DIARY NOTE!

**australian chamber orchestra**

Richard Tognetti’s iconic Australian Chamber Orchestra is supporting a major fundraising event for the Veterinary Science Foundation with a unique performance of Saint-Saëns Carnival of the Animals—accompanied by words, narration and illustration from another Australian treasure, Michael Leunig. This magical performance, the perfect way to celebrate the season of festivity, will take place on Friday 17 December in the Verbrugghen Hall, Conservatorium of Music. Contact us to receive an invitation – (02) 9351 8026 or vsf@vetsci.usyd.edu.au.

**CANINE DESEXING CLINIC**

A large part of the success of the Faculty’s innovative surgical teaching project, the Canine Desexing Clinic, stems from the generosity of its sponsors. Pfizer Animal Health (previously CSL Animal Health), Bayer Australia, and most recently, Boehringer Ingelheim, Pfizer Animal Health (previously CSL Animal Health), Bayer Australia, and most recently, Boehringer Ingelheim, are the major sponsors of the Clinic, now located in a dedicated new facility on the Camden campus. All three companies provide annual cash sponsorship and in-kind product year-round, enabling the program to operate cost effectively.

**PARALYMPIC TEAM SPONSORS**

The Faculty has a link to the 2004 Athens Paralympic Games through year 2 student Ms Gillian Rickard, who is also Head Coach of the Australian Paralympic Equestrian team (see profile page 6). Thank you to Nature Vet, Australian Feed Company and Vetbac for their generosity: through the Foundation, these companies are providing sponsored product for the team’s best horse, Dr Doulittle.

**CHILDREN AND ANIMALS KINDNESS AND CRUELTY**

Dr Frank Ascione, Professor of Psychology and adjunct Professor of Family and Human Development at Utah State University, is undertaking a three-city Australian tour in July 2004 to deliver the Robert Kibble Memorial Lectures for Delta Society Australia. The Veterinary Science Foundation and NSW Animal Welfare League are supporting partners in this visit. Professor Ascione’s research has ramifications for both health professionals and veterinarians and brings to light new material related to humane education and the common roots of violence towards people and animals. In Sydney, Professor Ascione will deliver a public lecture on 20 July and full-day seminar on 21 July. See enclosed flyer or visit www.vetsci.usyd.edu.au/Foundation.

**KORN FERRY INTERNATIONAL**

Thanks to a pro bono search generously undertaken by executive recruitment company Korn Ferry International, the VSF Executive Committee has welcomed five new members (visit www.vetsci.usyd.edu.au/Foundation to read about the Foundation’s governance and Executive Committee). We are very grateful to Korn Ferry and Ms Suzanne Williams for devoting significant resources towards this critical task. Our Executive Committee are dedicated volunteers highly committed to the objectives of the Foundation and the Faculty.
The federal government is backing the Faculty’s vision for a Wildlife Health and Conservation Centre with a $2.2 million grant, secured by the Veterinary Science Foundation through the Campbelltown-Camden Sustainable Regions Programme. The multi-faceted Centre, to be built on the Campbell campus in February, was urged by the visiting AVMA team strongly to relocate the Faculty to a new teaching and research facility.

Following deregulation of the dairy industry, the three existing University of Sydney dairy farms (two commercial and one managed by the Dairy Research Foundation) were contributing to a dynamic and innovative program of student-centred learning.

The dairy milks forty cows at a time. Each cow has an ID bole in her rump that registers when she reaches the milking platform, delivering a specific ration. Each milking space has a small computer screen and terminal that measures and records data on every milking. The computers deliver individualised drafting after milking if a cow requires medication, or is needed for teaching or research, and they control the pivot irrigation system.

Following deregulation of the dairy industry, the three existing University dairy farms (two commercial and one managed by the Dairy Research Foundation) were eligible for a $3 million compensation package. The University provided an additional $500,000 and all three dairies were combined in a major redevelopment completed in late 2003. The project delivered not only the dairy, it also provided upgraded pasture areas, a sophisticated irrigation system, sluge pits, and research and teaching facilities with crush, race and yards.

The Faculty has significant expertise in wildlife research and education (see pages 4 and 5). Current projects involving staff, undergraduate or postgraduate students, include research on the koala, reptiles, flying fox, Tasmanian devil, feral pigs, seals, and other marine mammals, wombat, brush-tailed wallaby, Eastern Quoll, salt water crocodiles, black and white rhinoceros, Mongolian gazelle, common carp, pecaries, and the African Wild Dog. Reproductive and genetic studies in livestock are now also applied to the conservation of endangered species.

Since 2001, Veterinary Conservation Biology has been part of the undergraduate curriculum. It focuses on the roles for veterinarians in the conservation and management of biodiversity, and covers conservation medicine, the sustainable use of wildlife, and the development of sustainable farming practices including management of vertebrate pests.

A postgraduate Master of Applied Science (Wildlife Health and Population Management) run in conjunction with the School of Biological Sciences, is attracting increasing numbers of Australian and international students each year.

FEDERAL SUPPORT FOR WILDLIFE

STATE-OF-THE-ART MILK OUR DAIRY

Three hundred and twenty individually identified ruminants linking their bovine owners to a personal computer delivering a personalised ration? Irrigation at the touch of a button? The new University of Sydney dairy on the Camden campus is an extraordinary example of cutting edge dairy science.

The Faculty of Veterinary Science is progressing well towards achieving accreditation by the American Veterinary Medical Association (AVMA). The first consultative site visit to assess our Faculty took place in April 2003 and the visiting AVMA team strongly urged the Faculty to pursue accreditation.

The sixteen key strengths identified included:

• the Faculty’s strong commitment to teaching and student interests, with comment that our students had expressed strong appreciation for the Faculty’s efforts
• the Faculty’s outstanding strategic planning for future development
• the restructuring of the curriculum to be based on life-long learning, contributing to a dynamic and vigorous program of student-centred learning
• our students, whom they believed were mature, motivated, articulate and enthusiastic and who responded positively to the respectful professional relationship they enjoyed with the Faculty

Accreditation is critical for the Faculty. Students graduating from an accredited school have their degree recognised in North America and are entitled to sit the US National Veterinary Licensing Examinations. Accreditation is a mark of quality assurance and a means of benchmarking different veterinary schools across the world.

Alumni of the Faculty, Faculty staff, and other members of the veterinary profession are responding with tremendous generosity to the Veterinary Science Foundation’s current appeal for the redevelopment of the University Veterinary Centre at Sydney (UVCS) into a state-of-the-art small animal teaching Hospital, clinic and referral centre.

Veterinarians have joined other generous individuals and industry donors to help the Foundation achieve a current pledge total of more than $2.5 million—around 50% of our campaign target. The Post Graduate Foundation in Veterinary Science has contributed through a significant bequest, and the University of Sydney is providing dollar for dollar funding to match pledges made to the Foundation.

The Foundation and the Faculty are enormously grateful to all our campaign donors—their crucial support means Stage 1 is well underway, and we are now raising funds for Stage 2.

Veterinarians have contributed more than $300,000 since the campaign’s inception, and we are very pleased to acknowledge and thank the following:

AUSTRALIAN VETERINARY ASSOCIATION (NSW Division)
AUSTRALIAN VETERINARY ASSOCIATION Highland Branch (Victoria)
Professor Graeme Allan
Dr Keith Baker
Dr Gordon Bentley and Greg McCann
Dr Tony Black
Acting Dean Professor Paul and Dr Rhonda Canfield
Dr Peter Carter
Dr Jennie and Rоб Churchill
Dr Terry Collins
Dr Michele Cotton
Dr John Culverwell, Dick Churchill, Louise Stevenson, Tony Waugh
Dr Bill Gee
Dr Peter Gibbs and Stuart Williams
Dr David Harvey
The late Dr John N Henry
Dr Richard Hewetson
Dr Bruce Hindmarsh and Michael Hawkins
Dr John Hill
Professor David and Associate Professor Jennie Hodgson
Dr Penny Horsley
Dr Ted Humphries
Associate Professor Geraldine Hunt
Professor Alan Husband
Dr George James

Avocet: James Woodford, author of the Whitley-Farmer, Member for Macarthur, also spoke at the launch, which was attended by more than one hundred interested stakeholders— conservation and environmental organisations, veterinarians, community wildlife carer groups such as WIRES and Sydney Metropolitan Wildlife Services, and members of Camden and Campbelltown Councils, business and community groups.

A Steering Committee is overseeing the initial direction and development of the Centre, and the Faculty, recognising that partnerships will be vital to the Centre’s success, hopes to invite an active and interested and experienced members of the veterinary profession, as well as the local and broader community, wildlife carers and relevant research and conservation organisations.

The Faculty has significant expertise in wildlife research and education (see pages 4 and 5). Current projects involving staff, undergraduate or postgraduate students, include research on the koala, reptiles, flying fox, Tasmanian devil, feral pigs, seals and other marine mammals, wombat, brush-tailed wallaby, Eastern Quoll, salt water crocodiles, black and white rhinoceros, Mongolian gazelle, common carp, pecaries, and the African Wild Dog. Reproductive and genetic studies in livestock are now also applied to the conservation of endangered species.

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FEDERAL SUPPORT FOR WILDLIFE
THE KOALA’S CHALLENGE

BEATING CHLAMYDIOSIS AND CRYPTOCOCCOSIS

The koala has been the focus of significant research undertaken by the Faculty of Veterinary Science for more than twenty years. These studies, largely led by Professor Paul Canfield, have created a huge bank of knowledge on the two most prevalent infectious diseases in both wild and captive koalas: chlamydiosis and cryptococcosis (representing 35% and 2.5% of all koala infections, respectively).

A Faculty team driven by Dr Mark Krockenberger, Lecturer in Veterinary Pathology, and including Professor Paul Canfield, Drs Richard Malik, Susan Homesley, Merran Govendir and Damien Higgins, is now working on a major research project aimed at developing practical strategies for the management, prevention and cure of these diseases in both captive and free-living koala populations.

Chlamydiosis, the most prevalent disease of koalas, is very similar to the disease in humans, causing painful proliferative conjunctivitis, keratitis, rhinitis, and inflammation and fibrosis of the urinary and reproductive tracts. Urogenital tract disease causes difficulty with urination, urinary incontinence and urine staining known as “wet bottom” or “dirty tail.” Severely affected animals become blind, incontinent or die.

The research project includes retrospective studies into contemporary management practices for chlamydiosis in koala primary care facilities. The efficacy of relevant antibiotic agents and the most effective treatment methods will be determined, and strategies developed for preventing transmission and development of disease.

Cryptococcosis causes rhinitis, pneumonia or meningitis. The fungal organism causing this disease is also widespread and has been found to colonise the nasal cavities of 30% to 100% of koalas in coastal NSW. Unlike C. neoformans, which predominately affects immunocompromised people, C. gatti causes disease in normal hosts including people, cats, dogs and koalas. Predominantly, koalas and humans seem susceptible to infection through the association of C. gatti with certain eucalypts, and as the organism is most readily isolated from tree hollows, the use of these hollows by other fungi, insects, birds and arboreal marsupials may be contributing factors.

The project aims to determine the efficacy of antifungal drugs in clinical and subclinical cryptococcosis. Environmental factors encouraging the disease’s development will be identified by looking at the temperature, humidity and other biological factors involved in the growth of the fungus, particularly in the hollows of Eucalyptus camaldulensis, the organism’s major environmental niche in Australia. Strategies will also be evaluated that could decrease the environmental presence of C. gatti in koala enclosures in zoos and wildlife parks through surface-active-acting environmental antifungal agents.

The team hopes this major project will enhance koala welfare and, through developing effective treatment strategies and a better understanding of the chlamydial and cryptococcal organisms and their behaviour in the koala, reduce the morbidity and mortality of affected animals in this treasured national Park. Mark Krockenberger and the team have already generated strong interest from people involved in overseeing wild and captive koala populations: Mark can be contacted on email mkrocken@vetsci.usyd.edu.au.

THE DAUGHTERLESS CARP

The Faculty of Veterinary Science is involved in a number of key environmentally-focused projects of the Pest Animal Control Cooperative Research Centre (PACCRC), including research aimed at the biological control of carp in the Murray-Darling Basin.

The basis of the PACCRC’s program is the Daughterless Carp technology developed by the CSIRO. Part of the Murray-Darling Basin Commissioner’s Native Fish Strategy, the project aims to control carp through biased sex ratios towards males— with fewer females in the population, this genetic technology has the potential to sharply reduce carp numbers in the Basin within twenty to thirty years of implementation.

The Faculty’s role, through PhD students Gwilym Haynes and supervisors Professors Frank Nicholas and Richard Whittington, is to create a genetic map of carp in the Murray-Darling Basin. Dr Dean Gilligan, NSW Fisheries, and the PACCRC’s Brad Tucker, are also working with the Faculty. Specifically, Gwilym is developing validated microsatellite markers for investigating carp population structure, including discrete populations requiring individual management, and the number of migrants between population units. This information will influence the dispersal of daughterless genes throughout the Basin. Gwilym’s project will also investigate reproductive fitness and parasitism, determining natural rates of daughterless carp, and enabling refined modelling of the carp population decline. Genetic tools to determine sex ratios will also be developed.

Carp are Australia’s most recognised freshwater fish. In some areas of the Murray-Darling Basin, they make up 90% of the fish biomass, with one carp per square metre. Apart from competing with native fish for food and habitat, they increase water turbidity through uprooting aquatic vegetation and siltating through sediment when feeding. This removes native fish food sources, presents disturbed plants from re-establishing, and, with excretions from the large biomass of carp, stimulates algal growth through increased nutrient levels. Increased turbidity also reduces sunlight penetration with over time, permanent loss of plant life.

Daughterless Carp technology uses gene silencing technology. All fish embryos start life as male (in humans they will become female) and the protein aromatase, produced in the brain and reproductive organs, stimulates female development at the embryo stage. By silencing aromatase production, scientists can bias sex ratios toward male development through to adult. As daughterless carriers reproduce normally and the gene is heritable, daughterless males can pass on the gene to non-daughterless carp.

The genetic technology is engineered to be specific to carp and cannot operate in any other fish or animal species. But there is potential, because carp have a similar sex determining and developmental pathway to other fish and amphibians, for the daughterless carp technology to be modified for pests such as cane toads.

The Faculty’s involvement will make a critical contribution to its success, and add to our growing strength in aquatic animal and environmental health.
How healthy are our seals?

PhD student Rachael Gray’s passion for seals has already taken her twice to Eastern Antarctica; both times sacrificing warm Sydney summers for the opportunity to join a team of biologist based at Davis Station, one of three Australian Antarctic research bases. The team is investigating the health, foraging, and acoustic behaviour of the leopard seal, with similar studies in the Weddell seal.

As large bodied mammals, leopard seals (Hudson bay) and Weddell seals (Leptonychotes weddellii) are important species within the Antarctic ecosystem. Rachael’s PhD project has established the general health status of a population of leopard and Weddell seals in Prydz Bay, Eastern Antarctica, knowledge that is critical to enabling a broader understanding of the marine ecosystem occupied by these species. Indicators of health studied include clinical examination, body condition, haematology, serum biochemistry, serum protein electrophoresis and parasite studies. An investigation into the levels of trace metals in leopard and Weddell seal tissues has also been undertaken.

Rachael’s project forms part of a larger research program of the Australian Marine Mammal Research Centre (AMMRC), based at Taronga Zoo, and is under the supervision of Acting Dase Professor Paul Caicula and Dr Tracy Rogers, Director of the AMMRC and Adjunct Senior Lecturer at the Faculty, and PhD student Rachael Gray.

The study also showed that trace metal analysis in the fur of the seals is a useful means of non-invasive sampling of this species. The different methods of analysis enabled both short-term and longer-term accumulations of trace metals to be determined.

Rachael’s project has established important reference points for a number of key health indicators and trace metal concentrations in the leopard and Weddell seal populations in this region of Antarctica. The study will be critical to enabling future changes in this population to be determined as either natural fluctuations or anthropogenic influences.

Collaring the peccary

The PhD project of Jaime Gongora, a Colombian postgraduate student supported by an Australian-funded International Postgraduate Research Scholarship, aimed to help develop more effective conservation, protection, monitoring and management strategies for peccary species and populations by assessing their molecular diversity and phylogenetic relationships (genetic “trees”) across their geographic range. This was done by amplifying, cloning and sequencing mitochondrial DNA from peccaries in zoos in Colombia, Argentina, Bolivia, Mexico, United States and Australia.

Jaime is working with Associate Professor Chris Moran and the project’s partners include the Centre for Molecular Biology in Bogota, Colombia, and the Guadalajara Zoological Gardens in Mexico. Sydney veterinary graduate Dr David Schwarz has supported the project from the Adelaide Zoo, in South Australia.

The project has demonstrated that peccaries (or at least their mitochondrial DNA sequences) are surprisingly genetically distinct between the areas north and south of central Colombia. It is likely that there are two species within what is currently classified as a single Collared peccary species: the North and South group of Collared peccaries; and the South and North group of Collared peccaries. Further studies are required to determine if the Colombian Collared peccaries represent an ancient centre of diversity, from which distinct groups dispersed to the north and south, or whether they result from a more recent mixing of Northern and Southern types which happen to have met in Colombia after diverging elsewhere.

The project has clarified that, for conservation and zoo breeding programs where hybridisation, or crosses between distinct populations, are generally to be avoided, the use of wild peccaries and interchange of species for breeding purposes must take into account geographical origins. Mitochondrial DNA sequences taken from peccaries of unknown origin in the Adelaide Zoo, for example, placed these animals as most likely originating from the northern group and being closely related to the Collared peccary.

Possibilities include aerial delivery of fertility vaccines including blood, fur, whiskers, faeces and urine.

Feral pigs also spread exotic diseases of human significance such as Japanese encephalitis (sentinel pigs on Cape York recently vaccinated).

PhD student Brendan Cowled (right) is focused on developing additional effective and humane methods for controlling an animal that is already estimated to cost the Australian agricultural sector 100 million dollars a year – an irresponsible force with the many billions of dollars a lost and mouthseliver would cost, and feral pigs have the potential to spread this disease.

Feral pigs create havoc through lamb predation, disease spread (rabies, footrot, sparganosis and meloidosis), infrastructure damage to fences and water supply, pasture damage, competition for feed, and crop damage. They change habitats through selective feeding and rooting for underground plants and invertebrates, especially in the tropical north World Heritage Areas. They spread invasive weeds and are implicated in the spread of Phytophthora, the root rot fungus responsible for death in native vegetation.

Australia is a country overwrought with introduced animal and plant pests, and one of the most damaging is the feral pig.

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Feral pigs also spread exotic diseases of human significance such as Japanese encephalitis (sentinel pigs on Cape York recently vaccinated).

Brendan’s PhD project, funded by the Pest Animal Control Cooperative Research Centre (PAC CRC), through funding from the National Feral Animal Control Program, Menil and Livestock Australia and Wildlife and Exotic Diseases Prevention Program, has several objectives.

The first is to develop a commercial feral pig bait for use by land managers, through collaborative work with the PAC CRC, Animal Control Technologies and the Queensland Department of Natural Resources and Mines. Critical issues include animal welfare considerations (control methods must be as humane as possible) and, by the use of a targeted bait and a different toxin delivery system, ensuring the baits are specific to feral pigs and safe for native fauna.

Field trials have been taken place at the Robert Wicks Pest Animal Research Centre at Inglewood, Cunnamulla, and are planned for the Namadgi National Park, Southern Queensland and Cape York.

The project is also reviewing the physiology, ecology and behaviour of feral pigs with the aim of using this information to research new and potentially more target specific methods of control, and to field test these possibilities, which may include aerial delivery of fertility vaccine and new baits and humane toxins.

Brendan’s final research focus in this complex pest control issue is through exploring the use of molecular ecology in managing feral pig populations. By determining genetic distinctness and gene flow on a landscape scale, researchers can determine the dispersal of feral pig populations, and this can assist in improving procedures for population control and disease management.

For further information, contact Brendan at brendan.cowled@pestanimal.crc.org.au.
Tell us about your pathway to veterinary science

I always wanted to compete in dressage at the highest level. My older sister was training to be a vet and, as she didn’t have time to ride, I wasn’t going to be a vet. Instead I studied Education, became a teacher and rode as well. I moved to the Hawkesbury district, the centre of dressage, teaching in high schools while becoming a known rider, coach and trainer. I rode in the Australian Dressage team at the 1990 World Equestrian Games in Stockholm.

Since then, I have learnt about lameness and developed a keen interest in what, why, and how to fix it. The amazing professionalism and care given to me by the Camden University Veterinary Centre led me to become a vet. I feel, having been at the top, that I will be able to understand clients and sympathise with their disappointments.

What’s your history with the Paralympic Games?

I became Assistant Coach in 1999. For the Sydney 2000 Paralympic Games, I rode hundreds of horses to choose the final 110. I became Head Coach after Sydney (we won two gold, two bronze and came fifth as a team). In 2003 we qualified for Athens with two silver medals at the World Championships. Thanks to a great horse we leased called Dr Doullie (subsequently purchased for the team by a kind benefactor). We will take four horses to Athens, great horse we leased called Dr Doulittle (subsequently purchased for the team by a kind benefactor). We will take four horses to Athens, and I think our team can experience in all aspects of small animal surgery.

Craig continued as registrar at both Sydney and Mudgee Universities before entering private specialist referral practice. He is interested and highly experienced in all aspects of small animal surgery.

Recently promoted to head of the UVCC Primary Care Unit, Dr Arieih Ende came to veterinary science with a Science degree and honours in Zoology. After graduating from this Faculty, he spent time in mixed practice in rural NSW, before joining the UVCC as Veterinary Registrar in Small Animal Medicine, a role that includes clinical training of undergraduate and postgraduate students in the medicine unit.

His new position involves clinical work and strategic planning and management of the Primary Care Unit. The unit operates as closely as possible to general private practice, giving students exposure to routine clinical veterinary medicine. Arieih says he and his team of four veterinarians are dedicated to delivering the highest quality veterinary care and ensuring veterinary students receive an excellent clinical education. “I also want to focus on raising the community profile of the UVCC and general access to the hospital to help deliver to our students the experience of working in a busy operating veterinary hospital”.

Who inspires you and why?

I love challenges. I like to extend myself and I like to win. It is interesting, but the most influential people in my life apart from my parents have been my voice coach (a very important sister, a vet), an ex-boyfriend (a vet) and a Sydney University Professor (a vet). So it’s not surprising my path has brought me here, it’s just a taken while.

Dr Vanessa Barrs
Specialist in Feline Medicine

Dr Vanessa Barrs, specialist in Feline Medicine and Fellow of the Australian College of Veterinary Scientists, has returned to the UVCC as a Senior Lecturer in Small Animal Medicine. In addition to her academic role, Vanessa will play a critical part in developing the Small Animal Medicine Service and leading the Feline Practice in the new Valentine Charpton Cat Centre.

Vanessa is a graduate of the Sydney Faculty with strong ties to the UVCC. Following a period in practice, she returned to complete a Ph.D. residency in Veterinary Clinical Studies. Appointed Senior Registrar in small animal medicine, she then completed a Feline Medicine Fellowship training program, supervised by Dr Richard Malik.

Vanessa has worked at London’s Royal Veterinary College, private referral practice in London and, back in Australia, as a registered Specialist in Feline Medicine at the North Shore Veterinary Specialist Centre. She has published extensively, and is President of the Feline Chapter of the Australian College of Veterinary Scientists.

An important component of Vanessa’s responsibilities will be clinical teaching, a role for which she is well suited in 1997. Year 4 students voted her the Hugh Gordon Clinician of the Year for excellence in clinical and small group teaching.

Dr Craig McPherson
Senior Lecturer in Surgery

The Faculty’s new Senior Lecturer in Surgery, Dr Craig MacPherson developed an interest in surgery during his time in mixed general practice in New Zealand. He undertook an internship at Massey University, a residency at the University at Sydney, and was registrar at Murdoch University before completing a Master of Veterinary Studies at Sydney and securing his Fellowship of the Australian College of Veterinary Scientists in small animal surgery.

Craig continued as registrar at both Sydney and Mudgee Universities before entering private specialist referral practice. He is interested and highly experienced in all aspects of small animal surgery.

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Dr Christine Smith, specialist equine surgeon and a Diplomate of the American College of Veterinary Surgeons (above), has joined the University Veterinary Centre at Camden (UVCC), working with UVCC Director Associate Professor Andrew Dart and Dr Beth O’Donnell.

Following graduation from the Ontario Veterinary College, University of Guelph, Canada, Christine became an intern at Texas A&M University, then resident in equine surgery and Lecturer at the prestigious University of California, Davis (with one of the largest equine caseloads in North America). In 2000 she became a specialist in equine surgery, and has published research papers and contributed to key equine texts. In California, she also worked part-time at major equine and camelid private veterinary centres.

Christine, a life-long rider and lover of horses, brings to the UVCC broad veterinary equine experience, with special expertise in the field of lameness and the surgical management of colic, and the surgical and medical management of lameness and the surgical management of colic. She will also teach, as a clinical instructor or final year students and interns, and play a role in the UVCC cameld (alpaca and llama) clinical practice.

International Livestock Congress

Year 4 student Kathryn Adams (above) was one of only thirteen international students chosen for a Travel Fellowship to the February 2004 International Livestock Exchange in Houston, Texas.

Kath says all the Fellowship students had an “intense dedication to a future in the beef industry” and gained much from the three-day conference, which featured an International BSE Summit, and topics such as beef health and nutrition, and beef industry profitability.

“It has been an amazing time in Houston. Everything is certainly bigger in Texas—the cars, the rodeos, the belts and of course the boots” says Kath. “My perspective and knowledge on the beef industry was broadened enormously, as it explored alliances used to market beef from the producer through to the retailer and consumer in countries such as Argentina, Canada and America.”

Caring for pets in Broken Hill

Two 12-hour trips through the desert were all part of the experience for students Zoe Cutcher and Karina Argondona (above). In November 2003 Broken Hill RSPCA desexing and responsible pet ownership program.

T he week-long RSPCA/AVA NSW program resulted in 200 dogs and cats being desexed, vaccinated, heart worn tested and microchipped, and involved RSPCA sets Drs Ann Maigret Withers and Magdoline Awad, and Dr Honey Nelson and staff from Broken Hill Veterinary Hospital. Supporters were Fort Dodge, Jurox, Idecex and Frontline.

The week was invaluable for Zoe and Karina, with intensive hands-on experience in canine anaesthesia as well as routine procedures. “It was a fantastic opportunity. We both gained confidence and broadened our basic skills substantially. The RSPCA staff were very supportive and allowed us every opportunity to gain new skills,” said Zoe.
GAINS IN TEACHING AND LEARNING

An unrelenting Faculty focuses on improving teaching and learning to achieve substantive and sustained improvement in student perceptions of their learning experience. The quantitative assessment occurs through the annual Student Course Experience Questionnaire, completed by University of Sydney graduating students from every Faculty. The 2003 results place the Faculty of Veterinary Science among the leading Faculties in the University. The survey showed significant gains in good teaching, clear goals and standards, appropriate assessment, and generic skills, and gave the Faculty an overall satisfactory rating of 80% (University average is 69%). Associate Professor Rosanne Taylor, the Faculty’s Associate Dean for Teaching and Learning says, “While some areas need work – in particular appropriate workload – it is really encouraging to see that we are recovering from the inevitable turbulence created by the new curriculum. Our challenge is to continue to aim for delivery of an outstanding program, to improve assessment and feedback, and work on areas perceived to be less than satisfactory by our students.”

The Thyne Reid Teaching Innovations Unit, funded by the Andrew Thyne Reid Charitable Trust, focuses on online delivery and small group, inquiry-driven and case-based learning to develop students who are flexible, adaptive and self-directed learners. New teaching infrastructure has been important, including the redeveloped Gaines Buildings teaching laboratories, and aids such as digital projectors, multiheded microscopes, and a digital radiographic scanner.

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The Faculty has also reviewed graduate attributes with input from staff, students and industry, and is currently reviewing curriculum alignment and revision is vital to ensure the course prepares the next generation of veterinarians in a thorough and effective way.

INDUSTRY PRAISE FOR VETERINARY PUBLIC HEALTH MANAGEMENT PROGRAM

A wide range of industry and government organisations are finding immediate benefit from the technical, management, and policy development skills gained by students who undertake the Faculty's postgraduate Veterinary Public Health Management (VPHM) program. Students from AQIS (Australian Quarantine Inspection Service), Agriculture Fisheries and Forestry Australia, Rural Land Protection Boards, the New Zealand Ministry of Agriculture and Forestry, Animal Health, Police, the New Zealand Police, state agriculture departments, and government bodies in French Polynesia and Switzerland, are undertaking workplace-linked assignments, immediately delivering tangible input into their organisations.

VPHMg objectives include:

• applying specialist understanding (epidemiology, zoonoses, food safety, veterinary economics, and animal health issues)
• applying skills in leadership and project management in a work context and managing the planning and implementation of projects
• analysing and integrating knowledge to better understand complex issues
• realistically evaluating personal and team performance
• adopting a problem-solving approach to a range of issues

Dr John Weaver, Manager of Disease Surveillance at Primary Industries and Resources South Australia, said the company was

What are your career highlights?

Graduating, successfully treating complex cases in practice, investigating factors associated with perineal disease, and developing scientifically based guidelines have been career highlights. Dr Weaver is also pleased to be involved in a company that has given him significant responsibility, and is committed to nurturing an interest in ART among veterinary science undergraduates.

What project is giving you the most satisfaction at the moment?

I am the coordinator for Veterinary Anatomy and Physiology II, a unit that focuses on reproduction and body development. I gain great satisfaction in improving the integration of structure, function and clinically relevant material within this unit.

What is your current position?

Lecturer in Veterinary Anatomy, Histology and Embryology and Sub Dean for Students.

What qualifications do you hold?

Bachelor of Veterinary Science and Doctor of Philosophy, both from the University of Sydney.

How did your career begin?

I grew up on an arable farm and was always interested in the interaction between science and agriculture. I decided on a veterinary career because it offered a varied and interesting profession. I graduated from the University of Sydney in 1984, having completed my thesis on the effects of Malazol on the natural immunity of the horse. I was then employed by the NSW Department of Agriculture and then the Australian Animal Health Laboratories. I studied for a PhD at the University of Sydney and then returned to the Department of Agriculture. I am currently the Sub Dean for Students in the Faculty of Veterinary Science at the University of Sydney, a role which allows me to interact with students at all levels of study.

INDUSTRY PRAISE FOR VETERINARY PUBLIC HEALTH MANAGEMENT PROGRAM

A wide range of industry and government organisations are finding immediate benefit from the technical, management, and policy development skills gained by students who undertake the Faculty's postgraduate Veterinary Public Health Management (VPHM) program. Students from AQIS (Australian Quarantine Inspection Service), Agriculture Fisheries and Forestry Australia, Rural Land Protection Boards, the New Zealand Ministry of Agriculture and Forestry, Animal Health, Police, the New Zealand Police, state agriculture departments, and government bodies in French Polynesia and Switzerland, are undertaking workplace-linked assignments, immediately delivering tangible input into their organisations.

VPHMg objectives include:

• applying specialist understanding (epidemiology, zoonoses, food safety, veterinary economics, and animal health issues)
• applying skills in leadership and project management in a work context and managing the planning and implementation of projects
• analysing and integrating knowledge to better understand complex issues
• realistically evaluating personal and team performance
• adopting a problem-solving approach to a range of issues

Dr John Weaver, Manager of Disease Surveillance at Primary Industries and Resources South Australia, said the company was

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W.J. HARTLEY COLLECTION

Dr. W. J. Hartley’s receipt of the Olafson Medal in 1992, the most prestigious international award for veterinary pathologists, acknowledged his outstanding contribution to his field. The Faculty of Veterinary Science, where he spent almost twenty years, is now honouring Dr. Hartley with the naming of the W. J. Hartley Veterinary Pathology Collection.

Located next to the newly refurbished B. Richards Veterinary Pathology Teaching Laboratory in the Gunn Building, the Collection houses a wealth of specimens collected over the last fifty years, with access to many of Dr. Hartley’s images. His generosity and continuing interest in teaching has led to the loan of sections of his massive slide collection to the Faculty for online teaching.

A graduate of the Royal Veterinary College London, Dr. Hartley worked in New Zealand until hypersensitivity to Brucella abortus forced his retirement from general practice. His move to the Wallaceville Animal Research Station initiated a forty-five year passion for investigative pathology – and the start of an extraordinary visual and written documentation of veterinary diseases (particularly neurological disorders), perinatal mortality and poisonous plants. During his career, Dr. Hartley published more than two hundred original articles on diseases of domestic and wild animals.

Dr. Hartley joined the Faculty of Veterinary Science at Sydney University in 1960 (he has been described as being an “encyclopaedic resource for staff and students”). He also spent time in Turkey setting up a diagnostic pathology laboratory for the United Nations Development Program, and in 1980, returned to Wallaceville. Both here, and later at Taronga Zoo, he established extensive domestic animal and wildlife pathology registers.

The WJ Hartley Veterinary Pathology Collection will be a permanent recognition of his contribution towards a better understanding of the diseases of domestic and wild animals worldwide.

NEW REPTILIAN REFERENCE GUIDE

Leading Australian herpetologist and Senior Lecturer in Anatomy, Dr. Glenn Shea (right) has lent his expertise to the recently published ‘A Field Guild to Reptiles of New South Wales’ (New Holland, ISBN 1 877 069 06, RRP $34.95). Glenn worked with original author Dr. Gerry Swan, Associate of the Australian Museum, and Dr. Ross Sadlier, Collector/Manager for the Museum’s Herpetological Department, to extensively revise the 1990 edition. The new book features more reptile species and field locations, freshwater and marine turtles are now included, and the layout has been revised for more effective use.

Dr. Shea is a Research Associate of the Australian Museum, a member of the Native Animal Advisory Committee of NSW Agriculture, the Peter Rankin Trust Fund in Herpetology, and the Australasian Reptile and Amphibian Specialist Group.

AUSTRALIA DAY HONOURS

Two distinguished Emeritus Professors of the Faculty and a wildlife veterinarian were recognised for exceptional contribution and service in the January 2004 Australia Day Honours:

Emeritus Professor Ernest F. Annison, AM: Service to agriculture and veterinary science research and education.

Emeritus Professor Terence J. Robinson, AM: Service to animal husbandry in the field of reproductive biology and to tertiary education and training in the agricultural sector.

Dr Teri A. Bellamy, OAM: Service to veterinary science particularly through contributions to the preservation of wildlife.

The 4th week.

It’s when other flea treatments aren’t up to scratch.

David Halliburton’s handsome tabby cat “Dog”, a long term diabetic, has had a close association with the University Veterinary Centre at Sydney (UVCS). Through the Veterinary Science Foundation, David is now supporting the UVCS through generous monthly contributions towards the Foundation’s rebuilding campaign (see page 3).

NEW REPTILIAN REFERENCE GUIDE

A Field Guild to Reptiles of New South Wales

Dr. Glenn Shea.

VSF HOUSE