Ethics of Animal Care and Use
In Veterinary Medicine
At the University of Illinois

By: Somaiya Shakil
    BTW 250-A1_06-01
    Chase Connor
    & Ming-Tao Tsai
In “An Introduction to Veterinary Medical Ethics: Theory and Cases”, Bernard E. Rollin describes an ethical situation that a veterinarian might be thrown into by:

A five-year-old healthy dog is presented to your clinic for euthanasia. The dog is well behaved and the client gives no reason for the euthanasia. The consent form is signed and the dog euthanized. The following day the client’s wife phones inquiring about the dog. The dog was hers and her husband had it destroyed as part of an ongoing fight with her (Rollin 331).

Questions arise from this situation towards the future veterinarians. They must figure out if all members of the family should be contacted before euthanasia is performed. They must also consider if the veterinarian is at fault for the death of the dog. These types of circumstances and questions help each veterinarian student understand ethics and how each decision will involve people from different walks of life. As the semesters fly by the veterinarians students, they work with live subject research to prepare them for their future as doctors. Meanwhile, the University of Illinois Urbana-Champaign hopes that the students will become respectable Veterinarians due to their experiences and lessons learned.

**History and Evolution of Animal Laws**

Innumerable types of legal concepts and precedents are included within the framework of veterinary medical concept. Daily provisions of veterinary services are greatly affected by many laws and regulations. Laws and regulations on animals date back to 1641, when the Puritans of the Massachusetts Bay Colony printed their first legal code, the Body of Liberties. Because at this time, animals were considered as mere property and were often used and abused at the owner’s expense, the Body of Liberties forbade cruelty to animals. The Common Law existing at the time did not have clause protecting animals. The Body of Liberties, on the other hand, had an entire section, “The
Bruite Creature” dedicated to animals. For example, the forbiddances of animal cruelty were listed in Liberty 92, and 93. There were as follows:

Liberty 92: “No man shall exercise any Tirrany or Crueltie towards any bruite Creature which are usuallie kept for man’s use.
Liberty 93: If any man shall have occasion to leade or drive Cattel from place to place that is far of, so that they be weary, or hungry, or fall sick, or lambe, It shall be lawful to rest or refresh them, for a competent time, in any open place that is not Corne, meadow, or inclosed for some peculiar use (Halverson & Leavitt 2).

In case of sever animal cruelty, though, Common Law did play a role. For example, the Digest of New York Statues and Reports stated:

28. Cruelty. The wanton cruelty to an animal – e.g. excessive beating of his horse by a cartman, - is punishable at common law as a misdemeanor (Halverson & Leavitt 2).

Credit for the first anti-cruelty law in the United States goes to B. F. Butler and John C. Spencer. On October 15, 1828, in New York, they wrote a letter to the Legislature stating that the Common Law had long ceased to be an efficient guide in assigning punishments. They were responsible for phrasing the first anti-cruelty state law and assigned its violation and punishment of a misdemeanor (Halverson & Leavitt 3).

Following New York, Massachusetts passed an anti-cruelty legislation in 1835. Massachusetts’s legislation was similar in its content with that of New York’s except their punishment was designated “by imprisonment in the county jail, not more than one year, or by fine not exceeding one hundred dollars” (Halverson & Leavitt 3). In the same manner, other states and territories followed the trend of adding an anti-cruelty law to their statues. The punishment varied from state to state; some had punishments more severe than others.
Idaho went a step further and passed a companion law to enforce a similar penalty on any person who poisoned any cattle or domestic animals. To the best of our knowledge, this is the first law in the United States protecting domestic animals from poisoning. For a chronological outline showing the year in which each state enacted its first anti-cruelty law, see Appendix A (Halverson & Leavitt 4).

In 1866, a man named Henry Bergh, after witnessing animal cruelty, secured legislative approval for the incorporation of the American Society for the Prevention of Cruelty to Animal (ASPCA), the first humane society in the Western Hemisphere. Even with the anti-cruelty laws and the newly incorporated society, Henry Bergh found it hard to convict the perpetrators. On April 19, 1866, Henry Bergh passed his first law on animal cruelty. He kept it similar to the 1828 law, except he added a clause to protect disabled horses and mules from abandonment. He still wasn’t content with himself and proceeded to create an act, which more effectively prevented animal cruelty; this was passed on April 12, 1867. The act has ten sections and has since served as the foundation for drafting many anti-cruelty laws to come into existence; see Appendix B for act (Halverson & Leavitt 5-7).

Nearly a century later, the United Nations (UN) adopted a universal declaration of the rights of animals—“All animals are born with an equal claim on life and the same rights to existence” (Soave & Crawford 27). This declaration proved to be effective because it eventually led to the World Humane Movement. Since then, in the United States, federal laws have been enacted such as the Humane Slaughter Act (1958), the Animal Welfare Act (1970) and the Horse Protection Act (1976).
Around the same time, organizations such as the University of Illinois Institutional Animal Care and Use Committee (IACUC), United States Department of Agriculture (USDA), and the U.S. Environmental Protection Agency (EPA) were established to help carry out certain regulations towards issues surrounding animal care.

The IACUC was launched in the 1980’s due to the government’s policies becoming stricter pertaining to animal care. Animal Welfare Act is the basis for rules and regulations adopted by the American veterinary schools. This particular act was passed first in 1966 and then changed twice, 1970 and 1976. Its main purpose is to protect the animals used in research activities funded by the federal government. They make sure that everything from research facility to animal carrier is in accordance with the rules and regulations stated. Animal Welfare Act and the Code of Federal Regulations are guidelines that all individuals working with animals must adhere by.

The United States Department of Agriculture has enforced the Animal Welfare Act for over ten years. The USDA serves as a department to amend and follow through with the Animal Welfare Act, thus providing animals with humane and ethical treatment. This relation has been effective in maintaining experimental animals’ welfare.

**Ethics Enforcement Agencies**

To ensure ethical conduct and humane teaching techniques or researching practices, principles, rules, or laws are intended to govern conduct specifically for the treatment of animals. The Vice Chancellor for Research (VCR) is the university official whose responsibility is to ensure compliance with state and federal laws and regulations pertaining to the use and care of animals in teaching and research (Policy Governing). The VCR oversees the entire campus animal care and use program and provides divisions
within that are responsible for requirements of teaching activities involving animals (Vice Chancellor Research). The units under the Office of the VCR include the Division of Animal Resources (DAR) and the Agricultural Animal Care and Use Program (AACUP). These offices are responsible for assuring that the care of animals used in research and teaching is professionally sound and that high standards of humane treatment of animals are observed (Policy Governing).

Training in the humane care and use of animals, as well as the management of the institution's program of veterinary care are services offered by both DAR and AACUP. The Director of DAR is also the Attending Veterinarian for Laboratory Animals. His job is to ensure the satisfactory veterinary care of animals used in laboratory research and education. He also controls all laboratory animal facilities on campus directly. The head of AACUP, also known as the Attending Veterinarian for Agricultural Animals, has the responsibility to ensure the same amount of veterinary care, but for agricultural animals used in research or teaching. Both attending veterinarians have the power to make urgent decisions pertaining to the treatment of animals that are experiencing pain or suffering. Adequate veterinary care is required for these animals or humane euthanization if necessary. There is one exception in which acceptable conditions are permitted by the IACUC that allow research or teaching initiatives to be granted. The investigator of IACUC is consulted before a decision is made as often as possible (Agricultural Animal Care).

Every animal research project, including live subject research, at the University of Illinois must work with the IACUC to guarantee that rules and regulations are not broken during the research. The purpose of the IACUC has many various aspects to its job
criteria. Along with inspections of the facilities, they also review grievances and concerns regarding the use and care of animals at the U of I (Xx, Ms. 4 April 2006). They review potential activities that deal with animals and decide whether or not to approve the activity. The IACUC has the power to postpone any animal activities or conduct that it believes to be unethical or cruel. They are allowed to take the appropriate action on the people who were believed to have broken regulations or laws (Xx, Ms. 4 April 2006). Thus, the IACUC is a checks and balance approach to make certain that animals are treated correctly.

However, according to Ms. Xx, the violations that occur at the U of I for the most part are not urgent. For example, on every animal research project, a list is made up all of the researchers or workers that will be working on that specific project and is turned into the IACUC. To be eligible to work on the research, one must pass an online test to make sure each person understands the ethical standards to work with and take care of animals (Xx, Ms. 4 April 2006). On the contrary, ethical decisions are exceptionally difficult topics to even comprehend, let alone make a test to understand a people’s ethical values. Hence, an online test might allow individuals that would perform unethical practices or actions on animals. Furthermore, the most common violation at the University of Illinois is that some people were accidentally left off the research project list. To resolve this violation, the IACUC points out the discrepancies and urges them to put everybody on this list (Xx, Ms. 4 April 2006).

Moreover, the IACUC is obligated by the Animal Welfare Act to have at least three members, who are a chairman, a Doctor of Veterinary Medicine, and a member that is not associated with the University (Xx, Ms. 4 April 2006). In addition to the Animal
Welfare Act, the IACUC is required by the Public Health Service Policy to have at least five members, in which one is a practicing scientist with live animal research and one has primary concerns outside of the scientific field (“About the IACUC”). The purpose of having such a diverse group of people is to secure the understanding of animal care and practices in all walks of life. Ethics never has a definite yes or no answer, thus the committee obtains assorted people in order to better approach ethical situations. On one hand, some members of the committee may see a possible unethical situation to be acceptable in their eyes due to their background. On the other hand, other members might see it as an unfair treatment to the animals and would oppose their argument. To ensure the best environment for the animals, the IACUC at the University of Illinois has more than fifteen members on its committee to enhance the understanding of ethics.

Next, the protocol is best way for the IACUC to maintain stability and to ensure proper ethics and care of the live subjects. Before a scientist decides to perform a research project, he must submit a protocol, which discusses the project at length (The Life of a Protocol”). The scientist can achieve a form, which can be found at http://www.iacuc.uiuc.edu/IACUC-1.doc, on the organization’s website and can also submit it to them by email. After the review by either the whole committee or an IACUC specialist, questions are asked towards the scientist due to any lack of information or specification on the protocol. Once the scientist has reviewed the questions or recommendations, he makes the needed accommodations and sends it to the committee members. Subsequently, the committee reviews the protocol and ensures that the animal work is well explained and that all work described acts in accordance with both federal and campus regulations. Then, the protocol is either approved by the committee or sent
back to the scientist to make the necessary changes. Once the committee approves the protocol, it is sent to the IACUC office for final evaluation. Finally, the scientist must sign the protocol to guarantee that the scientist will follow it and it is officially approved at that time (“The Life of a Protocol”).

Furthermore, according to the Veterinarian Department, the IACUC abides completely by the Animal Welfare Act (Xx, Ms. 4 April 2006). The Act orders that every research facility exhibits professionally satisfactory principles overseeing the care, treatment, and use of animals are followed. The Animal Welfare Act also has a specific section for research facilities. It discusses registration, IACUC, personnel qualifications, attending veterinarian and adequate veterinary care, record keeping requirements, annual report, and miscellaneous subjects for every research facility to follow. For instance, under the registration section, every research facility must sign up their facility to the Secretary by filing out forms (Animal Welfare Act). In addition, it states that the University of Illinois is not responsible in any way and is not accountable for any unethical treatments dealing with the research facility in the veterinarian medical department. The veterinarian department has the whole liability placed on them rather than the U of I (Animal Welfare Act). On the other hand, if the University of Illinois was held responsible for violations, it would provide beneficial advantages for the animals due to the U of I’s authority. Some of the tough ethical problems would have to go through some of the powerful figures at the University.

Another way that the federal government provides checks and balances for institutional research is through the USDA. The USDA was formed for many reasons, including regulating laws and regulations pertaining to research and enforcing the Animal
Welfare Act (Crawford and Soave 31). One of their main goals is to ensure that research facilities are not unethical and do so by investigating them (Xx, Ms. 4 April 2006). A principle investigator that works with the IACUC will examine complaints or concerns brought up to the IACUC. As the principle investigator looks into the situation, he might feel that serious misconduct has occurred and will have to report the situation to the USDA. As well as this procedure, the USDA has annual surprise visits to research facilities to catch them off guard. The USDA inspector will make sure the facility is in accordance to the Animal Welfare Act (Xx, Ms. 4 April 2006). If a research facility is performing unethical practices towards animals, the USDA has many procedures in order to rid such behavior. The Veterinarian Medical Department’s research facilities may take extra precautions to make certain that animal cruelty does not occur at their facility due to the consequences it may receive from the federal government.

If the USDA, IACUC, and the Animal Welfare Act were not enough, the EPA also has control over rules and regulations of a research facility. The operation of the agency is management and abatement of contamination in the areas of air, water, solid waste, radiation and toxic substances (Crawford and Soave 73). In one way or another, research facilities can experiences one or more of such problems depending on the specifications on the project. Every research facility is subjected to follow the regulations and standards of the EPA, and thus, is liable to periodic inspection. Because the University of Illinois is in the heart of the cornfields and takes pride in its agricultural department, research facilities that are trying to find innovative pesticides that will not affect the drinking source of animals will have to follow the Toxic Substances Control Act, which is a part of the EPA (Crawford and Soave 74).
Veterinarian Ethics at the University of Illinois in Urbana-Champaign

Ethical issues tend to be in a gray area as far as the right answer is concerned. The result of controversial ethical issues has produced agencies and acts to make sure animals are taken care of in the right manner. The rules and regulations provided by such acts help the agencies decide whether or not something is unethical.

However, ethical decisions to the Veterinary Medicine students at the University of Illinois are not black and white. Dr. Xy, the Associate Dean of Student Affairs and professor of a mandatory ethics course in the Veterinary Medicine program, explains that in his class, students aren’t told what is right or what is wrong ethically, but are taught to think critically about ethical problems in their field. Students learn the laws of veterinary practice in a second mandatory class that focuses mainly on the Animal Welfare Act.

Material for the ethics class, however, is taken right out of a book chosen by the professor (Xy, Dr. 13 April 2006). The book is called *An Introduction to Veterinary Medical Ethics: Theory and Cases* and is by Bernard E. Rollin. Rollin is a trained ethicist who visited and spoke at a seminar to U of I students about ethical issues in Veterinary Medicine in March of 2000. “Dr. Rollins illustrated Plato’s assertion that adults cannot be taught right and wrong but can be reminded to follow their moral instincts,” read an article in the *Veterinary Report* that month (http://www.cvm.uiuc.edu/vetreport/spring2000/concerns.html) (“Ethicist Addresses Issues”). Although Dr. Xy is not a trained ethicist, the role as professor of the ethics course was handed to him alongside his position as Associate Dean of Student Affairs. The course book is an interesting text, first exploring the nature of ethics with a second part providing many scenarios that provoke ethical decision-making in the Veterinarian
field. For example, cases discussed include “Suspected Dog Fighting” (107), “Client Refuses Euthanasia for Sick Cat” (279), or “Poor Air Quality in Swine Barn” (315). While these are just some examples discussed, the most targeted issue to talk about in a Veterinary Medicine ethics course is Euthanasia—whether in an urgent situation or a case in which you are recommending it to a client because it is in the best interest of the animal. Students will come up with issues they want to discuss as well (Xy, Dr. 13 April 2006).

**Making Changes in UIUC Policies**

Students do have an important role in making ethical judgments for the Vet Med program at UIUC. One group of students who is dedicated to this role is the Society for Animal and Veterinary Ethics (SAVE). Their mission is to encourage and represent all views for ethical concerns on animal use in the program. They meet once a month altering topics in veterinary ethics (Society for Animal and Veterinary Ethics). In the past, non-member strong-willed students made waves regarding changes in controversial animal procedures at the U of I in early 2000. Just over six years ago, all first-year students practiced in terminal live animal physiology laboratories as early as the first few days of their program. Students have always been able to silently opt out of these labs if their beliefs opposed them or if they didn’t feel ready. However, students started expressing their disapproval of faculty’s alternatives to live subject research (LSR) or lack thereof in the *Survey of University of Illinois Veterinary Students on Animal Use in Education* of October 1999. To view some of the comments made by the students in the survey, see Appendix C. Although the protestors initially only wanted alternative methods to terminal laboratory practices, after information went public the end result was
a halt on terminal labs at UIUC (Office of Advancement Veterinary Report). This was a kind of a start of a movement in the evolution of ethical policies, since it got to be such a public concern. The People for Ethics Teaching Animals (PETA) used this information to protest against live animal use in medical schools altogether. Their site lists Illinois along with 14 other states that use live animals in teaching and plead readers to join in their efforts to “modernize” relatively “less progressive universities” from continuing their cruelty to animals (PETA). It is true that even student protestors don’t agree with the radical efforts of PETA. Nonetheless, it was the students who originally spoke out about their ethics and U of I’s policies have positively progressed because of it.

Currently, there are no required terminal live animal laboratories for first year students. Physiology labs utilize simulation animals and videotapes while Gross anatomy labs use animal cadavers. For second-year students the only use of live animals is a lab where students draw blood from their own pets for a Clinical Pathology lab. Terminal live animal surgery isn’t done until the student’s third year, and of course is under the supervision of a senior faculty member. (Xy, Dr. 13 April 2006). They are also electives so this takes care of two ethical concerns; that a) young students are not competent to be working on live animals so early in the program, and b) alternative methods should be offered for those who do not believe in working on live animals just for the sake of practice.

Another organization created by students in the Vet Med program at UIUC is called SILA, Students Improving the Lives of Animals. SILA is devoted to educating the University of Illinois about non-humane animal usage in the university’s curriculum. They are not afraid to take action to change policies and procedures that they believe to
be immoral towards animals. Their website posts all sorts of initiatives that were carried out by student and faculty action (About SILA).

**Final Thoughts**

Ethics in the department of Veterinary Medicine, not to mention other areas using live animals, cannot be handled as a black and white issue. There will always be students disagreeing with students, faculty members disagreeing with faculty, and vice versa. The important thing to remember is that policies are in constant change, as long as organizations like SAVE and SILA on campus, and national organizations like PETA are still active. As far as we know, there were no written laws considering animal cruelty or mistreatment before 1641. Someone had to do something about that. That is why we felt it necessary to accredit people in history who contributed to the creation of animal care laws, including B. F. Butler, John C. Spencer, and Henry Bergh. Their ethical decisions stood behind the creation of these laws just as ethical decisions made by students and faculty at the University of Illinois, and the public influence stand behind policies and procedures dealing with animals in present day.
Appendix A

United States Anti-Cruelty Laws
1641 Massachusetts Bay Colony “The Body of Liberties”

1828 NY

1835 Massachusetts

1838 Connecticut

1838 Wisconsin

1842 New Hampshire

1845 Missouri

1848 Virginia

1851 Iowa

1851 Minnesota

1852 KY

1854 Vermont

1856 Texas

1857 RI

1858 TN

1859 Kansas

1859 Washington

1860 PA

1861 Nevada

1864 Idaho

1864 Oregon

1867 NJ

1868 Cali

1868 W.VA

1869 IL

1871 District of Columbia

1871 MI

1871 Montana

1872 Colorado

1873 Delaware

1873 Indiana

1873 Nebraska

1875 Georgia

1879 Arkansas

1879 Louisiana

1880 Mississippi

1880 Ohio

1881 NC

1881 SC

1883 Alabama

1883 Maine

1884 Hawaii

1887 New Mexico

1887 South Dakota

1889 Florida

1890 Maryland

1891 North Dakota

1893 Oklahoma

1895 Wyoming

1898 Utah

1913 Alaska

1913 Arizona

1921 Virgin Islands
Appendix B

Statues at Large of the
State of New York

Passed in the Years 1867, 1868, 1869, 1870
John W. Edmonds, Ed., Vol. VII 1870

CHAP. 375

AN ACT for the effectual prevention of cruelty to animals.

Passed April 12, 1867; three-fifths being present

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. If any person shall over-drive, over-load, torture, torment, deprive of necessary sustenance, or unnecessarily or cruelly beat, or needlessly mutilate or kill, or cause or procure to be overdriven, over-loaded, tortured, tormented or deprived of necessary sustenance, or be unnecessarily or cruelly beaten, or needlessly mutilated or killed, as aforesaid, any living creature, every such offender shall, for every such offense, be guilty of a misdemeanor.

Section 2. Any person who shall keep or use, or in any way be connected with, or interested in the management of, or shall receive money for the admission of any person to any place kept or used for the purpose of fighting or baiting any bull, bear, dog, cock, or other creature, and every person who shall encourage, aid or assist therein, or who shall permit or suffer any place to be so kept or used, shall, upon conviction thereof, be adjudged guilty of a misdemeanor.

Section 3. Any person who shall impound, or cause to be impounded in any pound, any creature, shall supply to the same, during such confinement, a sufficient quantity of good and wholesome food and water, and in default thereof, shall upon conviction, be adjudged guilty of a misdemeanor.

Section 4. In any case creature shall be at any time impounded as aforesaid, and shall continue to be without necessary food and water for more than twelve successive hours, it shall be lawful, for any person, from time to time, and as often as it shall be necessary, to enter into and upon any pound in which any such creature shall be so confined, and to supply it with necessary food and water so long as it shall remain so confined. Such person shall not be liable to any action for such entry, and the reasonable cost of such food and water may be collected by him of the owner of such creature, and the said creature shall not be exempt from levy and sale upon execution issued upon judgment therefor.
Section 5. If any person shall carry, or cause to be carried, in or upon any vehicle or otherwise, any creature, in a cruel or inhuman manner, he shall be guilty of a misdemeanor; and whenever he shall be taken into custody therefor by any officer, such officer may take charge of such vehicle and its contents, and deposit the same in some safe place of custody; and any necessary expenses which may be incurred for taking charge of any keeping and sustaining the same, shall be a lien thereon, to be paid before the same can be lawfully recovered. Or the said expenses or any part thereof remaining unpaid, may be recovered by the person incurring the same, of the owner of the said creature, in any action therefor.

Section 6. Every person who shall hereafter use any dog or dogs for the purpose of drawing or helping to draw any cart, carriage, truck, barrow or other vehicle, in any city or incorporated village, for business purposes, shall be required to take out a license for that purpose, from the mayor or president thereof, respectively, and shall have the number of said license and the residence of the owner distinctly painted thereon; and for each violation of this section shall forfeit and pay a fine of one dollar for the first offense, and a fine of ten dollars for each subsequent offense.

Section 7. If any maimed, sick, infirm or disabled creature shall be abandoned to die, by any person, in any public place, such person shall be guilty of a misdemeanor; and it shall be lawful for any magistrate or captain of police in this state to appoint suitable persons to destroy such creature if unfit for further use.

Section 8. Any agent of the American Society for the Prevention of Cruelty to Animals, upon being designated thereto by the sheriff of any county in this state, may, within such county, make arrest, and bring before any court or magistrate thereof having jurisdiction, offenders found violating the provisions of this act; and all fines imposed and collected in any such county, under the provisions of this act, shall inure to said society, in the aid of benevolent objects for which it was incorporated.

Section 9. This act shall take effect on the first day of May next. And the said American Society for the Prevention of Cruelty to Animals shall cause the same to be published once each weekly for three weeks, in for daily papers published in New York City, or in default thereof shall forfeit the right to receive the penalties and fines as provided.

Section 10. Nothing in this act contained shall be construed to prohibit or interfere with any properly conducted scientific experiments or investigations, which experiments shall be performed only under the authority of the faculty of some regularly incorporated medical college or university of the sate of New York.
Appendix C

ABRIDGED STUDENT SURVEY RESPONSES:

QUESTION: IF YOU DID PARTICIPATE IN THE PHYSIOLOGY LABS, WAS YOUR EXPERIENCE GAINED WORTH THE RESOURCES USED?

"For each lab, ONE person in FOUR got to place an IV catheter; most of us were too preoccupied with having to kill the dog that physiology wasn't concentrated on; there was nothing surgical about the procedure."

"I'm not sure I can justify the use of the animal and its life with the knowledge I got out of the lab."

"No, I did not feel I learned enough about what we were supposed to learn in regards to the drugs and the labs. Animal/anatomical experience was valuable, but could be accomplished in other, less wasteful ways, i.e., keeping the animals ALIVE."

"I have understood that the benefits I gained from these labs will be presented to us later in the curriculum. I did not believe, for the objectives presented from the teachers that the experience was worth the resources used."

"No, I think getting live dogs and spending all that money could be used in a better way, like for more surgery experience junior year."

"It was not necessary to do two labs involving the dogs. The first lab helped me to learn a lot, but the second lab wasn't very different. They probably could've been combined."

"More needed to be gotten from these animals. During the 2nd cardio lab, our dog died within 15 minutes and we were not able to save it because we had intubated the _stomach_. This was despite the fact that a professor helped us intubate the dog."

"The material covered were facts that we could learn in a book. There was no benefit in wasting the lives of many (any) animals in order to see that epinephrine increases the heart rate when it is a fact you can understand by simply reading about physiology."

"I don't think a live animal was necessary to learn the physiology, and we will get surgical experience later."

"I don't think the lab objectives were very good. I just think I could have gotten the same out of good notes."

"I could have got the results we were supposed to see easily in lecture. For the renal physiology lab especially, I could have guessed that by giving our pig more fluid, his
urinary output would increase-- I didn't need to see this on a live animal--definitely didn't need to sacrifice a life."

"If you tell me a drug works in a certain way--I will believe it. I don't need every drug demonstrated in order to believe that it works a certain way."

"I learned nothing from the wet labs as I was too pre-occupied trying to: 1) monitor anesthesia?!/keep dog alive (no direction was given). 2) Fumble through surgical part with NO technical training/support."

PRO-VIVISECTION SENTIMENT WAS ALSO EXPRESSED

"Animals were put on earth by God to be used by man as he sees fit. As there is an overabundance of hogs in this country, not much in the way of resources was actually used."

"Yes, but more by just getting to handle and actually be involved with something other than reading textbooks and looking at slide shows. We need _more_practical experience at this university early on in our training."

"Pigs are going to be killed for food anyway."

"I believe when animals are raised strictly as a research resource, it is pointless to not use them as such."

"I think that if a group of student can walk away from their pig with some more confidence, knowledge and experience than when they walked in, then it was worth it."

"I learned surgical techniques, hands on experience, monitoring a live animal and keeping it alive and of course a great anatomy review. They were pigs raised in a production herd in mass quantities and their destiny was the slaughterhouse. We put them to better use. Dogs I would have a problem with."

"-Being allowed the opportunity to work on live animals as freshmen was a good experiment. You don't realize that the animals bleed and how careful you really have to be when you are working on live tissue."

"Yes. The pigs we used were raised for slaughter or research anyway. I believe there is no better way to learn than by experience, which is what the physiology labs did for me. There is invaluable experience to be gained simply by knowing what tissues feel like to incise with a scalpel, I would feel quite incompetent (and somewhat cheated) if after 4 years of vet school, I had never performed a surgery or incised _living_ tissue. I would actually probably be more of a liability to the person/practice who hires me (and my clients)."
QUESTION: IF AN EQUIVALENT EDUCATIONAL ALTERNATIVE TO THE
PHYSIOLOGY LABS EXISTED, WOULD YOU HAVE PARTICIPATED IN THIS
INSTEAD OF THE CURRENT PHYSIOLOGY LAB?

"Nothing that was covered in those labs could not have been learned from a demo, or a video. The guilt I felt for participating outweighed all beneficial aspects of the experience."

"I have to say that a computer model that could be gone over again and again would help. Some of the effects of the drugs were so transient we missed them."

"I think the physiology labs are a waste of money and a waste of life. To use dogs in this way--we should learn a lot."

"Any alternative that does not require the loss of a life would be much appreciated."

"A video would have served the main purpose; all else revolved around practical experience, better gained in other parts of our curriculum."

"I don't see how the use of animals was justified for the freshman physiology lab. Alternatives are possible."

"I would prefer to minimize destruction of animals for little educational gain, especially if alternatives exist."

"I do not believe what is being taught in these labs is either educationally or ethically sound. Physiology certainly can be taught without killing animals, as is already done in many other U.S. veterinary colleges. We need not be taught the art of HEALING through KILLING."

"Yes, if it required that no animals be sacrificed, i.e., video, interactive software, anatomical models, etc."

"Looking back, I know I learned nothing from the lab."

"Yes--the labs are poorly run and the physiology principles can be learned from a video instead of sacrificing animals' lives. There should be only enough dogs ordered for those willing to participate and an alternative for those who do not."

"I see/saw no point in repeating an 'experiment' that I could plainly see on a video. No technical skills were taught or practiced."
QUESTION: IF YOU PARTICIPATED IN THE PHYSIOLOGY LABS, DO YOU PERCEIVE YOUR SURGICAL SKILLS TO HAVE BENEFITED FROM THESE LABS? (question for 3rd and 4th year students only.)

"This wasn't surgery: there was very little instruction on techniques, instruments, or anesthesia! NONSTERILE techniques were used."

"I learned a lot more in the first week of surgery."

"No sterile technique employed; no proper surgical tools; antiquated syringes, out of date drugs, only injectables (anesthesia) used --for LONG procedures. I guess you could say I learned what _not_ to do. It must have taken us 4 tries to place the endotracheal tube, not enough instruction and, of course, no laryngoscopes provided."

"Nothing that we haven't learned in surgery class."

"We were not taught any suture patterns or surgical techniques as these were not survival labs."

"We were completely unprepared. It was chaotic."

"It was before we had any surgical training to know what we were doing and why."

QUESTION: IF YOU DID NOT PARTICIPATE IN THE PHYSIOLOGY LABS, DO YOU PERCEIVE YOUR SURGICAL SKILLS TO HAVE SUFFERED FROM NOT PARTICIPATING? (3rd and 4th year students)

"There are many other ways to gain experience besides anesthetizing an animal, giving it a bunch of drugs over a couple of hours, and euthanizing it!"

"Surgical skills are skills which are developed over time and _need_ to be well explained and demonstrated in order for good techniques to be accomplished and for bad habits not to be developed. If anything I would think that the lab would create bad habits more than do anything else since we are not instructed well with RE to this portion of the lab."

"No. In order to become a qualified candidate for veterinary school I acquired experience in a practice. I was able to assist in surgeries and observe surgical techniques. Third year vet school lectures explain surgical techniques and there are many opportunities to then practice and improve these skills on living animals and tissue samples. During breaks I take advantage of working with veterinarians to gain more skill and knowledge. When you make a decision to end a life simply for an experiment then deep thought should be given as to whether this is the only way to accomplish this goal. If the answer is no (and in this case I believe it is) then alternatives should be sought."