unit. The Faculty has a long tradition of leadership in animal science research, particularly reproduction, immunology, nutrition and genetics. Our future as a Faculty depends on our capacity to be research leaders, attracting competitive research grants. The focus of funds would be to support postdoctoral fellow and PhD students to undertake relevant research.

This is an ambitious project list but I believe that we must think expansively to ensure the future of the veterinary profession. The desire for knowledge - particularly how to find and utilise information effectively - will be an increasingly valuable commodity. More and more, knowledge and learning will be created through partnerships. We will seek to do this with the community of veterinary practitioners as well as major corporations who are in the business of knowledge creation and innovation, with an international focus.

I am excited about the task ahead of us and will provide further details in the next issue of Roundhouse.

Veterinary Students and the Olympic Experience

Ariane Lowe

Memories of the Sydney 2000 Olympic Games are still fresh. It was an exciting and colourful time, capturing international attention and highlighting Australia. A handful of veterinary students from Years II – V were privileged to be selected as veterinary assistants to the Veterinary clinic at Hornsby Park, the equestrian venue.

The Sydney University students included Merrin Hicks, Lesley Hawthorn, Robin Bell, Fiona Napier, Lisa James, Jenny Smith, Marcus Serrano, Kate Ireland, Rebecca Jenner, Ariane Lowe, Francette Geraghty and Mark Schembri.

Four students from the University of Melbourne, and one from the University of Cambridge were also involved in the equine clinic.

Organisation for student participation began last year, coordinated by Dr Jennie Hodgson. Training started in September of 1999 with the International Three-Day Event held as a trial in the lead up to the Olympics. Students worked in the ten-minute box, becoming familiar with the routine and timing that would be so important in 2000. The Olympics still loomed distant in the future, but the buzz of the helicopters overhead was a reminder that this was going to be an event under the international spotlight.

These students were soon back at Hornsby Park in August this year, helping with international horse arrivals for quarantine prior to the opening ceremony. The animals were a stunning sight, as were the container loads of equipment that accompanied each team. It was a fascinating experience watching the veterinary clinic evolve from its quarantine role to the treatment area on competition days. The clinic was an enormous, green bubble structure complete with state of the art equipment. Students were on site 24 hours a day, with two people on each 8 hour shift. Up to 260 horses were monitored hourly on the night shift.

The official responsibilities of the veterinary assistants included having a thorough knowledge of equestrian sport, working within a large team, customer service, assistance to athletes, maintaining a clean and functional and a thorough knowledge of drugs that could be administered in the lead up to competition time.

It was an exciting venue and work area. The individual and team cross country days were a hive of activity, particularly in the ten minute box where students helped obtain vital, maintained records of the compulsory veterinary checks, and monitored the timing. At the end of the day it was also a very social environment!

After the preparation, security clearances, bomb checks and training for the event, it was a flash of excitement that finished almost as quickly as it began. The Sydney 2000 Olympics have left memories for each of us. These students were privileged to not only have access to fantastic facilities but to also work with world class equestrian specialists from all corners of the globe. It was an inspirational experience, working with talented veterinarians, horses and riders.

Fun and Games

Jennie Hodgson

Well, the "best Olympic Games ever" are now over, and we have all settled back into our post Olympic lives. However, a few members of staff, and 12 veterinary students at the University of Sydney have some unique memories of the Games and, in particular, their time spent at the Equestrian Events.

The veterinary coordinator for the Sydney Olympics was Dr Nigel Nichols (from Quirindi Veterinary Hospital), who organised a purpose built clinic, located in the Sydney International Equestrian Centre, to house a state-of-art veterinary hospital. The team of volunteer veterinarians manning the hospital came from the USA, the UK and many different Australian states. They ran the equine hospital, as well as assisting the veterinarians of the individual equestrian teams from around the world.

The hospital was functional from the time the first of the 260 horses flew into Australia (4 weeks before the Games began) to the last day of events, a total of 6 weeks. Thus, the time commitment for this group of veterinary volunteers was considerable. Professor David Hodgson, from the University Veterinary Centre Camden, assisted in the clinic on weekends and during the equestrian events.

The diagnostic laboratory, situated within the veterinary hospital, also involved Sydney University personnel.

The pathologists and technicians from the University Veterinary Centre Camden (Jennie Hodgson, Allan Kessell, Kate Boweard and Denise Oliff) and Angela Begg of the Scone Veterinary Diagnostic Laboratory managed the laboratory for the duration of the Games. It was a hectic time, and many a day was submerged in blood samples, tracheal washes, and the occasional joint fluid sample. However, there was also ample time to observe some of the world's elite equestrian athletes and their riders. Meeting and working with the volunteer and team vets was a highlight for the laboratory staff.

It was a time that all involved will remember with great fondness. And seeing first hand the Three Day Event team win gold for the third time is something we will always remember!!!
VSF ACTIVITIES

Jill Maddison

The Veterinary Science Foundation has been operational for approximately nine months. In that time we have achieved several milestones. We now have an office, located in the JD Stewart Building which has facilitated the day to day functioning of the Foundation. Our web site has been developed (www.vetsci.usyd.edu.au/foundation) and launched. There is still a lot of work to do on it but the most important aspect, a class contact list and chat room for our graduating class of 2000, is an integral part of the site.

The Foundation has developed and refined its five year vision and one year business plan to compliment the vision for the Faculty that has been developed by the Dean and Faculty members. The VSF is committed to assisting the Faculty achieve its vision.

Activities during the year that have been organised by the Foundation to build and strengthen the Faculty's relationship with its alumni, the veterinary industry and our Faculty Friends have included Vet Week in August, a thank you BBQ for practitioners who host our students for extramural clinical practical work and a dinner for benefactors and Friends of the Faculty. Events in the planning stages include a Pet Fancy Dress Party to launch the Pet Health Trust and the Alumni Dinner on March 17th (all alumni will receive a personal invitation in February).

Vet Week

Vet Week was hosted by the Veterinary Science Foundation for the faculty from August 9th-11th and was magnificently supported by industry. ABC Radio Science Show presenter Dr Robyn Williams opened the event with an exploration of the remarkably warm bond between humans and their pets. "They are not child substitutes," Dr Williams joked. In contrast to faithful and comparatively clean pets, "children are repellent things. They spend the first seven years mewing, puking and pooping and the next 10 years demanding things which are either impossible or illegal."

Other guest speakers included faculty alumni Professor Graham Mitchell, University medallist and an Officer in the Order of Australia; Julie Summerfield, presenter of television show Pets Behaving Badly; veterinary practitioner, actor and author Tony Sheldon; a youth ambassador for development in Thailand, Natasha Lee; Warwick Lamb, who has established a large multi-person specialist practice in Sydney and veterinarian Michele Cotten who ran a small animal practice in Saudi Arabia.

Gold sponsors, Bayer Animal Health and Ralston Purina and Silver sponsors, Hills, Intervet, Lyppards and the Postgraduate Foundation participated in a magnificent trade display in the Veterinary Science Conference Centre that allowed our students to gain further knowledge (and goodies) about each company's products and services. Bronze sponsors, Novartis, VetMed, AVA NSW, Merriel, Guild Insurance, The Veterinarian and CSL supported a variety of prizes for student competitions including art work, cartoons, music and creative writing. Pewter sponsors Virbac and Boehringer Ingelheim were also generous in their support of Vet Week.

Family and friends of student prize winners attended an Awards ceremony which was followed by an inspirational JD Stewart Memorial Oration from Prof. Graham Mitchell AO whose theme was "From Vet School to Collins Street - a pilgrims progress". Prof. Mitchell is recognised as one of Australia's leading biological scientists. To add to the numerous honours he has received during his illustrious career (including being appointed an Officer in the Order of Australia for services to science) he received the magnificent JD Stewart memorial bust created by another alumnum, Bill Chalmers. The oration was generously supported by Guild Insurance.

Other activities included the Staff vs Student Debate. The proposition for the debate was "In animals, stiffness is a good thing". The staff team, who were forced to take the affirmative side, consisted of Reuben Rose, Paul Hopwood and Jill Maddison. They valiantly attempted to win over a completely biased student audience and despite presenting what was clearly the superior argument, failed to win the debate judged by audience acclamation.

A dog obedience demonstration was another highlight of Vet Week as well as a stunning performance of medieval music by several first year students. As Prof. Rose commented - "In my day vet students didn't even know how to spell medieval music, let alone play it!" A more contemporary form of musical entertainment was provided by student band Penny and the Vets at the Vet Soc barbecue (sponsored by AVA NSW) following an auction to raise money for the John Mercer student scholarship fund. Glen Shea had generously offered to shave off his hair and beard if sufficient funds were raised but unfortunately the magic amount was not reached.

Vet Week is a unique opportunity for the Faculty to host several fun and informative events for our students, veterinarians, industry, and family and friends and to showcase the Faculty. While, as with all new programs, the actual format of Vet Week needs some fine tuning to maximise the benefits and interest for all participants, we look forward to Vet Week 2001.

Extramural "thank you" BBQ

The "Thank You BBQ" for practices that host our fourth and fifth year students during their extramural prac work was held in November. Kindly sponsored by Bayer Animal Health, the guest speaker was Chris Clarke, an alumnus of our Faculty who has made a seriously successful career as a business advisor and speaker. After enjoying a gourmet BBQ at the Veterinary Science Conference Centre, Chris informed, entertained and challenged us all with his presentation entitled "Successful practice on the edge of chaos - an examination of some of the key success factors in a rapidly changing world." The Faculty is indebted to the role that practitioners play in the education of our students and the BBQ was a small token of our appreciation for their efforts.

The 2001 Veterinary Alumni Dinner

Saturday March 17th, 7,30 pm
The Great Hall, The University of Sydney
Guest speaker: Peter Fitzsimons
MC: David Church
Enquiries: 9351 8026
Proudly supported by Provet

A New Structure for the Faculty of Veterinary Science

The Faculty has been giving a lot of thought to how we can be most effective in our organisational structure, given diminishing resources. After considerable discussion and planning, in December 2000, we decided to abolish the former departments and become a single school Faculty. The aim of the restructuring is to focus our assets and improve our management systems. The new structure will have the following benefits:

• Facilitates our administrative arrangements in relation to finance and general administration to ensure that the Faculty operates as efficiently as possible.
• Provides the maximum flexibility to form groups of like-minded staff who wish to collaborate in research or some other activity.
• Enables the Dean to be more externally focused to promote the interests of the Faculty in the University community, to research-funding bodies, and to external supporters and alumni.
• The new structure is organised around the core functions of the Faculty: teaching, research, staff and student administration and clinics. Teaching, research and staff and students have Associate Deans appointed to oversee these areas across the Faculty, general administration is supervised by the Faculty Manager. The clinics at Sydney and Camden have a General Manager who commenced in early January 2001 and has a background in financial management. This group, together with the Dean and Pro-Dean, will run the day-to-day operations of the Faculty. We are confident that the new structure will place the Faculty in a strong position to provide professional leadership and to meet our core function: producing high quality veterinary graduates and new information.
1950 GRADUATES REUNION

Rex Butterfield & Bill Gee

This is the chapel - here my son
Your father thought the thoughts of youth
And heard the words that one by one
The touch of life has turned to truth

These famous words of Sir Henry Newbolt may have epitomised the reunion of the veterinary graduates of 1950, meeting after half a century on the once hallowed ground of the horse surgery lawns now occupied by the splendid new Veterinary Conference Centre.

The graduating year of 1950 had 94 survivors from a post-war group, which at its peak contained 125 students and severely strained the staff, premises and logistical resources of the Faculty. At that time it had to cope with all undergraduates from Australia and New Zealand.

Advancing years have unfortunately claimed an unfair proportion of the graduates, most of whom were mature-age returned servicemen. Nevertheless, an enthusiastic 56, including partners, came from New South Wales, Queensland, Victoria, South Australia and New Zealand to meet and reminisce at the Vet School on 11 December. Between them they represented about 2000 years of veterinary experience.

Dean Reuben Rose eloquently led the Faculty's presentation on the new order of things following Associate Professor Paul Canfield's account of historical milestones particularly pertinent to the assembly. Perhaps inartlessly, he supplied us with our official exam records which made us realise our good fortune through the years at the hands of compassionate examiners. Dr Jill Maddison, Director of the Veterinary Science Foundation, outlined plans for the future for new buildings and resources desperately needed by the Faculty to maintain its place as a world leader in veterinary science delivery. The Veterinary Science Foundation graciously assisted in the publication costs of the CVIs prepared by and sent to all 1950 graduates we could track down. These should represent a treasure trove of anecdotes and folklore for future veterinary historians.

A brief tour of the precinct, thoughtfully led by staff members, was followed by lunch at the Centre.

New Vet Scope for the University Veterinary Centre

Notes for the 1950 class reunion

Jim Whitem

I have no doubt that we must have taught you something, and something worthwhile, judging by the only slightly exaggerated mini-autobiographies in this valuable book. I have read it from cover to cover. I must say that the individual articles are a good deal more interesting than were your pathology examination papers, at least as far as I can remember them.

I would like to attempt a partial synthesis of your achievements, especially exploits in northern Australia, in relation to pleuroneumonia, brucellosis and TB. I do not remember whether there were pleuro out Takes in NSW when you were students- but I suspect that there were and that we would have shown you fresh lesions in lungs from Homebush abattoirs. It was just as well, for it was not long after graduation that Dave Mahonby found himself in the field dealing with outbreaks in Queensland and N.T.

Bryan Woolcock found himself in a similar situation in Queensland and saw the last pleuro case there. He went on to manage the BTEC program in that huge and cattle-populous state.

Others of you were similarly blooded in the southern states. A few years later, some of you worked with me in the Territory and made huge contributions to the success of the eradication campaign, which itself led directly to formation of the Commonwealth & States Veterinary Committee, and later to the Bureau of Animal Health.

Goff Letts was the first among equals - as Assistant Dal later Dal, CVO, and so on. He made a major contribution in opening up the feral cattle & buffalo problems on the sub-coastal plains- which became important in the BTEC campaign, and was in the chair- or the field, I am not sure which, when the last Australian case of CBPP was discovered in a beast from Carlton Downs or Lejune. Bruce Paine was also there.

Alf Hulme, working in Alice Springs, was the first colleague who raised the interesting question of priorities - 'Jim you should be eradicating TB, not pleuro.' He first recognised the size of the problem on stations like New Crown, in the Alice Springs District.

Barry Hart, working on Rockhampton Downs, was the first colleague to recognise clinical brucellosis on the Barkly Tableland, long before BTEC evolved. He deserves a monument.

Last but not least, after my time in the territory, Bill Gee became CVO there, and began a career of veterinary public service which culminated in leadership of the BAH and successful conclusion to the BTEC campaign.

In summary, members of the 1950 graduating class have left their mark on this nation in animal health and public health. Cattle exports are no longer plagued with restrictions due to major bovine diseases, while in the human population undulant fever and Potts disease have disappeared. As my friend Frank Mulhearn of the USDA put it 'where have all the hunchbacks gone'.

Ladies and gentlemen, I salute the 1950 graduating class.
Merial survey demonstrates winter flea prevalence

During the winter of 2000, thirty-three veterinary clinics throughout Australia worked with Merial to survey the incidence of fleas on dogs and cats. The aim was to establish the proportion of cats and dogs with flea burdens during the winter period.

Preliminary results identified that a surprisingly large percentage of the Australian dogs and cats studied, had evidence of flea infestation.

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<th>Preliminary results</th>
<th>% of pets with fleas and/or flea dirt</th>
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<tr>
<td></td>
<td>Dogs</td>
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<tr>
<td>Victoria</td>
<td>38%</td>
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<td>Western Australian</td>
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<td>New South Wales</td>
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<td>28%</td>
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To be eligible for inclusion in the study, pets must not have received a flea treatment during 8 weeks leading up to the flea examination.

As the cooler months approach, it is important to remind clients that fleas continue to pose a major challenge to both dogs and cats. FRONTLINE® kills fleas fast and keeps on killing fleas for at least a month, even if pets get wet.

These results indicate that cats are a major source of fleas and contribute significantly to household flea infestations. This is consistent with research from both the UK and Japan, where cats were found to be more likely than dogs to carry flea burdens during winter.

The first year experience

The year 2000 has been an exciting milestone for the Sydney University Veterinary Science course. As first year vet students in the year 2000 we have had the privilege of experiencing a curriculum that has been redesigned to meet the changing expectations and skills demanded of the modern veterinarian.

The focus of the new course has shifted away from traditional and increasingly outdated pure science subjects towards a more practical approach. For year one, this has meant the end of physics, a revamped and relatively pain-free approach to biochemistry, and the introduction of clinically relevant (and interesting) courses such as Professional Practice. The introduction of veterinary physiology as a first year subject means that we are learning to make relevant clinical observations about the animals we encounter.

In first semester, we found ourselves conducting a clinical study on core temperature and heart rate of dogs in various veterinary contexts. This exposure to the real world was a consistent and much appreciated feature of our experience as "veilings". Due to the Herculean efforts of Henry Collins, numerous urban practices had the dubious pleasure of introducing us to the cocktail of communication issues, client and staff relations, business matters and fiddly little accounting details that is professional life. At the same time, we were able to witness events ranging from the expression of the humble anal gland to major reconstructive surgery. Despite, or perhaps because of, some hair-raising moments, the overall consensus was that exposure to "real-life" practices was invaluable.

Meanwhile, back in the lecture theatre, we were educated and entertained by a series of eminent guest speakers including Bill Gee, Larry Vogelnest, Leanne Begg and Chief Veterinarian for the RSPCA, Mark Lawrie. Expert speakers also abounded in the new-look biochemistry component, coordinated by Dr Paul Sheehy. The clinical emphasis of this otherwise potentially dry course was appreciated by students.

The "Cellular Biology of disease, therapy and performance" lecture series featured nothing less than inspired problem-based approaches by Dr David Church (on diabetes), Dr Laurent Rivory (on doping vs therapeutics), Dr Merran Govindir (anaesthesia), and others.

Another welcome change to the curriculum has been the introduction of a formal animal welfare component, allowing students the opportunity to research and form opinions about welfare issues under the guidance of recently appointed animal ethicist, Dr Cathy Schuller.

Whilst devouring the fruits of curricular change, our year also continues to enjoy those staples that nourished our predecessors. Summer days frolicking in the paddocks at Camden, allergic days collecting agronomic specimens, hours freezing in the anatomy lab, and neuron-depleting nights at Bar-B-Greg appear resistant to even the most zealous members of the curriculum task force.

We look forward to the second year of the new-improved course, particularly upcoming features such as Veterinary Conservation Biology and (if we haven't been duped) an exciting new look at the biochemistry of nutrition.

The prognosis: So far, the guinea pigs are thriving, and their future looks bright!
Humpback whales and their songs

Michael Noad, a postgraduate student of the Faculty, along with his supervisor Prof. Michael Bryden and Douglas Cato, an honorary associate of the Faculty, have authored a paper that will appear in Nature. Those of you with an awareness of the relative prestige of various scientific publications will recognise that a paper in Nature is one of the highest accolades a researcher can achieve in relation to publications.

The paper is entitled 'Cultural revolution in the songs of humpback whales'. Humpback whales migrate from summer feeding areas in Antarctic waters, along our east coast, to breed in the sheltered tropical waters within the Great Barrier Reef. Others migrate along the coast of Western Australia to breeding areas in the west. Each population of humpback whales has a long and complex song which is unique to that population.

In the second year of Michael’s PhD study, he recorded a song from a couple of whales that was distinctly different from all others in the east coast population; the next season about half the population had adopted the new song, and by the next year all of them had (and the old song had completely disappeared). Michael showed that the new song was almost identical to that sung by west coast whales, and concluded that the new east coast song was introduced by a small number of immigrants from the west.

This observation represents a revolutionary change in vocal tradition that has not been reported before in any species, and is of interest to those who study animal communication as well as to students of linguistics. As Michael commented "It just goes to show you the strange places that a degree in vet science can lead you!"