New York State
College of
Veterinary Medicine
Cornell University
Annual Report
1980-81
The 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-fourth Annual Report

July 1, 1980–June 30, 1981

Legislative document number 88

The New York State College of Veterinary Medicine
at Cornell University in Ithaca, New York,
is the primary health resource
for the state's multibillion-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 1980–81 fiscal year,
of the students, faculty, and staff
who worked to accomplish the mission
and thereby to justify the public trust.
Office of the Dean  
New York State College of Veterinary Medicine  
A Statutory College of the State University at Cornell University  

Frank H. T. Rhodes  
President  
Cornell University

Dear President Rhodes:

Pursuant to the requirements of the laws of New York State, I present herewith a report of 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, 1981, this being the eighty-fourth annual report of this college.

Respectfully submitted,

[Signature]

Edward C. Melby, Jr.  
Dean

Office of the President  
Cornell University  
Ithaca, New York

The Board of Trustees of Cornell University, the Chancellor and Board of Trustees of the State University of New York, and the Governor of the State of New York

Ladies and Gentlemen:

In accordance with the requirements of Section 5711 of Article 115 of the State Education Law, I am pleased to submit, on behalf of Cornell University, the report of the New York State College of Veterinary Medicine for the year beginning July 1, 1980, and ending June 30, 1981.

Sincerely yours,

[Signature]

Frank H. T. Rhodes  
President

Office of the Chancellor  
State University of New York  
Albany, New York

The Board of Regents, the Governor, and the Legislature of the State of New York

Ladies and Gentlemen:

Pursuant to the law, the 1980–81 Annual Report of the New York State College of Veterinary Medicine at Cornell University is herewith submitted.

Very respectfully yours,

[Signature]

Clifton R. Wharton, Jr.  
Chancellor
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The one-world approach, still so elusive of realization in some areas of human endeavor, has long been a basic scientific precept. While isolationism may appear at times to be a viable political alternative, it has never been an acceptable mode to serious students of the physical, chemical, and biological laws that govern all the world's creatures.

Although Cornell University's geographical location is often, somewhat disparagingly, referred to as "out of the way" or "centrally isolated," there is nothing provincial about the University's reputation or impact. The stage was set for an international approach to learning and teaching in Ithaca by Ezra Cornell when he selected as first president of the University Andrew Dickson White, much of whose education had been acquired abroad. The die was cast in the same mold for the College of Veterinary Medicine when White recruited James Law, a European-educated native of Scotland, to join Cornell's first faculty and to make education in veterinary medicine a part of the University scene from its beginning.

In the early days of the University and the college, more was drawn from elsewhere than was given. In later years, the trend has often been reversed. But at all times there has prevailed an awareness that the exchange of knowledge works only on a two-way street. A healthy flow of traffic in both directions nourishes all who dwell along it.
Over the years a network of connections has developed linking many units of Cornell University with institutions in almost every corner of the globe. Because these affiliations have proved mutually rewarding, they have tended to grow and expand, making Cornell’s international ties progressively strong and productive.

From the earliest days, the College of Veterinary Medicine has been an active participant in the University’s international exchange of information. One of the most effective methods whereby this exchange has occurred has been the training of graduate students from abroad. These individuals come with information about conditions in their home countries that is valuable to scholars here, and they are eager to gain knowledge and expertise here to take back and apply to specific problems at home. Frequently, such persons assume positions of leadership through the decades that follow, helping to ensure a continuing spread of scientific capability.

A glance at the long rows of theses on the shelves of the Flower Veterinary Library serves to illustrate the scope of graduate teaching by the veterinary college. Of the 545 students represented there, all of whom received master’s or Ph.D. degrees in veterinary medicine from Cornell University since 1898, nearly 250 were from outside the United States. The largest representation has been, not surprisingly, from Canada (more than 30), followed by Australia, China, India, Nigeria, and Peru, with 10 each. Forty-nine other countries, representing every variety of climate, culture, and level of development, have, through the years, sent from one to nine students each to the Ithaca campus for graduate training in veterinary medicine. Almost equal numbers have come from each of four major areas of the globe: Asia, Europe, South America and the Caribbean, and the Near East and Africa.

Many, although not all, of Cornell’s international programs have been aimed at solving practical problems that relate to feeding expanding populations, and it is in this arena that the College of Veterinary Medicine has been most active. The close relationship that always exists between livestock health and food production becomes more crucial as animal populations are expanded and their transfer among various nations increases.

The need to coordinate good health practices with good management procedures in such matters has prompted the College of Veterinary Medicine and the College of Agriculture and Life Sciences to work frequently as partners in addressing problems involving food-producing animals.

During the 1980–81 year two broad international projects were launched, both of which are cooperative efforts involving faculty and administration of those two colleges, and both of which are focused on improving food production in the participating countries. One is an agreement to work with personnel of the Council for Agricultural Planning and Development (CAPD) of the Republic of China, Taiwan, for a six-year period. The formal agreement, signed for the College of Veterinary Medicine by Dr. Charles G. Rickard, associate dean, in an October 1980 ceremony at Taipei, leaves the door open for continuation beyond that time.

The signing of the agreement followed many months of planning and a two-week visit by Dr. Rickard to Taiwan, where he reviewed their colleges of veterinary medicine, their agricultural and veterinary medical research institutes, and various governmental departments. Dr. Robert C. T. Lee, who received his Ph.D. degree in veterinary pathology from Cornell in 1962, was the signer for the CAPD.
A steering committee, consisting of two members of the CAPD, one representative of the Cornell College of Agriculture and Life Sciences, and Dr. Rickard from the College of Veterinary Medicine, was named and charged with developing plans of work, evaluating proposed research, reviewing candidates to serve as visiting professors or scholars and graduate students, and acting in a broad advisory capacity.

A list of programs that seemed most feasible to initiate at the outset was drawn up by that committee and organized into three groups, the first of which includes pig neonatal disease and reproductive pathology and duck nutrition, along with grain-crop projects. Individuals at the college with special expertise in reproduction will work closely with the Taiwan scholars in that field in identifying the specific problems to be addressed on the basis of their importance to the pig industry there.

Plans call for an animal husbandry scholar from the National Taiwan University to spend a year at the Duck Research Laboratory at Eastport, Long Island, operated jointly by the Cornell Colleges of Veterinary Medicine and Agriculture and Life Sciences, to gain information on a wide range of nutrition, husbandry, and health concerns of ducks reared for commercial purposes.

A second group of projects, equally high in priority but less capable of immediate activation, includes, along with grain and fruit projects, the development of pigs and minipigs as experimental models for biomedical research and research in fish diseases and nutrition.

A third group of items contains long-term projects, some of which are in progress. These include the development of the Atlas of General Veterinary Pathology, an effort headed by Dr. John King, Department of Pathology at Cornell. He worked on the atlas in Taiwan for two months in the spring of 1981 while also giving instruction in pathology. Another long-term project in the third group is concerned with the anatomy, embryology, and histology of the pig. Dr. Howard Evans, of the Department of Anatomy at the college, also visited Taiwan in the spring of 1981 to assist in the planning of an anatomical resource center and teaching museum at the Pig Research Institute of Taiwan to support teaching at all veterinary departments in that country.

A few months later, a similar agreement was signed with representatives of the University of La Plata in Argentina. Again, the arrangement calls for input from faculty of Cornell's College of Veterinary Medicine and College of Agriculture and Life Sciences and spells out the overall procedures for addressing specific problems related to livestock health in Argentina. Dean Edward C. Melby, Jr., represented the College of Veterinary Medicine in the formulation of plans that were concluded in March 1981, after Dean Melby's visit to Argentina.

Plans for this program will involve exchanges of professors and graduate students. One Argentine scientist is already at the college, and others will be coming to Cornell early in 1982.

Indonesia was the destination of Dr. Francis Kallfelz, Departments of Clinical Sciences and Physiology, who traveled to Asia on a one-month assignment for the International Atomic Energy Agency. His task was to assist in the application of radioisotopes to the study of animal nutrition in that country, with selenium deficiency the major emphasis of the research. An assignment for the United States Department of Energy took Dr. Kallfelz to Austria. Dr. Robert Corradino and Dr. Robert Wasserman, both of the Department of Physiology, also went to Austria to attend a conference on calcium metabolism.

Six other faculty members spent varying amounts of time in half a dozen European countries during the past year. Dr. Lennart Krook, of the Department of Pathology, spoke on the pathology of nutritional diseases at the International Food and Agricultural Organization's conference for veterinary pathologists of developing countries, held in Sweden, and Dr. Ronald Minor, of the same department, gave a university lecture in that country. Dr.
Minor's topics—the toxicity of radiolabeled amino acids and connective tissue biology—also formed the basis of seminars he presented in Finland and West Germany.

Dr. Stephen B. Hitchner was in Rumania for a week in the spring to assist with the formulation of a vaccination program in that country as part of an ongoing collaborative effort between the college's Department of Avian and Aquatic Animal Medicine, of which Dr. Hitchner is a member, and the Avian Tumor Virus Laboratory in Bucharest.

Dr. Alan Dobson and Dr. Ellis Loew, Department of Physiology, spent several weeks working on a research project based at Cambridge University in England. Canine reproduction was the subject that took Dr. Patrick Concanon, Department of Physiology, to the Netherlands to participate in a conference there sponsored by the Royal Veterinary Society.

Dr. Evans may be the college faculty member who went the farthest in carrying out international assignments, for, in addition to his efforts in Taiwan, he spent several weeks in South Africa. He was a guest professor for five weeks at the Veterinary College of the University of Pretoria and addressed both faculty and students at universities, institutes, and a game preserve in Johannesburg, Cape Town, and the northern Transvaal. One of his visits was to the Medical University of Southern Africa, an institution that will enroll its first class of fifty black veterinary students next year.

Many miles were covered by Dr. William Hansel, chairman of the Department of Physiology, traveling to Israel for a two-week stint under the auspices of the Binational Agricultural Research and Development Fund, an effort in which Dr. George Poppensiek, the James Law Professor of Comparative Medicine, also participates. Dr. Poppensiek is a member of a joint team of Israeli and United States scientists who review research proposals to that body and recommend for grants those that appear to have potential value to the agriculture of both nations.

Dr. Poppensiek's international activities also involved travel, in this case within the home hemisphere. He is a consultant in veterinary medicine to the government of Trinidad/Tobago in their development of an academic-research complex devoted jointly to medicine, dentistry, and veterinary medicine.

Another trip in this hemisphere was made by Dr. Julius Fabricant, Department of Avian and Aquatic Animal Medicine, when he went to Mexico to deliver a paper on mycoplasma eradication and vaccination at a conference and to confer with officials of the Mexican Department of Agriculture on the same general topic.

Faculty members on sabbatical leaves traveled to many parts of the world to gather or exchange knowledge for the ultimate improvement of life in all nations.
Several campus-based activities have direct worldwide implications. One of them is the International Registry of Reproductive Pathology, compiled by Dr. Kenneth McEntee, which now has nearly twenty thousand cases entered on the computer and available for retrieval and study in practically every nation on Earth. This registry forms the basis for diagnosis and development of programs to prevent and control reproductive diseases.

Another computer service based at the college is the American Veterinary Medical Data Program, a central repository for information from veterinary teaching hospitals at eighteen participating institutions on this continent. The addition during the past year of a full-time medical records administrator brought that program to full operation, making search and retrieval of the stored data available to the international veterinary and animal-health community.

Information on the incidence of feline infectious peritonitis was gathered from twenty-four countries on all the inhabited continents of the globe by means of a survey conducted by staff of the Feline Health Center. Public service activities of the center were stepped up as a major effort was made to increase the dissemination of information and advice concerning cat health care to veterinarians and owners. Quarterly newsletters were sent to more than seven thousand persons throughout the United States and fifteen foreign countries who had expressed interest in receiving them. Veterinary colleges in Australia and the Netherlands also requested the publications.

The Diagnostic Laboratory continued to make a contribution to advances in food production abroad, while also serving the interests of New York State producers and veterinarians, by performing more than ten thousand tests on animals for export during the past year.
Several hundred articles a year reporting on findings in many of the current or completed research projects at the college are accepted and published by a wide range of scientific journals, making this information available to researchers and other interested scientists around the world. Articles reporting on research by scholars in other countries are made available to faculty and students at the college by the Flower Veterinary Library. During the 1980–81 year 321 scientific journals published abroad were received. This amounts to around 40 percent of the total number of veterinary medical periodicals included in the library's offerings. Some 50 of the foreign-journal subscriptions are in exchange for the Cornell Veterinarian, which is sent to thirty-two countries outside the United States.

Every year the college is fortunate to include visiting appointees in its faculty roster. These temporary staff members, usually representing the peak of achievement in their various specialties at home, enrich the academic climate far beyond what their brief stays might suggest. The knowledge and added perspective gained by students and permanent faculty through attending guests' lectures, participating in their seminars, working with them in the laboratory, and exchanging information and ideas in less structured situations is invaluable.

A veterinarian from Nanking began a two-year visit to campus in May 1981 as part of an exchange program with the People's Republic of China, and the associate dean of the College of Veterinary Medicine in La Plata, Argentina, spent the first half of 1981 on the Ithaca campus. Both were working in the Department of Avian and Aquatic Animal Medicine. That department also hosted the director and another scientist from the Avian Tumor Virus Laboratory in Bucharest who came to Ithaca during the year to work with faculty members on problems relating to poultry health in Rumania.

A visiting scientist from Yugoslavia and another from Israel each spent a year in the Department of Physiology, working with college staff and learning new research techniques, while visitors from Canadian and English universities came to the same department for six-month stints.

A visiting associate professor from the Republic of China, Taiwan, and a visiting fellow from Mexico spent the latter half of 1980 acquiring advanced training in anatomic and diagnostic pathology in the college's Department of Pathology. During the same period, a visiting professor from Australia worked in that department, developing special laboratory techniques needed in his studies involving animal models of human "storage" diseases. A visitor from the Veterinary Research Institute in Pulawy, Poland, spent a year in the Department of Pathology, pursuing his studies on bone metabolism, with particular emphasis on its application to equine species.

Two of the individuals selected to fill training positions in veterinary pathology in the college's Department of Pathology are from abroad—one from England and one from Australia—and almost one-quarter of the graduate students in the Field of Veterinary Medicine at Cornell are from outside the United States. Twelve candidates for advanced degrees in the field are citizens of nine countries: Australia, Ireland, Jamaica, Korea, New Zealand, Pakistan, the Philippines, Taiwan, and Zimbabwe. Their major subjects are almost as diverse as their home addresses, encompassing anatomy, bacteriology, immunology, parasitology, pathology, pharmacology, and virology.
Official notice of full accreditation for the college by the Council on Education of the American Veterinary Medical Association was received in the fall of 1980. It seemed to bring with it the sense of renewed vigor and commitment needed to keep abreast of the rapidly progressing and ever-changing challenges inherent in the veterinary medical field.

At about that time, the formation of two new departments, one encompassing college teaching and research in all aspects of physiology and the other devoted to pharmacology, was accomplished. The newly organized and renamed Department of Physiology also serves, as did the former Department of Physical Biology, as the Section of Physiology in the University's Division of Biological Sciences. Nearly all the faculty members in the college department have joint appointments in the University section. A new course, Cellular Mechanisms, in which the relationships of cellular physiology and biochemistry to the clinical aspects of human and animal disease were emphasized, replaced the traditional first-year offering in biochemistry. Modifications were made in two basic physiology courses and in the teaching of endocrinology and reproductive biology.

Another new course, to be offered in 1982, in the use of tracer techniques and radioimmunoassays was developed cooperatively by Dr. Francis Kallfelz, Departments of Clinical Sciences and Physiology, Dr. Fred Lengemann, Department of Physiology, and Dr. Thomas Reimers, Department of Preventive Medicine. Funds for that project were provided by the International Atomic Energy Agency.

The pervasive, and often controversial, use of chemicals that is rapidly becoming a hallmark of modern society has made it imperative that a correspondingly high level of expertise be developed for managing that use. Chemicals entering the food chain, intentionally or by error, pollution of the environment by deliberate or accidental discharge of industrial chemical waste, and the consumption of drugs by human beings and animals must all be recognized as potential hazards.

The ability to prevent widespread damage from chemical use and to deal with it when it occurs depends on unceasing effort on the research front plus the diligent application of acquired skills. Making maximum use of the vast spectrum of available drugs in treating disease is also of paramount concern and deserves the unceasing attention of experts in the field of pharmacology.

The shortage of individuals equipped to assume leadership roles in managing society's use of chemicals prompted the College of Veterinary Medicine to intensify its commitment to the fields of pharmacology and toxicology. Toward this end, a separate Department of Pharmacology was established in the fall of 1980. Dr. Geoffrey W. G. Sharp, whose record of achievement in research and in university instruction is outstanding, was recruited to head the new college unit. One professor who was on the college staff as a member of the former Department of Physiology, Biochemistry, and Pharmacology and three newly recruited assistant professors make up the current staff. Modest renovation of existing facilities has begun, as has planning for more extensive modernization in the future.

New courses are being developed for second- and third-year students in the professional-degree program, and several graduate-level courses will be added to implement the new Ph.D. program in veterinary pharmacology. Some pharmacological research already in progress is continuing, and a considerably expanded research program is being developed.

Extensive interaction between staff of the new department and other units of the college, such as the clinics and the toxicology section of the Diagnostic Laboratory, as well as with other units of the University with related interests is anticipated.
The end of the five-year reorganization of the Department of Pathology coincided with a University-required external review that noted high morale and motivation in departmental staff, a strengthened teaching program, high-quality service functions, and significant growth in outside support for research. Assumption by the department of the responsibility for instruction in clinical pathology was facilitated by the appointment of an assistant professor in that discipline. Another position in that field is still to be filled.

During 1980, four trainees who completed their two-year programs in the department with the aid of subsidies from industry and other sources were awarded certification by the American College of Veterinary Pathologists. Recognition of the potential for expanding the department’s role in alleviating the serious national shortage of board-certified veterinary pathologists came with its selection by the National Cancer Institute (NCI) as one of the five institutions in the country to receive grants for such training. The NCI will provide in excess of $600,000 over the next five years to support the department’s intern and residency program.

Expanding interest and activity related to aquatic animal species and the crucial role to be played by veterinary medicine in maintenance and development of this vital source of food was evident in several college programs. Aquavet, the joint effort of the New York State College of Veterinary Medicine and the School of Veterinary Medicine at the University of Pennsylvania in cooperation with marine biological institutions in Woods Hole, Massachusetts, marked its fifth anniversary. Students from earlier Aquavet courses have entered practices of aquatic animal medicine, taken research positions in marine science institutions, and been appointed to faculties of schools of veterinary medicine in teaching and research programs involving a wide range of aquatic animals.

During the summers of 1980 and 1981, a faculty member from the Department of Avian and Aquatic Animal Medicine operated a diagnostic laboratory at the Marine Biological Laboratory (MBL) at Woods Hole, Massachusetts. The objective has been to provide assistance in marine animal health to the large research community there. Future objectives are to participate with marine biologists and aquaculture experts in the development of highly defined aquatic laboratory animals for research purposes. During the past forty years, laboratory rodents, such as mice and rats, have been selected, domesticated, and freed of most indigenous diseases to achieve their present level of usefulness to science. Most fish, shellfish, and other aquatic forms used in research are taken from wild, undefined populations, and their genetic, nutritional, or health status is not known.

Because certain aquatic animals have special research potential, it is imperative that standardized laboratory stocks be developed. Veterinary medicine has much to offer in this long-term project, which will be of direct benefit to commercial aquaculture as well. Dr. Louis Leibovitz from this college accepted leadership of the veterinary medical aspect of these activities at the MBL after a sabbatical leave in France studying shellfish culture.

The wide popular appeal of marine biology led to the presentation by Dr. H. E. Evans, Department of Anatomy, of two one-week programs for interested adults. Those presentations, dealing with tropical marine biology, were given on St. Croix, Virgin Islands, as part of Cornell’s 1981 adult education program.

A strengthening of the means to ensure the humane treatment of laboratory animals throughout the University, both on the Ithaca campus and at the Medical College, was accomplished with the formation of the Center for Research Animal Resources under the direction of Dr. Fred Quimbly of the college staff. Provision of optimal veterinary care, environment, and housing for all such animals and the reduction of the number of animals needed by providing colonies and individuals of predictably high quality are among the major aims of the new center.

The appointment at the end of the previous reporting year of Richard D. Rostowsky as assistant dean for hospital administration has proved to be a significant asset to the entire Teaching Hospital. Ways to make service more efficient, free faculty from administrative duties, and enhance the financial stability of the hospital have been identified and are being implemented as rapidly as possible.
In spite of rising inflation that has had a noticeable negative impact on many practitioners and other veterinary college hospitals, the patient population at the college clinics has shown a modest increase. While a slight drop was recorded in large-animal patients from the previous year, the increased numbers of small animals treated more than offset that loss.

About half the patients seen in the two clinics were referrals from practitioners, a situation that benefits students and faculty by providing case variety to teaching and clinical research programs and is also of educational value to the referring veterinarians.

The role of the Diagnostic Laboratory in maintaining health among the food-and fiber-producing animals of the state continues to expand at an impressive rate, with more than 750,000 tests done during 1980–81. Fourteen new procedures were added during the past year. Five of these were in endocrinology, the newest unit of the laboratory. In the past year, more than 27,000 tests were performed to aid both small-animal and large-animal practitioners in identifying hormonal imbalances that lead to such ailments as Addison’s disease, Cushing’s syndrome, diabetes, and infertility, along with other skin, reproductive, and metabolic disorders.

Eight new procedures were added to the viral serology roster, and one to parasitology. A unique program of the bacteriology section that provides assistance in the diagnosis of anaerobic bacterial diseases in livestock has nearly tripled in volume during the past three years. Brucellosis surveillance remains the single largest program of the laboratory, with some 640,000 tests performed during the year.

Specimens submitted to the Diagnostic Laboratory for chlamydia isolation attempts or Newcastle disease virus tests are handled by the poultry, companion-bird, and aquatic animal diagnostic services of the Department of Avian and Aquatic Animal Medicine.

Diagnostic Laboratory assistance to Northeast veterinarians and producers was also increased through the expanded field service and extension programs. Field service veterinarians handled some two thousand telephone calls and visited 130 farms to help practitioners deal with complicated cases. The newly redesigned extension publication *Veterinary Topics*, distributed to more than three thousand veterinarians and individuals in allied professions, is an excellent vehicle for communicating up-to-date research and clinical findings. Exhibits, presentations at meetings, and seminars are some of the other vehicles that are proving effective.

Staff expertise is drawn from all units of the Diagnostic Laboratory and other units of the college by veterinary extension personnel in the Department of Preventive Medicine and pooled with that of extension service staff in the College of Agriculture and Life Sciences to provide a comprehensive service to the agricultural needs of the entire region.
Information for lay people as well as alumni and other practitioners about college activities and animal health is disseminated through two vehicles produced by the public information staff of the college. *Veterinary Viewpoints*, now in its sixth year, was redesigned during 1980-81 into a more attractive and readable format. It is distributed four times a year to some 4,500 alumni, donors, parents of students, and college staff.

*Veterinary Focus*, also produced on a quarterly basis, is a four-page insert in the *Cornell Alumni News* that is focused on one subject each time. The first insert, appearing in May 1981, was concentrated on dog health and featured research at the James A. Baker Institute for Animal Health on canine parvovirus disease. The second insert deals in depth with the nutritional requirements and behavior problems of pet cats. Copies of the insert material alone are available for veterinarians to distribute in their offices.

Another publication, begun in November 1980 and published monthly, is *VIP (Veterinary Information for Personnel)*. It contains news of college staff and is distributed throughout campus offices.

Recognition of the college's outstanding achievements and capabilities in research continues to be expressed in the form of support from many segments of society. Federal, state, industrial, and foundation grants, along with private and individual gifts for research, rose again during the 1980-81 year. The grand total of more than $13 million represented an increase over the previous year's sum, which was about $11.3 million.

Awards from the National Institutes of Health (NIH) alone were more than $7.1 million, some of which is earmarked to support work beyond the current year. It was satisfying to note that the college surpassed most schools in allied health professions, such as public health, pharmacy, dentistry, and nursing, in attracting NIH funds, and competed favorably with the top human medical colleges for grants to support investigations into atherosclerosis, cancer, immunology and aging, and hepatitis.

Receipt of federal funds dispensed by the Department of Agriculture for food-animal studies was also on a par with or beyond that achieved by other colleges of veterinary medicine.

About $1.4 million in new grants during the past year were won by faculty members who have joined the college staff within the past three years.

Special recognition was given to two college researchers for their contributions to learning. The Society for the Study of Reproduction selected Dr. William Hansel to receive the Carl G. Hartman Award for his achievements in bovine reproductive studies, and Dr. Leland E. Carmichael, of the Baker Institute for Animal Health, was presented with the Gaines Fido Award. Dr. Carmichael was voted Dogdom's Man of the Year in a survey conducted by the Gaines Dog Research Center for his research in canine parvovirus. He and coworkers at the institute isolated the parvovirus in 1978 and have developed a vaccine against the disease it causes.

Financial support from alumni and other friends of the college continues to play a vital role in the maintenance of excellence at the college. The Campaign for Cornell Veterinary Medicine closed at the end of the 1980 calendar year with a grand total of $7,522,941. More than $400,000 of unrestricted gifts from alumni were distributed during the past four years to benefit programs in every department. These funds, which were used to buy or lease equipment, build display cases, purchase books, develop computer-assisted teaching programs, and support a variety of other projects, have had a significant positive impact throughout the college.

The second Veterinary College Fund, which ran from October 1980 through June 1981, showed outstanding gains over the previous year's. The 632 alumni donors gave just short of $160,000, as compared with a little less than $106,000 the previous year, and gifts from other supporters totaled more than $133,000, an increase of nearly $50,000.
A major expansion in the college’s capabilities in bovine disease research will come with the construction of a building in which a specific-pathogen-free herd of cattle can be developed. The structure, to be erected on Snyder Hill primarily with a $600,000 gift from an anonymous foundation, will be the first in a planned complex for the center.

An outstanding gift, which will benefit the Feline Health Center, the Small Animal Clinic, and cats and cat lovers everywhere, was the nearly $100,000 estate left by Sarah H. Swits of Ballston Spa, New York, retired teacher and cat fancier. In naming the Feline Health Center as beneficiary, Mrs. Swits expressed the hope that her gift would “give cats a happier, healthier, more pleasant life.” The funds were specified for use in the care and treatment of cats as well as in research on feline diseases.

About $12,500, raised during the Travers Celebration at Saratoga Springs in August 1980, was donated to support research in equine diseases at the college. The dinner-dance held to celebrate the running of the one hundred eleventh Travers Stakes, the nation’s oldest stake race, was the major fund-raising event. Plans for similar events for next year are under way.

Alumni contributions helped support the newly initiated James Law Distinguished Lecture Series, designed to present eminent scientists in the biological disciplines to all members of the University community and other areas of upstate New York. The series of five, for the 1980–81 year, drew some 1,200 listeners. They heard Marc Weksley, of the Cornell University Medical College, discuss the immunological basis of aging; Samuel M. McCann, of the University of Texas Southwestern Medical School, speak on the control of pituitary hormone release by brain peptides; Barry R. Bloom, of the College of Medicine at Yeshiva University, talk about immunology and the Third World; and Baruch S. Blumberg, of the University of Pennsylvania and the Institute for Cancer Research in Philadelphia, speak on cancer of the liver in humans and wild animals.

Nobel Prize winner Robert C. Gallo, chief of the Laboratory of Tumor Cell Biology, Experimental Therapeutics Program, National Cancer Institute, also an adjunct professor at George Washington University and a courtesy professor of the New York State College of Veterinary Medicine, delivered the February lecture on leukemias and lymphomas of animals and human beings.

The Flower Veterinary Library was the recipient of several gifts from friends of the college. Three separate grants, totaling more than $25,000, were earmarked for the acquisitions endowment fund. Unrestricted alumni campaign monies were designated to initiate a computer-assisted literature search service, to restore some rare and historically significant volumes, and to buy needed books.

The library staff assumed responsibility for the collection and operation of the college’s autotutorial materials, bringing all the education resources, print and nonprint, into one unit. Autotutorial programs are still developed by the Biomedical Communications staff, whose total output continues to grow. Completely automated black-and-white and color processing was installed during the 1980–81 year, greatly facilitating the turnover of work and freeing the staff for more creative tasks. A lettering machine and a new process for the production of titles for color slides yields a superior product, which has increased the demand for this kind of work.

Computer services that constitute a vital support for college activities at every level were expanded and updated. Addition of a second computer to the veterinary medical computing facility more than doubled that installation’s capability to process information and improved the already notable reliability of the system.
The downward trend in the number of applicants seeking admission to the professional-degree program in recent years appears to be a continued response to the financial pressures of inflation and the establishment of new institutions offering veterinary medical instruction. However, no such drop in qualifications presented by those applying was felt, with all but seven of the entering class having had four years of college and nearly one-third having also completed some graduate work.

Concern is again being felt about the shortage of students with degrees from veterinary schools in the United States who are expressing interest in graduate work in veterinary medicine at Cornell. The welcome rise in the number of such applicants that followed the 1977 increase in stipends was brief. The current reversal undoubtedly reflects the neutralizing effect of inflation on that increment.

Maintaining efficiency for today’s veterinary medical teaching activities in a physical plant designed in the early 1950s and constructed a few years later remains a constant challenge. Additions and renovations such as the superb new sterile surgical suite and the isolation facility for large-animal patients at the Teaching Hospital allow for remarkable improvements in the quality of patient care and instruction. The conversion of the college garage to a student surgical facility, including equipment and housing for the animals, has proved very successful.

But serious problems with the physical capabilities of the Teaching Hospital, now considered the oldest in any veterinary college in this country, remain. Space, especially in the Small Animal Clinic, is extremely limited, and it is essential that plans for easing the situation be developed soon. Additional housing for equine patients in the Large Animal Clinic must be provided soon if service is not to be curtailed during the busiest periods.

A gain in one area has created a loss of teaching space needed for the presentation of patients; an amphitheater directly accessible to the Teaching Hospital would solve that problem and would be valuable for continuing education programs as well as for student instruction.

Both teaching and research are enhanced by facilities at the Equine Research Park. A stallion barn was completed in the fall of 1980, and improvements were made on sixty acres of pasture at another site to provide inexpensive summer facilities for a herd of forty pony brood mares whose foals are needed for numerous studies in equine nutrition, infectious diseases, parasitology, and physiology.

Design and specifications have been completed for a metabolism building that will contain stalls for animals used in studies requiring the collection of feces and urine. About one-quarter of the funds for that structure have been received from private donations.

Research projects, such as the one dealing with Marek’s disease, that are dependent on specific-pathogen-free flocks of chickens, will benefit from a new structure to house those animals. Partly funded by the National Institutes of Health, the building was started in the spring of 1981 adjacent to the Levine Laboratory on Hungerford Hill Road.

The completion of the new wing to house small laboratory animals at the Baker Institute, for which NIH also provided funds, was delayed a few months past its anticipated date in early 1981 by difficulties with the sophisticated mechanical systems being installed.

Revisions continue to be made in plans for a structure to house electron microscopes. Decisions regarding the size, type, and placement of the facility so that the primary needs of the college can be met while keeping costs as low as possible are expected to be made in the upcoming year.
Faculty and Staff Changes

New Appointments
Malcolm N. Allison, Postdoctoral Fellow
Murray G. Blue, Visiting Assistant Professor
Michael A. Brunner, Assistant Professor
Avis H. Cohen, Research Associate
James L. Cone, Director of Laboratory Operations
Jack M. DeBoy, Director of Laboratory Operations
G. Frederick Fregin, Associate Professor
Hermon Gershon, Adjunct Professor
Robin D. Gleed, Assistant Professor
Michael A. Hannwacker, Visiting Assistant Professor
Rita W. Harris, Director of Personnel
Edward L. Jarroll, Jr., Research Associate
David E. Lawson, Visiting Professor
Jin Song Li, Visiting Fellow
Patricia Losco, Postdoctoral Fellow
Charles A. Mebus, Courtesy Professor
Gerard A. Meenan, Director of Laboratory Operations
Lawrence E. Mezza, Postdoctoral Fellow
Robert A. Milvae, Postdoctoral Associate
Jennifer M. Pell, Postdoctoral Associate
Manuel Posso, Adjunct Professor
John F. Randolph, Assistant Professor
Karen E. Redmond, Staff Writer
Miriam D. Rosenberg, Visiting Assistant Professor
Lois Roth, Postdoctoral Fellow
Gary L. Seawright, Adjunct Associate Professor
Geoffrey W. G. Sharp, Leading Professor and Chairman, Department of Pharmacology
Carlos G. Silva, Visiting Fellow
Alan VanPoznak, Adjunct Professor
David L. Wassom, Senior Research Associate
Leo F. Wuori, Senior Extension Associate
Nancy I. Wurster, Postdoctoral Associate

Promotions and Title Changes
Emmett N. Bergman, Professor (from Professor and Acting Chairman, Department of Physiology, Biochemistry, and Pharmacology)
Julia T. Blue, Assistant Professor (from Postdoctoral Associate)
Robert B. Brown, Assistant Dean for Administration (from Director of Student Affairs and Admissions)
John C. Carlson, Adjunct Associate Professor (from Visiting Assistant Professor)
Jeffrey N. Davidson, Assistant Professor (from Senior Extension Associate)
Joanne Fortune, Assistant Professor (from Senior Research Associate)
Bahiru Gametchu, Postdoctoral Associate (from Veterinary Assistant)
William Hansel, Professor and Chairman, Department of Physiology/Section of Physiology (from Professor and Chairman, Department of Physical Biology/Section of Physiology)
Nancy Hiscock, Director of Laboratory Operations (from Technician)
Thomas J. Kern, Assistant Professor (from Instructor)
Thomas O. Manning, Assistant Professor (from Resident)
Ann Marcham, Assistant to the Dean for Instruction and Special Projects (from Assistant to the Dean, Director of Personnel)
Joan P. Opdebeeck, Assistant Professor (from Veterinary Assistant)
Pamela M. Powers, Instructor (from Resident)
Fred W. Quimby, Associate Professor and Director, Division of Laboratory Animal Services, and Director, Center for Research Animal Resources (from Associate Professor and Director, Division of Laboratory Animal Services)
Marcia J. Sawyer, Director of Student Affairs and Admissions (from Student Records Coordinator)
Robert J. Seiler, Instructor (from Veterinary Resident)
John C. Semmler, Assistant Dean for Facilities and Research Administration (from Assistant to the Dean for Facilities and Research Administration)
Brian A. Summers, Assistant Professor (from Instructor)
Kathleen P. Telling, Director of Financial Management (from Assistant Director of Financial Management)
Melissa C. Woan, Research Associate (from Postdoctoral Associate)
Completed Terms
Osman M. Abdalla, Visiting Professor
Gerald D. Baird, Visiting Research Associate
Varda K. Barash, Postdoctoral Associate
Melissa Behr, Instructor
Kazimierz Bieniek, Visiting Assistant Professor
Frederick A. Buuck, Visiting Fellow
Clive R. Huxtable, Visiting Associate Professor
Ronald S. Jones, Visiting Professor
Jerzy Kita, Visiting Associate Professor
Christine M. Koch, Instructor
Douglas B. Koch, Assistant Professor
Peter Kraljevic, Visiting Assistant Professor
Cheng-i Liu, Visiting Associate Professor
Nester Z. Menendez, Visiting Fellow
Walter E. Roe, Visiting Professor
Dan P. Sponenberg, Assistant Professor
Petr Stuibe, Visiting Fellow
Emilin T. Traver, Visiting Fellow
Johann G. Van der Walt, Visiting Fellow
Leslie B. Zeman, Lecturer

Resignations
William J. Arion, Professor
Arthur L. Aronson, Professor
Linda Brewer, Research Associate
Leroy Coggins, Professor
Rudolf Dueland, Associate Professor
Ronald Fayer, Adjunct Associate Professor
Lawrence T. Glickman, Assistant Professor
Robert Grieve, Research Associate
Bruce F. Hiscock, Director of Laboratory Operations
Yasutaka Hoshino, Postdoctoral Associate
Christine S. Hui-chou, Postdoctoral Associate
Walter J. Kochanek, Jr., Director of Financial Management
Michael Marmor, Assistant Professor
Bruce D. Murphy, Visiting Associate Professor
Mannu M. Mykkanen, Postdoctoral Associate
Robert W. O'Donnell, Research Associate

Retirements
John Bentinck-Smith, Professor (to Professor Emeritus)
Henry O. Dunn, Senior Research Associate
Stephen B. Hitchner, Professor (to Professor Emeritus)
Kenneth McEntee, Professor (to Professor Emeritus)

Deaths
Myron G. Fincher, Professor Emeritus
### Table 1
Continuing Education, 1980–81

<table>
<thead>
<tr>
<th>Program</th>
<th>Participants</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>Anesthesia and Critical Care Skills for Technicians</td>
<td>45</td>
<td>24</td>
</tr>
<tr>
<td>Annual Conference for Veterinarians</td>
<td>473</td>
<td>18</td>
</tr>
<tr>
<td>Bovine Gastrointestinal Workshop</td>
<td>38</td>
<td>16</td>
</tr>
<tr>
<td>Equine Practitioners’ Short Course</td>
<td>36</td>
<td>8</td>
</tr>
<tr>
<td>Farriers’ Conference</td>
<td>16</td>
<td>55</td>
</tr>
<tr>
<td>Pathology Short Course</td>
<td>61</td>
<td>40</td>
</tr>
<tr>
<td>Lendings, autotutorial programs: 178</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 2
Laboratory Animals Housed and Cared For by the Division of Laboratory Animal Services, 1980–81

<table>
<thead>
<tr>
<th>Animal</th>
<th>Daily Average</th>
<th>Annual Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calves</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Cats (SPF)</td>
<td>250</td>
<td>552</td>
</tr>
<tr>
<td>Cats (other)</td>
<td>140</td>
<td>208</td>
</tr>
<tr>
<td>Chicks</td>
<td>1,013</td>
<td>4,750</td>
</tr>
<tr>
<td>Dogs</td>
<td>290</td>
<td>530</td>
</tr>
<tr>
<td>Ferrets</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>Frogs</td>
<td>2</td>
<td>56</td>
</tr>
<tr>
<td>Gerbils</td>
<td>35</td>
<td>165</td>
</tr>
<tr>
<td>Goats</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Guinea pigs</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td>Hamsters</td>
<td>30</td>
<td>112</td>
</tr>
<tr>
<td>Hens</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Mice</td>
<td>2,500</td>
<td>5,525</td>
</tr>
<tr>
<td>Opossums</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Pigs</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Rabbits</td>
<td>125</td>
<td>346</td>
</tr>
<tr>
<td>Raccoons</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Rats</td>
<td>508</td>
<td>1,536</td>
</tr>
<tr>
<td>Sheep</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Turtles</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>Voles</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Woodchucks</td>
<td>25</td>
<td>67</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>5,172</strong></td>
<td><strong>14,198</strong></td>
</tr>
</tbody>
</table>

### Table 3
Graduate Student Enrollment, Field of Veterinary Medicine, 1980–81

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>1980–81</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidates for the Ph.D. degree</td>
<td>44</td>
</tr>
<tr>
<td>Candidates for the M.S. degree</td>
<td>11</td>
</tr>
<tr>
<td>Professional-degree students in the combined D.V.M./M.S. program</td>
<td>1</td>
</tr>
</tbody>
</table>

### Table 4
Geographic Distribution of Accepted Applicants, Class of 1985

<table>
<thead>
<tr>
<th>Legal Residence</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>59</td>
</tr>
<tr>
<td>Connecticut</td>
<td>3</td>
</tr>
<tr>
<td>Delaware</td>
<td>2</td>
</tr>
<tr>
<td>Maryland</td>
<td>2</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>1</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>1</td>
</tr>
<tr>
<td>New Jersey</td>
<td>8</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>1</td>
</tr>
<tr>
<td>Vermont</td>
<td>2</td>
</tr>
<tr>
<td>West Virginia</td>
<td>1</td>
</tr>
</tbody>
</table>

### Table 5
Degrees Awarded, 1980–81

<table>
<thead>
<tr>
<th>Degree</th>
<th>1980–81</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.V.M. (with Distinction: 5)</td>
<td>80</td>
</tr>
<tr>
<td>M.S.</td>
<td>2</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>7</td>
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</table>

### Table 6
Predoctoral Student Enrollment, 1980–81

<table>
<thead>
<tr>
<th>Year</th>
<th>1980–81</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidates for the D.V.M. degree</td>
<td>80</td>
</tr>
<tr>
<td>Class of 1981</td>
<td>80</td>
</tr>
<tr>
<td>Class of 1982</td>
<td>79</td>
</tr>
<tr>
<td>Class of 1983</td>
<td>80</td>
</tr>
<tr>
<td>Class of 1984</td>
<td>80</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>319</strong></td>
</tr>
<tr>
<td>Cornell undergraduates taking courses in the college (full-time equivalents)</td>
<td>70</td>
</tr>
</tbody>
</table>
### Table 7
Clinical and Diagnostic Accessions, 1980

<table>
<thead>
<tr>
<th></th>
<th>Horses</th>
<th>Cattle</th>
<th>Goats</th>
<th>Swine</th>
<th>Dogs</th>
<th>Cats</th>
<th>Poultry</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical and surgical</td>
<td>1,676</td>
<td>1,050</td>
<td>251</td>
<td>36</td>
<td>9,387</td>
<td>4,167</td>
<td>240</td>
<td>214</td>
<td>17,021</td>
</tr>
<tr>
<td>Ambulatory clinic</td>
<td>1,730</td>
<td>35,486</td>
<td>795</td>
<td>1,090</td>
<td>9</td>
<td>13</td>
<td>1</td>
<td>39,124</td>
<td></td>
</tr>
<tr>
<td>Clinical pathology specimens</td>
<td>5,008</td>
<td>5,335</td>
<td>357</td>
<td>79</td>
<td>11,249</td>
<td>2,947</td>
<td></td>
<td>1,316</td>
<td>26,291*</td>
</tr>
<tr>
<td>Diagnostic Laboratory</td>
<td>22,414</td>
<td>222,010</td>
<td>5,384</td>
<td>1,688</td>
<td>21,748</td>
<td>7,284</td>
<td>129</td>
<td>1,261</td>
<td>281,918†</td>
</tr>
<tr>
<td>Necropsies</td>
<td>323</td>
<td>1,107</td>
<td>206</td>
<td>223</td>
<td>783</td>
<td>440</td>
<td>56</td>
<td>241</td>
<td>10,002</td>
</tr>
<tr>
<td>Surgical pathology</td>
<td>500</td>
<td>469</td>
<td>70</td>
<td>52</td>
<td>7,383</td>
<td>1,238</td>
<td>49</td>
<td>488</td>
<td>744‡</td>
</tr>
<tr>
<td>Laboratory animal examinations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic animal accessions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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></td>
<td></td>
</tr>
<tr>
<td>Mastitis Control Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>31,651</td>
<td>519,269</td>
<td>7,063</td>
<td>3,168</td>
<td>50,689</td>
<td>16,215</td>
<td>3,728</td>
<td>5,464</td>
<td>637,247</td>
</tr>
</tbody>
</table>

*The Clinical Pathology Laboratory performed 32,712 tests on the 26,291 specimens.
†The Diagnostic Laboratory performed 361,085 tests on the 281,918 specimens.
‡The Division of Laboratory Animal Services maintained 14,198 animals; the daily census averaged 5,172.

### Table 8
Library Holdings, 1980–81

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bound volumes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At beginning of year</td>
<td>66,288</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisitions</td>
<td>1,462</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Less withdrawals</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Total bound volumes</td>
<td>67,733</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Periodicals and annuals</td>
<td>1,063</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 9
Library Use, 1980–81

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>On campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserve books (in-library use)</td>
<td>11,443</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Books lent (home use)</td>
<td>15,746</td>
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</tr>
<tr>
<td>Photocopy items provided (in lieu of loans)</td>
<td>8,876</td>
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<td></td>
<td></td>
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<tr>
<td>Total on campus</td>
<td>36,065</td>
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<tr>
<td>Interlibrary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books lent</td>
<td>76</td>
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<td></td>
</tr>
<tr>
<td>Photocopy items provided</td>
<td>382</td>
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<tr>
<td>Books borrowed</td>
<td>71</td>
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<td></td>
</tr>
<tr>
<td>Photocopy items received</td>
<td>467</td>
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<td>Total interlibrary</td>
<td>996</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Table 10
Qualifications of Accepted Applicants, Class of 1985

<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>7</td>
<td>9.0</td>
</tr>
<tr>
<td>Four years of college</td>
<td>48</td>
<td>60.0</td>
</tr>
<tr>
<td>More than four years of college (graduate level)</td>
<td>25</td>
<td>31.0</td>
</tr>
<tr>
<td>Institution previously attended</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cornell University</td>
<td>34</td>
<td>42.5</td>
</tr>
<tr>
<td>Other</td>
<td>46</td>
<td>57.5</td>
</tr>
<tr>
<td>Field of preparatory study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal science (or related)</td>
<td>36</td>
<td>45.0</td>
</tr>
<tr>
<td>Biological sciences (or related)</td>
<td>40</td>
<td>50.0</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>5.0</td>
</tr>
</tbody>
</table>
### Table 11
Summary of Grants and Contracts Awarded, 1980–81

<table>
<thead>
<tr>
<th>Recipient</th>
<th>1980–81</th>
<th>Subsequent Years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>$434,275</td>
<td>$96,223</td>
<td>$530,498</td>
</tr>
<tr>
<td>Anatomy</td>
<td>44,126</td>
<td>88,414</td>
<td>132,540</td>
</tr>
<tr>
<td>Avian and Aquatic Animal Medicine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department program</td>
<td>401,672</td>
<td>623,470</td>
<td>1,025,142</td>
</tr>
<tr>
<td>Poultry Disease Laboratories</td>
<td>182,599</td>
<td>0</td>
<td>182,599</td>
</tr>
<tr>
<td>Total Avian and Aquatic Animal Medicine</td>
<td>$584,271</td>
<td>$623,470</td>
<td>$1,207,741</td>
</tr>
<tr>
<td>Clinical Sciences</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Department program</td>
<td>$509,969</td>
<td>$855,470</td>
<td>$1,365,439</td>
</tr>
<tr>
<td>Mastitis Control Program</td>
<td>327,071</td>
<td>0</td>
<td>327,071</td>
</tr>
<tr>
<td>Total Clinical Sciences</td>
<td>$837,040</td>
<td>$855,470</td>
<td>$1,692,510</td>
</tr>
<tr>
<td>Diagnostic Laboratory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture and Markets Contract</td>
<td>$824,803</td>
<td>0</td>
<td>$824,803</td>
</tr>
<tr>
<td>Equine Drug Testing and Research Program</td>
<td>1,980,186</td>
<td>0</td>
<td>1,980,186</td>
</tr>
<tr>
<td>Other</td>
<td>27,500</td>
<td>0</td>
<td>27,500</td>
</tr>
<tr>
<td>Total Diagnostic Laboratory</td>
<td>$2,832,489</td>
<td>0</td>
<td>$2,832,489</td>
</tr>
<tr>
<td>Microbiology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department program</td>
<td>$871,509</td>
<td>$771,172</td>
<td>$1,642,681</td>
</tr>
<tr>
<td>Baker Institute for Animal Health</td>
<td>738,679</td>
<td>677,387</td>
<td>1,416,066</td>
</tr>
<tr>
<td>Total Microbiology</td>
<td>$1,610,188</td>
<td>$1,448,559</td>
<td>$3,058,747</td>
</tr>
<tr>
<td>Pathology</td>
<td>$408,046</td>
<td>$581,073</td>
<td>$989,119</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Physiology</td>
<td>898,039</td>
<td>1,238,028</td>
<td>2,136,067</td>
</tr>
<tr>
<td>Preventive Medicine</td>
<td>320,149</td>
<td>205,808</td>
<td>525,957</td>
</tr>
<tr>
<td>Grand total</td>
<td>$7,968,623</td>
<td>$5,137,045</td>
<td>$13,105,668</td>
</tr>
</tbody>
</table>

### Table 12
Interns and Residents, 1980–81

<table>
<thead>
<tr>
<th>Area</th>
<th>Applicants</th>
<th>Interviewed</th>
<th>Accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>339</td>
<td>164</td>
<td>59</td>
</tr>
<tr>
<td>Compact states</td>
<td>204</td>
<td>72</td>
<td>19</td>
</tr>
<tr>
<td>Other states</td>
<td>103</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>646</td>
<td>244</td>
<td>80</td>
</tr>
</tbody>
</table>

### Table 13
Admission Summary, Class of 1985

<table>
<thead>
<tr>
<th>Area</th>
<th>Applicants</th>
<th>Interviewed</th>
<th>Accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>339</td>
<td>164</td>
<td>59</td>
</tr>
<tr>
<td>Compact states</td>
<td>204</td>
<td>72</td>
<td>19</td>
</tr>
<tr>
<td>Other states</td>
<td>103</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>646</td>
<td>244</td>
<td>80</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, 1979, through June 30, 1980, and July 1, 1980, through June 30, 1981. These figures do not include expenditures for indirect costs, estimated for 1980–81 at $2,402,223 for general support services and $3,070,804 for salary fringe benefits.

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

<table>
<thead>
<tr>
<th>Source of Funds</th>
<th>1980–81</th>
<th>1979–80</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. State appropriation</td>
<td>$ 6,828,448</td>
<td>$ 6,431,507</td>
</tr>
<tr>
<td>B. Federal appropriation</td>
<td>228,258</td>
<td>268,624</td>
</tr>
<tr>
<td>C. Grants and contracts</td>
<td>8,215,756</td>
<td>7,231,964</td>
</tr>
<tr>
<td>D. College income</td>
<td>5,299,185</td>
<td>4,308,477</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$20,571,647</strong></td>
<td><strong>$18,235,572</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Use of Funds</th>
<th>1980–81</th>
<th>1979–80</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Instruction and departmental research</td>
<td>$ 2,990,664</td>
<td>$ 2,842,067</td>
</tr>
<tr>
<td>F. Teaching Hospital</td>
<td>3,270,083</td>
<td>2,910,831</td>
</tr>
<tr>
<td>G. Organized research</td>
<td>7,869,872</td>
<td>7,127,657</td>
</tr>
<tr>
<td>H. Extension and public service</td>
<td>4,307,021</td>
<td>3,679,132</td>
</tr>
<tr>
<td>I. Academic support</td>
<td>183,810</td>
<td>168,096</td>
</tr>
<tr>
<td>J. Student services</td>
<td>188,953</td>
<td>175,879</td>
</tr>
<tr>
<td>K. Institutional support</td>
<td>1,400,056</td>
<td>984,987</td>
</tr>
<tr>
<td>L. Plant maintenance and operation</td>
<td>242,030</td>
<td>238,606</td>
</tr>
<tr>
<td>M. Student aid</td>
<td>119,158</td>
<td>108,317</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$20,571,647</strong></td>
<td><strong>$18,235,572</strong></td>
</tr>
</tbody>
</table>

**Source of Funds**

- **A** (33.2%)  
- **B** (1.1%)  
- **C** (39.9%)  
- **D** (25.8%)  

**Use of Funds**

- **E** (14.5%)  
- **F** (15.9%)  
- **G** (38.3%)  
- **H** (20.9%)  
- **I** (0.9%)  
- **J** (0.9%)  
- **K** (6.8%)  
- **L** (1.2%)  
- **M** (0.6%)
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*Ex officio.
†Inactive.

Note: The persons listed on pages 27—29 were holding the indicated offices on June 30, 1981.
One appointment to the State University of New York Board of Trustees was pending.
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New York State College of Veterinary Medicine

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Robert A. Squire
John E. Willson
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**General Inquiries**

General inquiries should be directed to
Edward C. Melby, Jr., Dean
New York State College of Veterinary Medicine
Cornell University
Ithaca, New York 14853
Telephone: 607/256-3201.

**Statistical Supplements**

The following supplements, containing detailed statistical material compiled on the basis of the calendar year (1980), are available:

*Report of Necropsies*
*Report of Parasitological Examinations*
*New York State Mastitis Control Program*
*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, and all telephone numbers are area code 607.

*Admissions and Student Affairs*
Ms. Marcia Sawyer
C117
Telephone: 256-7633

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

*Biomedical Communications*
Mr. Robert E. Smith
L21
Telephone: 256-7682

*Biomedical Electronics*
Mr. H. Donald Hinman
621 Research Tower
Telephone: 256-7670

*Bovine Health Research Center*
Dr. George C. Poppensiek
315 Research Tower
Telephone: 256-7676

*Comparative Medicine*
Dr. George C. Poppensiek
315 Research Tower
Telephone: 256-7676

*Computing Facility*
Dr. Howard Moraff
620 Research Tower
Telephone: 256-7687

*Continuing Education*
Dr. Charles E. Short
426 Research Tower
Telephone: 256-7700

*Development and Public Affairs*
Mr. Edward J. Trethaway
G1 Research Tower
Telephone: 256-7603

*Diagnostic Laboratory*
Dr. Raymond H. Cypess
207 Diagnostic Laboratory
Telephone: 256-6541

*Equine Drug Testing and Research*
Dr. George A. Maylin
114 Diagnostic Laboratory
Telephone: 256-6555

*Equine Infectious Diseases, Laboratory for*
Dr. James H. Gillespie
216 Research Tower
Telephone: 256-2150

*Equine Reproductive Studies*
Dr. Donald H. Lein
209 Diagnostic Laboratory
Telephone: 256-6541
Equine Research Park
Dr. Jack E. Lowe
517 Research Tower
Telephone: 256-5402 or 256-7656

Equine Research Program
Dr. Herbert E. Schryver
516 Research Tower
Telephone: 256-7656

Extension Service (Veterinary)
Dr. Michael A. Brunner
205 Diagnostic Laboratory
Telephone: 256-6541

Feline Health Center
Dr. Fredric W. Scott
618A Research Tower
Telephone: 256-7663

Fish Diagnostic Laboratory
Dr. Louis Leibovitz
E116
Telephone: 256-5440

Graduate Study, Field of Veterinary Medicine
Dr. Neil L. Norcross
227 Research Tower
Telephone: 256-7737

Laboratory Animal Services, Division of
Dr. Fred W. Quimby
221B Research Tower
Telephone: 256-7787

Large-Animal Consulting Service
Dr. Francis H. Fox
G126
Telephone: 256-6545

Library (Flower Veterinary Library)
Ms. Susanne Whitaker
C201
Telephone: 256-2083

Mastitis Control Program
Ms. Frances D. Barnes
Field Laboratory
Telephone: 533-7852

Poultry Diagnostic Laboratories
Dr. Bruce W. Calnek
E117
Telephone: 256-5449

Teaching Hospital
Dr. Alexander de Lahunta
G130
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