The Evolution of the Role of the Attending Veterinarian

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Background

- Role of Attending Veterinarian
- Push my personal philosophy
- TTPT
Taylor’s Two Pot Theory

- Assuring compliance
- Facilitating research
- Optimizing the welfare of the animals
  - providing an environment that takes into account the animal's health, behavior, and biological functions
  - minimize the impact of non-experimental variables
- Valued research support service
Valued Research Support Service

- Environment - encourages open and ongoing communication
- Seen as part of the solution and not part of the problem
  - Take the lead - making compliance easy
  - Gain the credibility – the research team
  - Have the confidence – listen to suggestions → refinements

Optimizing animal welfare becomes everybody’s priority
My Philosophy

☐ Saw the light
☐ Evolutionary process
☐ Definition
Evolution

- process of change in a certain direction
- a process of continuous change from a lower, simpler, or worse to a higher, more complex, or better state
- a process of gradual and relatively peaceful social, political, and economic advance
Evolution

- Survival of the fittest
  - My first few years as a LAV
  - Sink or swim
  - Our conditioning
  - Primate clinician
  - An adventure
  - Snatch and grab
Making A Difference

☐ Surgical models in Markowitz

☐ Balloons were used to collect gastric secretions
  ■ Zinc oxide
  ■ Prophylactics

☐ Go to guy for major department
“Yeah though I walk through the valley of the shadow of death, I will fear no evil because I am the meanest SOB in the valley.”

Survival

- Daily goal
- Copy of a cartoon

- Survival of the fittest - Herbert Spencer
  - Struggle for existence
  - Natural selection

- Adaptability
  - Survival of the most adaptable

"It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change."

Charles Darwin
Adaptability

- "the ability to change to fit changed circumstances"
- Does not come naturally for everybody
- Like any skill, it takes practice; patience
- Adapt to the way things are in order to be able to get them headed in the direction that you want them going
Evolution

- Evolution is about adapting to the environment
- Take a look at the environment in which the role of the attending veterinarian has evolved
- Environment as defined by the Animal Welfare Act
Animal Welfare Act

- August 24, 1966 (PL-89-544) - "Laboratory Animal Welfare Act
  - Facilities using dogs and cats
  - AV not defined
  - Minimal requirements for registration
  - No annual report
Animal Welfare Act

1970 Amendment

- AV not defined
- Required an annual report
  - Show that professionally acceptable standards
  - Number of animals that are now included in category E
  - Certification by AV or Committee of three

April 15, 1972 the regs. referred to both an attending veterinarian and an oversight committee, but defined only the role of the committee.
Attending

- serving as a physician on the staff of a teaching hospital
- having primary responsibility for a patient
- Attend
  - tv – pay attention to; to look after: take charge of as in attending to your duties
  - intv - to apply oneself; to apply the mind or pay attention
- ing - defines an action or process
Attending Veterinarian\textsuperscript{TMD}

- “the veterinarian who takes charge of the animal care and use program and looks after the animals involved in that program”

- It goes without saying that to do that one would need to pay attention and apply your mind
Animal Welfare Act

- 1976 Amendment - June 15, 1977
  - Contained a definition for attending veterinarian
  - Annual report expanded to include group C and D animals
  - The requirement for certification was maintained
Attending veterinarians means a person who has graduated from a veterinary school accredited by the American Veterinary Medical Association's Council on Education, or has a certificate issued by the American Veterinary Medical Association's Education Commission for Foreign Veterinary Graduates and who is responsible for evaluating the type and amount of anesthetic, analgesic and tranquillizing drugs used on animals during actual research, testing or experimentation where appropriate to relieve all unnecessary pain and distress in the subject animals.
Animal Welfare Act

- 1985 Amendment
  - Final Rule - August 31, 1989
  - “Attending veterinarian means a person who has graduated from a veterinary school accredited by the American Veterinary Medical Association's Council on Education, or has a certificate issued by the American Veterinary Medical Association's Education Commission for Foreign Veterinary Graduates, or has received equivalent formal education as determined by the Administrator; has received training and/or experience in the care and management of the species being attended; and who has direct or delegated authority for activities involving animals at a facility subject to the jurisdiction of the Secretary.”
From a statutory standpoint, for slightly over 22 years the attending veterinarian position had only the direct or delegated authority for activities involving animals at a facility subject to the jurisdiction of the Secretary that the vet staff “took charge of”
PHS Policy

- 1971 – “Policy, Care and Treatment of Laboratory Animals”
  - assure accredited by a “professional accrediting body”
  - or
  - 3 member committee (one DVM) to evaluate the care of warm-blooded animals.
  - an annual inspection of facilities with maintenance of records of those inspections.
PHS Policy

**1973 update**

- applicable to institutions using vertebrate animals
- recommended that the committee review animal protocols
- DHEW Principles for Use of Laboratory Animals.
PHS Policy

- 1979 - PHS Policy on Humane Care and Use of Animals
  - required institutions to follow the *Guide* and the Principles of Animal Use
  - committee of at least five members
  - not in conformance with the *Guide*, they had to file an annual report on the progress toward full conformance
PHS Policy

- 1985 - PHS Policy on Humane Care and Use of Laboratory Animals
  - IACUC – DVM who has direct or delegated authority and responsibility for activities involving animals at the institution
  - 1985 Guide - expanded role of the veterinarian in program oversight
The Guide (1963)

- The Guide for Laboratory Animal Facilities and Care recommended that animal facilities be directed by a professionally qualified person with 3 years of pertinent training, experience or a combination. Pertinent training involved the completion of formal professional or academic training in lab animal medicine or a related field.

- It was also recommended that animals be observed 1-3 times a week though dogs, cats and simian primates should be observed daily, but did not specifically require that a veterinarian be in charge of the control and treatment of non-experimentally induced conditions.
The *Guide* (1965)

- Recognized that many institutions employed specialists in laboratory animal medicine, but did not specifically recommend that they be in charge.

- It did recommend increasing observations to daily, but did not specify that a vet be in charge of the managing, diagnosis and treatment.
The Guide (1968)

- Recommended that institutions employ a specialist in laboratory animal medicine to assist in meeting an increased requirement for high quality animals maintained under rigorously controlled environmental conditions

- Scientist have welcomed this support
The Guide (1972)

- Section on a program of adequate veterinary care
  - administered by a veterinarian qualified by training or experience to do so
  - husbandry appropriate for each species
  - frequent observation of all animals
  - availability of veterinary medical services
  - to include consideration for the humane aspects of animal experimentation, such as the proper use of anesthetics and analgesic and tranquilizers
The *Guide* (1972)

- Section on monitoring the use and care of animals
  - Committee on Use and Care of Animals
    - effective way to develop and monitor policies to guide animal care and use in keeping with institutional requirements
    - members should be representative of the various users and at least one of the members should be a Doctor of Veterinary Medicine
    - responsible for evaluating the animal care program in regard to the maintenance of standards for the care, use and treatment of animals in research and education
Guide for the Care and Use of Laboratory Animals - adequate veterinary care should be provided by a veterinarian qualified by postdoctoral training or pertinent experiences.

- Full-time or regularly scheduled attendance
- Oversight responsibility for husbandry programs
- Frequent observation of all animals
- Availability of veterinary medical services
- Consideration of humane aspects of animal experimentation
- Appropriate surgical procedures and postsurgical care
- Euthanasia procedures
The Guide (1978)

- In the chapter on Institutional Polices the authors indicated that the provision of adequate veterinary care was an institutional responsibility
The *Guide* (1985)

- Institutional Policies - moved to the forefront
- Program of adequate veterinary care was a required institutional responsibility
- Standards aspects of veterinary care
  - can also contribute to the establishment of appropriate policies and procedures for ancillary aspects of veterinary care
  - advising on experimental models
  - reviewing protocols and proposals
  - monitoring occupational health, hazard containment, and zoonosis control programs
  - supervising animal nutrition, husbandry and sanitation
The *Guide* (1996)

- Expanded - responsibilities of the institution and the IACUC
- Appeared to increase in the authority of the IACUC at the expense of the authority of the attending veterinarian
- Responsibility for directing the program is generally given either to a veterinarian with training or experience in laboratory animal science and medicine
- Required that a veterinarian must provide guidance
  - to ensure appropriate handling, immobilization, sedation, analgesia, anesthesia, and euthanasia
  - guidance or oversight to surgery programs and oversight of postsurgical care
The Guide (2011)

- Statutory basis - IO, IACUC and AV
- “…overall program direction should be a shared responsibility among the IO, the AV and the IACUC”
- “policies and procedures to ensure regulatory compliance, monitor program performance and support high quality science and humane animals use”
The *Guide* (2011)

- “For a program to work effectively, there should be clear and regular communication between the AV and the IACUC.”
- “For a program to work effectively, there should be clear and regular two way communication between the AV and the researchers.”
Environment

- 1972 Guide – increased the authority of the veterinarian for other aspects of the program and their involvement in the oversight process

- Statutory authority - from 1967 to 1989 did not provide much of an advantage in terms either their ability to survive or adapt
Environment

- 1967 to 1985
  - Initial regulatory definition of AV did really do much to help us in that regard
  - It was not until 1989 the role of the AV obtained significant statutory authority
  - *Guide* - AAALAC and in 1979 the PHS used the *Guide* in their programs.
  - Impacted by the lab animal vets ability to adapt; to their desire to take charge of the environment in which they worked

- So how did the role of attending veterinarian evolve during this period?
The Evolving Process

- Committee on Use and Care of Animals described in the 1972 *Guide* to develop and monitor policies for animal care.

- Afforded the veterinary staff the opportunity to have input into program management:
  - take the burden off the other committee members and become seen as a key player in providing research support services.
  - help create a line of communication between the veterinary staff and the investigators that had not always been there before.
The Evolving Process

- At UIC
  - 1976 - Assistant Administrator of the BRL
  - oversight of the business management and being the veterinarian on this committee
  - Implement a two page form for opening an account
    - information analogous to the lay description
    - information on what the veterinarian needed to know in order to provide the services needed by the investigator
The Evolving Process

☐ At UIC

- 1978 – expanded this form to include information on “humane consideration for animal experimentation”

☐ The committee supported my application and my letter with conditions for accepting

- Committed to AAALAC Accreditation
- Core budget to open the doors
- $50K for equipment for 3 years*

*First Rule of ACUP Management

An administrative promise is a lie waiting to happen
The Evolving Process

- January 1, 1986 – Revised PHS Policy
  - Veterinary staff played a key role in that process
- Four year grace period leading up to the AWRs
- An incredible evolution
  - Operation of IACUC
  - The stature of the attending veterinarian
  - Key player in the management of the animal care and use program at the institutional level
The Evolving Process

- IACUC was just added to the duties of the person responsible for the management of IRB
- Best interest of the institution and certainly of the vet staff for the them to play a key role
  - protocol submission process
  - managing the IACUC
  - go to person for regulatory advice
- 1989 AWRs
  - VMOs had a learning curve
  - AV was often a tutor
The Evolving Process

- Role and responsibilities of the AV and the IACUC evolved in kind of a low key environment in the shadow of the IRBs up until the late 90s
The Evolving Process

- Late 90’s - several IRBs were shut down
  - Got the attention of IOs
  - Resources for the IRBs increased dramatically
  - Collateral impact on IACUC management
    - Stand on its own two feet
    - AV role in management
The Evolving Process

- An interesting aside
  - 1985 Amendment to the AWA
  - "full employment for lab animal vets regulations"
  - whole new employment classification – IAUCUC Coordinator, IACUC Professional, IACUC Support staff, Compliance Officer

- Turf battle evolution
  
  Conflict Resolution: When the AV, IACUC, and Compliance Offices Disagree
The Evolving Process Perspective

- Defining the environment

  Introduction to the 1985 Guide - “The Guide is deliberately written in general terms so that its recommendations can be applied in the diverse institutions and settings ... This approach requires that users, IACUCs, veterinarians, and producers use professional judgment in making specific decisions regarding animal care and use.”

  “Professional judgment is essential in the application of these guidelines.”

  1996 Guide
The Evolving Process Perspective

- Used professional judgment
  - Whether a situation represented a serious deviation from the *Guide*
  - Minor protocol drift was opportunity to educate
    - Strongly supported by our outside member
    - Key to creating the open and active communication environment
    - Trusted and respected
  - Part of the solution; valued member
The Evolving Process Perspective

- Progressive, proactive animal ACUP
  - Learn from our mistakes and from the occurrence of unforeseen events
  - Not serious deviations form the Guide if they were recognized and addressed in a timely manner
  - How those events are handled is important
  - Concentrate on fixing the problems and not finding fault
The Evolving Process Perspective

- Positive reinforcement techniques should be used to encourage cooperation
The Evolving Process Perspective

- Use of professional judgment
- PRIM&R 2005 – Prompt reporting letter
  - Some of the examples of what needed to be reported without delay were management issues that could be addressed within the program
  - Undermine respect with the investigators
  - Change in attitude and level of frustration
  - Living it to hearing about it
The Evolving Process Perspective

  - USDA Policies
  - Compilation of OLAW Guidance - 84 pg. document - 19 double spaced 6”x9” pgs
    - September 11, 2006 - 82 FAQ
- 2010 - the age of enforcement
- The environment has changed
- Impacts the adaption (survival) process
My Take

- On Today’s Environment
  - Can’t say for sure the impact
  - I can say for sure that I have trouble
    - advancing age
    - diminishing cognitive abilities
  - I would find it impossible to do the job of the AV as I thought it should be done
My Take

- On Today’s Environment
  - Staying on top of ever changing guidance and “best” practices
  - Staying on top a research support service – ever changing needs of PIs
  - Pull back from IACUC support functions and concentrate on trying to help the investigators keep up with the changes
  - I am glad I did not have to make that decision
My Take

- On Today’s Environment
  - The environment that allowed the AV’s role to evolve to a point where
    - The go-to-person for regulatory compliance
    - Director of the day-to-day program
      - addressed the needs of the animals and in turn minimize the impact of non-experimental variables and thus facilitate research
  - Has changed
My Take

- On Today’s Environment
  - It appears to me that the those responsible for the management of the institutional animal care and use program have lost some of the flexibility to manage a program that is designed specifically to meet the needs of the institution and in so doing have become gate keepers and not facilitators.
My Take

- On Today’s Environment
  - Makes it more difficult for the LAVs to be seen as part of the solution; valued members of the research team
  - When LAVs lose the flexibility to use their professional judgment to make decisions on a case-by-case basis
  - Hard to maintain the credibility necessary to earn the respect of the investigators
My Take

- In Today’s Environment LAVs
  - Like the Darwin’s finches
  - Specialize to survive
  - Not enough hours in the day
  - Assuring institutional compliance while facilitating research
My Take

☐ That is too bad

- Assuring animal welfare is the common denominator
  - assuring compliance
  - facilitating research

- LAVs are in the best position to manage this on the frontlines
My Take

- It does not seem to me to be in the best interest of the animals or the advancement of science to have an environment where the AV cannot readily be responsible for both