



# Veterinary Viewpoints

The New York State College of Veterinary Medicine at Cornell University

Number Eight

Winter, 1979

## Dean's Message

In the past I have tried to use this column to provide a succinct overview of an individual topic or acquaint you with an interesting activity of the College. Realizing the relative infrequency of these opportunities, I will try to update you on the status of several items and urge any of you who wish a more detailed explanation to contact me.

In my last column I attempted to acquaint you with the role and activities of our advisory committees and councils which are so important to the ongoing life of the College. As the recently renamed James A. Baker Institute for Animal Health seeks to define its role in the last two decades of this century, it has appointed an Advisory Council composed of distinguished scientists, corporate leaders and concerned individuals who are deeply interested in animal welfare. At present, the following individuals serve on that Council:

Mr. Richard Johnson,  
Eisenhower Professor of Neurology  
The Johns Hopkins University  
School of Medicine

Dr. Robert R. Marshak, Dean,  
School of Veterinary Medicine,  
University of Pennsylvania

Mr. John Lafore,  
Former President,  
American Kennel Club

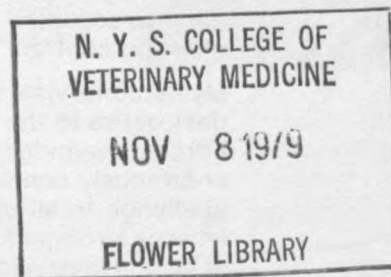
Mr. John M. Olin,  
Former Chairman,  
Olin Corporation

Mr. Gary A. Lee,  
United States Representative,  
33rd District, New York

Dr. Niel W. Pieper,  
Private Practitioner

Mrs. Richard Scaife

Dr. Irwin H. Lepow,  
Director of Research and Development  
Sterling-Winthrop Corporation



Since the founding of the Institute (previously known as the Veterinary Virus Research Institute) it has achieved national and international distinction for its work in pathogenic viruses and in the diagnosis and prevention of diseases caused by a number of infectious agents. Work continues to improve vaccines, and to seek out the causes of diseases in animals which remain unknown or uncontrolled. Such work becomes more and more complex as knowledge and techniques are drawn from the related disciplines of microbiology, immunology, biochemistry, genetics and cell biology. To continue the preeminent role it has achieved in veterinary medicine the Institute must expand its talents and capabilities in modern science while maintaining the close and rewarding communication it has achieved with the practicing segment of the profession and the larger public it serves. The new Advisory Council to the Institute will greatly assist in achieving these goals.

A brief comment on the status of the College: In other sections of "Viewpoints" we will introduce three new faculty and staff members and report on various programs and activities. But as I complete four years of service as Dean of the College I would like to take this opportunity to express certain personal views and convictions. We have witnessed much trauma and change since I arrived on this campus in the fall of 1974. It has not been an easy time for any of us as we experienced financial adjustments of an unprecedented nature, delays in the renovation or construction of urgently needed facilities or interruptions caused by the breakdown of old or outdated equipment, and a turnover of 25% of our total faculty and 45% of our clinical faculty due largely to competitive forces in the marketplace. Yet through all of this we have emerged as a much stronger institution. I am enormously proud of the faculty and staff of this College as they have joined together in meeting these challenges.

*Continued*

The understanding and support provided by our many alumni and friends have been crucial to us. The general spirit of the student body, faculty and staff appears to be at an all-time high. Exciting progress is being made on nearly every front: overall communication and understanding by the profession and public we serve has greatly improved; the services offered by the Teaching Hospital and the fine, new Diagnostic Laboratory are reaching new levels of recognition and acceptance; there is a renewed commitment to excellence in teaching, recognizing the extraordinary challenge and opportunity for working with this fine body of intelligent, highly motivated young men and women; and we are reaching unprecedented heights in research activity. As an example, this past year the *total* sponsored research effort of the College rose 22.8% with a higher percentage of that total coming from the National Institutes of Health at a time when competition for research funding is at an all time high. Looking back, as I was preparing to return to Cornell, several of my colleagues in the profession told me that "Cornell was a sleeping giant". If that was the case, I serve notice on the world that this giant has at least one eye open, is beginning to stir, and is prepared once again to accept its role as a leading force in education, research and public service!

As I meet with various groups around the country probably the most frequent subject of conversation has been the summary of the report by the Arthur D. Little Company of the future of the veterinary profession through 1990, released by the American Veterinary Medical Association. At this writing we are still examining the full text of the study but have little to report beyond that which has been provided to you in summary form. It is important to recognize that all such studies are subject to inadequacies in design, scope of sampling and data analysis; nevertheless, a number of other signs clearly indicate that the projections which have been made for veterinary medical manpower needs are changing rapidly. To my knowledge, no one individual or group is sufficiently clairvoyant to set predictions which must be accepted as *fait accompli*. Rather, it is *we* who can try to change such predictions if they run contrary to our beliefs, desires and expectations.

My personal view is that our profession is caught up in an expansion which may very well be destructive to the orderly development and progress we have worked so hard to achieve. Forces, seemingly beyond our control, have projected us into a situation which can be enormously damaging to the profession. Rapid change is now almost certain and the real challenge to all of us will be that of orchestrating the change so that the profession will emerge stronger for having gone through this period. Now is the time for us to look carefully at means to develop a clearer understanding of veterinary medicine on the part of the public we seek to serve, to establish areas of responsibility wherein individuals trained in veterinary medicine are uniquely qualified to serve and then equip ourselves to meet these responsibilities in the best possible manner. This responsibility must be shouldered by each and every one of us and not left to the schools, the committees and councils of organized veterinary medicine or "others". Rather than pointing the finger of blame and accepting doleful predictions, let us seize upon this period as a time of opportunity and, in the traditions of the past, emerge as a profession which will fully exploit the unique talents and capabilities we have to meet the needs of the world in the decades ahead. I will have more to say on this topic in subsequent issues of "Viewpoints".

**Edward C. Melby, Jr., Dean**

### **Profile: Department of Physical Biology and Section of Physiology**

Creation of this unit represents an attempt to integrate the numerous and diverse activities in physiology at Cornell and to relate the results of these activities to applied problems in veterinary medicine and the animal sciences. The section of Physiology is one of the six major units of the university-wide Division of Biological Sciences; the other units are Biochemistry and Cell Biology, Botany Genetics and Development, Ecology and Systematics, Neurobiology and Behavior and the Bailey Hortorium. All sections of the division contain staff members of at least two Colleges, but Physiology is unique in that it contains appointees from three colleges — the Veterinary College, Agriculture and Life Sciences and Arts and Sciences. Combination of the Section and the Department of Physical Biology has resulted in a unit with great strength in both basic and applied sciences that is providing a focal point for activities in the field of physiology at Cornell.

#### **Teaching Services**

As the major University teaching facility for physiology, this unit has responsibility for a wide range of courses taught across the campus. Course levels range from a beginning biology course to advanced laboratory courses for graduate students. Many of the courses have large (and growing) enrollments. As examples, Dr. Daniel Tapper teaches a beginning general physiology course to about 400 students

from all three colleges; Dr. Ellis Loew gives an auto-tutorial course in biology to about 200 students; joint appointees, such as Dr. Ronald Butler and Dr. Robert Foote of the Animal Science Department teach a variety of courses such as endocrinology (80 students), a new beginning course in large animal physiology (200 students) for farm-oriented Animal Science students, and animal reproduction and development (250 students).

We have instituted three new graduate level courses in mammalian physiology that are attracting graduate students from all three colleges. Dr. Klaus Beyenbach, a new addition to the staff, is playing a major role in organizing and teaching these advanced level courses. Increasingly, members of the unit are utilizing their talents to improve our offerings in physiology for veterinary students, although major responsibility for this task resides with the Department of Physiology, Pharmacology and Biochemistry. To date, the inputs have been mainly in the areas of endocrinology, reproduction and radiation biology. Since an increasing number of entering veterinary students already have had basic courses in physiology, we look forward to developing more advanced courses for these students, particularly in specialized areas such as renal physiology, endocrinology, sensory physiology and advanced nutrition.

### **Research Activities**

Formation of the Physical Biology-Physiology group has served to bring together some of the best known research units on campus. The reproductive physiologists are respected for their contributions to knowledge concerning control of ovarian and testicular functions in cattle, sheep, dogs and chickens. The membrane physiologists have recently isolated and identified an important Vitamin D-induced calcium binding protein from intestinal epithelium. The neurophysiologists are doing excellent work in establishing the neural basis of skin sensation, and in working out the physiology and biochemistry of vision. Behavioral physiologists are making real progress in identifying the factors that control food intake in the domestic animals and in establishing the exact hormonal control of the expression of estrus in the bitch and the cow. Other groups are working in kidney function, the mechanisms of transfer of lipids into the tissue, electrical discharges from the cerebral cortex and mineral metabolism.

### **Future Directions**

The objectives of the Physical Biology-Physiology groups are clearcut. The high level of research activity must be continued; the current organization should enhance Cornell's ability to obtain both training and research grants in physiology. A major effort will be made to apply the research results already available to practical problems such as infertility in cattle, postpartum anestrus, artificial estrous cycle regulation, parturient paresis and cystic ovarian degeneration. There is a great need for dissemination of new information in physiology to practicing veterinarians, artificial insemination technicians and managers of all kinds of animal operations. We hope to accomplish this through the office of the Extension Veterinarian, and by short courses and local meetings whenever possible. Members of the section are also working closely with the Diagnostic Laboratory in establishing a new Radioimmunoassay Laboratory to measure steroid and peptide hormones. When operational, this unit should provide a much needed service for diagnosis of endocrine diseases.

Efforts to improve and extend course offerings in physiology will continue. Several new advanced level courses for both veterinary and graduate students are planned.

## **NEWS OF THE CAMPAIGN FOR CORNELL VETERINARY MEDICINE**

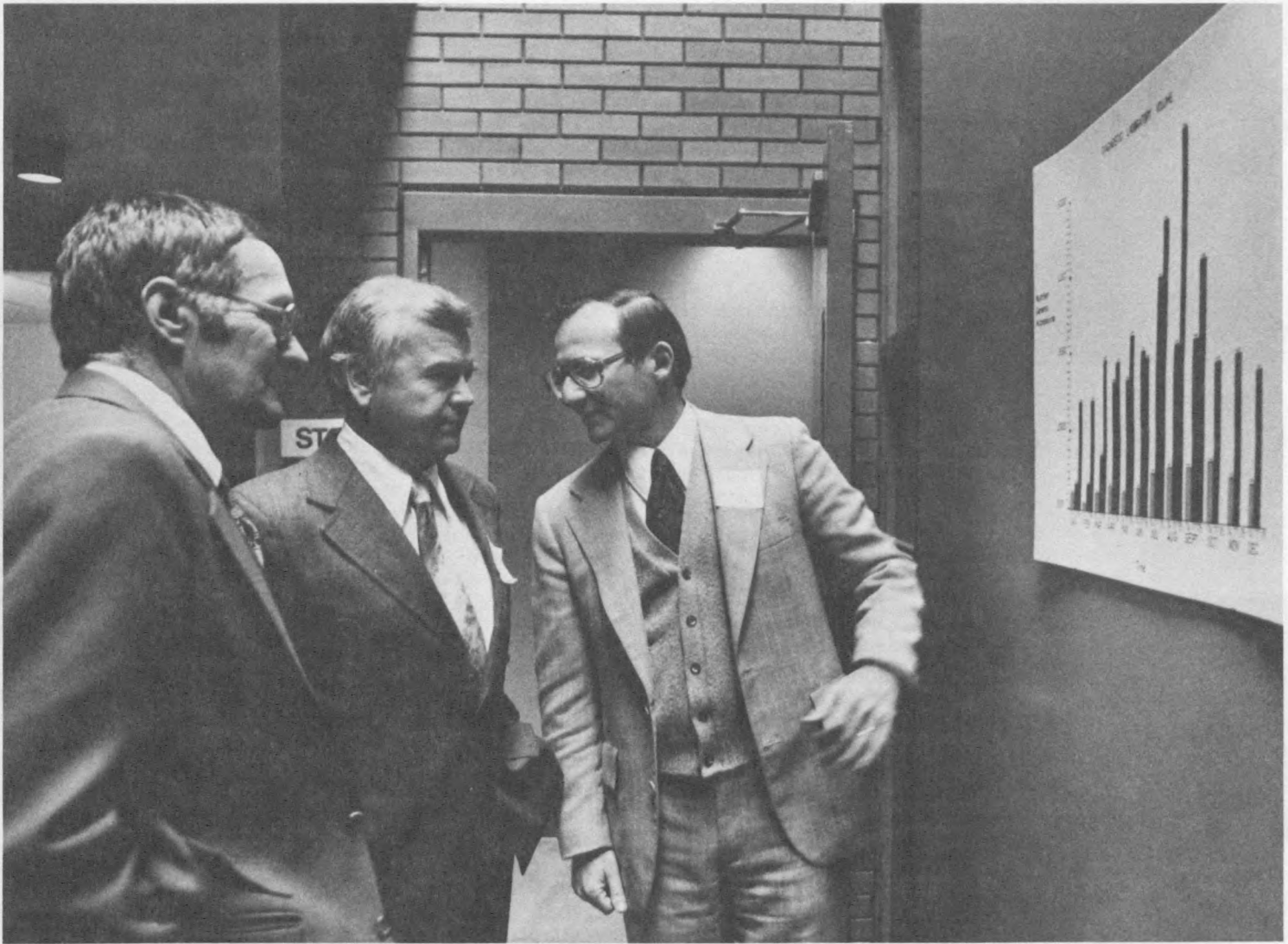
The College Development Advisory Committee in its October meeting decided to establish a special honor roll to recognize the alumni who secure support for the College from their clients or the general public. These gifts may be generated by use of the leaflet, *A Visit to the New York State College of Veterinary Medicine at Cornell University* or any other means. They may be cash, stocks or deferred gifts which will benefit the College in the future.

We are pleased to present below the first honor roll. It includes the names of alumni using the above leaflet whenever we were able to identify the doctor. In the future we urge all alumni to stamp their names on the back of the tear-off coupon so that proper credit can be given when the coupons are sent to the College.

### **HONOR ROLL ALUMNI SECURING NON-ALUMNI GIFTS**

Dr. James P. Childress '55	\$6100
Dr. Robert E. Clark '52	300
Dr. Stanley E. Garrison '50	1 bequest
Dr. Raphael Meisels '34	203,160
Dr. Earle N. Peterson '58	100
Dr. Jean T. Wilson '52	25

Since the campaign began in 1976 non-alumni gifts and credits for anticipated bequests total \$2,826,572.



*J. Roger Barber, commissioner of the New York Department of Agriculture and Markets, and P. R. (Bobby) Smith, assistant secretary in the U.S. Department of Agriculture, discuss the volume of work handled by the New York State Diagnostic Laboratory with Dr. Raymond Cypess, laboratory director, after the facility's formal dedication. Accessions increased 85% in 1977 and promise to increase about another 30% in 1978.*

### **Diagnostic Lab Formally Dedicated**

Stressing the importance of animal industries to New York State and the inter-relationship of animal and human health, Cornell and government officials formally dedicated the College of Veterinary Medicine's new \$1.7 million New York State Diagnostic Laboratory.

William T. Smith, state senator from the 51st District, said the College of Veterinary Medicine had received a \$50,000 appropriation in the state's supplemental budget for research on brucellosis, a disease that recently resurfaced as a threat to the state's dairy industry. He is confident, he said, that the college can find a permanent solution to brucellosis, citing its successful efforts in the control of equine infectious anemia, vibriosis and canine distemper.

J. Roger Barber, commissioner of the New York State Department of Agriculture and Markets, whose agency provided capital funds for the laboratory and which continues to support its efforts, formally presented the laboratory to Cornell.

In a press conference after the ceremony, Commissioner Barber stressed the laboratory's role in helping New York develop an export program for its dairy cattle. Some 40,000 head of cattle, he said, will probably be exported from the state this year.

P. R. (Bobby) Smith, assistant secretary for marketing services in the U.S. Department of Agriculture, said that a major role of the laboratory is guarding against the introduction of exotic diseases of livestock, which could devastate the animal industry in New York and the Northeast.

In addition to its testing services for the state's livestock industries, the laboratory conducts equine drug testing and research for the State Racing and Wagering Board and performs diagnostic services for veterinarians throughout the Northeast who work with companion animals.

## STAFF ANNOUNCEMENTS



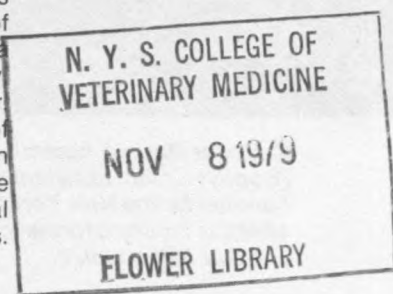
**Susanne Whitaker**, who served as Assistant Librarian in the Flower Veterinary Library for the past year, has now been appointed Librarian to replace Mia Reinap who has retired after 25 years of service to the College. Mrs. Whitaker was born and raised in the historical Boston area at Lancaster, Massachusetts. She obtained her Bachelor of Arts degree at Clark University in 1969. On a stipend for studies in Medical Librarianship, she was awarded a Master of Science in Library Science after one year at Case Western Reserve University. In 1970 she joined the staff of Yale Medical Library at New Haven. From 1972 - 1976 she was librarian at the Hartford Hospital in Hartford, Connecticut. She is a member of the Medical Library Association. She is married to Daniel Whitaker, Cornell '70, M.S. '72.



**Dr. Joanne Fortune**, Research Associate, Physiology-Physical Biology. Dr. Fortune received the Ph.D. Degree from Cornell University in 1974 where she majored in Embryology. After spending one year as a Postdoctoral Fellow at the University of Western Ontario in the Department of Physiology and Obstetrics and Gynecology, she returned to Cornell in 1976. Her major work concerns control of steroid production by pure cultures of theca and granulosa cells obtained from bovine preovulatory follicles.



**Dr. Barry J. Cooper**, Assistant Professor of Pathology, has been at the College since September 1976, in the positions of intern, resident and lecturer. Prior to that, Dr. Cooper was a tutor in veterinary pathology at the University of Sydney, Australia, and a practitioner in the private pharmacy field. Dr. Cooper earned the Ph.D. degree from the University of Sydney in 1976, and is a 1977 diplomate of the American College of Veterinary Pathologists. Dr. Cooper is responsible for the Surgical Pathology service, and is the departmental liaison for the computerization of Pathology service reports.



## STUDENT ADMINISTRATION

In the May 1977 edition of *Veterinary Viewpoints* we described our concept for the selection of those many talented men and women who join the College for the DVM program. Since that time, the Faculty Admissions Committee and the staff of the Office of Admissions have had an opportunity to review an additional 858 applications in selecting the 80 members who joined the College this fall as members of the Class of 1982. The results this past year clearly underscored the importance of our "whole person" evaluation efforts. A detailed analysis of the year's efforts and a look to the future causes us to feel quite comfortable with our admissions philosophy. We anticipate continuing in much the same fashion as we select the Class of 1983. The time-consuming and costly nature of our review process has meant internal modification to streamline without detracting from our goal of identifying the very best applicants while at the same time affording the opportunity for a full review for as many applicants as time will allow.

The increased involvement of the faculty in the evaluation of applications meant that of the 858 who initially applied this past year, 660 applicants received a complete file review; a greater number than ever before. Many of the applicants who did not go into the more detailed review stage had not established their prerequisites in a minimally adequate fashion and were disqualified. There were some who withdrew their applications as they became more aware of the intensity of competition. By using three faculty members to independently review each completed application we were able to

conduct nearly 2100 separate file evaluations. It was estimated that each evaluation took from 45 minutes to 1 hour. It is obvious that the College gives a high order of priority to the admissions process.

The faculty has reaffirmed the importance of the interview as a final step in the selection process. While it would be ideal to interview all qualified applicants, the complexity of the interview process and the magnitude of the task precludes that. Seeking to interview as many as possible, the Committee was able to meet with a record 273 of the top-ranked applicants this year.

The Class of 1982 consisted of 58 New Yorkers, 20 from the compact states of New England, New Jersey, Delaware, and the two best qualified applicants from the nearly 150 residents of all other states (and some foreign countries) who applied. The final class selection was based purely on an order-of-merit ranking system. The Faculty Admissions Committee could certainly feel comfortable with the qualifications of many more, were it possible to accept over 80.

The new class is heterogeneous. While there is a concentration of undergraduate degrees associated with either the animal or biological sciences, a number of other academic backgrounds are represented. Applicants from nearly 30 highly reputable undergraduate schools were enrolled. Most had extensive experience with both large and small animals. There were a few successful applicants with below 3.0 cumulative grade point average. This is only appropriate in a concept of looking at the "whole person". It should be noted, however, that the relative quality of the pool of applicants, as measured by quantitative factors such as grade point averages and GRE scores, is better than in previous years.

We are quite sensitive to the problems associated with the denial of nearly 90% of an applicant pool. Not only are we disappointing the denied applicants, but their families, sponsors, colleagues, and others associated with them. We have, therefore, made a major effort to provide denied applicants with as much information as we can. Over the past year, the Director of Admissions has conducted individual one-on-one counseling with many of the denied applicants. This counseling seeks to provide some insights and guidance to help the applicant plan subsequent actions. Within the limitations of time and staffing we have also tried to be as responsive to input from sponsors as we can. We hope that where there is specific concern and the need for feedback from us you will allow us to respond to your inquiries.

Selection of the Class of 1983 will follow policies and procedures similar to those of the last two years. The faculty will again attempt to offer a "whole person" evaluation for as many applicants as time and other resources will allow. We hope to expedite the process to allow for an earlier decision. Our goal is to be able to contact those who have been accepted not later than the first week in April. In this way, denied applicants will have a better opportunity to pursue alternatives. The faculty and administration are anxious to streamline the process but only to the degree that it does not compromise the concern we have for guaranteeing every applicant fair and equitable consideration.

At a time when it appears that we will be unable to enroll more students in our program and the number of applications remains high, it may seem unusual to be concerned about a recruiting effort. We do have this concern, however, and we want to solicit your support. Quality is of paramount importance in our admissions effort. We are concerned that superbly talented men and women will be routinely turned-off if they are led to believe that there is absolutely no chance for enrollment. For every applicant who is successful, there are at least another three or more who would be welcome additions to the profession. Many of those who are successful have received strong encouragement and advice for a number of years as they moved toward their goal of becoming veterinarians. We therefore call upon everyone in a position to offer advice and counsel to prospective applicants not to assume an immediate negative reaction based on the odds, but instead to help applicants obtain the best possible information about veterinary medicine, our program and those things which must be accomplished to become competitive. Then, once prospective applicants feel that they have all available objective information, we hope that they will feel comfortable in their decision about application.

The imbalance in the number of minorities in veterinary medicine is a national concern and one which our College is committed to deal with through effective affirmative action programs. This does not involve quotas or a lessening of standards. We are particularly concerned about the need to provide talented minority students with useful information about possible careers in veterinary medicine. Encouragement of qualified minority students must begin at a very early age. Once again we solicit the support of as many readers as possible to help identify and advise talented minority candidates.