The Clinical Theriogenologist
A Second-Rate Academic Citizen?

The 1989 Barlett Lecture
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It was with mixed emotions that I accepted this invitation to present the 1989 Barlett Lecture. First, it is truly a privilege and an honor to be selected. The anguish in accepting is two fold: Am I worthy of such an honor? Can I prepare a presentation that warrants my being chosen? In all honesty I would have to say "no" to each question. I accepted the invitation knowing that there are many among you that are both more deserving and better qualified. The fact that I did not reject the invitation, I can only contribute to my ego.

What success I have had as an educator and theriogenologist I owe to the help of many people. As Dr. Lloyd Faulkner so aptly presented in the 1983 Bartlett Lecture - "None Goes His Way Alone". Of all the persons influencing my life and career, the most important is my wife Beryl. She has been totally supportive of my efforts and gave the encouragement to continue when times were troubled. I wish to acknowledge the help of an unselfish friend and colleague, the deceased Dr. E. F. Ebert. He was my first department head and gave me much needed confidence and encouragement in my professional efforts. I also owe much to Prof. Dr. C.H.W. de Bois, University of Utrecht, The Netherlands. The sabbatical leave under his guidance had a very positive influence on my career. In addition there are many other people who are responsible for what success I have enjoyed. They include peers, colleagues, students and residents--especially the residents, many of whom were so gifted and have gone on to create outstanding careers. I am sure I gained more from them than they did from me. If I have counted correctly, seventeen members of the College have been residents in the program at Missouri. A great deal of success of this program is due (in alphabetical order): Dr. Ron Elmore, Dr. Charles Martin, Dr. Ed. Mather and Dr. Robert Youngquist. There is no way I could rank them in order of importance. I am delighted that I have this opportunity to recognize the contributions of these colleagues and good friends.

Very early in my career I felt that what we now call "theriogenology" was one of the true specialties in veterinary medicine. The first semblance of recognition of a specialty
group in theriogenology was the predecessor to the present Society for Theriogenology -- The Rocky Mountain Society for the Study of Breeding Soundness in Bulls. This organization became the focal center for veterinarians interested in what we now know as theriogenology. The recognition of the specialty came after the Society had become well established, and though they initially failed in obtaining the recognition of theriogenology as a specialty, their efforts laid the groundwork for later success.

The most rewarding and gratifying aspect of my professional endeavors was being part of gaining recognition of this specialty by the American Veterinary Medical Association (AVMA). It was a privilege to be allowed to serve with the founding committee which was made up of outstanding theriogenologists for whom I held great admiration — Drs. David Bartlett, Steve Roberts, Ray Zemjanis, Lloyd Paulkner, John Kendrick and Payne Oberst.

Also, of great importance was the growth and development of the Society for Theriogenology. I vividly remember the evolution of the Society from its beginning as the Rocky Mountain Society for the Preservation of Breeding Soundness in the Bull. It was kept alive by the dedicated efforts of a few individuals. It soon became apparent that the organization could not survive because the administrative duties were too time-consuming for part-time input of individual members. The Society was on its last legs when it was suggested that we acquire an executive secretary. The Society meeting was held in Columbia, Missouri, that year and a group of us met one evening in my home. One of our group had invited Bob Gary as a guest and possible candidate for executive secretary. After a great deal of discussion with the members present, Bob commented: "I wouldn’t touch this organization with a ten-foot pole." I’m very pleased we compromised our differences and changed Bob’s mind. His organization has been instrumental in the development of our organization to its present status of excellence. We are fortunate that Bob’s successor, Don Ellerbee, has not only continued the tradition, but has added innovative ways to continually improve the organization. The Society at times has had its differences with The American College of Theriogenologists (ACT), but these have been well reconciled and the organizations have become synergistic. They represent both academics and practice and represent a most powerful group to mold the objectives and set the standards for theriogenology. They have the power to change existing conditions. This brings me to the main theme of this paper. "The Clinical Theriogenologist - A Second-rate Academic Citizen?" By this statement I am referring to the present status of clinical theriogenology in many of our colleges of veterinary medicine.

Recently, I had a conversation with a leading embryo transfer specialist, Dr. Robert Rowe, who related a situation which stimulated my thoughts concerning the academic theriogenologist. Dr. Rowe informed me of the likely prospect of cloned, frozen
embryos being commercially available. He felt that the technique for producing cloned embryos was not the problem, but that the implantation of the those embryos could well be the limiting factor. One of the principal investigators in developing the process indicated that he would prefer to utilize animal husbandry graduates and not veterinarians to transplant the clones. He told Dr. Rowe that he felt they would be more receptive to training and that veterinary schools were providing little in the way of clinical education in embryo transfer. Dr. Rowe took the opposite view in that he felt that veterinarians should be utilized in transfer of the frozen clones. This is just one of the examples where clinical proficiency is a must along with technical knowledge. We must anticipate the needs in advance and begin preparing veterinarians to meet the challenges of the future. The veterinarian in the field often recognizes the need for change in education long before that change is implemented in our colleges. This is why our specialty organizations which are most aware of needs in the field should be in a position to council and advise the academic community.

Today's academic community pays only "lip" service to clinical education of its undergraduate and postgraduate programs. The primary emphasis is on how many grants can be brought in and how many papers can be published. The granting of tenure is based on publications and "grantsmanship". When clinical positions are filled, these factors are much more weighted than the clinical proficiency of the candidate. Our primary reason for veterinary colleges is still to graduate veterinarians capable of conducting a practice. It remains the single most important reason for a student selecting veterinary medicine as a career. The undergraduate should be receiving primary attention. Instead, he often receives secondary attention from the clinical staff because the first priority of the clinician has been changed to "publish or perish" not teaching. The basis for his advancement and gaining of tenure is heavily based on publication and "grantsmanship", not teaching. I agree its not easy to define or validate teaching, while published papers and grants obtained are easily documented. I become weary of the excuses such as "Students will take care of themselves", or "The senior student can teach the junior" or "He will really learn clinics when he goes into practice." If all this be true, then why not use a correspondence course for didactic material and farm him out to a clinician for the clinics. This would give the clinician adequate time to do his research and write grant proposals. I know this is an overexaggeration, but really, the situation is becoming more of a reality. You are well aware of what happens to the clinician that places most emphasis on teaching - he is left out when it comes to promotion, salary increases and tenure.

Please do not misunderstand me, I am not saying that postgraduate degrees are not important or not needed, but a Master's degree in reproduction in the rabbit goes a very short distance in assuring clinical proficiency in our food animals.
The importance of publication is not being downgraded. The clinician should be publishing material, but should be granted equal credit for clinical papers, which include extension materials, as well as results of clinical investigations. Credit should be based on the content of the paper as well as its application.

If the clinical theriogenologist is a secondary citizen, whose fault is it? The administrators of our veterinary colleges? Yes, they must share some of the blame. The immediate department head or director of clinics should be more adamant in insisting upon credentials which assure that clinical education is taught by clinically proficient personnel.

Who else is to blame? You and I who make up the American Veterinary Medical Association (AVMA), the Society for Theriogenology and The American College of Theriogenologists. We should be the ones who set the minimum standards for both undergraduate and graduate theriogenology.

We, The Society and The College have the influence and ability to make needed changes. I strongly believe that both organizations should assure that minimum standards are identified for both undergraduate and postgraduate clinical theriogenology. In earlier years both the College and the Society had more important objectives to achieve to become well established. Most of these objectives have been achieved. We have made some forward progress in providing standards through committee work in supplying theriogenology questions for the national board. This assures that the student is examined using questions which the specialists in the field feel are significant. We should now be turning our attention to prescribing minimum requirements or objectives which should be achieved in both undergraduate and graduate theriogenology. In the graduate area my thoughts refer to the resident theriogenology programs.

The first step in asserting our guidance to assure graduate training in clinical theriogenology is through accreditation of theriogenology resident programs. I realize we would be opening the proverbial "can of worms", but I firmly believe that this should become a project for our specialty. This in no way replaces the requirements for individuals to qualify as candidates for Diplomate status to The College. We need diplomates who have research degrees, but equally we need the highly qualified clinical theriogenologist as well. The resident that is certified through a true resident program should be considered as an equal in qualification. In the clinical teaching program he should receive precedence. The institution offering a resident program must assume the responsibility for the educational validity of its program; however that program must meet minimum standards set forth by the accrediting body made up of members of The College and the Society. In this way we best assure that the teaching of clinical theriogenology will meet the needs in education and practice. It also provides
administrators with guidance as to undergraduate education, as well as graduate programs that are consistent with what the specialists in the field have determined meet minimum standards. The selection of clinical theriogenologist responsible for teaching undergraduates could then be based on certification.

Medical Specialists Programs - General.

I have investigated the resident programs in human medicine, specifically in regard to the residency in obstetrics and gynecology. I interviewed both the residents and the program director. I was also supplied with material published by The American Medical Association on graduate medical education programs.

Physicians in graduate medical education are by convention called resident physicians or residents. During the graduate phase the knowledge and skill acquired in medical school are expanded through progressive assumption of personal responsibility for patient care in supervised, clinical, educational environments which provide opportunities to learn about the variability of human beings in health and disease and about their biological, emotional and social problems. As residents progressively gain more knowledge and skill they are provided greater latitude to make decisions and treat patients, but always under supervision.

Graduate medical education is organized by specialty. Some institutions may offer programs in many specialties, while others sponsor only a few, consistent with their clinical resources and capabilities. Each residency training program is organized and directed by a program director who has a staff responsible for education, training and supervision of the residents. Each institution is responsible for providing sufficient resources and assuring supervision of its program.

Approval and Accreditation: Approval and accreditation of training are voluntary efforts of all parties involved in graduate medical education. The process of accreditation assures medical students, residents, specialty boards and the public that training programs are in essential compliance with published standards.

To be approved and accredited, graduate medical education programs must meet General Requirements for graduate medical education and Special Requirements for a specialty and be sponsored by an institution. The Special and General Requirements are the standards against which programs are judged by a Residency Review Committee and the Accreditation Council for Graduate Medical Education. There is an established Residency Review Committee for each of the specialties in medicine for which certification is provided (24 specialties certified).
Obstetrics-Gynecology Residency

Special training requirements are set out for each specialty. In Obstetrics-Gynecology they identify specific types of programs such as: Independent - conducted by a single education institution, Integrated - conducted within multiple educational institutions, but under a single program director and Affiliated - defined as an resident that spends a total of more than six months on extramural rotations outside of the the parent institutions.

Obstetrics-Gynecology residents are provided with a document developed by the American Association of Obstetricians and Gynecologists and the Council on Resident Education in Obstetrics and Gynecology (College of Obstetricians and Gynecologists)². This document is not a recommendation for minimum requisite learning. It is a comprehensive example of educational objectives in obstetrics and gynecology. Instructor and residents are advised to make optimum use of the objectives, with latitude to revise them to make them consistent with the policies and resources of the residency program. The published objective describe in behavioral terms what a resident should know or be able to do by the end of the residency. They have three components: (1) What the resident must do to demonstrate the knowledge, skill, or attitude required by the residency program. (2) The conditions under which this behavior must be learned. and (3) A criterion for acceptable performance.

Theriogenology Residency:

I am not suggesting that our organization adopt the procedures prescribed for Obstetrics - Gynecology verbatim. They would serve as a basis for guidance and discussion. It is difficult to argue with the reasons they give for accreditation: "The process of accreditation assures medical students, residents, specialty boards and the public that training programs are in essential compliance with published standards." I ask you again, who is best qualified to set the standards for accreditation in theriogenology? The answer is obvious - The American College of Theriogenologists and The Society for Theriogenology. These organizations working through and with the AVMA are analogous with to those which have been successful in human medicine. It is realized that this would be a complex, difficult undertaking with much controversy, but I believe it is the only way we can obtain the recognition for clinical theriogenologists so they are considered of equal rank with their colleagues who hold research degrees.

Membership and active participation in the AVMA is a must if we are going to improve our specialty. The Society and The College represent a potent political force. These are your organizations and are the instruments to motivate change. The guidance and setting of minimum standards for clinical theriogenology are your responsibility.
This does not mean that institutions which do not have specified theriogenology sections would be prevented from having a residency program. If they have the resources, program director and adequate staff, a residency program could be approved and accredited.

In closing I would like to express my pleasure in being allowed to be a part of both organizations. You have made great strides in advancing your specialty. I have no doubt that you will obtain your ultimate objectives. The comments I have made I hope will serve to stimulate discussion. I believe they have merit. Having been selected to give the 1989 Bartlett Lecture has been an honor which I shall never forget. Thank you so very much.
Bibliography


2. Educational Objectives for Residents in Obstetrics and Gynecology, Council on Resident Education in Obstetrics & Gynecology, 3rd Ed. 1989