www.csu.edu.au/vet

News from the CSU Veterinary Science program



Contents

- Page 1 From the Director Construction underway for Clinical Training Centre
- Page 2 McCaughey Memorial Institute supports CSU
- Page 3 Students recognised for excellence Scholarship remembers J H Chalmers
- Page 4 Animal husbandry extramural studies
- Page 5 Veterinary Science students rewarded for their commitment to rural communities

CSU students ready for rural practice

- Page 6 CSU Vet students celebrate 'Half Way'
- Page 7 CSU well-placed to impact biosecurity New prize recognises CSU staff member
- Page 8 Staff profiles

Thank you

The Charles Sturt Veterinary Science Foundation would like to acknowledge the support of new and continuing donors to the Veterinary Science program:

Lvndall Anael Ardrossan Anaus Arayle Pastoral Australian Veterinary Association **Bahgallah Veterinary** Services Ben and Louisa Beck Doug Bryden Bukalona Cattle Council of Australia Jeffrey Chalmers Dunoon Dr Ray Ferguson Hazeldean Hillgrove Pastoral Company Dr John Holt Jancourt Jurox Pty Ltd Phil Kidd Leeton Veterinary Hospital Lithgow Veterinary Hospital Lyppard Masterfoods Petcare Moruya Veterinary Hospital

Mount Elephant Station Mount Raven Stud Onslow Robyn Paton Pine Hill Provet Redgate Poll Herefords RennyLea Angus Steven Roberts Romani Pastoral Company Scott's Angus Springwaters Pty Ltd Talooby Trust Thring Pastoral Company Dr Roger Turner Jill Walker Welch Allyn W G Graham Trust Willurah Wirrung Yabtree West Yavenvale

<section-header><section-header><section-header><section-header><text>

02 6338 4680

Yakka

Contact us

CSU Tails is produced by Charles Sturt University. For further information contact the Charles Sturt Foundation on:

Phone: 02 6338 4680 Fax: 02 6338 4833 Email: vetfoundation@csu.edu.au Web: www.csu.edu.au/special/vetfoundation

Disclaimer

The opinions published in CSU Tails are not to be regarded as the official opinion of Charles Sturt University. While every effort has been made to ensure accuracy and completeness, no guarantee is given, nor responsibility accepted by Charles Sturt University for errors or omissions in the information presented. Before relying on any information in this publication, readers are responsible for independently verifying its accuracy, currency and completeness.

If you would prefer not to receive CSU Tails in the future, please email aowens@ csu.edu.au and type 'unsubscribe CSU Tails marketing' in the subject field, or call 02 6338 4680.

The Commonwealth Register of Institutions and Course for Overseas Students (CRICOS) Provider Number is 00005F (NSW) and 01947G (VIC) for Charles Sturt University.

© Charles Sturt University, 2007

Front cover.

CSU Vice-Chancellor and President Professor Ian Goulter, Director of Veterinary Science Professor Kym Abbott and Head of the School of Agricultural and Veterinary Sciences Associate Professor John Kent turn the first sod of the Veterinary Clinical Training Centre.

From the Director



Director of Veterinary Science, Professor Kym Abbott.

During 2007, I have initiated a number of activities aimed at fundraising in support of the veterinary program at Charles Sturt University. This has not been an entirely comfortable strategy for me. Like many from a background in veterinary science, asking for money (without first earning it!) does not come naturally but recent experiences with the financial difficulties faced by some students has given me additional resolve.

CSU has created the Veterinary Science Foundation to encourage and manage donations which will improve the educational experience of our students. One of the Foundation's goals is the establishment of a fund which will provide financial assistance to students with scholarships and bursaries during their studies. Many veterinary students face significant financial hardship while studying. The contact hours during teaching periods are long and it can be difficult and disruptive to studies to fit paid employment into each week. The demands of compulsory work placements in vacation time erode the capacity of students to build up financial capital during non-teaching periods. Not all students qualify for government assistance.

All veterinary schools in Australasia expose their students to off campus clinical rotations in the last year of the course and ours is no exception. A particular strength of our program is that our students will each spend time in a number of rural and metropolitan placements, experiencing mixed practice, farm animal practice and companion animal practice in a variety of settings. This is a valuable contribution towards their preparation for a veterinary career, but brings with it the necessity to leave Wagga Wagga and their normal accommodation and part-time jobs and find accommodation near their placements.

While CSU will do what it can to ease the difficulties for students, a direct financial contribution towards their living expenses in the last years of the undergraduate course will be of enormous benefit. Donors are invited to consider providing scholarships for one year, or to create a life-long award which will continue to support students in perpetuity. In the future, I trust that our alumni, remembering the generosity of others while they were students, will contribute towards the assistance of future generations. In the meantime, I ask those of you who are in a position to support the first generation of CSU veterinarians to give the idea some consideration.

Construction underway for Veterinary Clinical Training Centre

Construction has commenced on the Veterinary Clinical Training Centre at CSU Wagga Wagga Campus after Vice-Chancellor and President Professor Ian Goulter joined the Director of Veterinary Science Professor Kym Abbott and the Head of the School of Agricultural and Veterinary Sciences Associate Professor John Kent to turn the first sod on 23 May 2007.

The AU\$8 million facility is designed for the training of undergraduate students in clinical veterinary medicine, surgery, diagnostic imaging and reproduction, and will include:

- Large and small animal medicine and surgery teaching suites
- Large and small animal tomography and scintigraphy
- Ultrasound and x-ray facilities
- Reproduction training and research unit



"In addition to providing the facility for the Veterinary Science program, the Clinical Training Centre will extend pre-existing expertise at CSU in equine science and medical imaging," said Professor Ian Goulter.

To support the construction of the Clinical Training Centre, the Charles Sturt Veterinary Science Foundation has launched a campaign aiming to raise AU\$750,000 from businesses and the community.

If you would like to find out how you can contribute to this project, please contact the Charles Sturt Veterinary Science Foundation on 02 6338 4680 or complete the donation form at the back of this magazine.

The facility is planned to be completed by March 2008, in time to meet the needs of the first cohort of fourth year veterinary science students.

McCaughey Memorial Institute announces financial commitment to CSU

The McCaughey Memorial Institute has announced a commitment of more than AU\$600,000 towards veterinary science programs at CSU over the next five years.

The commitment includes the creation of the first McCaughey Memorial Institute-CSU Chair in Animal Production and the creation of a support network for new veterinary graduates.

"This is our largest financial contribution from a single supporter of the Veterinary Science program at CSU and we are overwhelmed by the generosity of the trustees of the Institute," said CSU Director of Veterinary Science, Professor Kym Abbott.

As a result of the announcement, one of Australia's leading research scientists in animal production, Dr Peter Wynn has accepted the inaugural position of McCaughey Memorial Institute-Charles Sturt University Chair in Animal Production, commencing in 2008. A former Associate Professor at Sydney University and Senior Research Scientist at CSIRO, he comes to CSU with an active research program in dairy cattle production and extension in Pakistan, funded by ACIAR, and two research projects involving endocrinological and food conversion efficiency in pigs, funded by the Pork CRC.

"With his very strong record in research and education relevant to the livestock industries, Dr Wynn has identified strong alignment between his interests and those developing at CSU and we are delighted to have him on board from next year," said Professor Abbott.

The second project to receive funding from the MMI will enable the development and operation for three years of a web-based support network for CSU graduates in veterinary science. Many new graduates require considerable support during their transition into busy clinical veterinary practice and this can be particularly challenging for rural veterinary practice due to remote locations and reduced opportunity for case referral. In preparation for the first CSU veterinary science graduates in 2010, CSU will now develop an online postgraduate support structure to provide timely, accurate and contextually relevant information to our CSU graduates.

McCaughey Memorial Institute is a trust established by members of the McCaughey family in 1945 as a memorial to two family members killed in WWII, Samuel Michael McCaughey and David MacPherson.

Its core asset was a portion of Coree Station, Jerilderie, based around the old homestead, which became known as 'Old Coree'. Various investments and income are used to fund research of an agricultural nature and aid the education of the future agriculturalists of Australia. This is done by supporting universities in starting relevant and innovative courses aimed at aiding agriculture in general. Once such project led directly to assisted reproduction techniques and many of the researchers became world famous in the IVF field.

McCaughey Memorial Institute also funds a number of undergraduate scholarships, and over the years has been involved in funding postgraduate scholars, plant breeding research and genetic marker research. The Trustees still include members of the McCaughey family and others who are focused on the aims of the trust; advancing Australian agriculture through research and education.



every generation should live better

than the last

Sustained sustainability

1996:	Before most knew what a carbon footprint was, Westpac set about halving theirs.
2003:	The first (and only) Australian bank to sign The Equator Principles, agreeing not to fund major projects that endanger communities or the environment.
2002 -07:	Recognised by Dow Jones as 'The World's Most Sustainable Bank' five years running.
2007:	Named in The Independent/Ethical Investment and Research Services 'Top 10 Greenest Companies in the World'.
2007:	Winner of Australia's most prestigious gold award for sustainability at the Banksia Awards. st

Terms and Conditions

* The Banksia Awards recognise outstanding environmental achievements by businesses and individuals in Australia.

Westpac Banking Corporation ABN 33 007 457 141.

W001672 (7/07)

Veterinary science students recognised for excellence

Thirteen CSU veterinary science students have been rewarded for their effort and dedication to study through Charles Sturt Foundation Scholarships.

The scholarships were awarded to students studying the Bachelor of Veterinary Science on the University's Wagga Wagga Campus for outstanding academic performance, community involvement, leadership and dedication to the future of the veterinary profession.

The inaugural J H Chalmers Memorial Scholarship was awarded this year to Naomi Bakker, a third-year veterinary science student who has a particular interest in veterinary reproduction and nutrition.

"The scholarship has contributed to my living expenses and allowed me to put a lot more time towards my studies and university activities instead of working a part-time job. Not having to juggle work with my studies has been a real blessing," she said.

Scholarships awarded to veterinary science students this year included: Claire Petterson (Country Womens' Association of NSW – Riverina Group), Naomi Bakker (J H Chalmers Memorial), Amanda-Lee Charman (Kapooka-Legacy), Jocelyn Hoogstraten, Megan McGrice and Jocelyn Todd (Masterfoods – Petcare), Joelle Russell (Redgate Poll Hereford), Sarah Sutherland (Rotary Club of Wagga Wagga Sunrise), Jessica Said and Lauren Said (Rotary Club of Wagga Wagga Wollundry Book Prize), Amy Dutton (Tarcutta and Wantabadgery Merino Breeders Association), Torquill McKillop (The Rural) and Sarah Sutherland (Wagga Wagga City Council).

The Charles Sturt Veterinary Science Foundation has also commenced fundraising to support a Professional Experience Program which will help students cover the costs associated with the compulsory practical placement component of the veterinary course. Moruya Veterinary Hospital is the first donor to support the program, providing a donation of AU\$1,500 to assist students to cover costs such as accommodation, transport and meals while undertaking the required practicum.

Chair of the Charles Sturt Veterinary Science Foundation committee, Professor Jim Pratley says the scholarship program not only provides students with financial support during their studies, but also the invaluable opportunity to create industry links and networks.

If you would like more information on how you can support veterinary students at CSU through the scholarship or professional experience program, please contact the Foundation on 02 6338 4680 or complete the donation form at the back of this magazine.



(L-R): Amanda-Lee Charman, Megan McGrice, Jocelyn Hoogstraten, Jocelyn Todd, Claire Petterson.

Scholarship remembers J H Chalmers

Jeffrey Chalmers, Lyn Angel and Robyn Paton, children of well-known Wagga Wagga veterinarian, J H Chalmers BVSc (Sydney) MACVS, have established a Charles Sturt Foundation scholarship in memory of their father.



The late Dr J H Chalmers.

Dr Chalmers moved to Wagga in 1955 having bought a local veterinary practice which became the Wagga Wagga Veterinary Hospital, where he was the senior of four partners before retiring in 1983. Many final year students were given their introduction to large animal practice by John and his partners over seven decades.

Throughout his professional life, Dr Chalmers stood on numerous subcommittees on Bovine Eye Cancer and Ovine and Bovine Brucellosis and was the Senior Veterinary Advisor to the Poll Hereford and Murray-Grey societies. He received a number of prestigious awards recognising his contribution to the industry, including the Australian Veterinary Association Meritorious Service Award and the Seddon Memorial Prize, and he was elected as an inaugural member to the Australasian College of Veterinary Scientists.

Dr Chalmers also demonstrated an enormous commitment to the Wagga community. He was an original member of the Interim Board of the Riverina College of Advanced Education, an antecedent institution of Charles Sturt University, and was extensively involved in Rotary and Legacy.

The lifetime scholarship will each year benefit a third-year Veterinary Science student and was awarded for the first time in 2007 to Naomi Bakker.

Animal husbandry extramural studies

Veterinary students at CSU are required to obtain experience working on 'real' farms during their vacations to supplement their theoretical learning as part of a program known as Animal Husbandry Extramural Studies (AHEMS).

AHEMS is designed to allow students to gain a broad range of experience in animal husbandry and build their confidence in handling the major species of farm animals.

Specifically, students are required to undertake a total of 12-weeks experience, including: two weeks on each of a sheep, beef cattle, dairy cattle and pig producing farm; one week each on a horse stud, performance horse establishment and a poultry farm; and one week on 'other', which may include one of those listed or an enterprise such as a fish farm, boarding kennel, zoo or wildlife sanctuary.

"The University maintains a register of 'Cooperating Farmers', which students can access when organising their placements," explained CSU Associate Professor John Glastonbury. "The register was built by personal contacts, recommendations from livestock officers and veterinarians, and students from farms volunteering their own families. We are deeply indebted to the livestock producers who are prepared to host our students."

Bryce Mooring is a CSU student who undertook one of his placements on a property 100 kilometres from Bourke, NSW, and found it a personal and professional learning experience.

During his placement, Bryce worked on a drought-affected property where he was involved in the dayto-day health of the animals and management of the property. "The work itself was interesting but it is also important to me to work in rural communities, particularly in the Bourke region which influenced me so much as I grew up and helped me develop a passion for becoming a veterinarian," he said.



CSU Veterinary Science student, Kimberly Groner during her Dairy AHEMS in Scotland.

"I spent two weeks on an organic dairy property overlooking beautiful Loch Lomond in South-West Scotland completing my dairy AHEMS. During this time I lived with the family who owned this dairy, who provided me with a vast amount of knowledge about dairy farming in the UK and also taught me about Scottish culture and gave me instructions on how to play the bag-pipes ...I'm definitely NOT a natural! The Glasgow University Veterinary Science students also visited this property and I joined them for a morning of pregnancy and fertility testing and castrating." - Kimberly Groner, CSU veterinary science student.



Servicing the Veterinary, Pharmaceutical & Personal Care Industries

NxGen specialises in:

- New Product Development
 - Stability Testing •
- Analytical Method Development
 - Analytical Validation •
- Compounding lab onsite for individual needs •



For more information on our services, please contact Dr. Jim Rowe or Daryll Knowles on **1300 853 621**

Veterinary science students rewarded for commitment to rural communities

Two CSU veterinary science students have recently received statewide awards recognising their significant personal achievements.

Second year student Amy Dutton has been awarded the NSW Farmers' Association Tertiary Scholarship for her commitment to agriculture and rural communities.

As one of eight students in NSW to be awarded the AU\$5,000 scholarship, Ms Dutton was recognised as an ambassador for youth in rural communities.

"This scholarship will enable me to become involved in organisations focused on the issues affecting rural youth," said Ms Dutton, who has already received invitations to forums addressing the shortage of young people undertaking tertiary education, as well as those prepared to work in rural areas after they graduate.

With an interest in sheep genetics and dairy cattle, Ms Dutton plans on working in a rural mixed practice before travelling overseas to gain experience in exotic diseases such as foot and mouth.

"My upbringing on the land and the rural community has taught me so much and now I can use my interest and knowledge to give back some of what I had previously been given," she said.

The scholarships are available to any student in NSW undertaking full-time tertiary study and linked to a NSW Farmers Association membership.

Earlier this year, first year veterinary science student Brittany Bowd was recognised for her high level of academic achievement through a Premier's Victorian Certificate of Education (VCE) award.

Ms Bowd completed Horse Studies as an extra subject outside school while completing her HSC and has been ranked sixth in the state for her performance in the subject. "It is wonderful to be recognised for all of the time and effort I put into my study," she said.

"I chose to complete the Horse

Studies course because of my interest and involvement in horses through activities such as Pony Club," said Ms Bowd. "The program was also appealing because I would be awarded with a Certificate II in Equine Industries."

Once she completes the veterinary program at CSU, Ms Bowd hopes to become a rural veterinarian in her home state of Victoria.



Second year student Amy Dutton, recipient of a NSW Farmers' Association Tertiary Scholarship.

CSU students ready for rural practice

Charles Sturt University (CSU) Veterinary Science students will be required to undertake a series of placements in veterinary practices to help develop their skills and their understanding of veterinary workplaces. The program is called CEMS (Clinical Extramural Studies) and all students will have to complete 12 weeks of CEMS between the end of third year and the end of sixth year, in addition to their clinical rotations.

Director of Veterinary Science Professor Kym Abbott believes the CEMS program is very beneficial to all veterinary students, providing them with exposure to a wide range of veterinary environments. It also exposes the students to a number of potential employers.

"Graduates commencing employment in rural mixed practices will be expected to contribute to the dayto-day activities of the business from day one," said Professor Abbott. "The practical placement program at CSU allows the students to learn things a university education cannot teach and will help us produce competent and reliable employees for practices anywhere in Australia."

Professor Abbott is urging veterinarians to become involved in the program by completing the form included with this magazine and returning it to the School of Agricultural and Veterinary Sciences.

"We are looking for practices throughout Australia willing to participate in the CEMS program. Exposure of fourth year students to clinical practice is a tremendous stimulus to their learning, while practitioners gain a great deal of satisfaction from introducing such keen students to the challenges of working in their particular patch," he said.

The Charles Sturt Veterinary Science Foundation has also established a professional experience fund which enables individuals, groups and businesses to assist students with the costs associated with undertaking work placement.

CSU Vet students celebrate 'Half-Way'

Charles Sturt University veterinary science students celebrated the half-way point in their six-year degree in October with a 'Half-Way Festival'.

Organised by the Veterinary Students' Association, the three-day festival was designed to recognise the hard work of the students and also raise much needed funds for the students' chosen charity, Aussie Helpers.

Third year veterinary science student and coordinator of the festival, Sarah Charlton, said the festival was a huge success, proving to be a time for students to relax and have fun, and at the same time give back to the community.

"Aussie Helpers is a charity that aids drought stricken farmers in times of need and we are

delighted that we were able to raise money to support its cause. We chose this charity due to our close link to the land and the hard times that farmers and horse owners have been experiencing with the drought and now the equine influenza outbreak," Sarah said.

The weekend kicked off early on the Friday morning with a breakfast for the students with veterinary science Lecturer, Heidi Austin, followed by a scavenger hunt, and concluding at The Home Tavern later that evening.

Sarah believes that the highlight of the weekend was the fundraising rugby match held between the agriculture and vet science students with the winning team, the Aggies, awarded the trophy named after CSU Director of Veterinary Science, Professor Kym Abbott. The Dr Doug Bryden inaugural Man of the Match award was named in



Third year veterinary science student Kelly Plozza sings the National Anthem before the Inaugural Halfway Festival Ag vs Vet Football match.

honour of the esteemed veterinarian, Dr Douglas Bryden. The rugby match raised some AU\$2,500 for Aussie Helpers and drew a crowd of over 200 people on the day.

Sarah said that local businesses were very supportive with ELANCO, Ag & Vet Services, Hunters and Kooga clothing supporting the festival.

Saturday night included a dinner for the third year students, their parents and staff of the CSU School of Agricultural and Veterinary Sciences. The formalities concluded with a debate between a female staff-student team and a male staff-student team. On this occasion the male side was victorious with their winning argument that women make better vets. Entertainment continued into the night at the Home Tavern with 'Who's your Daddy'.

The final day of celebrations involved a barefoot bowls competition and an all you can eat buffet recovery session.

The Veterinary Students' Association at CSU provides support to the veterinary student body through fundraising, social activities and promotion of the veterinary science course and students to the community. Already this year, the Veterinary Students' Association has organised a community pet show, a barbecue for Australian Idol's Wagga Wagga auditions, fundraising for Relay for Life and Shave for a Cure, as well as a dinner for first year students and their parents.

If you would like to support the activities of the Veterinary Students' Association, please phone 02 6338 4680.



(R) Mrs Janet Gray, daughter of Dr Douglas Bryden, presents the Douglas Bryden Shield to Man of the Match, John Stuart.

CSU well-placed to impact biosecurity

Biosecurity is more important today than it has been in the past with more than 75% of emerging diseases classified as zoonotic (able to be transmitted between domestic animals, wildlife and humans), according to Chief Veterinary Officer, Dr Gardner Murray, at a Vet Foundation dinner at CSU.

"Over the last 15-20 years there has been a large number of new or reemerging diseases which Australia has not been, or will not be immune from. Some novel zoonotic or emerging diseases found in Australia in recent times include Hendra, Menangle and Bat Lyssa viruses, Porcine Myocarditis and Feline Spongiform Encephalopathy detected in an imported cheetah and Golden cat," said Dr Murray. There are many factors which can contribute to the development and establishment of emerging and re-emerging diseases including demographic changes, trade, tourism and war.

"Biosecurity as it relates to animal health is well developed in Australia and, although there is always room for improvement, the measures we have in place are arguably the best in the world, or at least equal to the best other top countries have to offer," Dr Murray said.

"Key components of Australia's animal health system include: quarantine, well trained staff, effective legislation, strong laboratory and surveillance networks, contemporary quality



For the first time ever, a vaccine for pinkeye!

Because it's something you never want to see.

Coopers[®] introduce Piliguard[®], the first vaccine available in Australia to help prevent pinkeye in cattle. Prevention really is better than cure, and you only need a single dose. Find out more by going to www.pinkeye.com.au or calling 1800 226 511.



COOPERS® & PILIGUARD® are registered trademarks of Schering-Plough Animal Health Corporation.

standards, top class emergency management approaches, good communication systems, and most importantly, first-class working relationships between industry, state and territory governments and the Commonwealth.

"I hope that in the future rural practitioners play a greater role in national-interest animal health matters," Dr Murray said. "CSU is in a wonderful position to train students who are eager to become involved in Australia's biosecurity measures and conduct research of an applied nature to meet future needs."

Vet practice prize recognises CSU staff member

Dr Douglas Bryden, a driving force behind the development and philosophy of the CSU veterinary science program, has established a University prize in honour of inaugural CSU Course Coordinator, Dr Heidi Austin.

The Dr Heidi Austin Prize for Veterinary Practice will be awarded to the student who has the highest accumulated score in feedback sheets from veterinary practitioners during the completion of Vet Practice 1 and 2 and the first semester of Vet Practice 3. The successful student must also have passed all animal handling practical examinations at first attempt, have passed the cattle pregnancy diagnosis examination, and demonstrate good communication skills.

Dr Austin worked closely with Dr Bryden in establishing the Veterinary Science program, and will be fondly missed by students and staff alike when she relocates to Brisbane with



Third-year veterinary science students Anneliese Seager (L) and Emily Stearman (R) say a fond farewell to Dr Heidi Austin at a Breakfast BBQ at the Beach.

Staff Profiles:



Dr Scott Norman

Senior Lecturer in Veterinary Reproduction in the CSU School of Agricultural and Veterinary Sciences Dr Scott Norman views his career highlights in two distinct categories.

"Firstly, there are the academic highlights of my career, including the attainment of my BVSc degree, gaining

my American speciality boards in theriogenology, the awarding of my PhD and being recognised through an AVA teaching award," he said. "The second category is one of simple pleasures. Moments include when the first cow on which I had to perform a caesarean section survived, when the first horse I had to administer a general anaesthetic to stood up without any back flips and when the first client came into the clinic and specifically asked for me to attend to their case." As a Senior Lecturer in the School of Agriculture and Veterinary Science, Dr Norman is involved in teaching and student mentoring; administration; research and postgraduate supervision; providing a theriogenology (veterinary reproduction) consultancy service for veterinarians; and providing a link between the practising veterinary profession and CSU.

"CSU is leading the way with its extended course providing smoother transition for students into the busy world of general veterinary practice," he said.

Professor Norman's research interests revolve around the nutrition of the pregnant mother during gestation and how this affects the future life of its offspring.

"While my research in this area has mainly focused on cattle, readers may be interested to know there is an increasing body of evidence which shows that in humans the nutrition of the woman during pregnancy can influence the future health of the baby," he said. "In particular, disease conditions such as diabetes, cardiac disease and obesity may be influenced by the protein and energy intake of the mother".



Professor Nick Sangster

Professor Nick Sangster spent many years researching parasites in sheep to further understand anthelmintic (drench) resistance before commencing his position as Professor of Veterinary Pathobiology at CSU. This work has led him to become involved in a research initiative which tackles the most economically important

diseases in Australian sheep. "Some sheep naturally carry fewer worms than others and our project aims to understand the genes of sheep that are responsible for reducing infection," Professor Sangster said. "This has involved detailed DNA micro-array studies. The genes that we discover will then be investigated with the hope of finding diagnostic markers for sheep which naturally carry low worm burdens."

A recipient of the Fellowship of the Australian Society for Parasitology, Professor Sangster is committed to a lifelong quest for new knowledge in his chosen field. "It is important to strive to be a leader in your field, both nationally and internationally," he said. "It is how scientists contribute back to society and it means the students in our courses are seeing exciting science in action."

Professor Sangster considers one of the greatest challenges for Australians in the future is climate change and the effect of a less predictable climate on agricultural enterprises. However, he believes that beyond these threats lie opportunities.

"I think there are opportunities for the profession. There will be a trend towards preventive health and increased disease surveillance. Changing environments will require new solutions and research will provide these."

"CSU is ideally placed to contribute to the industry on several fronts. By delivering innovative courses and employing excellent staff we are training veterinary, animal science and equine science graduates who will be well equipped for the future needs of society. Research in our laboratories benefits from our close physical association with agriculture and can be more responsive to the changing industry needs in animal production and health."

CHARLES STURT

Veterinary Science Wine Pricelist

Enjoy award-winning, great value wine, and the same time support the Charles Sturt Veterinary Science Foundation. Proceeds from every purchase will help the Foundation support the future generation of veterinary practitioners.

Cellar Door Hours Monday - Friday 11am - 5pm Saturday & Sunday 11am - 4pm

Wine List	Quantity ordered units	GST inclusive	Amount Ş
Smarkling Wines			
2004 Limited Release Pinot Noir/Chardonnay - NEW RELEASE!		\$19.80	
2005 Limited Release Sparkling Shiraz		\$19.80	
White Wines			
2005 Limited Release Pinot Gris		\$13.20	
2006 Sauvignon Blanc		\$13.20	
2006 Chardonnay		\$18.15	
2006 Limited Release Chardonnay (Orange Region) Gold Medal Winner		SOLD OUT	
2004 Riesling Traminer		\$13.20	
Red Wines			
2007 Cellar Reserve Alfresco Rosso		\$9.90	
2005 Shiraz - NEW RELEASE!		\$13.20	
2004 Cabernet Sauvignon/Merlot Gold Medal Winner		\$13.20	
2003 Limited Release Cabernet Sauvignon (Hilltops Region)		\$19.80	
2004 Cellar Reserve Shiraz/Cabernet Sauvignon		\$27.50	
Desert/Fortified Wines			
Late Harvest Dessert Wine (375ml)		\$8.80*	
Liqueur Port (375ml)		\$15.40	
Liqueur Muscat (375ml)		\$15.50	
		Freight	
* No further discount		TOTAL	



WINERY

Since its establishment in 1977, wines from Charles Sturt University Winery have been awarded 23 trophies, 84 gold, 164 silver, 394 bronze medals in national wine shows.

FREIGHT COSTS INCL GST								
	1 Case	2 Cases or more						
	(per case)	(per case)						
Sydney	\$14.50	\$10.10						
NSW country	\$14.50	\$11.70						
Melbourne	\$14.50	\$10.10						
Vic. country	\$14.50	\$13.70						
Brisbane	\$13.80	\$13.80						
QLD country	\$19.10	\$19.10						
Adelaide	\$14.50	\$14.50						
SA country	\$17.50	\$17.50						
Perth	\$24.40	\$22.20						
WA country	\$30.60	\$30.60						
Tasmania	\$23.30	\$23.20						
NT	\$32.30	\$32.30						

PLEASE SEND WINES TO:

Name: _

Delivery Address (not a PO Box): ____

Postcode: ___

Daytime Phone: ___

Delivery Instructions if no-one home: ____

CREDIT CARD please tick one box Bankcard
MasterCard
Visa

____/____/_____/_____/_____

Signature: ____

Expiry Date: ____

Name shown on card: ____

Please return order forms to: The Charles Sturt Veterinary Science Foundation The Grange, Charles Sturt University, Panorama Avenue Bathurst NSW 2795

 PHONE:
 02 633 84680

 FAX:
 02 633 84833

 EMAIL:
 vetfoundation@csu.edu.au

Veterinary Science Foundation Membership

I would like to support the Charles Sturt Veterinary Science Foundation by becoming a (please tick one):

- □ Governor \$5,000 per annum
- Donor \$1,000 per annum
- □ Supporter \$250 per annum
- □ Associate with a monthly credit card contribution of
 - □ \$20 □ \$50 □ \$100

OR I would like to donate the amount of \$

Ν	а	m	le	:	

Address: ____

Postcode:

Phone:_____Email:___

Payment options:

Please invoice me in _____(month) each year for the above amount.

OR Make cheques payable to 'Charles Sturt Foundation' and forward to the address below

OR Please charge my credit card:

Bankcard Visa MasterCard American Express

Expiry date: ____

Amount of authorisation: ____

Cardholder's name:

Signature of cardholder: _

Please return to: Charles Sturt Foundation c/- Charles Sturt University Panorama Avenue, Bathurst NSW 2795



www.csu.edu.au/vet



Illustration by Jan Austin (Inland by Hand) http://www.inlandbyhand.com.au/