



# Veterinary Viewpoints

The New York State College of Veterinary Medicine at Cornell University

N. Y. S. COLLEGE OF  
VETERINARY MEDICINE

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## Message from the Dean

JUL 22 1980

Recently, eighty talented young men and women were graduated from the College. They will begin their careers as members of the veterinary medical profession and, simultaneously, will join the ranks of the alumni body of this University. This is an event worthy of great pride and satisfaction, yet also one that inevitably brings a degree of uncertainty and concern. It would seem that the world is changing at an ever more rapid pace; the energy supplies of the nation are in jeopardy; segments of the economy appear to be wavering; and, of course, the political parties are preparing for the presidential contest.

Within the veterinary profession considerable debate exists about where the profession is going and at what pace. Several new schools of veterinary medicine have been established or are in various stages of planning, and existing schools have been expanded. Last summer the Arthur D. Little Company, under contract to the American Veterinary Medical Association, rendered a report on the status of the profession. If its assessment is correct, the profession faces an excess of veterinarians within the not-too-distant future. But there are other factors that also must be considered.

As I discuss these issues with practitioners, I find that some in small-animal practice report that the general economic uncertainty in the country is having a negative effect on their practice. Many are concerned that we are beginning to overprice our services in an attempt to give the best possible care to patients. Certainly, advances in knowledge, instrumentation, medical and surgical skills, and available drugs all make it possible to accomplish results in both human and veterinary medicine that were unthinkable just a short time ago. Yet it is easy to see that the cost of human medical care in this country has become a monster in our midst, devouring ever-increasing quantities of public and private funds. How can we, as professionals, protect ourselves against criticism (and significant financial loss due to litigation) unless we have provided the very best medical and surgical care known to us? We want to give maximum service to patients and clients, yet we must continually recognize that the economics of the current situation may make this impossible to achieve on a uniform basis. These are among the profound problems facing every veterinarian in companion-animal work.

In large-animal practice additional problems are encountered. Although the large-animal practitioner must continue to serve the needs of individual patients, increasing emphasis will have to be given to group, herd, or flock health matters, generally addressed under the umbrella topic of "preventive medicine." In this issue we describe the new Department of Preventive Medicine established at the College to provide leadership and direction as we develop a team approach in meeting these needs. Harvard University has recently announced a major revision of its undergraduate programs, stressing the traditional basics of reading, writing, and arithmetic. Significantly, its faculty has listed another "basic," the use of computers. It may be difficult for some of us to accept that in the very near future, it will be necessary to use computers in our daily lives. Yet one of the faculty members in our new Department of Preventive Medicine will be developing ways for a practitioner to use an office computer to assist in meeting the animal-health and farm-management needs of clients. It is not farfetched to predict that within the next decade, veterinary practitioners serving certain segments of the food- and fiber-producing agricultural industry will avail themselves of such instrumentation.

All these changes promise to have significant impact on the education, research, and service programs of the College. As the saying goes, "Just when I think I know where it all is, someone moves it." As dean of the College and as a parent with children still in school, I am concerned about the escalating costs of veterinary medical education. Many of these costs have been mandated by forces entirely beyond the control of the faculty and the profession. We seem to be caught up in a whirlwind, without the ability that we—and members of most other professions—have had in the past to direct our destiny. In the months ahead the faculty of this College will spend long hours examining and debating the current curriculum. Arguments will be raised concerning the emphasis placed on clinical versus basic sciences; the degree of emphasis placed on laboratory teaching; the need to provide more relevant clinical training during the first and second year of professional education; the provision of more "hands-on" experience during the clinical years; the sequence of course offerings; overlap in courses; the strengths and weaknesses of providing detailed lecture and laboratory outlines for students and of using autotutorial and computer-assisted programs; and many other considerations.

This is not a new undertaking; indeed, it is a continuous process—both formal and informal—in any institution of merit. At the same time, we must consider basic changes that are occurring within the profession. What will be the impact of so many new schools of veterinary medicine? What emphasis should we place on preparing at least a percentage of our student body for careers in teaching and research? How can we best prepare our students for careers in industry, government, or public health, where significant need has been identified for veterinarians possessing specialized talents? What will be the role of veterinary medicine in the emerging fields of aquatic animal medicine, conservation, and environmental studies?

How should the faculty approach these critical issues that will, to a major degree, affect the future of this College and a segment of our profession? Who can best evaluate the existing curriculum? The students know it best from one point of view but perhaps not in relation to the needs of the outside world. Who will set the criteria

and who is sufficiently clairvoyant to predict what will be needed in the future? The older established schools may find it more difficult to institute change but usually have the greatest resources with which to work. The changes we undertake here at the College will have significant impact on faculty organization, the use of space and equipment, and research productivity. We must be very careful not to damage the substantial fabric on which the strength of the College is firmly based. The most profound concern must remain the preparation of our students to meet the needs of a changing world.

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

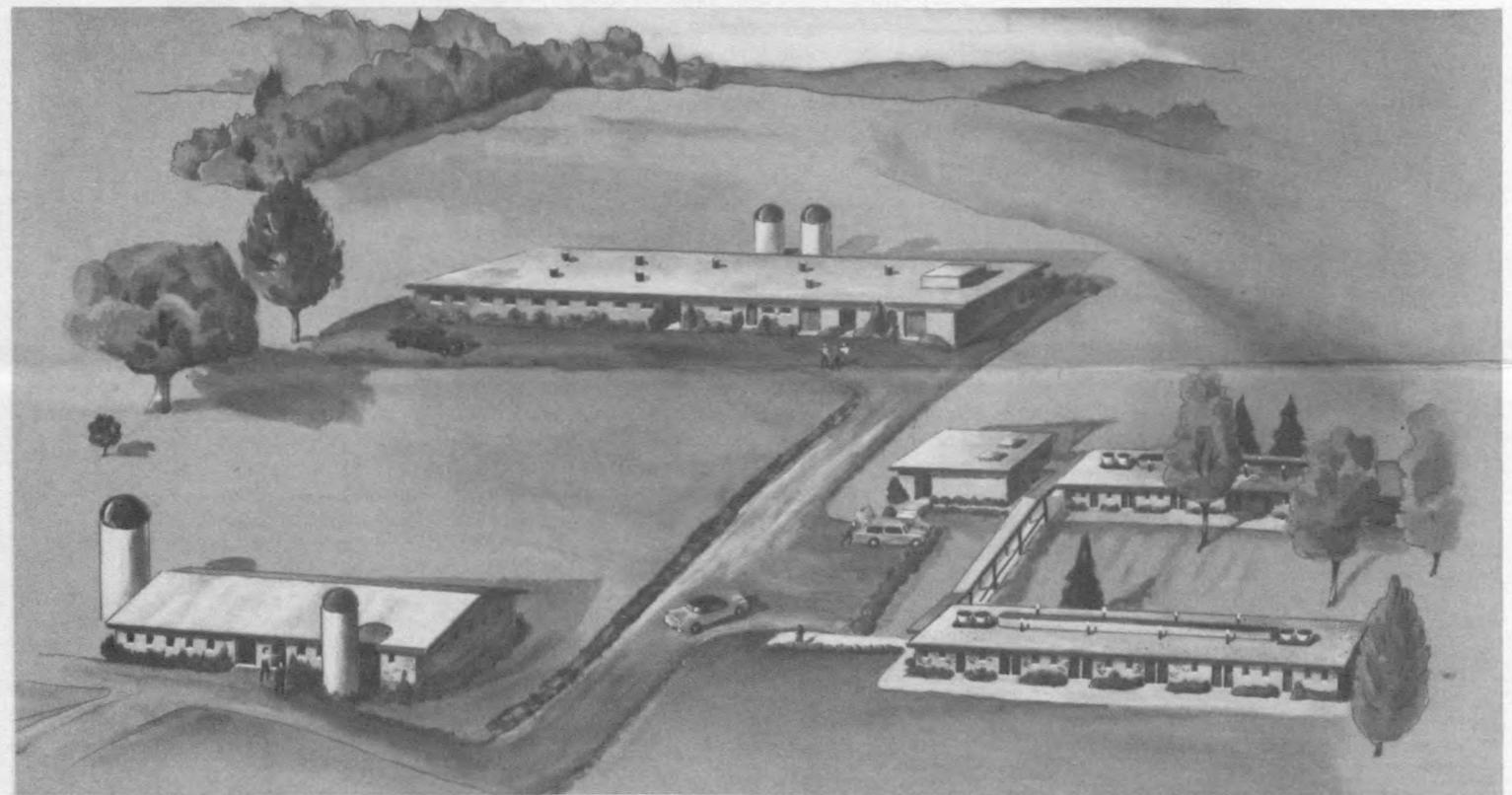
## **Profile: Department of Preventive Medicine**

### **The Need**

Recognition of the need to provide broader training, research, and service in all areas of preventive medicine provided the necessary impetus for the recent authorization and funding of the Department of Preventive Medicine at the College. The new department has been organized so that many of its programs will be developed in conjunction with the Diagnostic Laboratory, thus permitting the effective integration of laboratory science and preventive medicine principles. This arrangement, though unique in some aspects, is in the College tradition; a similar link exists between the Department of Clinical Sciences and the Veterinary Medical Teaching Hospital and between the Department of Avian and Aquatic Animal Medicine and the avian diagnostic laboratories.

### **The Staff**

Dr. Raymond Cypess, chairman of the new department, has focused department activities in three major areas: (1) animal production, (2) epidemiology and public health, and (3) environmental health effects. Accordingly, faculty have been recruited within these three areas. Although the available pool of persons with the highly specialized training needed to fill the posts is limited, some outstanding appointments have been made: John C. Babish (Ph.D., 1976, Cornell University), food and industrial epidemiology; Hollis N. Erb (D.V.M., 1974, University of California, and Ph.D., 1979, University of Guelph), animal health services; Lawrence T. Glickman (V.M.D., 1972, University of Pennsylvania, and Dr.P.H., 1977, University of Pittsburgh School of Public Health), clinical epidemiology; Michael Marmor (Ph.D., 1972, State University of New York), environmental epidemiology; Jeffrey Davidson (D.V.M., 1976, University of California, and M.P.V.M., 1979, University of California), health services; and Thomas J. Reimers (Ph.D., 1974, University of Illinois), animal production.



*Artist's drawing of the proposed field facilities for the Bovine Health Research Center, to be constructed near the James A. Baker Institute for Animal Health on Snyder Hill. The specific-pathogen-free unit is shown at lower left, the large multipurpose barn is in the distance, and the isolation facility is on the right.*

Another professorial appointment made for 1978-79 was that of Daniel Cohen (D.V.M., 1955, University of Illinois, and M.P.H., 1960, University of Pittsburgh) as visiting professor while on leave from his post as professor of comparative medicine at the Ben Gurion University of Negev School of Veterinary Medicine, in Beersheva, Israel. Dr. Cohen's credentials are impressive, including long and prestigious association with international agencies such as the World Health Organization and the Pan American Health Organization. His contributions to the new department's development have also been impressive, particularly in the areas of international health, public health, and epidemiology.

Joint appointments have also added considerable breadth to department expertise. George C. Poppensiek (V.M.D., 1942, University of Pennsylvania, and M.S., 1951, Cornell University), the James Law Professor of Comparative Medicine and former dean of the College, and a world figure in comparative medicine and international health, is the most recent of these. The other joint appointee to date is R. David Smith (Ph.D., 1973, Cornell University), assistant professor, Department of Animal Science, College of Agriculture and Life Sciences, whose areas of specialization are reproductive physiology and animal health.

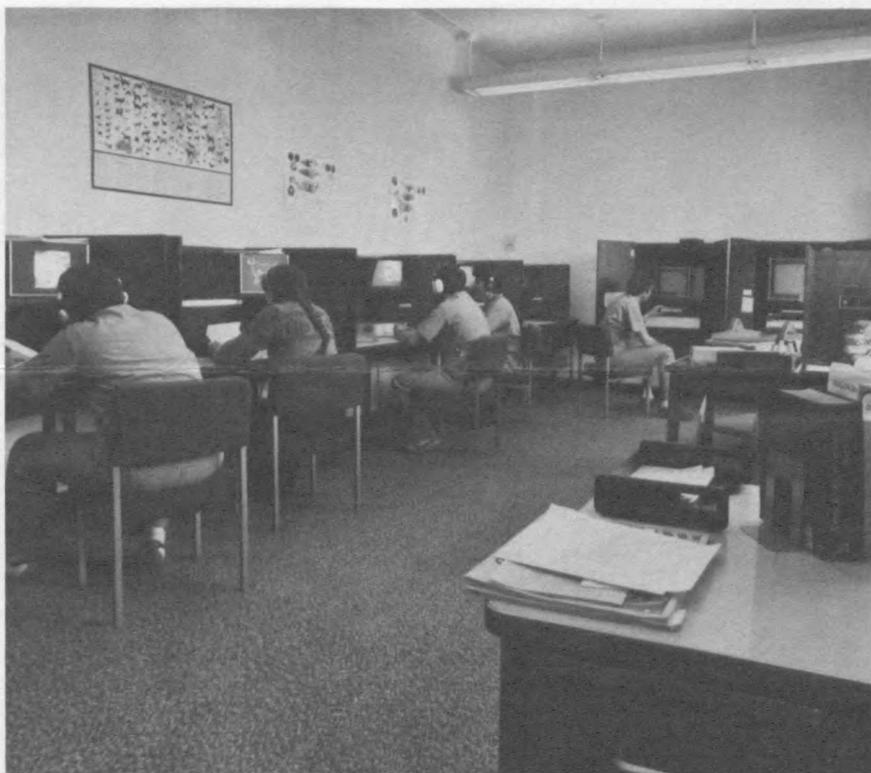
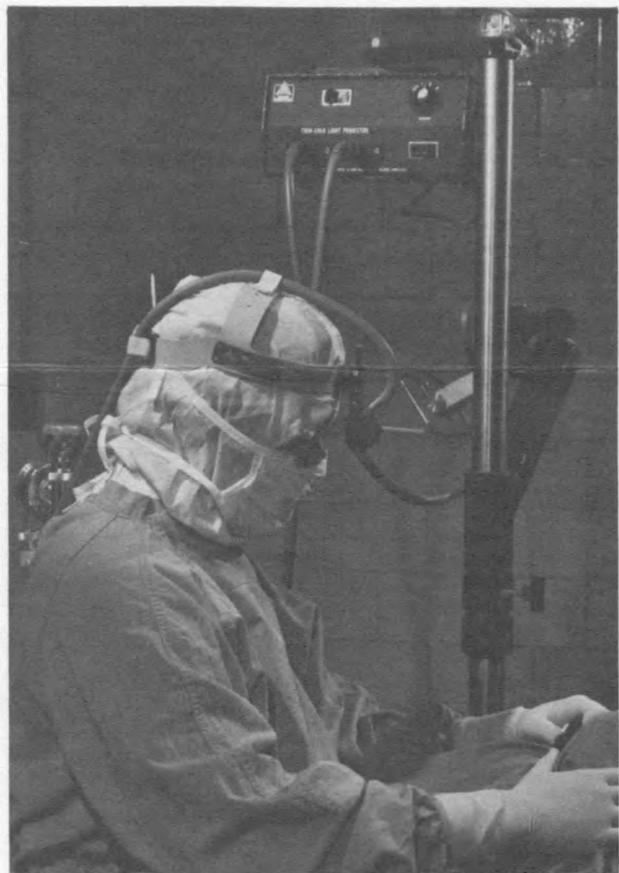
Robert B. Grieve (Ph.D., 1978, University of Florida), immunoparasitologist, fills the research associate post, and Dennis R. Downing (B.S., 1972, Iowa State University), who has special training in laboratory automation and instrumentation, is a research support specialist in the department.

### **The Programs**

Even though staffing is not yet complete, the department's professional and graduate teaching programs are well under way. The newly developed courses Principles of Epidemiology and Principles of Preventive Medicine in Animal Production have been incorporated into the core curriculum for professional-degree candidates, and beginning this fall, six new elective courses will be offered in the graduate curriculum. Every member of the department has service responsibilities in the Diagnostic Laboratory, and one of the first goals shared by both units is the development of an effective field service program in food-animal medicine that integrates all available resources at the College.

### **Report on the Investment of Campaign Funds**

The Campaign for Cornell Veterinary Medicine is nearing the end of its third year. Dr. Frederick O. Wright '41, general chairman, has sent two reports to alumni on the use of unrestricted funds, but no information has yet been distributed on funds designated for use within the Veterinary Medical Teaching Hospital in the Small and Large Animal Clinics.



Above: *Small Animal Clinic autotutorial room*

Left: *The Fiberoptics headlight system*

## New Equipment in the Clinics

Alumni gifts to the campaign have been used to purchase important equipment that has improved both the teaching and clinical research capabilities of the Veterinary Medical Teaching Hospital. In the Small Animal Clinic the equipment for ophthalmic examinations was improved by the purchase of a Kowa portable slit-lamp microscope. This instrument, used to examine the anterior segment of the eye, is adaptable for use with large as well as small animals and is especially valuable in teaching.

A Fiberoptics headlight system for focal surgical illumination has been added to an existing operating-microscope power source. This system is particularly useful in lighting poorly defined cavities. A dual binocular operating microscope is still needed to complete this set of equipment for microsurgery instruction.

A dual-head teaching microscope was purchased for use in the examination area of the Small Animal Clinic, where it is readily available for simultaneous use by the clinician and student in a wide range of microscopic examinations.

Funds were also used to purchase a new Hewlett-Packard electrocardiograph machine and to construct a unit to assure the immediate availability of sterile, functional cardiac pacemakers. These pacemakers have been donated and are currently being used successfully in a number of canine patients.

A new whirlpool hydrotherapy unit was obtained for the dermatology service to improve the service's healing capabilities.

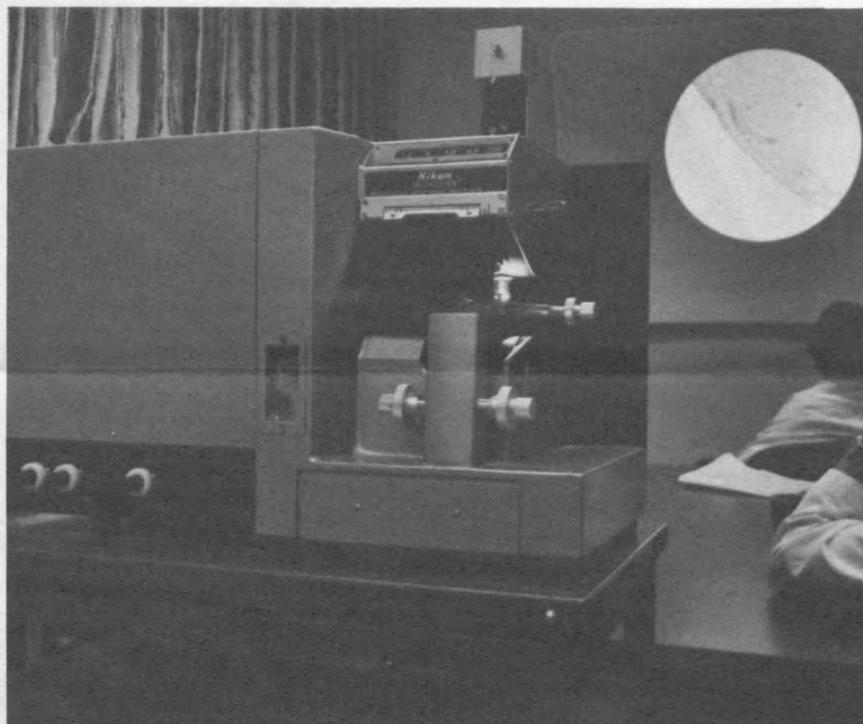
Funds were used to purchase cabinets needed for the sorting and storage of slides used in the teaching program. These slides are arranged predominately by system or diseases and are available for use by any of the faculty in preparing courses at the College or continuing-education courses for practitioners.

An Ancom audiovisual unit with approximately twenty programs was obtained for use with clients of the Small Animal Clinic. These programs project an excellent image of the veterinary profession and permit greater flexibility in the time commitments of the clinical faculty.

Equipment purchased for the surgical services includes a minifragment ASIF orthopedic instrument and implant set, which is extremely useful in treating certain fractures in small-animal patients. A modern surgical cautery unit with both foot and hand controls has greatly facilitated the use of the cauterization procedure.

Funds earmarked for the Large Animal Clinic provided important items that could not be obtained in any other way. Purchase of a portable large-animal surgery table and an Ohio cattle transporter has greatly improved the capability to restrain large bovine patients—especially bulls—and to perform surgery in a safe, effective manner.

A deluxe two-horse trailer was bought to assure safe transport of Thoroughbreds to the Equine Research Park, primarily for orthopedic and respiratory-system examinations on the half-mile track.



Above: The Nikon Xenon arc-glass slide projector

Left: Cattle transporter unit

New padding was purchased for the recovery stalls, designed to prevent injuries upon recovery from anesthesia. This twelve-inch-thick, compressible foam material provides comfortable support while the patient is recumbent and adequate traction when it attempts to stand.

Slide-storage cabinets were purchased for clinical faculty who teach in the Large Animal Clinic, and jet lavage and new light sources were added to the surgical suite.

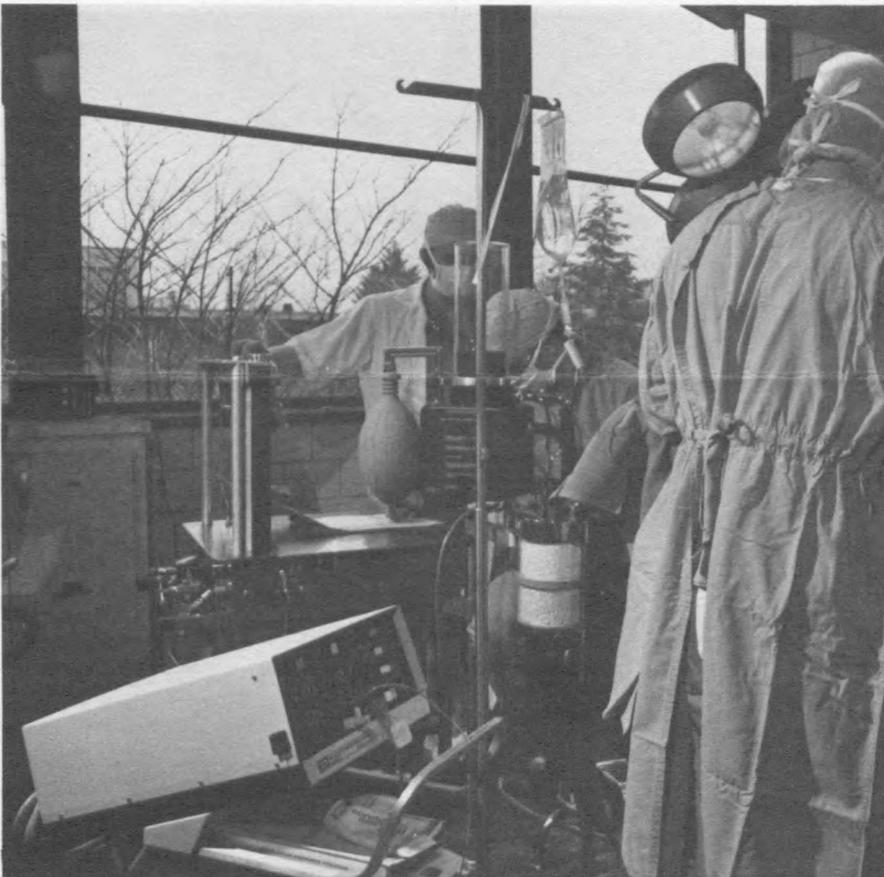
### Important Uses of Unrestricted Gifts

Rather detailed reports have been made on several important uses of unrestricted funds for programs and equipment for the College, but there has not been an opportunity to date to show the fine results achieved in equipping the autotutorial room on the second floor of the Small Animal Clinic or the good resolution capabilities—at magnifications above 20X—of the new Nikon Xenon arc-glass slide projector. These facilities have improved the teaching program significantly.

The new Section of Anesthesiology has been equipped with units that permit the College to use current techniques in clinical anesthesia. This modern anesthetic and monitoring equipment can be used with spontaneous or assisted breathing or with a mechanical ventilator, and records the patient's heart rate, respiratory rate, and electrocardiogram. The units are important in the clinics' teaching programs and have also been used in continuing-education courses for veterinarians and veterinary assistants.

### Summary of Alumni Funds Received

To date, alumni have given \$562,473 in unrestricted and restricted funds. The joint committee, made up of the General Committee of the College and the three alumni representatives, has awarded almost \$220,000 of the unrestricted funds in response to requests from College faculty and staff. Both kinds of gifts have had a major impact on the College, benefiting fields ranging from avian and aquatic animal medicine to preventive medicine. Seven of the eight departments in the College have been directly assisted by the campaign. Thus, the alumni and the College have come closer together and now enjoy a more satisfying relationship.



Above: Dean Melby thanks Mrs. W. David Maginnes (A.B., 1944, Cornell University) for her leadership in sponsoring the College's first Canine-Feline Symposium, in Andover, Massachusetts, on April 7, 1979. Four hundred fifty dog breeders and owners attended the canine lectures, and eighty persons interested in cats attended the feline lectures, which were presented concurrently.

Left: Anesthetic and monitoring equipment

## Faculty Appointments

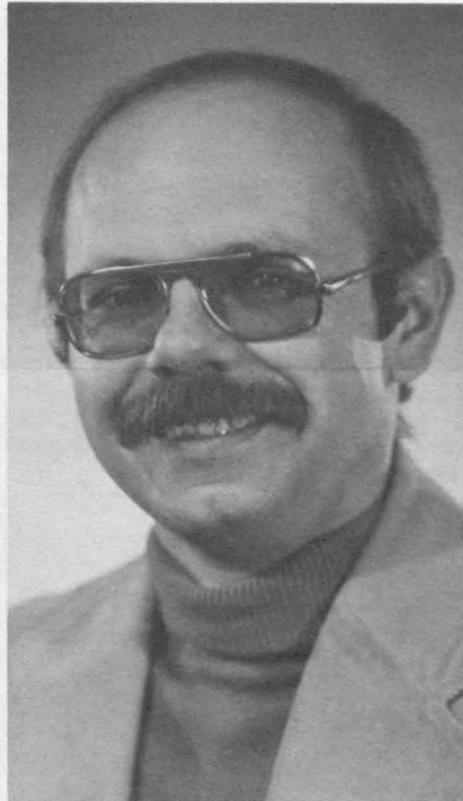
**Michael Marmor**, Assistant Professor of Environmental Epidemiology in the Department of Preventive Medicine. Dr. Marmor received a Ph.D. degree in physics from the State University of New York in 1972. He comes to Cornell from New York University, where he served as an assistant professor of environmental medicine and held a postdoctoral fellowship in epidemiology and biostatistics from the National Institutes of Health. Dr. Marmor previously served as assistant research scientist at Brookhaven National Laboratory and as program associate in the Division of Natural and Environmental Sciences at the Rockefeller Foundation. He joined the veterinary faculty in September 1978 and is currently working in the areas of lead poisoning and veterinary clinical trials.

**Thomas J. Reimers**, Assistant Professor of Endocrinology in the Diagnostic Laboratory. Dr. Reimers comes to Cornell from Colorado State University, where he served as a postdoctoral fellow and research associate in reproductive physiology. He earned his Master's and Ph.D. degrees in animal science from the University of Illinois. Dr. Reimers joined the veterinary faculty in 1978 and has been named director of the endocrinology laboratory. He is in the process of developing a service program in diagnostic endocrinology, and beginning in February of this year, the laboratory will be prepared to conduct assays for milk progesterone as well as other hormone determinations from serum samples.

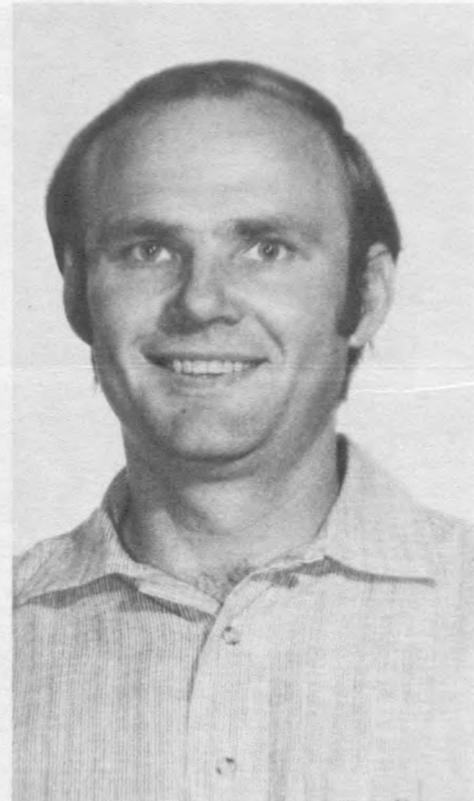
**Maurice Edward White**, Assistant Professor of Medicine in the Department of Clinical Sciences. After receiving his D.V.M. degree from Cornell in 1975, Dr. White served an internship and residency at the University of Guelph and was in private practice in Vermont for one year. Dr. White earned several awards as a veterinary student and has written scientific articles for publication. Dr. White is responsible for teaching and research in medicine and for service in the ambulatory clinic.



Michael Marmor



Thomas J. Reimers



Maurice Edward White