

Future of Veterinary Medicine Explored at Student-Planned Conference

Mark Troxel, Jennifer Duster, Angela Daniels[†] and Scanlon Daniels^{††}

“The future is about hard work, new leadership, and organizational models that need to change. It’s about changing our scope and our influences while concurrently functioning and changing in a world where our future is in a fast-forward mode.”

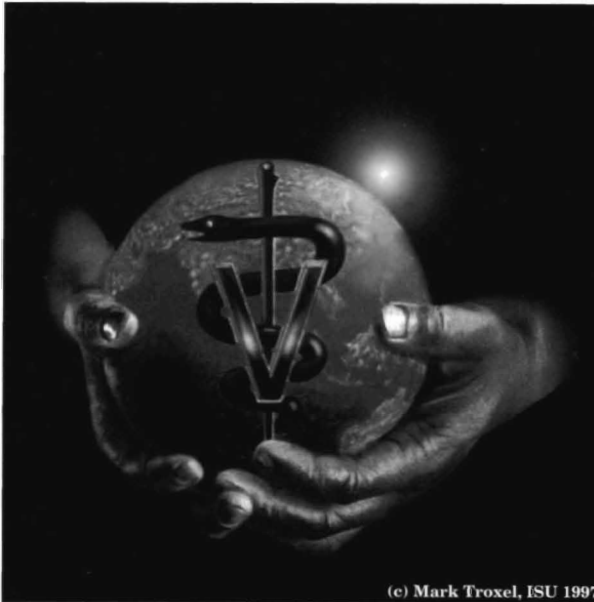
This statement, made by Dr. Lonnie King, Dean of the Michigan State University College of Veterinary Medicine, was presented to an audience of approximately 350 veterinary students, veterinarians, and industry representatives at the “Visions in Veterinary Medicine: Facing a New Millennium” conference. The conference, established by students of the Iowa State University College of Veterinary Medicine, was created to explore the dynamic issues and opportunities facing the future generation of veterinary professionals.

Iowa State student members have always been leaders in affecting change in veterinary medicine. The “Visions” conference was designed with that specific goal in mind. After attending a round table discussion panel at the 1997 SAVMA Symposium at Purdue University, several student leaders

from the College returned with the idea to establish a dialogue between students, administration, practicing veterinarians, and industry representatives. This dialogue would explore current hot topics in veterinary medicine such as pet health insurance, internal and external marketing, legislative and environmental issues, the art of consulting in food animal practice, and much more. However, this dialogue would not merely concern itself with current trends, but would proactively address issues concerning the future of the profession.

To that end, a group of dedicated student leaders committed themselves to organizing a unique conference that would address these issues. The student central planning committee felt the goals of the “Visions” conference were to:

- conduct informative workshops that would highlight diverse opportunities facing recent and future veterinary professionals,
- tackle complex business, legal, and other professional issues not often addressed during formal veterinary education,
- explore the dynamic changes that will be occurring within the profession in the years to come,
- establish partnerships between students, recent graduates, veterinary administrators, and the corporate world, and,
- foster educational collaboration among a diverse group of veterinary students and current veterinarians.



(c) Mark Troxel, ISU 1997

The Visions in Veterinary Medicine conference was created to “explore the dynamic issues and opportunities facing the future generation of veterinary professionals.”

[†]Mark Troxel, Jennifer Duster, and Angela Daniels are third-year veterinary students at the Iowa State University College of Veterinary Medicine.

^{††}Scanlon Daniels is a fourth-year veterinary student at the Iowa State University College of Veterinary Medicine.



“The future is about hard work, new leadership, and organizational models that need to change,” declared Dean Lonnie King during his keynote address.

To meet these decidedly lofty goals, the committee recruited the top minds in the profession to present informal workshops and round table discussions. While all the speakers are too numerous to list here, they included Dr. Mary Beth Leininger, Past-President of the AVMA; Dr. Norm Hutton, AVMA Vice-President; Dr. Ann Schola Clark, director of the AVMA Career Development Center; Dr. James Wilson, veterinary practice management and legal consultant; and Dr. Donald Draper, IVMA President.

The two-day conference, held at the College on November 7-8, 1997, began with several introductory speeches, a keynote address presented by Dr. King, and was followed by a social reception created to form partnerships between students and practicing veterinarians. The morning of Saturday, November 8 was dedicated to general workshops that were of interest to a diverse population of students and veterinarians. Afternoon workshops were subdivided to allow some degree of species tracking. Each workshop was presented in an informal manner, often with a high speaker-to-guest ratio, al-

lowing the establishment of a direct dialogue between speakers and conference guests. The conference concluded with individual mini-keynote speeches and round table discussion panels that addressed the futures of companion and food animal medicine.

Paradigm Shifts of the Profession

“The future of veterinary medicine is here,” Dr. Donald Draper boldly stated during his introductory address at the “Visions” conference. Dr. Draper’s comments succinctly outlined the trends that have already begun to shape the future of the veterinary profession. The profession is no longer able to continue with the status quo, but must evolve to meet these future trends and to stay in the forefront of veterinary medicine and public health. Five future trends, as outlined by Dr. Draper, that have already begun to occur include:

- a new social ethic (animals have biological value and rights),
- agricultural industrialization,
- changing ownership in veterinary medicine,
- information and technology revolution, and,
- bioinformation and knowledge revolution.

“The future will be determined not only by those of us with vision, but also by those who can help society to understand the services and expertise to expect from veterinary medicine, and to educate the profession to meet these expectations,” said Dr. Hutton during his introductory comments.

These trends were further elaborated during the keynote address presented by Dr. King. In his address, Dr. King outlined the status of veterinary medicine as two S-shaped curves. The first S-shaped curve represents the natural development of things and illustrates the current state of the veterinary profession. According to this model, veterinarians are concerned with the practice of veterinary medicine, improvement in

“You can’t navigate the future by looking through a rearview mirror.”

Dean Lonnie King

skills and diagnosis, and effective delivery of services. However, to keep pace with the technological revolution of society in general, a paradigm shift to the second S-shaped curve must occur. This model represents innovation and revolutionary change within the profession. The forces that drive the second curve are those of globalization, restructuring of agriculture, new social issues (e.g., environment, conservation, biodiversity), and technological advances.

These two models lead to a conundrum within the profession — old models do not work as well and new models have not truly evolved. Dr. King believes that preparing for the future, therefore, will require a change in thinking, behavior, and actions; acquisition of new skills; and creation of our futures together through shared leadership.

General Workshops

The Saturday morning workshops were of a general nature, providing information applicable to all fields of veterinary medicine. Participants were able to attend workshops focusing on various aspects of business, including debt management; job searches and interviewing strategies; research, academia, and international veterinary medicine; negotiations and contract law; and gender equity within the profession.

Gender Equity Gender equity is a concern in all professions including veterinary medicine. Drs. Leininger and Susan Hyland presented a well-received workshop on gender equity issues entitled “The Gender Trap.” Two goals of their session were to identify issues related to challenges that face women in veterinary medicine and to outline tools that may be helpful in changing these pat-



Jim Fosse, Biomedical Communications

Dr. Donald Draper addresses conference guests during opening introductory comments. He succinctly outlined the trends that have already begun to shape the future of the profession.

terns. Two main challenges that women face are equal access to all employment categories for which they have ability and dealing with the disparity of income between men and women at all stages of their careers in private practice. Currently, sixty-seven percent of all graduating classes are women; early in the next century, over one-half of all practicing veterinarians will be women. The main issue identified for women to help meet the challenges they face when entering veterinary medicine is the importance of positive female role models acting as leaders within the profession.

Debt Management Dr. Ann Schola Clark presented a workshop entitled “Debt Management and Finding Your Niche.” Mean starting salaries were reviewed for the last several years in the various veterinary fields and compared between genders (Table I). With the increasing debt load of veterinary students, the primary focus of the workshop

Table I: Mean Starting Salaries for 1997*

Type of Practice	Female (\$)	Male (\$)	Mean (\$)
Equine	27,605	33,214	29,985
Small Animal Exclusive	34,315	34,791	34,456
Small Animal Predominant	33,962	34,808	34,211
Mixed Animal	33,669	35,056	34,282
Large Animal Predominant	33,977	37,088	36,425
Large Animal Exclusive	31,220	39,464	36,991
All Types of Practice			34,468
Public & Corporate Practice			34,318

*Adapted from Clark, *Visions in Veterinary Medicine*



Dr. Susan Hyland, along with Dr. Mary Beth Leininger (not pictured), presented a workshop entitled "The Gender Trap" that discussed the evolving role of women in the profession.

was managing debt load utilizing the three R's principle: resist temptation, reduce debt load, and refinance. The average debt load for veterinary students following graduation is approximately \$54,000. In 1997, 14.5% of veterinary students had a debt load of over \$80,000.

In addition to debt management, Dr. Clark also discussed the importance of finding a niche in the veterinary profession. There are several important considerations when selecting a practice. Things to consider include client education, quality of medicine and diagnostics, and the presence or absence of a friendly team atmosphere. It is also important to consider who is being replaced and why that person left the practice. Caution should be taken when interviewing with practices that hire new graduates each year, but do not routinely retain them beyond the first or second year.

Interviewing Strategies Understanding the interviewing process is of vital importance, not only for future veterinarians, but for anyone considering a new position. "The determining factor of the interview's success is the ability of the applicant to effectively communicate," said Dr. Tom Burkgren during his workshop on interviewing strategies. "An interview is no more than a business meeting between two parties who have a mutual interest in finding out more about each other."

Important features of a quality interviewer are the use of open-ended questions

to allow the formation of a more complete picture of the applicant and the use of follow-up questions to explore unexpected areas that arise during the interview. Successful interviewers are also able to effectively use shorter questions to lessen the amount of influence the question will have upon the answer and silence to solicit additional information. Applicants should consider their answers to potential questions and obtain general practice information prior to the interview, and ask open-ended questions of the interviewer.

Contract Law Following a successful interview and offer of employment, veterinarians should be knowledgeable of the importance of negotiations and contract law. During his workshop entitled "Selecting That First Job and Assuring You're Being Compensated What You're Worth," Dr. Wilson presented the principles of contract law to conference attendees. This included the elements of a contract, when a contract is formed, the capacity to contract, statutes of frauds, remedies for breaches, and unjust enrichment of contracts. Dr. Wilson also discussed the pros and cons of percentage-based compensation for veterinarians, as well as the method of establishing percentage-based compensation.

Research, Academia, International Veterinary Medicine A global perspective was brought to the conference by Dr. James Roth in his presentation "Opportunities and Challenges in Research, Academia, and International Veterinary Medicine." Trends in our society of growing populations, increasing demands for food production, rapid emergence of infectious diseases, and the depletion of natural resources are all areas in which veterinarians will be able to play an important role. To be most effective on an international scale, however, veterinarians need specialty training beyond the veterinary degree. Researchers are needed that are able to integrate new knowledge gained through basic research into an understanding of its application in the live animal. Dr. Roth emphasized that although there are difficulties to finding a position in academia, the benefits, both to the individual and to the practice of veterinary medicine, are extremely rewarding.

The Future of Companion Animal Medicine

The Saturday afternoon companion animal workshops, the mini-keynote address, and the companion animal round table discussion panel focused primarily on business issues, but also identified several major trends for the future of companion animal medicine. Veterinarians in the past concerned themselves merely with the health of the small animal patient. However, with increased awareness of public health issues in today's society, the role of the veterinarian is shifting to total family health care.

Pet-Facilitated Therapy During her presentation entitled "Pet-Facilitated Therapy and the Importance of the Human-Animal Bond," Dr. Clark discussed the new and evolving role of pet-facilitated therapy programs. Dr. Clark believes that the role of the veterinarian in companion animal medicine will evolve into total family health management, serving as part of a health care team including physicians, counselors, and social workers.

"As veterinary medicine serves society, it fulfills both human and animal needs," states the AVMA's *Guidelines for Animal-Facilitated Therapy Programs*. "The veterinarian, as an individual and a professional, is in a position to provide community service and to aid in the scientific evaluation and documentation of the health benefits of the human-animal bond."

Dr. Eldon Uhlenhopp, Associate Dean for Academic and Student Affairs at the Iowa State College of Veterinary Medicine, believes that "veterinarians should see themselves in the role of significant contributor to the "Health Care Team," providing both

companion animal health care for the good of the family, as well as family counsel for the good of the pet."

Pet Health Insurance As in human medicine, health insurance for companion animals has begun to take its place in veterinary medicine, and Dr. Wilson believes that the trend in companion animal medicine will lean toward increasing levels of pet health insurance. During his presentation entitled "Pet Health Insurance: Today's Reality or Tomorrow's Dream?," Dr. Wilson identified the major issues surrounding companion animal health insurance.

Most diagnostic and therapeutic procedures available in human medicine are also available in veterinary medicine. "The quantity of these services delivered to pets often has been limited because the costs are perceived to be too high by the average pet owner," said Dr. Wilson.

Companion animal health insurance provides these services to clients with limited disposable income. Insurance policies from *Veterinary Pet Insurance*, currently the primary pet health insurance company in the United States, has several advantages not shared by human health insurance (Table II). Additional advantages for veterinarians are listed below.

- The client, rather than the veterinarian, files insurance claims. This frees the veterinarian from complex and time-consuming paperwork often associated with human health insurance.
- Pet health insurance can be a competitive advantage for a practice.
- Pet insurance allows the clinician to spend more time discussing health issues rather than the financial costs of veterinary care.
- Health insurance lowers the "burn out"

Table II: Comparison of Pet and Human Health Insurance*

Pet Health Insurance	Human Health Insurance
1. Owner pays premium	1. Employer/government pays costs
2. Major owner co-pay	2. Zero to some patient co-pay
3. Owner files policy claims	3. Physician files policy claims
4. Owner has involvement in decisions	4. Minimal decisions about costs
5. Euthanasia is an option	5. Euthanasia is not an option
6. Limited intensive care costs	6. Major intensive care costs
7. Low liability risks and costs	7. Major liability risks and costs
8. Low long term care costs	8. Major long term care costs

*Adapted from Wilson, *Visions in Veterinary Medicine*



Dr. James Wilson, practice management and legal consultant presented two workshops. The first dealt with negotiations and contract law. The second workshop discussed pet health insurance and legal issues concerning referral.

factor of euthanasia, allowing pet owners to explore medical and surgical treatments that are often curative, but previously cost-prohibitive.

- Health insurance allows the profession to continue to grow and serve societal needs for increased animal health management.

Pricing & Marketing Other major trends discussed during the companion animal workshops revolved around evolving business practices. Currently, some veterinarians are of the mindset that most clients are unwilling to spend a great deal on pet health. However, studies seem to indicate that the market will support increasing veterinary fees.

During his workshop entitled "The Future of Pricing for Companion Animal Medicine Services," Dr. Bruce Ilgen, Regional Vice-President at Veterinary Centers of America, identified several major trends with regard to fee structures. "As we increase the quality of medicine, and as the strength of the human-animal bond increases, fees must also increase to reflect the quality of services and the clients' willingness to pay," Dr. Ilgen stated. Dr. Ilgen predicts a 30% increase in veterinary fees in the near future.

With increasing fees comes the necessity of marketing veterinary services, both internally and externally. During his presentation on marketing strategies for companion animal medicine, Dr. Marv Johnson predicted that marketing practices will continue to evolve and will become increasingly important in our fast-paced society.

Specialization and Referrals Increasing

veterinary specialization was the final trend discussed during the companion animal workshops. According to Dr. Wilson, specialists are currently not utilized as much as they should be. In concurrence with this, Dr. Robert Rooks stated during his workshop on specialty practices and referral clinics that veterinary specialty is the wave of the future. Specialty practices and referral clinics provide a positive influence for general companion animal practices. Not only do specialists perform sophisticated medical and surgical procedures often unavailable to general practices, specialists possess a greater depth of knowledge that is available as a form of "continuing education" to the general practitioner. Additionally, the opportunity exists for the formation of alliances among general practices for the purpose of recruiting specialists to a region with low supply. When and why should referrals be offered to clients? Dr. Wilson stated four primary reasons:

1. Morally - when a disease process is "over the head" of a general practitioner,
2. Ethically - AVMA Principles of Veterinary Medical Ethics states that "referrals should be offered or sought whenever it appears that the quality of veterinary service will be enhanced,
3. Legally - a legal doctrine (*The Duty to Refer to a Specialist*) exists that requires veterinarians to refer cases when the health care of the patient is beyond the professional capabilities of the veterinarian, and,
4. Practically - before it is too late.

The Future of Food Animal Medicine

"Trying to predict the future is like driving a car blindfolded while someone in the back seat gives you directions by looking out the back window," said Dr. James Jarrett, Executive Vice-President of the American Association of Bovine Practitioners, during his food animal medicine mini-keynote address. Much of the discussion during the food animal workshops and roundtable forum did not focus on what lies in the future, but how to prepare for the future. Dr. Mike Apley coined it, "filling your basket."

Knowing where the profession is headed requires knowledge of where the profession

has been. Dr. Jarrett pointed out the parallel that veterinary medicine has to animal agriculture. Since the birth of the profession, veterinarians have worked with livestock; only recently have veterinarians begun to provide services for companion animals. Veterinary medicine evolved along with agriculture and will continue to play an integral role.

As the percentage of individuals employed in the field of agriculture has declined, so has interest in agriculture. Society is often primarily concerned with cheap, safe food. Healthy animals are efficient animals, thus establishing the basic role of veterinary medicine in animal agriculture. According to Dr. Jarrett, modern, efficient agriculture is not an option; it is a must. Dr. Jarrett stated that animal agriculture will continue to become more efficient and, therefore, there will always be a need for health programs. This does not guarantee that veterinary medicine will be the profession to provide this service. However, veterinarians have the edge through a broad-based education. "Veterinarians are like orchestra conductors," Dr. Jarrett said, "they are not soloists or experts with each instrument, but they have knowledge about all of them."

Dr. Jarrett stated three "musts" for future practitioners. First, food animal practitioners will know that a sick animal is a sign of herd health management problems, rather than merely one sick individual. Second, practitioners must be good at diagnosis and treatment at both the individual and herd levels through management alone. Finally, successful veterinarians must be well-versed in prevention and control of system problems.

The skills that will be demanded are not new. "We must shift our focus from the problem and how to fix it, to how the problem began and how to prevent it." Dr. Mark Hilton summarized his statement by saying that the primary challenge for a veterinarian is to find the very first thing that happened in a particular situation, rather than the last; a veterinarian must fix the cause, not the effect.

The on-going challenge for veterinarians has been to change with time while continuing to provide a beneficial service. Once the service is defined, the challenge then be-

comes marketing the service and receiving appropriate compensation for rendering the service.

Most of the food animal medicine speakers also believe strongly that people management skills and communication skills will become increasingly important. Dr. James Roth believes that communication skills are under-emphasized. Drs. Hilton and Mark Engle agree and emphasize that veterinarians must also play a role as instructor to the producer, while motivating clients to want to learn.

Veterinarians are constantly challenged to refocus what they have been taught. Education therefore becomes a life-long process. Dr. Jarrett states that "anyone who wants to leave footprints in the sands of time must wear work-boots."

Conclusion

The air around Iowa State University's College of Veterinary Medicine was charged with the anticipation of the future of veterinary medicine. The conundrum identified by Dr. King in which "old models no longer work and new ones have yet to be developed" began to be resolved. During the "Visions" conference, steps were taken to produce a new "model" of veterinary medicine that will work for the future. Students and practitioners armed themselves by becoming better educated in aspects of business, marketing, pricing, public health, consulting, and debt management.

A new age of veterinary medicine approaches. The paradigm is shifting and new ideas need to be embraced. This conference marked the beginning of a new vision of veterinary medicine. ♦

The Visions conference committee hopes to have conference transcripts available for purchase by early summer. For information, contact Mark Troxel, VM4, at the ISU CVM or by e-mail at: mtroxel@iastate.edu.