USE OF POUND DOGS IN RESEARCH AND TEACHING

AAHR (Australian Association for Humane Research) Inc. is a non profit organization that opposes the use of animals in research and teaching and promotes the use of more humane and scientifically-valid non-animal alternatives.

We are very grateful for the opportunity to express our view on a very controversial topic within the community – namely pound seizure.

Pound Seizure is a term commonly used internationally to describe the provision of pound animals to research and teaching facilities. AAHR first became aware of the practice occurring in Queensland when approached by a number of residents, concerned that their local councils were supplying animals to the University of Queensland. Our enquiries confirmed that three councils – Brisbane, Logan and Caboolture (now Moreton Bay) were providing animals for veterinary training. Since voicing our concerns, Brisbane Council has since ceased the practice, Moreton Bay is currently reviewing its policy and Logan Council has renewed their contract to continue providing animals.

As quoted from Patronek et al, published in Systematic review of comparative studies examining alternatives to the harmful use of animals in biomedical education “The primary objections to the terminal use of animals in biomedical education include a belief that it is ethically wrong to kill healthy animals for educational purposes and a conviction that medical and surgical skills can be obtained without such use of animals. It has also been suggested that the terminal use of animals could lead to decreased sensitivity among professional students1 and to a sense of irreverence for life.2,3

Specific Issues

1. Animal welfare risks and impacts of using pound animals.

Pet overpopulation is an unfortunate problem faced by society. However whilst pound animals are regarded as a resource, there is a conflict of interest and there will not be sufficient emphasis by councils to addressing the core problem nor satisfactory efforts made to rehabilitate and rehome the dogs. Veterinary schools that use pound dogs are therefore exacerbating the problem.

As quoted by veterinarian Dr Andrew Knight – pioneer of Australia’s first Conscientious Objection Policy at Murdoch University, Western Australia, “Using pound dogs creates a dependency on pounds. Yet all would agree that the overpopulation of dogs and cats, with the resulting mass destruction of many thousands of unwanted animals annually, is a problem we should be urgently seeking to eliminate. If, however, it is maintained that a continued supply of pound animals is necessary for teaching, a conflict of interest is created that may reduce the desire to solve this problem.”

This has been further claimed by University of Sydney veterinary graduate, Dr Anne Fawcett, September 2000 in “The Real Thing. A discussion on the use of pound dogs in the veterinary science curriculum” who stated “the use of pound dogs by veterinary schools creates a dependence on pet overpopulation, whilst failing to address this problem in any meaningful way. In other words, there is a perception that veterinary schools that use pound dogs are benefiting from the human irresponsibility and cruelty necessitating pounds, and that it is ethically unsatisfactory.”

Similar concerns have been raised by US group Physicians Committee for Responsible Medicine, who suggested “pound seizure brings experimentation issues in conflict with animal control needs. Animal control officers rely on the good will of the public if sick, injured or abandoned animals are to be brought into shelters. People bringing animals into a shelter expect that animals will either be adopted or humanely euthanased. When people know that pound seizure is routine, they tend to leave the animals on the street. Studies in New Mexico and Washington DC showed that pound release practices measurably erode public confidence in animal control facilities.”

Such sentiment has also been expressed by The Animal Alliance of Canada. “Animal shelters and pounds were established as refuges for lost, stray and abandoned animals, not as warehouses for cheap laboratory subjects. For these organizations to operate efficiently, the public must be confident that animals taken there will be returned to their owners, adopted into loving homes or humanely euthanased. Pound seizure jeopardizes public trust and diminishes support for the shelter. The research community has taken advantage of society’s inability to address irresponsible pet owners. However, surrendering animals to an uncertain, possibly painful fate, is not the answer.”

Such concerns have also been reinforced through personal discussions with pound staff and councilors.

After initial correspondence, Logan Council imposed a moratorium on providing pound dogs until a review of the situation had been conducted. I was informed that during this time pound staff were visibly distressed that they had to euthanase healthy animals that would otherwise be sent to Queensland University. These animals were to be euthanased regardless, but the onus was no longer on pound staff and so the responsibility of ending the dogs’ lives was removed, consequently and importantly removing the need to consider the root of the problem.

Similarly, I met with Cr Roz Blades, former Mayor of Springvale Council (prior to its amalgamation to Greater Dandenong, Victoria). Some time ago, Springvale Council provided their pound dogs to the Baker Institute for medical research. Since ceasing the practice they have placed greater

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7 Pound Seizure – Pets in Experimentation, Animal Alliance of Canada, 2008
8 Personal meeting with Scott Brown and Rod Watton of Logan Pound
emphasize on addressing the over-population problem through education about responsible pet
ownership, reviewing registration fees and desexing etc.

The number of animals euthanased through lack of homes is an unfortunate problem that
councils and welfare groups need to work on together to resolve, however it is apparent that
whilst these animals are regarded as a resource, there will not be sufficient emphasis on
addressing the core of the problem nor satisfactory efforts made to rehabilitate and rehome them.

2. Ethical Issues associated with the use of pound dogs.

As stated by Animal Behaviorist Dr Jonathan Balcombe, “A basic ethical principle asserts that if
we have a choice between two ways of achieving something – one that causes pain, suffering,
and death and the other that does not – then ethical conduct dictates using the latter method.
Using animals in education presents such a choice.”

It is unethical to “practice” on homeless animals in order to gain skills to use on those fortunate
enough to have carers prepared to foot veterinary bills. Pound animals are sentient individuals
and not mere tools for teaching and practicing on. They have their own intrinsic worth – equal to
pedigree animals who have homes.

To suggest that these animals “will die anyway” is an inappropriate and derogatory view of the
lives of sentient creatures, and one which should never be perpetuated by the veterinary
community – a group whose main purpose is to protect animals from harm.


The main benefit of using pound dogs is to practice surgical skills on living tissue, however as
discussed in further detail below, there are more humane ways of achieving this objective. They
may also be used for live palpation in anatomy labs of anatomical landmarks, animal handling
and clinical skills training eg venipuncture (blood sampling) however these too can be achieved
through more humane means. The continuation of using pound dogs for this purpose therefore
only desensitises students and sends a confusing message.

Trainee veterinarians should be learning to respect life. Killing those that they are expected to
heal sends a confusing message that can result in desensitisation to killing and a loss of respect
for life.

Harmful use of animals can also present a barrier to otherwise dedicated students; they are also
contrary to the ethos of the profession.

4. Alternatives to the use of pound dogs.

Considering the availability of more humane and medically sound alternatives, the use of terminal
surgery labs is an unnecessary and unethical practice.

Alternative methods have come about partly from an increasing demand from both students and
teachers to avoid methods of teaching and training that harm animals. They ensure the dignity

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9 Balcombe, J. Dissection: Case for Alternatives.
11 Martinsen, Siri, Jukes, Nick, Towards a humane veterinary education, JVME 32(4) 2005 AAVMC
and humane treatment of animals that all teachers and students must observe as the very ethos of the veterinary profession that they serve.12

Many non-harmful alternatives now exist, including computer simulations, high quality videos, ‘ethically-sourced cadavers’, preserved specimens, models and surgical simulators, non-invasive self-experimentation and supervised clinical experiences.13

Aboud and colleagues14 have suggested that the use of models, mannequins and simulators could forever eliminate the use of live anaesthetized animals for surgical training.

Well designed educational software can encourage a high conceptual level of understanding as well as increase understanding of the specific topics being addressed. In a virtual dissection or anatomy program, students can perform tasks at their own pace, repeating as necessary.15

Ethically-sourced animal cadavers and tissue. The term "ethically-sourced" refers only to cadavers and tissue obtained from animals that have died naturally or that have been euthanized in response to natural terminal disease or non-recoverable injury.16 These are excellent tools for clinical skills training and for the practice of surgical techniques, once basic competency has been gained using non-animal alternatives.

The use of ethically-sourced cadavers is standard practice in human medicine. The ethical sourcing of animal cadavers is potentially easier to implement than for human cadavers.17

Kumar18 reports that students appear to have a better appreciation of anatomy and exhibit more mature behavior in taking care of cadavers with animals provided by a client donation program and that such a program is cost effective.

Clinical practice
Students need the experience of handling animal tissue and living animals, including learning to perform invasive surgery and other clinical procedures. This training can and should be achieved by fully replacing conventional animal experimentation or other harmful procedures with the alternative of neutral or beneficial work with animals. As well as helping to meet practical teaching objectives, alternatives to harmful animal use also ensure that students do not acquire undesirable attitudes towards animals, such as indifference to animal life and/or a disrespectful attitude towards animals as patients. Moreover, some necessary elements of veterinary education, such as training in patient care and understanding species-typical behaviour, are likely to be undermined if there is harmful use of animals in the students training.19

Humane veterinary surgical courses ideally comprise several stages. Students may commence by learning basic manual skills such as suturing and instrument handling, using knot tying boards, plastic organs and similar models. They may then progress to simulated surgery on ethically-

12 Ibid
13 Knight, Andrew, The Effectiveness of Humane Teaching Methods in Veterinary Education, ALTEX 24. 2/07
15 Martinsen, Siri, Jukes, Nick, Towards a humane veterinary education, JVME 32(4) 2005 AAVMC
17 Ibid
19 Martinsen, Siri, Jukes, Nick, Towards a humane veterinary education, JVME 32(4) 2005 AAVMC
sourced cadavers. Finally students observe, assist with, and then perform necessary surgery under close supervision on real patients that actually benefit from the surgery – as distinct from on healthy animals that are later killed – similar to the manner in which physicians are trained.20

An important part of humane veterinary surgical courses worldwide are animal shelter sterilization programs, in which homeless animals are neutered by students under supervision and returned to shelters. The popularity of these programs stems in part from the fact that all parties benefit from them. The animals have their adoption rates increased by neutering,21 the numbers of unwanted animals subsequently killed due to uncontrolled breeding is decreased, students gain invaluable experience at some of the most common procedures they will later perform in practice, and their veterinary school experiences the public relations benefits of providing a valued community service.22

Spay/neuter surgeries of animals from humane societies meet both budgetary and social demands

This type of care is mostly directed to treating sick animals brought to the facilities by clients/animal guardians and providing for the animal's wellness by prophylactic treatments such as immunization. For the veterinary student, work with living animals is essential, but the animals themselves should always benefit from the experience, or at least not be harmed. Students can also gain an appreciation of the diversity of patients and clinical situations and improve skills in communicating with colleagues and animal guardians.23

Pedagogic value
The key question is not whether one method is equal to the other but, rather, how well a given method promotes learning. A conservative conclusion based on [several] studies is that alternative methods are pedagogically equivalent to traditional animal dissections.24

Studies of veterinary students were reviewed comparing learning outcomes generated by non-harmful teaching methods with those achieved by harmful animal use. Of eleven published from 1989 to 2006, nine assessed surgical training – historically the discipline involving greatest harmful animal use. 45.5% (5/11) demonstrated superior learning outcomes using more humane alternatives. Another 45.5% (5/11) demonstrated equivalent learning outcomes, and 9.1% (1/11) demonstrated inferior learning outcomes.25

Of the eleven studies comparing veterinary student learning outcomes, eight were more than a decade old (published prior to 1996). Hence, a considerable number of these studies examined humane teaching methods such as films, interactive video discs, and early compute simulations which have been largely superseded by more advanced alternatives, particularly in the field of computer simulations.26

20 Knight, Andrew, The Effectiveness of Humane Teaching Methods in Veterinary Education, ALTEX 24. 2/07
22 Knight, Andrew, The Effectiveness of Humane Teaching Methods in Veterinary Education, ALTEX 24. 2/07
23 Siri, Jukes, Nick, Towards a humane veterinary education, JVME 32(4) 2005 AAVMC
24 Balcombe, J. Dissection: Case for Alternatives.
25 Knight, Andrew, The Effectiveness of Humane Teaching Methods in Veterinary Education, ALTEX 24. 2/07
26 Ibid
A similar comparison illustrated additional benefits of humane teaching methods in veterinary education, including time and cost savings, enhanced potential for customization and repeatability of the learning exercise, increased student confidence and satisfaction, increased compliance with animal use legislation, elimination of objections to the use of purpose killed animals, and integration of clinical perspectives and ethics early in the curriculum. The evidence demonstrates that veterinary educators can best serve their students and animals, while minimizing financial and time burdens, by introducing well designed teaching methods not reliant on harmful animal use.27

The fact that veterinary schools in the UK, as well as Sydney University are able to produce well-qualified veterinarians without relying on terminal surgery labs demonstrates that they are able to achieve the same outcome by more humane means.

All curricular design involves combining tools from many different sources, and alternatives will almost always be used in combination to meet teaching objectives and to achieve a comprehensive learning experience. Nerve-muscle physiology practicals may combine computer simulation with student self-experimentation, and surgery courses may offer a range of different simulators in conjunction with clinical apprenticeship.28

Such an investment in alternatives will benefit all the groups concerned – not only the students, the teachers, and the animals, but also the veterinary profession and society in general. These students will have not, during their education, gone against the creed of ‘first, do no harm’. 29

5. Evidence that current mechanisms for considering the ethical and welfare issues and justification for using pound dogs are deficient.

The use of animals in research and teaching is currently regulated by animal welfare legislation, the Code Of Practice30, animal ethics committees and the 3R’s principle of Reduction, Refinement and Replacement.

The system however is largely self regulatory.

Ask any institution or company whether they use animals in research and their response will nearly always say that all animals are treated humanely and their use is subject to approval by an animal ethics committee which contains an animal welfare rep.

The presence of animal ethics committees, and in particular inclusion of a category C member (animal welfare representative) can therefore be seen to promote a ‘clean’ image of the research industry to the public - as an assurance that the care and use of animals is sanctioned by those with a concern for their welfare and/or rights.

While it might be considered necessary to retain a system that monitors and polices the use of animals in research, the system is far from flawless. In particular, our continued efforts to refine experiments may be detracting our efforts to reduce and replace animals by actively seeking alternatives.

Overseas studies of the ethics committee system and discussions with Australian AEC members have revealed serious concerns and raise questions as to whether this system is doing more damage than good. It therefore begs the question of whether we should be trying to resolve these

27 Knight, Andrew, The Effectiveness of Humane Teaching Methods in Veterinary Education, ALTEX 24. 2/07
28 Siri, Jukes, Nick, Towards a humane veterinary education, JVME 32(4) 2005 AAVMC
29 Ibid
problems or whether we should be re-evaluating the entire system, including our attitudes and approach to the use of animals in research.

6. Evidence that there is deficient application of the 3R’s.

The Australian code of practice for the care and use of animals for scientific purposes – which is legally enforceable under Queensland’s animal welfare legislation - clearly states "Scientific and teaching activities using animals may be performed only when they are essential"(1.1) and "Techniques that totally or partially replace the use of animals for scientific purposes must be sought and used wherever possible."(1.8)

Teaching is the passing on of information that is already known. No further knowledge is obtained by using animals for this purpose. There are a huge number of alternative teaching methods available, which makes such use of animals unjustified and these alternatives should therefore be promoted rather than allowing the continuation of animal use in this area.

Teaching is an area in which we CAN replace animals and yet they are still being used. Such use is therefore in breach of the ‘replacement’ principle.

As an example of the lack of adherence to the code, live rabbits were being used in cardiovascular physiology classes at Monash University, despite a non-animal alternative being available. The live rabbits were anaesthetised, tied down by their legs and teeth and had their throats slit in order to insert a catheter to administer drugs that raise and lower their heart rates. After completion of the experiment the rabbits were killed.

The university has since advised that the practical has now been replaced with alternatives including non-invasive experiments in humans using the Finometer MIDI, however this was only following protests by Animal Liberation and letters of objection from AAHR and its supporters and, as admitted by Monash University, in response to public concern.


Some evidence indicates that terminal surgery labs in veterinary education may result in the decreased likeliness of students to view animals as sentient, in decreased empathy towards animals, in decreased propensity to administer peri-operative analgesics (surgical painkillers) and an impedance of moral reasoning ability. Consequently, the replacement of harmful animal use with humane teaching methods is likely to result in veterinarians with more positive attitudes towards animal welfare, which is likely to directly benefit their animal patients.


8. How the welfare impacts associated with using pound dogs differs to the use of alternatives such as dogs from other sources or other species.

Recently ‘stray’ companion animals and unwanted ‘pets’ suffer stress and fear. From a scientific point of view, stress and fear create variables, and can nullify the results of a well-designed experiment. As well as the welfare implications, pound dogs are not considered to be good scientific models when used in other forms of research. As quoted by Dr Neal Barnard, Chairman of Physicians Committee for Responsible Medicine, “Pound animals are the worst possible research subjects. We don’t know their age, we don’t know what diseases or parasites they may be harboring, we don’t know their history of treatments or what genetic illnesses may be in their ancestry. A study that failed to account for these variables in human subjects would never be taken seriously.”

The World Health Organisation, the Council of Europe and the International Council of Organisations for the Medical Sciences all strongly recommend against the use of shelter animals in experimentation.

9. No basis for treating use of pound dogs differently to the use of other animals.

While the ethics of using pound dogs in veterinary training is considered by many to be even more unjustified than the use of animals from other sources, AAHR does not condone the use of ANY living animal to practice a skill that can be achieved by other more humane means. Both pound animals and purpose-bred animals are sentient. We therefore urge that any use of pound dogs is NOT replaced with animals from another source.

10. Costs and benefits of banning the use of pound dogs for scientific purposes.

While short term costs may be involved in changing current curricula and developing alternative methods of teaching, these are far outweighed by the long term benefits of effecting such change.

Banning the use of pound dogs for scientific purposes will result in:
- More emphasis by shelters to rehome animals. (As seen since this issue became public, councils have worked more closely with the Animal Welfare League Gold Coast to rehome a greater number of animals.)
- The use of alternatives such as ethically sourced cadavers will result in a higher regard for animal life and thus more compassionate vets without compromising the pedagogical value of their training.
- Veterinary students can, through supervised training on real patients, gain invaluable experience in post operative care.
- The community will benefit by having more affordable veterinary services.


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37 Pound Seizure – Pets in Experimentation, Animal Alliance of Canada, 2008
38 Ibid
AAHR considers the development of guidelines to be an endorsement of the use of pound dogs. The only situation in which pound dogs should be used is if the research is not harmful and they themselves will benefit. For example, some years ago pound dogs were used in Victoria to consider behavioural modification. The tests were non-invasive and assisted the dogs (as well as future pound dogs) by increasing their chances of being rehomed rather than killed.

As well as the specific issues we have been asked to address, per above, we consider the following issues to be pertinent in the debate as to whether or not pound seizure should be banned:

Public Opinion
According to a recent opinion poll\textsuperscript{39}, the majority of the population does not believe that humans have a moral right to experiment on animals.

- 58\% of respondents do not believe that humans have the moral right to experiment on animals.
- 87\% consider that the number of animals used for research and teaching in Australia (approx 7 million p.a.) is unacceptable or is capable of reduction.
- 71\% of the population supports the use of alternatives to the killing of animals in research.

Overseas situation
In the United States, 13 states have enacted laws prohibiting pound seizure. It has also been banned in Sweden, Netherlands and Denmark, and Great Britain has not allowed students to use live animals for more than a century.\textsuperscript{40}

We also draw your attention to the appendix enclosed which lists statements from distinguished veterinarians opposing the use of pound dogs in veterinary training.

Summary Position

We sum up by reiterating the words of veterinarian Andrew Knight: “Rather than continuing to rely upon harmful animal use, the evidence clearly indicates that veterinary educators can best serve their students and animals, and can minimize financial and time burdens upon their faculties, by introducing well designed, humane teaching methodologies.”\textsuperscript{41}

Current legislation, public opinion and ethics dictate that the replacement of pound dogs with more humane methods of veterinary training will be a win-win situation for all parties concerned – veterinary students, the community and of course pound dogs themselves.

Helen Marston
Chief Executive Officer
AAHR Inc.


\textsuperscript{40} Pound Seizure – Pets in Experimentation, Animal Alliance of Canada, 2008

\textsuperscript{41} Knight, Andrew, The Effectiveness of Humane Teaching Methods in Veterinary Education, ALTEX 24. 2/07


A call for University of Queensland to end the use of pound animals for veterinary training.

As a veterinarian and professor of veterinary medicine at the University of California School of Veterinary Medicine, I know it is unnecessary for students to be trained in this way. Our university uses a system of training that does not require the purposeful death of dogs for surgical training. The Univ of Queensland surely can develop a similar system. It is the height of hypocrisy for the veterinary profession to kill in order to train.

Professor Nedim C. Buyukmihci, V.M.D. University of California, School of Veterinary Medicine.

"It is inhumane and unacceptable to train veterinary students by killing pound animals who were at one time someone's family members.

Tufts University has successfully implemented an educational memorial program (EMP) a decade ago that uses ethically sourced client donated pet bodies to teach dog and cat basic as well as clinical anatomy.

Given our proven success in training some of the best veterinarians in the world with EMP, I am sure the University of Queensland can also develop a humane education program sparing the lives of pound animals so that they may live out their lives"

A. Kumar, Professor of Anatomy and Developmental Biology, Tufts University

Regarding use of live animals for teaching basic surgical skills, at The Ohio State University, over 7 years ago, we eliminated the use of live animals that needed to be sacrificed for the sake of teaching surgical skills. We replaced our live animal laboratories with basic skills tutorials and simulators, and ethically-sourced cadaver experiences.

In addition, students rotate through an intensive 2-week training program with a dedicated shelter surgeon. This one-on-one experience focuses on elective surgery procedures to help make these homeless dogs and cats more adoptable.

This is a win-win situation, students practice their skills in an ethical manner, and they help the community at the same time. I see no reason to sacrifice animals for the sake of surgery training, there are simply better (more ethical and affordable) options available now.

Our professional students can "hold their own in surgery" when compared to the skill levels of student graduates from other top-tier US veterinary schools.

Daniel D. Smeak, DVM, Diplomate ACVS; Professor, Small Animal Surgery, Colorado State University.

It is clear that we are entering an age of increased ethical awareness. There is now a moral imperative for our educational institutions firstly to recognise, and secondly to embrace, the concept of reverence for all life. 

Andre Menache, MRCVS, South African veterinary graduate

Alternatives are a viable method of instruction in the field of biomedical education. Thus, we would encourage biomedical educators to consider how adopting alternative teaching methods could be of benefit to their teaching programs, students, and faculty members.

Garry J. Patronek, V.M.D., Ph.D. Asst. Professor, Tufts Cummings University School of Veterinary Medicine

As a West Australian veterinary student from 1997-2001, I was forced to overcome strong faculty opposition to humane teaching methods.

In a profession that should be dedicated to upholding animal welfare, such veterinary student experiences are disturbingly common, within Australia and elsewhere. Fortunately, after a long and arduous struggle, which included the commencement of legal action against my university, I succeeded.
As a result we were able to establish Western Australia’s first veterinary surgical training program based on healing, rather than killing, healthy animals, including neutering homeless animals from shelters. I gained around five times the surgical experience of my classmates who killed to obtain their degrees, and found it enormously satisfying to be preventing unnecessary deaths from pet overpopulation, rather than causing such deaths during my training. My transition to surgical practice after graduation was also considerably eased, and I’m proud to be able to state that I’m a competent practicing veterinary surgeon today.

A large body of published educational studies overwhelmingly demonstrates the effectiveness of humane teaching methods within veterinary and other biomedical education, and, commonly, their superior cost-effectiveness. Furthermore, the relevant Australian Code of Practice – which is legally enforceable in all states and territories – clearly requires their use. Killing animals within veterinary and other biomedical education is educationally unnecessary, ethically reprehensible, and technically illegal within Australia and countries with similar animal welfare legislation.

Dr Andrew Knight, BSc., BVMS, CertAW, MRCVS, FOCAE

Our Faculty is committed to promoting the health and welfare of companion animals by providing excellent learning and teaching opportunities for our students. Faculty policy does not permit the use of live, non-survival, dogs for practical instruction; instead we have invested substantial resources in community initiatives such as sterilisation of animals that are to be rehomed through local welfare agencies.

Live dogs have been replaced with cadavers for surgery practical classes. These cadavers are unwanted dogs that have been humanely killed as part of routine pound operations. It is important to stress that the University has absolutely no influence over their supply. Instead of being incinerated immediately by the pound, the cadavers serve as a valuable teaching resource. Support by concerned citizens for this form of teaching initiative would benefit veterinary students Australia-wide.

Professor Leo Jeffcott, Dean, Faculty of Veterinary Science, The University of Sydney

In 2003, the newest college of veterinary medicine in the United States and Canada admitted its Charter Class at Western University of Health Sciences in Pomona, California. I was the founding dean, and served in that capacity from 1998 – 2007. The college was founded on commitments to student-centered learning, reverence for life, and strategic partnerships.

The reverence for life commitment was defined as a promise that animals would not be killed or harmed in the educational programs. The commitment was based on the moral responsibility of veterinarians and veterinary students to “first do no harm”, and also was based on the evidence that veterinarians could be better educated than in the past, by using a variety of models and materials on which to master clinical skills instead of using sentient animals that would be killed after the teaching exercise. (Because the use of live animals, instead of models, increases student stress and sometimes decreases student opportunity to repeatedly practice procedures.) We believed that veterinary students should practice clinical skills many times over, to reach a point of mastery, in a safe setting where animal pain was not a negative result of their learning. We believed that veterinary students needed more, not less, experience with living patients that would benefit from the students’ actions.

The College of Veterinary Medicine at Western University operationalized the reverence to life commitment in the following ways:

A willed body program was established to obtain animal cadavers for anatomical dissections and prosections. Cadavers are donated of animals that have died or been euthanized due to terminal disease may be donated by their owners. To date we have received over 1,000 contributions from friends in the community who become engaged with our school through their gift of the body of their pet or other animal, and have received dogs, cats, horses, cattle, sheep, pigs, goats, lions (2), a variety of rodents and
pocket pets, iguanas, manatees (2) and llamas. The College convenes a memorial service for these willed bodies at the beginning of every academic year. The four semester Veterinary Issues course includes discourse and debate (with speakers ranging from the US Military to PETA) on animal welfare issues. Students have 24 hour per day access to about 300 on-line learning modules that demonstrate correct performance of clinical skills. A four semester Clinical Skills course in the first two years of the curriculum uses, in part, a variety of inanimate models we have built or purchased (and in some cases cadaver specimens from the willed body program) that enable students to practice, to mastery, clinical skills such as venipuncture, endotracheal intubation, bandaging, rectal palpation (bovine and equine), suture patterns, general surgical procedures and aseptic technique. Students in the first two years of the curriculum work in three “wellness clinics”, doing many repeat physical examinations, client communications and record keeping on healthy animals. Students in year three of the curriculum master general surgery by performing (under faculty supervision) spays, neuters, and other general surgery (coeliotomy, fracture repair, surgical biopsy, etc) on regional shelter animals from no-kill shelters that need the surgery.

So far, only two classes have graduated (in May 2007 and May 2008), but we do have the following outcomes data:

- Our national board pass rates are comparable to those of other schools in the US (and all of the Class of 2007 have passed national boards, though some after a retake which also is true with graduates from other schools).
- We have many anecdotal stories from students accepted to multiple veterinary schools in the US that chose to come to Western University because of our reverence for life commitment.
- The largest corporate veterinary practice in the US (Banfield the Pet Hospital with 720 hospitals seeing 100,000 cases per week) has reported that our graduates outperform those of other US schools in clinical skills, client communications skills and cases seen per day (data reported orally at the August 19-21 Banfield Industry Summit, Portland, OR).

Shirley D. Johnston, DVM, PhD  
Professor and Founding Dean, College of Veterinary Medicine  
Vice President, University Advancement