New York State
College of
Veterinary Medicine

A Statutory College of the State University of New York
A Component College of the State University of New York Health Sciences
Cornell University, Ithaca, New York

Eighty-seventh Annual Report

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The New York State College of Veterinary Medicine at Cornell University, in Ithaca, New York, is the primary health resource for the state’s multi-billion-dollar animal population.

The college’s mission, mandated by the citizens of New York State through their legislators, is to promulgate animal and human health through education, research, and public service.

This report is a compendium of the activities, during the 1983–84 year, of the students, faculty, and staff who worked to accomplish the mission and thereby to justify the public trust.
Dear President Rhodes:

Pursuant to the requirements of the laws of New York State, I present herewith a report on the activities and the accomplishments of the faculty and staff of the New York State College of Veterinary Medicine for the year ending June 30, 1984, this being the eighty-seventh annual report of this college.

Respectfully submitted,

Edward C. Melby, Jr.
Dean
CONTENTS

5 Giant Steps

7 The College Hospital

16 Confrontation with Reality

19 Summaries and Records

25 Financial Statements

27 Administrators and Advisers

31 Further Information
The end products of large amounts of effort, money, time, and technology are often profoundly simple. An enormous investment of equipment and accomplishments allows a telephone connection to be made—and one person speaks to another. A massive, multibillion-dollar effort makes it possible for a jetliner to take off and land—and a person gets from here to there. At the New York State College of Veterinary Medicine, hundreds of people, with training and experience totaling thousands of years; millions of pieces of equipment; and billions of dollars over the years are channeled through a network of activities stunning in its complexity—and a veterinarian gives a sheep or a sheep-dog a shot.

Research, lectures, and laboratories; stalls, cages, and pens; computers, microscopes, and test tubes; libraries, heating systems, and video equipment; professors, secretaries, students, and technicians—all play parts in the action that takes place in one arena on the campus: the Teaching Hospital. Here, the strands are united to make it possible for a pet to be vaccinated, a horse to have a broken leg repaired, and a heart that has stopped beating to be started again before it is too late.

If somewhere walls of ivy still insulate their occupants from the real world, it is not in the clinics of the college hospital. Here, students take that giant step from classrooms to cases.

Here, residents and interns grow from competent practitioners into skilled specialists. Here, skilled faculty members acquire those measures of experience and judgment that carry them to positions of eminence.

Here, also, a portion of the college debt to the public that supports it is repaid. And here, research data are gathered and new procedures tested that lead to improved health care for all animals.

The hospital dramas can appear deceptively routine. The crises become almost commonplace. But here, theories are translated into therapies—and the moments of truth are myriad.
In no other unit of the College of Veterinary Medicine are the three college missions so tightly interlocked as in the Teaching Hospital. Instruction, the prime reason for its existence, can be accomplished well only by providing premium-quality health care to patients, and that can be achieved only through the pursuit and application of research. These processes, alone and in combination, constitute a triple contribution to the welfare of all human and animal residents of the region—a pervasive public service.

Although the patients are animals instead of people, the similarities between the Teaching Hospital at the New York State College of Veterinary Medicine and a human medical hospital are greater than are the differences. For twenty-four hours of every day of every year, the battles to maintain health, to alleviate pain, to repair physical damage, to improve the quality of life for patients and owners never ceases. Illness and injury are no more respecters of the convenience or comfort of veterinarians than of physicians. A great deal of surgery is performed between midnight and 7:00 a.m.—and during the weekend football games. Equine colics and injuries to pet dogs and cats are the most frequent interrupters of staff sleep and recreation.

Even without such emergencies, patients already occupying hospital quarters need around-the-clock attention. And all this is in addition to a steady stream of patients and clients during regular clinic hours. Two-thirds (more than ten thousand a year) of those arriving at the Small Animal Clinic are treated as outpatients, while about 60 percent (some eighteen hundred) of the large-animal patients are admitted for stays ranging from one day to several months. Another forty thousand animals a year are seen in their barn or pasture homes by staff of the Ambulatory Clinic, who do the "ambulating" to patients within a twenty-mile radius of campus.

For the college hospital to discharge its varied teaching missions, diversity of material is vital. To train professional-degree students, a steady flow of animals of all the major domestic species is essential, including calves with diarrhea, puppies that need vaccinations, cats that are coughing, horses with colic, and cows with retained placentas, along with the cherished pets and valuable race-horses that need intensive medical care and sophisticated orthopedic surgery.

Most of the cases that represent the usual array of problems met by a practitioner come from owners in nearby communities, whereas the unusual or especially difficult cases are most often referrals. Referrals account for about one-third of the canine patients seen, but relatively few cats or other small animals are referred, so less than 25 percent of the cases in the Small Animal Clinic are in this category. The reverse
tends to prevail in the Large Animal Clinic, where two-thirds of the patients are referrals, including about 85 percent of the cows seen and about 65 percent of the horses. To handle the flow of work, the hospital clinics are organized into units—services in medical parlance. Each service is headed by a faculty person, usually a specialist, who may have as much as twenty or thirty years’ experience. Senior veterinary students, residents, interns, licensed animal-health technicians, and support personnel make up a team working under that person’s supervision. Although a major feature of the college hospital is the medical balance represented by the faculty, it has also achieved recognition for the outstanding contributions of many individuals in specialty areas. Since the late 1940s, when surgery and medicine were the first special-interest designations in the hospital, about a dozen areas of specialization have emerged. Currently, twenty-two members of the Teaching Hospital staff are board certified in one or more disciplines.

More than thirty years ago the college became a leader in orthopedic surgery, a position it continues to maintain. Ophthalmology, another specialty to receive early attention on the Ithaca campus, has continued to expand. Highly specialized equipment and staff expertise to use it makes it possible for the college to provide diagnostic capabilities in ocular electroretinography, histopathology, and ultrasonography—some of which are matched at only a handful of places in the world. Recently acquired ultrasound equipment has also enhanced the diagnostic potential in the fields of reproduction and cardiology and, used in conjunction with updated radiology facilities, increases the precision and safety of procedures that aid in the diagnosis of tumors, ailments of the gastrointestinal tract, liver and pancreas, and joint problems.

Members of the college faculty are also known for their early and outstanding work in dermatology, particularly in the area of immunodiagnosics. The college hospital is also recognized for the expertise of staff members in fiberoptic-endoscopic diagnostic techniques and the use of bile-acid studies as sensitive diagnostic tools for liver disease.

Learning in Action

Equipping students to move from the campus into the world of private practice is a multilayered process, calling for a variety of teaching methods. D.V.M. degree candidates—as any of them will testify—are required to learn a lot of facts. They spend long hours for three years of the four-year veterinary curriculum in classrooms, laboratories, and libraries, accumulating information about the normal and abnormal structures and functions of animals, about diagnostic methods and therapeutic procedures, and about how to approach problems.

But all that knowledge, useful as it is, is only the foundation. For, as any doctor—human or veterinary medical—will testify, the practice of medicine is not rote. While there are standard procedures to serve as guidelines in both diagnosis and treatment and ever-expanding batteries of tests and measurements that help define problems and progress, the success of the entire process ultimately rests on the practitioner’s perception, logic, intuition, and judgment. Skill with instruments is necessary, but the most basic tools of the trade are eyes, ears, noses, and hands.

Acuteness of observation, alertness to even subtle signs, awareness of changes however slight, and the capacity to sort, to sift, to assess, and to fit the pieces together are the abilities that must be acquired if the doctor is to determine what is wrong and what can be done about it. These cannot be taught, or learned, in the classroom; they are developed by doing. Nearly all of the fourth year of professional-degree training is spent in that “doing”—under close supervision and with much discussion surrounding the action.

Unless it is an emergency, a patient usually is seen first by a student who takes the history, talks with the owner, and examines the animal, thereby having a chance to interact with client and patient in a situation approximating private practice. Although action is taken only on the orders of the senior faculty member who heads the team, students are encouraged to think through the problem presented, analyze the data, and be prepared to propose steps to take. Then, by stacking their ideas up against those of their teammates and supervisors, the students can learn where they were on the right track or where their logic may have gone awry.
Because every person who receives a Cornell D.V.M. degree must be qualified to practice general veterinary medicine, the students rotate among the hospital services, each spending blocks of time in medical, surgical, and specialty services. Eight weeks of clinical work are elective and may be used to gain additional experience in any of the required services or in other specialty units. In the Ambulatory Clinic, activity closely resembles that of a typical large-animal practitioner, with considerable emphasis on preventive medicine such as herd-health programs.

Although student participation in the handling of particularly complex or difficult hospital cases is limited, the chance for them to observe and discuss such problems has a long-range impact on the profession as a whole, paving the way for today's unusual cases to become tomorrow's routine. For interns and residents, who are training to become specialists, unusual cases and sophisticated procedures are of more immediate import. The growth in the numbers of graduate veterinarians seeking advanced training—often after several years as practitioners—has paralleled the growth of specialties within the profession.

That demand and the steady increase in staff members with outstanding capabilities in specialty areas have resulted in a corresponding expansion in the intern/resident program at the Teaching Hospital. Each year for the past five years, thirty to thirty-five persons have served as interns or residents, and competition remains keen for the available positions.

As members of the service teams, interns and residents examine patients, talk to clients, and participate in analyzing and treating the health problems presented. Because they are licensed veterinarians, they assume more responsibility than students in carrying out medical and surgical procedures, but all members of the team, including technicians and support staff, contribute to the handling of a case according to the levels of expertise and experience they bring to the task.
The team approach also enhances the quality of care. Health—good or bad—involves an entire body, and few medical problems are simple or clear-cut. What is going wrong in one area may be a spin-off from a malfunction elsewhere or may be about to start a negative spiral of its own. An obscure connection between the primary problem and some other, apparently separate and perhaps minor, ailment may be picked up by any member of the team and may prove to be the vital link in a chain of events.

Input from the junior members of a service is valuable to the teachers as well as to the learners. Functioning as the faculty does, in a goldfish-bowl atmosphere, with every decision and every action not only observed but open to analysis and discussion, is to assume voluntarily more stringent standards than could possibly be applied from without.

**The Widening Circle**

For many cases, attention by the hospital service team is only part of the story. In the interest of topflight medical care all resources of the college—laboratories, equipment, and the expertise of all personnel—are brought to bear. Any of the highly specialized individuals in all the hospital services and throughout all the departments of the college may be called upon for assistance and advice. More than a dozen faculty members not on the hospital staff are board-certified specialists and many assume ongoing roles in clinic work.

In recent years staff members of the Division of Laboratory Animal Medicine and Services have developed a leading role in supervision of the special clinic devoted to the healing and rehabilitation of injured wild birds and are called upon routinely for advice in handling pet rodent and lago- morph patients in the clinics.

**Members of the Department of Anatomy are frequently consulted on health problems of exotic animals and the wild-bird clinic. Dr. Alexander de Lahunta, professor of veterinary anatomy, chairman of the Department of Clinical Sciences for the past six years, and director of the Teaching Hospital from 1978 until 1983, examines all neurological cases, both large- and small-animal, and participates in their handling.**

In addition to the broad support to practicing veterinarians provided by the necropsy and surgical pathology services of the Department of Pathology, members of that department contribute to the diagnostic and prognostic capabilities of the Teaching Hospital. Sophisticated procedures such as light-, fluorescent-, and electron-microscopic analyses of biopsy tissues; serologic and histopathologic examinations relevant to a wide variety of immune-mediated skin diseases; and special histochemical tests and examinations of muscle fibers, neuromuscular junctions, and peripheral nerves are performed for hospital cases involving all species. The results and consultations concerning the data are added to information garnered by the clinicians to help determine the best method for handling each case.

Increased ownership of birds as pets has brought a corresponding increase in avian patients to the Teaching Hospital, and clinicians frequently consult with members of the Department of Avian and Aquatic Animal
The radiological and physical diagnostics service, a joint operation of the hospital and the Department of Physiology, provides nuclear medical imaging studies and other nuclear medical evaluations of patients. The clinical nutrition service, another joint effort of the two college units, provides help to clinicians in solving nutritional problems. Computer analyses of feeding programs; extensive clinical chemistry procedures, such as the evaluation of selenium status in dairy cattle, horses, sheep, and swine; and complete metabolic profiles for dairy herds are among the services performed. During the past year samples from several hundred dairy herds were processed. All exchanges among clinical staff members and between them and others on the college faculty, whether they are recorded as formal consultations and figure prominently in diagnoses and decisions about therapy or whether they occur as informal conversations, are valuable threads woven into the fabric of high-quality care and high-quality training.

The flow of information between the Teaching Hospital and other units of the college travels on a two-way street, however, with clinicians presenting guest lectures to classes of first-, second-, or third-year students. Demonstrations of abdominal palpation by a practicing clinician can go a long way toward helping students understand what they need to learn about abdominal anatomy—and why. In addition, clinic patients often supply the needed material to illustrate topics being discussed in the classroom.

In Search of Better Medicine

The vast amount of information gathered from the day-in-day-out, year-in-year-out handling of hundreds of thousands of patients in the three clinics of the hospital plays a significant role in the college’s research mission. While merely juxtaposing the words research and hospital can spark a negative reaction, such a response, tritely enough, probably reflects a lack of understanding. Research involving hospital patients does not mean experimenting with sick creatures. Sick animals are treated at the New York State College of Veterinary Medicine’s Teaching Hospital—they are never used as laboratory material. A good deal of study, however, is based on recording, analyzing, and comparing what has happened in real, rather than designed, situations.

For example, it is not uncommon for there to be two, or more, tested and accepted methods of handling a particular medical problem. Analyzing the records of cases is a means of discovering which method more often yields good results. The findings can be surprising and may lead to a change in dealing with future cases of that kind.
Sometimes a new procedure—perhaps developed at a medical institution for use with human patients—shows great promise for adaptation to veterinary medicine. The pacemaker, for example, which had been approved and was in use for people with a certain kind of heart condition and had been used experimentally on laboratory dogs at several institutions to ascertain its safety for the species, was then introduced to the college hospital for selected canine patients and proved to be beneficial. Those early trials, however, constituted research by virtue of the fact that until then little had been learned about use of the device in dogs with heart ailments.

Field trials of new drugs that have received approval from the Food and Drug Administration (FDA) are carried out in all the clinics of the hospital. The object may be to compare a new product’s efficacy with one already in use for the same purpose. For such studies a clinician is provided with a supply of both drugs, and as cases requiring that kind of treatment arise, the owners are asked which they prefer—the new product or the more established one. Since any drug in such a trial is FDA-approved and since the newer one shows special promise, clients almost always elect to have the trial drug used. After the test product has been used in a specified number of cases, the results can be compared to those obtained with the earlier product and with parallel trials being conducted simultaneously elsewhere.

Newly developed vaccines are field tested in much the same way, although often they are the first compounds available for preventing a specific ailment of domestic animals. Because researchers at Cornell’s College of Veterinary Medicine have long been in the forefront of animal vaccine development, patients at the Teaching Hospital are sometimes among the first to benefit from such products. Again, owners are given the choice—to use or not to use—but rarely pass up the chance to get extra help in preventing illness in their animals.

Some research conducted with clinic patients carries a clear risk: When all other alternatives have been exhausted and there is no other hope, an unproven medical or surgical procedure may be proposed. In such a situation the proposed procedure, with all its risks and known drawbacks, along with a description of how or why it might work, is carefully delineated for the animal’s owner and tried only if permission is granted. Because the patient in such a case is almost certainly in critical condition, even those measures may fail; however, much medical progress has grown out of information gathered in cases of that kind, and when an animal in that condition recovers, the rewards are both immediate and far-reaching.

Some historical research is focused less on the treatment of ailments than on the origins, spread, and effects of diseases. As part of a joint study involving staff members in the Ambulatory Clinic and the Department of Preventive Medicine, farmers are asked to keep records on calf illnesses as they occur, so that the conditions of those animals can be evaluated at a later time to assess the long-range effects of the early health problems. A similar investigation is aimed at finding relationships between the occurrence of various diseases within herds of dairy cattle.

A cooperative program of a like nature has been conducted since 1981 by a doctor in the Small Animal Clinic with a special grant awarded to the Feline Health Center for the study of feline cardiomyopathy. In an effort to learn more about the causes and possible treatments of heart disease in cats, feline clinic patients suspected of suffering from heart ailments are examined and the collected information recorded. The clinician then maintains communication with the animals’ owners to gather continuing data throughout the pets’ lives. To date, the results include the establishment of normal
values, using echocardiology, as well as values of congestive, hypertrophic, and hyperthyroid cardiomyopathy. It is hoped that statistical analysis of the data will reveal indicators that may be used to predict various kinds of feline heart disease. A survey of topics currently under investigation at the college makes the interlock between clinical activity and research even more obvious. The frustrations felt by clinicians when they are faced with health problems for which there are few—or no—answers prompts many of them to set up laboratory studies in an effort to unravel the mysteries. During the 1983—84 year nearly three dozen members of the hospital staff were engaged in laboratory research on more than sixty topics running the gamut of species and ailments—equine neuromas, mastitis in goats, copper deficiency in pigs, canine renal transplants, feline hyperthyroidism, mycoplasma infection in bulls, control of parturition in domestic animals, ophthalmic diseases of large animals, calf diarrhea, reproductive problems in horses, and more.

Clinical problems often motivate faculty members not on the hospital staff to initiate investigations, such as one dealing with a canine ailment that resembles human shingles, an immunocytochemical study of a substance in the equine colon that may be relevant to colic, and virus infections in pet birds, among others.

Making It Work

With perhaps a dozen people—often including three licensed veterinarians—looking at a case, each from a different standpoint, quality care is assured. Speed is not. Patients in a Teaching Hospital need to be patient—as do their owners. The redundancy that is deliberately built into the system has its rewards for the ailing animals and their owners, as well as for the medical staff, but it is time-consuming. To fulfill teaching roles and perform other college duties as well, a faculty member in one of the clinics usually has responsibility for no more than eight or ten cases at a time—and probably confronts fewer than two dozen medical problems in a week.

This is not to say that all cases are dealt with in the most comprehensive manner conceivable. On the contrary, it is the owners who make the ultimate decisions concerning the extent of treatment to be given, and while some have unlimited cash and care enough to spend it, others who may care as much have severely limited resources. There are those too, who, money aside, elect not to subject their animals to prolonged treatment. These are the parameters within which the medical staff must work.

"I would be unalterably opposed," says Dr. Robert W. Kirk, director of the Teaching Hospital, "to doing everything in the most perfect way. That would be unrealistic. Everyone at the clinics—from faculty through students and support personnel—wants to do the best we can in terms of treatment, but we all must face economic limitations." Sometimes an owner says, "Money is no object, we'll spend anything to resolve this," but the response at other times is, "Our budget is $100—if you can take
The dilemma posed by these often contradictory guidelines had resulted in increasingly large deficits before the appointment in June 1980 of an assistant dean for hospital administration. The major task was to halt the deterioration of the institution's financial health and relieve the stress its losses were putting on the entire college budget, a mission that has been accomplished, at least temporarily.

The predicted deficit during the first year—$600,000—was trimmed by nearly half. During the second and third year, a bottom-line break-even point was reached, and the effort to maintain that level continues.

The turnaround was achieved primarily by increasing hospital income. Fees to clients were raised—in some cases sharply—but the introduction of modern management practices—fee schedules, controls, billing and collection procedures, and accounting systems—formed the basis of the reorganization. A significant increase in income was achieved by the relatively simple expediency of ensuring that all medical procedures and materials used in treating a patient were duly recorded and entered on the bills. (A modest allowance is available for reducing or eliminating charges to clients for cases with special educational value.)

And while it is true, as in human medicine, that the rapidly growing array of sophisticated equipment available to enhance diagnosis and therapy has added to costs, the improved care made possible by such tools and procedures has resulted in a decrease in the number of days many patients need to be hospitalized. The combined result of these complicated balancing acts is that bills to clients have risen less than might be expected but the hospital has generated more income from a greater overall volume of services provided. The fee schedule reflects charges generally higher than those of local practitioners but still reasonable enough to attract the varied case load needed for instruction. As costs continue to escalate but ways to increase income do not, it will become more difficult for the hospital to sustain financial stability.

Shorter average hospital stays have also helped somewhat to ease the space pressure on hospital facilities. That battle, however, is far from won. Renovations, the reorganization of available space, the doubling up of activities assigned to various areas, the reduction of "elbow room" to near zero, the elimination of areas not deemed absolutely essential to good patient care (such as locker space and lounges for personnel), and every other conceivable ploy have been applied to make it possible to function at a vastly expanded level in the same space available more than a quarter of a century ago.

When the College of Veterinary Medicine moved to its present location, the stipulation was that it would be...
housed in the same square footage as was then available in the earlier physical plant. Since that facility had been in use for many years (and had been planned earlier yet), the current space allotment reflects thinking based on the practice of veterinary medicine many decades ago—an eternity in a field expanding at an explosive rate.

Nevertheless, much continues to be done to upgrade the quality of care. Within the past year major remodeling was completed on the surgical suite in which large-animal, soft-tissue surgery is performed. The other surgical suite, opened in 1981–82, constitutes a state-of-the-art facility designed especially for "clean," nongastrointestinal procedures on large animals. Newly added arthroscopy systems and the latest equipment for dealing with the repair of fractures makes the hospital's capabilities for managing such problems in bovine and equine patients second to none. An outdoor area, renovated during 1983–84, contains twelve exercise paddocks and two lunging rings for equine patients.

During the past year an examination room was converted to an outpatient diagnostic unit for comparative ophthalmology, and special ophthalmic cryosurgical instruments allowing for the early sight-saving treatment of glaucoma in dogs and cats were added. A new intensive-care incubator, feline anesthesia chambers, surgical heating pads, and other equipment for treating cats and kittens were provided by the Feline Health Center with donated funds. Other needed equipment, much of it purchased with gifts from clients and alumni, and upgrading of the radiology and cardiology facility have improved the hospital's capabilities for dealing with patients and increased the potential for instruction.

The addition of personnel at both the faculty and support levels has brought the hospital staff early in 1984 to a point nearer its operational needs. Trends toward specialization continue to place demands on the numbers of faculty and staff required. The recent formation of the Infectious Disease Control Committee is helping ensure that concepts and procedures to prevent the spread of disease among patients are explored and implemented. A new telephone and paging system not only facilitates the flow of work within the complex and crowded labyrinth of the hospital but has enhanced the staff's ability to communicate with clients and referring veterinarians. Hospital reception areas and receiving procedures have also been reorganized to improve service and facilitate the flow of work.

For the New York State College of Veterinary Medicine's hospital to fulfill its three-fold mission—training more than one hundred students, interns, and residents; delivering health care to fifty or sixty thousand animals a year; and serving as a vital link in the college's research chain—is a formidable task. It is nevertheless being accomplished. And it is being done in the oldest such facility in the United States, one designed for less than half the current work load. That may itself constitute a medical miracle.
Pessimism is not generally productive; doomsayers are not known for doing. But neither is emulating the ostrich a constructive response to danger. A look on the dark side can speed the search for means to light the way.

One of the signal characteristics of the Teaching Hospital is that somehow the impressive volume of activity is maintained at extraordinarily high standards in spite of severe constraints. That situation, however, much pride it may legitimately engender in those who make it so, is an ominous omen, for prolonged operation against such odds inexorably leads downhill.

The threats to continued excellence in operation of the Teaching Hospital, although perhaps more acute, are in fact typical of those facing the entire college. They have not sprung unexpectedly from the shadows: When the volume of work is steadily increased but not the space or equipment to handle it, when costs for personnel and material escalate far more rapidly than allowances, when the complexity and sophistication of assigned tasks balloon far beyond the wildest predictions without a commensurate swelling of resources, when the normal aging process of a physical plant is accelerated by the excessive demands made on it, and when awareness of these negative balances prompts some of those most capable of dealing with them to seek greener pastures, the confrontation with reality cannot be postponed.

The handwriting, which has been a long time on the wall, was translated into typewritten pages late in 1983, when a "Blue-Ribbon Committee" of distinguished individuals in the field of medical education presented a report based on their inspection of college facilities and resources.

Appointed by President Frank H. T. Rhodes of Cornell University, the committee was charged with no less a task than assessing the ability of the college to accomplish its assigned missions and meet the expectations of those it serves. In his October 1983 State-of-the-University address to University trustees and council, President Rhodes warned that the College of Veterinary Medicine's "preeminence is threatened." He cited "a wholly inadequate level of state support" as a major factor, a position thoroughly supported by the subsequent findings of the Blue-Ribbon Committee.

The committee's report, which incorporated constructive suggestions and recommendations for specific action to correct deficiencies, was among the materials studied in Albany by a New York State Senate subcommittee on the college, under the chairmanship of L. Stephen Riford, Jr. That group's report to the Senate Standing Committee on Higher Education, submitted in February 1984, was a thicker sheaf, containing extensive detailed analyses of problems and needs, as well as recommendations for short-range, moderate-range, and long-range rectification, but the distillation concurs in all major respects with the Blue-Ribbon report. The essence of the Riford document is eloquently expressed in its title: "The State College of Veterinary Medicine: At the Edge of Decline."

"At the edge," however, is a workable, if uncomfortable, position. Growing awareness among state as well as college and University officials of the pressing need to take major steps, if the college is to continue to serve the people and animals of the region and strengthen its position of leadership, has already yielded positive results. A five-year plan for financial revitalization, drawn up by the college administration, has been studied, and planning conferences among many involved groups have begun.

Some immediate relief was provided by a $1.75-million increase in the college annual budget, effective in the 1984–85 year. Reviews of the entire physical plant have led to proposals to develop a master plan for overall upgrading, with primary focus on
construction and renovation, to restore accord between the college's assigned missions and the wherewithal to accomplish them.

A preliminary study by an architectural firm yielded the conclusion that the clinic structures are not only too old by years but too small by half. No designer's utopian fantasy, that conclusion and a proposed program to remedy the situation were based on data from other institutions, hundreds of hours of faculty input, and the architects' own expertise, all tempered with the knowledge that "how-to-do" as well as "what-to-do" questions must be solved. Their program, incorporating new construction and renovation of the existing buildings into a unified whole, calls for intricate planning, careful coordination of schedules, and the inevitable bottom line—a whopping budget.

If, however, the needed resources are available, the will and determination of college personnel are such that a successful retreat from the edge can become a reality.

Blue-Ribbon Committee
Dr. Charles E. Cornelius, director, California Primate Research Center, University of California, Davis, chairman. Dr. Cornelius formerly held positions as dean at the Colleges of Veterinary Medicine at Kansas State University and the University of Florida and was president of the American Association of Veterinary Medical Colleges.

Dr. John R. Brobeck, distinguished professor, University of Pennsylvania, Philadelphia. Dr. Brobeck's former posts include chairmanship of the Department of Physiology at the University of Pennsylvania School of Medicine and membership in the National Academy of Sciences.

Dr. William F. Jackson, private practitioner, Lakeland, Florida. Dr. Jackson recently served as president of the American Veterinary Medical Association.

Dr. Edwin F. Rosinski, professor and director, medical education, School of Medicine, University of California, San Francisco. Dr. Rosinski is a former deputy assistant secretary in the United States Department of Health, Education, and Welfare.

Dr. William J. Tietz, president, Montana State University, Bozeman. Dr. Tietz previously held posts as dean, College of Veterinary Medicine and Biomedical Sciences, and vice president, Colorado State University.

Others who took part in the discussions include Frank C. Abbott, assistant commissioner of education for the professions, New York State, and Thomas H. Meikle, Jr., provost for medical affairs, Cornell University. Other Cornell administrators who participated were Frank H. T. Rhodes, president; Robert Barker, vice president for research and advanced studies; and Geoffrey W. G. Sharp, director, Division of Biological Sciences. Edward C. Melby, Jr., dean; Robert Brown, assistant dean; and numerous faculty members of the New York State College of Veterinary Medicine shared their concerns with the committee, as did Dr. MacDonald Holmes, chairman of the College Advisory Council, and Dr. Frederick Tierney, president of the New York State Veterinary Medical Society.

Senate Subcommittee on the College of Veterinary Medicine at Cornell
L. Stephen Riford, senator, Fiftieth District, chairman
Joseph L. Bruno, senator, Forty-third District
Donald M. Halperin, senator, Eighteenth District
Owen H. Johnson, senator, Fourth District
Kenneth P. LaValle, senator, First District
In recent years many needs of the hospital as well as other college units have been met by increasingly generous gifts from alumni and other friends. During 1983–84 more than one thousand graduates contributed $305,207, of which about one-third was in the nonrestricted category. Gifts from other friends of the college totaled $1,429,914, including more than $150,000 from Priscilla M. Endicott—designated for the Baker Institute and a scholarship endowment—and nearly $300,000 from two foundations, earmarked for studies in equine reproduction.

A new editing system for Biomedical Communications was acquired during the past year with alumni contributions. The equipment allows for the rapid production at reduced cost of videotapes used in research and teaching.

Use of these and other study materials by students and staff becomes less efficient and less comfortable as volume and demand increase while library quarters do not. Only by incorporating modern time- and space-saving procedures into all possible aspects of library use has it been possible to meet college needs at an effective level in severely limited space.

Although the computer-assisted literature-search service of the library has proven helpful to all library users, it has perhaps been most appreciated by clinicians in the hospital, who often need information quickly and have little time to spend hunting it. The number of such searches has nearly tripled from the 262 performed in 1981–82, when the service was inaugurated, to 756 in the year just past. Use of the service has been a major factor in increasing the number of interlibrary borrowing requests, as staff members seek information in books or articles not held on campus.

The introduction of computer technology in the library, however, is only a small part of the steadily expanding use of computers throughout the college. The highly ambitious plan launched in 1974 to computerize all hospital medical records and make them readily accessible has remained a primary feature of the computing facility's total program. It would be difficult to overemphasize its importance in patient care, instruction, and research.

Hospital administration, including admissions, scheduling, billing and financial procedures, as well as general college accounting, records, and personnel administration are among other college operations to benefit from the expanding computing facility program. Computer-assisted diagnoses packages now being developed by faculty members show promise of having significant long-range impact on the practice as well as the teaching of veterinary medicine.

College activities during 1983–84, as in other years, were not limited to the campus nor even to the nation, as dozens of faculty members attended meetings, participated in seminars, presented papers, and acted as consultants in countries around the world. Several faculty members traveled to Saudi Arabia as part of the cooperative program with the King Faisal University.
Nearer home, the eighth session of Aquavet and the second of Aquavet II were conducted in Woods Hole, Massachusetts, in cooperation with the University of Pennsylvania School of Veterinary Medicine and the Marine Biology Laboratory. The Laboratory for Marine Animal Health continued to serve the needs of marine scientists at Woods Hole (where it is situated) as well as others throughout the Northeast and beyond by investigating disease outbreaks and developing diagnostic techniques for marine animals. In addition, staff of the laboratory are working to produce special stocks of marine animals for research.

An increased effort to inform the public of college activities and services included printing several new publications describing hospital procedures and policies, as well as news releases and articles for dissemination through lay media outlets. Special attention was given during the year to increasing public awareness of the expanding equine-health-related capabilities of the college.

**Faculty and Staff Changes**

**New Appointments**
- William Richard Allen, Adjunct Professor
- Mohammad K. Ashfaq, Postdoctoral Associate
- Carl T. Brighton, Adjunct Professor
- Arsene Burny, Adjunct Professor
- Donald R. Callihan, Director of Laboratory Operations
- Wayne V. Corapi, Postdoctoral Fellow
- Jonathan B. Crowther, Postdoctoral Associate
- Richard H. Eckerlin, Director of Laboratory Operations
- Vicki M. Eng, Postdoctoral Fellow
- Duncan C. Ferguson, Assistant Professor
- David A. Gamble, Postdoctoral Fellow
- Eugene V. Genovesi, Research Associate
- Yu-Pu Guo, Visiting Associate Professor
- Nils E. Hakanson, Visiting Fellow
- Susan H. Hamlin, Administrative Manager
- Kathleen L. Hawkins, Instructor
- Elimelich D. Heller, Visiting Associate Professor
- Margarethe Hoenig, Senior Research Associate
- Alex Hogg, Visiting Professor
- Yong San Huang, Visiting Fellow
- Arunagirinathan Iyampillai, Instructor
- Frederick S. Julius, Field Veterinarian
- Thomas J. Kern, Assistant Professor
- Ziqing Liu, Visiting Fellow
- Pamela Luther, Postdoctoral Fellow
- Paul J. Millard, Postdoctoral Associate
- Juan A. Montaraz, Postdoctoral Associate
- Julio Orilo, Instructor
- Dominique Romatif-Silvestre, Postdoctoral Associate
- Eric G. Schoetthner, Director of Laboratory Operations
- Michael A. Simmons, Medical Illustrator
- Frederik J. H. Sluijter, Instructor
- Arja H. Soliman, Research Associate
- George L. Spitalny, Adjunct Professor
- Daniel Strickland, Director of Laboratory Operations
- Shirazali G. Sunderji, Adjunct Assistant Professor
- Rory J. Todhunter, Instructor
- Alfonso Torres-Medina, Associate Professor
- Gordon L. Woods, Instructor

**Promotions and Title Changes**
- Judith A. Appleton, Research Associate (from Postdoctoral Associate)
- Robin G. Bell, Associate Professor (from Assistant Professor)
- James V. Desiderio, Research Associate (from Postdoctoral Associate)
- Amy E. Dietze, Assistant Professor (from Instructor)
- Stephen G. Dill, Assistant Professor (from Instructor)
Cornelis J. Drost, Visiting Fellow (from Senior Research Associate)
Jorge P. Figueroa, Veterinary Assistant (from Instructor)
William E. Hornbuckle, Associate Professor (from Assistant Professor)
William A. Horne, Senior Research Associate (from Resident)
Richard H. Jacobson, Associate Professor (from Assistant Professor)
Jiu-Shan Jin, Visiting Fellow (from Visiting Instructor)
Richard C. Johnson, Pharmacist (from Assistant Pharmacist)
Kerry L. Manzell, Research Support Specialist (from Director of Laboratory Operations)
Lawrence E. Mezza, Senior Resident (from Postdoctoral Fellow)
Colin R. Parrish, Assistant Professor (from Assistant)
John A. Perdrizet, Instructor (from Resident)
Geoffrey W. G. Sharp, Professor and Chairman, Department of Pharmacology, and Director, Cornell University Division of Biological Sciences (from Professor and Chairman, Department of Pharmacology)

Kathleen M. Walsh, Postdoctoral Fellow (from Resident)
John F. Wootten, Professor (from Professor and Associate Dean of the Graduate School)
Nancy I. Wurster, Research Associate (from Postdoctoral Fellow)

Completed Terms
David Abbott, Instructor
Hector W. Alila, Postdoctoral Associate
Sabry Mohammed Aly, Postdoctoral Associate
Tiziana Crepaidi, Postdoctoral Associate
Terry A. Dick, Visiting Professor
Hanania Gloobe, Visiting Professor
Jiu-Shan Jin, Visiting Fellow
Carol L. Meschter, Postdoctoral Fellow
Linda Rhodes, Instructor
Prabhandam V. Sarma, Visiting Fellow

Resignations
Mohammad K. Ashfaq, Postdoctoral Associate
Avis H. Cohen, Research Associate
John M. DeBoy, Director of Laboratory Operations
Richard W. Diters, Instructor
G. Frederick Fregin, Associate Professor
William P. Hamilton IV, Medical Illustrator
Kay A. Henderson, Postdoctoral Associate
Mathias J. Kemen, Jr., Senior Research Associate
Patricia Losco, Postdoctoral Fellow
Jean E. Maguire, Field Veterinarian
Mark J. Newman, Research Associate
Jennifer M. Pell, Postdoctoral Associate
Varahenage Y. Perera, Postdoctoral Associate
Lawrence S. Rivkin, Pharmacist
Kathleen P. Telling, Associate Director of Financial Systems
Peter J. Timoney, Adjunct Associate Professor
Table 1
Continuing Education, 1983–84

<table>
<thead>
<tr>
<th>Program</th>
<th>Participants</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesia for Veterinary Technicians</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>Conference for Veterinarians, 76th Annual</td>
<td>425</td>
<td>18</td>
</tr>
<tr>
<td>Eastern International Veterinary Practitioners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshop (held in conjunction with the</td>
<td>100</td>
<td>8</td>
</tr>
<tr>
<td>New York State Veterinary Medical Society)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feline Health Seminar</td>
<td>34</td>
<td>12</td>
</tr>
<tr>
<td>Immunology Seminar, Lake Ontario</td>
<td>94</td>
<td>12</td>
</tr>
<tr>
<td>Pathology Short Course, Olafson</td>
<td>63</td>
<td>50</td>
</tr>
<tr>
<td>Radiology for Veterinary Technicians</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Lendings, autotutorial programs: 79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2
Laboratory Animals Housed and Cared for by the Division of Laboratory Animal Services, 1983–84

<table>
<thead>
<tr>
<th>Animal</th>
<th>Daily Average</th>
<th>Acquisitions during the Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calves</td>
<td>22</td>
<td>152</td>
</tr>
<tr>
<td>Cats (SPF)</td>
<td>209</td>
<td>414</td>
</tr>
<tr>
<td>Cats (other)</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Chicks</td>
<td>1,520</td>
<td>6,529</td>
</tr>
<tr>
<td>Dogs</td>
<td>543</td>
<td>1,164</td>
</tr>
<tr>
<td>Ferrets</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Frogs</td>
<td>11</td>
<td>42</td>
</tr>
<tr>
<td>Gerbils</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Goats</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Guinea pigs</td>
<td>109</td>
<td>290</td>
</tr>
<tr>
<td>Hamsters</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>Mice</td>
<td>5,046</td>
<td>18,185</td>
</tr>
<tr>
<td>Opossums</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Primates</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Rabbits</td>
<td>145</td>
<td>400</td>
</tr>
<tr>
<td>Raccoons</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Rats</td>
<td>1,464</td>
<td>3,851</td>
</tr>
<tr>
<td>Sheep</td>
<td>189</td>
<td>134</td>
</tr>
<tr>
<td>Squirrels</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Woodchucks</td>
<td>300</td>
<td>223</td>
</tr>
<tr>
<td>Total</td>
<td>9,687</td>
<td>31,532</td>
</tr>
</tbody>
</table>

Table 3
Library Use, 1983–84

<table>
<thead>
<tr>
<th>Library Use</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On campus</td>
<td></td>
</tr>
<tr>
<td>Reserve books (in-library use)</td>
<td>10,745</td>
</tr>
<tr>
<td>Books lent (home use)</td>
<td>24,753</td>
</tr>
<tr>
<td>Photocopy items provided (in lieu of loans)</td>
<td>12,870</td>
</tr>
<tr>
<td>Audiovisuals used</td>
<td>5,417</td>
</tr>
<tr>
<td>Computer searches performed</td>
<td>756</td>
</tr>
<tr>
<td>Total on campus</td>
<td>54,541</td>
</tr>
<tr>
<td>Interlibrary</td>
<td></td>
</tr>
<tr>
<td>Books lent</td>
<td>72</td>
</tr>
<tr>
<td>Photocopy items provided</td>
<td>577</td>
</tr>
<tr>
<td>Books borrowed</td>
<td>124</td>
</tr>
<tr>
<td>Photocopy items received</td>
<td>1,266</td>
</tr>
<tr>
<td>Total interlibrary</td>
<td>2,039</td>
</tr>
</tbody>
</table>

Table 4
Graduate Students at the College of Veterinary Medicine, 1983–84

<table>
<thead>
<tr>
<th>Graduates</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidates for the Ph.D. degree</td>
<td>63</td>
</tr>
<tr>
<td>Candidates for the M.S. degree</td>
<td>22</td>
</tr>
</tbody>
</table>

Table 5
Library Holdings, 1983–84

<table>
<thead>
<tr>
<th>Library Holdings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bound volumes</td>
<td></td>
</tr>
<tr>
<td>At beginning of year</td>
<td>73,054</td>
</tr>
<tr>
<td>Acquisitions</td>
<td>1,118</td>
</tr>
<tr>
<td>Less withdrawals</td>
<td>61</td>
</tr>
<tr>
<td>Total bound volumes</td>
<td>74,111</td>
</tr>
<tr>
<td>Audiovisual items</td>
<td>19,458</td>
</tr>
<tr>
<td>Periodicals and annuals</td>
<td>1,043</td>
</tr>
</tbody>
</table>

Table 6
Degrees Awarded, 1983–84

<table>
<thead>
<tr>
<th>Degrees Awarded</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>D.V.M. (with Distinction: 5)</td>
<td>80</td>
</tr>
<tr>
<td>M.S.</td>
<td>5</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>8</td>
</tr>
</tbody>
</table>
### Table 7
Clinical and Diagnostic Accessions, 1983

<table>
<thead>
<tr>
<th></th>
<th>Horses</th>
<th>Cattle</th>
<th>Goats</th>
<th>Swine</th>
<th>Dogs</th>
<th>Cats</th>
<th>Birds</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical and surgical</td>
<td>1,799</td>
<td>762</td>
<td>171</td>
<td>26</td>
<td>10,526</td>
<td>4,376</td>
<td>175</td>
<td>144</td>
<td>17,979</td>
</tr>
<tr>
<td>Ambulatory Clinic</td>
<td>1,900</td>
<td>36,200</td>
<td>850</td>
<td>980</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td>39,935</td>
</tr>
<tr>
<td>Clinical pathology specimens</td>
<td>4,955</td>
<td>3,482</td>
<td>426</td>
<td>31</td>
<td>12,112</td>
<td>3,392</td>
<td></td>
<td>798</td>
<td>25,196*</td>
</tr>
<tr>
<td>Diagnostic Laboratory</td>
<td>23,639</td>
<td>623,541</td>
<td>5,057</td>
<td>1,241</td>
<td>19,289</td>
<td>8,890</td>
<td>292</td>
<td>3,769</td>
<td>685,718</td>
</tr>
<tr>
<td>Necropsies</td>
<td>379</td>
<td>642</td>
<td>148</td>
<td>84</td>
<td>608</td>
<td>270</td>
<td>6</td>
<td>344</td>
<td>2,481</td>
</tr>
<tr>
<td>Surgical pathology</td>
<td>513</td>
<td>435</td>
<td>65</td>
<td>31</td>
<td>6,168</td>
<td>1,238</td>
<td>48</td>
<td>155</td>
<td>8,653</td>
</tr>
<tr>
<td>Laboratory animal examinations</td>
<td></td>
<td></td>
<td></td>
<td>56</td>
<td>22</td>
<td></td>
<td></td>
<td>1,783</td>
<td>1,861†</td>
</tr>
<tr>
<td>Aquatic animal accessions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,017</td>
<td>1,017</td>
<td></td>
</tr>
<tr>
<td>Poultry Disease Laboratories</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7,510</td>
<td>8,657‡</td>
</tr>
<tr>
<td>Mastitis Control Program</td>
<td>5</td>
<td>216,363</td>
<td>186</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>216,555</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>33,190</td>
<td>881,425</td>
<td>6,903</td>
<td>2,393</td>
<td>48,763</td>
<td>18,190</td>
<td>8,031</td>
<td>9,157</td>
<td>1,008,052</td>
</tr>
</tbody>
</table>

*The Clinical Pathology Laboratory performed 33,508 tests on the 25,196 specimens.
†The Division of Laboratory Animal Services maintained 31,532 animals; the daily census averaged 9,687.
‡This includes 894 pet, exotic, and wild birds.

### Table 8
Geographic Distribution of Accepted Applicants, Class of 1988

<table>
<thead>
<tr>
<th>Legal Residence</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>59</td>
</tr>
<tr>
<td>California</td>
<td>1</td>
</tr>
<tr>
<td>Colorado</td>
<td>1</td>
</tr>
<tr>
<td>Connecticut</td>
<td>2</td>
</tr>
<tr>
<td>Delaware</td>
<td>1</td>
</tr>
<tr>
<td>Florida</td>
<td>2</td>
</tr>
<tr>
<td>Maine</td>
<td>1</td>
</tr>
<tr>
<td>Maryland</td>
<td>3</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>1</td>
</tr>
<tr>
<td>New Jersey</td>
<td>7</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>1</td>
</tr>
<tr>
<td>Vermont</td>
<td>1</td>
</tr>
</tbody>
</table>

### Table 9
Interns and Residents, 1983–84

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interns</td>
<td>10</td>
</tr>
<tr>
<td>Residents</td>
<td>22</td>
</tr>
</tbody>
</table>

### Table 10
Qualifications of Accepted Applicants, Class of 1988

<table>
<thead>
<tr>
<th></th>
<th>Number of Applicants</th>
<th>Percentage of Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of preveterinary preparation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fewer than four years of college</td>
<td>10</td>
<td>12.50</td>
</tr>
<tr>
<td>Four years of college</td>
<td>55</td>
<td>68.75</td>
</tr>
<tr>
<td>More than four years of college</td>
<td>15</td>
<td>18.75</td>
</tr>
<tr>
<td>(graduate level)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institution previously attended</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cornell University</td>
<td>37</td>
<td>46.25</td>
</tr>
<tr>
<td>Other</td>
<td>43</td>
<td>53.75</td>
</tr>
<tr>
<td>Field of preparatory study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal science (or related)</td>
<td>22</td>
<td>27.50</td>
</tr>
<tr>
<td>Biological sciences (or related)</td>
<td>50</td>
<td>62.50</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>10.00</td>
</tr>
</tbody>
</table>
Table 11
Summary of Grants and Contracts Awarded, 1983–84

<table>
<thead>
<tr>
<th>Recipient</th>
<th>For 1983–84</th>
<th>For Subsequent Years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>$ 160,492</td>
<td>$ 107,788</td>
<td>$ 268,280</td>
</tr>
<tr>
<td>Anatomy</td>
<td>179,149</td>
<td>336,824</td>
<td>515,973</td>
</tr>
<tr>
<td>Avian and Aquatic Animal Medicine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department Program</td>
<td>536,170</td>
<td>271,684</td>
<td>807,854</td>
</tr>
<tr>
<td>Poultry Disease Laboratories</td>
<td>221,909</td>
<td></td>
<td>221,909</td>
</tr>
<tr>
<td>Total Avian and Aquatic Animal Medicine</td>
<td>758,079</td>
<td>271,684</td>
<td>1,029,763</td>
</tr>
<tr>
<td>Clinical Sciences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department Program</td>
<td>1,782,289</td>
<td>1,886,033</td>
<td>3,668,322</td>
</tr>
<tr>
<td>Mastitis Control Program</td>
<td>412,133</td>
<td>0</td>
<td>412,133</td>
</tr>
<tr>
<td>Total Clinical Sciences</td>
<td>2,194,422</td>
<td>1,886,033</td>
<td>4,080,455</td>
</tr>
<tr>
<td>Diagnostic Laboratory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture and Markets Contract</td>
<td>1,060,950</td>
<td>0</td>
<td>1,060,950</td>
</tr>
<tr>
<td>Equine Drug Testing and Research Program</td>
<td>2,940,037</td>
<td>0</td>
<td>2,940,037</td>
</tr>
<tr>
<td>Other</td>
<td>518,317</td>
<td>79,004</td>
<td>597,321</td>
</tr>
<tr>
<td>Total Diagnostic Laboratory</td>
<td>4,519,304</td>
<td>79,004</td>
<td>4,598,308</td>
</tr>
<tr>
<td>Microbiology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department Program</td>
<td>919,308</td>
<td>196,147</td>
<td>1,115,455</td>
</tr>
<tr>
<td>Baker Institute for Animal Health</td>
<td>1,066,878</td>
<td>555,273</td>
<td>1,622,151</td>
</tr>
<tr>
<td>Total Microbiology</td>
<td>1,986,186</td>
<td>751,420</td>
<td>2,737,606</td>
</tr>
<tr>
<td>Pathology</td>
<td>658,429</td>
<td>1,094,493</td>
<td>1,752,922</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>681,857</td>
<td>785,890</td>
<td>1,467,747</td>
</tr>
<tr>
<td>Physiology</td>
<td>968,757</td>
<td>2,654,963</td>
<td>3,623,720</td>
</tr>
<tr>
<td>Preventive Medicine</td>
<td>345,545</td>
<td>818,939</td>
<td>1,164,484</td>
</tr>
<tr>
<td>Grand Total</td>
<td>$12,452,220</td>
<td>$8,787,038</td>
<td>$21,239,258</td>
</tr>
</tbody>
</table>

Note: Figures include indirect costs for all grants and contracts; in annual reports for previous years those were not included.

Table 12
Admission Summary, Class of 1988

<table>
<thead>
<tr>
<th>Area</th>
<th>Applicants</th>
<th>Interviewed</th>
<th>Accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>251</td>
<td>119</td>
<td>59</td>
</tr>
<tr>
<td>Contract states</td>
<td>133</td>
<td>54</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>129</td>
<td>27</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>513</td>
<td>200</td>
<td>80</td>
</tr>
</tbody>
</table>

Table 13
Predoctoral Student Enrollment, 1983–84

<table>
<thead>
<tr>
<th>Candidates for the D.V.M. degree</th>
<th>Class of 1984</th>
<th>Class of 1985</th>
<th>Class of 1986</th>
<th>Class of 1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>80</td>
<td>77</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Cornell undergraduates taking courses in the college (full-time equivalents)</td>
<td>317</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tables 14 and 15 are summaries of the income and expenditures of the New York State College of Veterinary Medicine for the fiscal years July 1, 1982, through June 30, 1983, and July 1, 1983, through June 30, 1984. These figures do not include expenditures for salary fringe benefits, estimated for 1983–84 at $4,268,420, or for general support services. Figures for the latter were unavailable for 1983–84 but were estimated at $2,677,565 for the previous year.

### Table 14
**Source of Funds**

<table>
<thead>
<tr>
<th></th>
<th>1983–84</th>
<th>1982–83</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. State appropriation</td>
<td>$8,682,504</td>
<td>$7,945,391</td>
</tr>
<tr>
<td>B. Federal appropriation</td>
<td>261,638</td>
<td>209,342</td>
</tr>
<tr>
<td>C. Grants and contracts</td>
<td>11,703,907</td>
<td>9,640,255</td>
</tr>
<tr>
<td>D. College income</td>
<td>7,620,051</td>
<td>6,814,910</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$28,267,700</td>
<td>$24,609,898</td>
</tr>
</tbody>
</table>

### Table 15
**Use of Funds**

<table>
<thead>
<tr>
<th></th>
<th>1983–84</th>
<th>1982–83</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Instruction and departmental research</td>
<td>$3,441,894</td>
<td>$3,291,743</td>
</tr>
<tr>
<td>F. Teaching Hospital</td>
<td>4,456,833</td>
<td>3,996,672</td>
</tr>
<tr>
<td>G. Organized research</td>
<td>11,521,335</td>
<td>9,249,292</td>
</tr>
<tr>
<td>H. Extension and public service</td>
<td>5,755,101</td>
<td>5,139,471</td>
</tr>
<tr>
<td>I. Academic support</td>
<td>273,179</td>
<td>227,628</td>
</tr>
<tr>
<td>J. Student services</td>
<td>195,708</td>
<td>193,259</td>
</tr>
<tr>
<td>K. Institutional support</td>
<td>2,031,288</td>
<td>1,994,598</td>
</tr>
<tr>
<td>L. Plant maintenance and operation</td>
<td>318,128</td>
<td>317,025</td>
</tr>
<tr>
<td>M. Student aid</td>
<td>274,234</td>
<td>200,210</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$28,267,700</td>
<td>$24,609,898</td>
</tr>
</tbody>
</table>

**Source of Funds**

- **A** (30.7%)
- **C** (41.4%)
- **D** (27.0%)
- **B** (0.9%)  

**Use of Funds**

- **E** (12.2%)
- **F** (15.8%)
- **G** (40.7%)
- **H** (20.3%)
- **L** (1.1%)
- **J** (0.7%)
- **I** (1.0%)
- **K** (7.2%)
- **M** (1.0%)
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Note: The persons listed on pages 27–29 were holding the indicated offices on June 30, 1984. Two appointments to the State University of New York Board of Trustees were pending.
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New York State College of Veterinary Medicine

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Donald S. Postle, Director of Financial Aid
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Joseph P. King, Consultant, Genesee Valley Regional Market Authority
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Arnold N. Weinberg, Professor of Medicine, Harvard Medical School
Stephen H. Weiss, Managing Partner, Weiss, Peck, and Greer
John E. Willson, Associate Director, Johnson and Johnson Research Foundation
Anyone interested in further information about the college or its programs is encouraged to request such information by mail or telephone. Writers are reminded to include the appropriate zip code for return mail.

Callers should be aware that most college offices are connected to the main switchboard, which may be reached between the hours of 8:00 a.m. and 5:00 p.m. on business days by dialing 607/256-5454. Individuals or offices may then be requested by name or by the appropriate extensions, given in the following lists as four-digit numbers preceded by an x. The seven-digit numbers that appear are for those college telephones not connected to the main switchboard. When those numbers are called, the main switchboard number should not be dialed.

**General Inquiries**

General inquiries should be directed to

Charles G. Rickard, Acting Dean
New York State College of Veterinary Medicine
Cornell University
Ithaca, New York 14853.

Telephone: x 2729

**Statistical Supplements**

The following supplements, containing detailed statistical material compiled on the basis of the calendar year (1983), are available:

- Report of Necropsies
- Report of Parasitological Examinations
- Poultry Disease Diagnostic Laboratories

Requests for any of the above should include the name of the document desired and should be addressed to

Annual Report Statistical Supplements
New York State College of Veterinary Medicine
Cornell University
Ithaca, New York 14853.

**Special Programs and Units**

Requests for information concerning the following special programs or facilities should be directed to the appropriate persons as listed below. All addresses are at the New York State College of Veterinary Medicine, Cornell University, Ithaca, New York 14853. See paragraph 2 on this page for an explanation of telephone numbers and the procedure for calling.

**Admissions and Student Affairs**

Ms. Marcia J. Sawyer
C117
Telephone: x 2700

**Baker Institute**

Dr. Douglas D. McGregor
James A. Baker Institute for Animal Health
Telephone: 277-3044

**Biomedical Communications**

Ms. Sandra P. Berry
L21
Telephone: x 2234

**Biomedical Electronics**

Mr. H. Donald Hinman
621 Research Tower
Telephone: x 2600

**Bovine Research Center**

Dr. Donald H. Schlafer
325C Research Tower
Telephone: x 2352

**Comparative Medicine**

Dr. George C. Poppensiek
315 Research Tower
Telephone: x 2771

**Computing Facility**

Mr. John M. Lewkowicz
624 Research Tower
Telephone: x 2606