Dear Cornellian,

Hal Borland, one of our contemporary American writers, reflected upon the first snowfall in his *Whisper of Winter*, saying, "When I look out upon the world after the first snowfall I always think that it is brand new, another kind of genesis, innocent and waiting for new and better transcriptions. Not only is the clutter and litter of autumn hidden and simplified, but the whole scene of man’s argument and confusion is cleansed and made briefly immaculate. All things are possible again. Even wisdom. Even understanding."

We are in the season of snowfalls, and surely in the place of snowfalls, far above Cayuga’s waters, as I prepare this annual Christmas message
to you. And since it is a traditional Christmas letter, I would like to paraphrase Borland’s expressive reflection by exchanging four words for three:

“When I look upon the world on Christmas eve, I always think that it is brand new, another kind of genesis, innocent and waiting for new and better transcriptions. Not only is the clutter and litter of autumn hidden and simplified, but the whole scene of man’s argument and confusion is cleansed and made briefly immaculate. All things are possible again. Even wisdom. Even understanding.” Merry Christmas!

As you will recall, we used to begin the annual Christmas message with an imaginary tour through the eight academic departments of the College and the library. We encapsulated the activities of all the faculty members and enjoyed the warm glow of their special honors and accomplishments together. But then, as the staff increased in numbers, the pages of the message multiplied, and we have had to modify the report of individual faculty member activities. This year, somewhat like our report to you last year, we will devote the initial part of this narrative of College-wide developments and concerns. And there have been some administrative changes about which you might like to know, so they will be in these pages too. Also, just to reassure you that we are still operating under a full head of steam, we will cite a few of the many fascinating studies under way at your Alma Mater. It takes an enormous amount of constraint to refrain from telling you about individual faculty and staff activities. This College is preeminent because of the great personal qualities and talents of all the people who work together day by day. I would like to spread before you something outstanding about every one of them. But since I cannot do that without having this tome as heavy as Manhattan’s telephone directory, we will just hope that your curiosity will hustle you back to the campus for a visit.

So, hold tight to your bridgework, for here we go . . .

ENROLLMENT AND THE UNDULATIONS OF NATIONAL STATISTICS

This year there were 659 qualified applicants for admission to the class of 1977. The numbers of applicants have been increasing steadily year by year, and even though the class size was increased from 60 to 65 in 1971, we are still turning away nine applicants for every candidate selected.

More and more young women are expressing interest in studying veterinary medicine. At the present time we have 13 females and 52 males in the first year class; 37 females and 214 males in the veterinary medical degree program; all splendid, well-motivated and capable young people.

Our faculty is willing to increase the enrollment under the caveat that we must be provided with sufficient additional faculty positions and space to handle the increase. A most important factor that must be considered in determining the optimal class size is the volume of clinical material available for effective teaching. A few years ago our clinicians advised the faculty that there is a sufficient case load available in the area that the clinics and hospitals serve for handling a class size of 90 students.
Given sufficient additional faculty positions to handle an increase in enrollment, as recommended by the Earl Walls Associates, Professional Programmers whom we retained to study our staffing and space needs, we can expand our enrollment to 80 in the present facilities if we section a major part of our classes. To expand beyond 80 we will need additional teaching facilities, and we have been planning for that during the past several years.

Consistent with standard protocol for preparing budget requests in the State of New York system, and basing our requests on the recommendations of Walls Associates, we have planned for the additional positions needed over a five-year period. In our negotiations, we have found sympathetic interest in the objectives among the fiscal officers of Cornell University, the State University of New York, the Executive Division of Budget and the Legislature’s Ways and Means Committee staff officers. However, with the competition for dollars among all State agencies, our five-year time schedule has not met with unanimous approval. Further, there are trends in higher education which are causing the holders of the purse strings to be cautious about funding proposals for expanded enrollments. In general, application rates for admission to programs in higher education are declining. This has caused agonizing consternation among University administrators who are faced with escalating costs of fixed obligations, and in a time when there appears to be a declivity of interest in tertiary or more advanced education.

In dealing with inquiries from academic planners about future trends in applications for admission to studies in veterinary medicine, we have based our responses on current rates and upon nationwide estimated demand for veterinary service in the decades ahead. We feel very optimistic and are of the opinion that the application rate will remain at a level considerably above our capacity. Nonetheless, there are opponents who are of the opinion that nationwide statistics show a declining interest in medical education. Some academic planners are suggesting that despite the limited number of colleges of veterinary medicine in this country, veterinary medical education may experience the impact of declining interest within a period of three to five years. It is difficult for those of us who see the ever-broadening opportunities for veterinarians in public service to understand these hand-wringing agonies of our co-workers in academic planning as they gaze into the misty crystal ball of the future. But in examining and evaluating the over-all trends in higher education, it is incumbent upon us to reach the wisest judgments that we can make and build our arguments as convincingly as possible. It is not difficult to recognize that if the human population continues to expand in an exponential manner, we will have to deal realistically with problems of food production in ways that undoubtedly will change our present priorities and practices. Veterinarians will have increasing responsibility in maintaining the health of food-producing animals. A major effort will have to be made to minimize waste in foodstuffs due to unnecessary morbidity or mortality in livestock, dairy and poultry production. It is even possible, as we peer into the
future, that there may be few pet animals in our American way of life because we may not be able to endure their competition for the food that man may need for his own survival.

As the total scope of medicine becomes increasingly sophisticated and precise, the opportunities for the study of diseases of animals, which have comparative relevance to the spectrum of diseases that beset man, become more important. We do not know exactly what kind of veterinary service the future needs of society will demand. But conceptual teaching and cognitive learning in veterinary medical education, well supported by problem-oriented veterinary research, should produce scholarly and pragmatic veterinarians who are able to meet the future demands of society, no matter what these might be.

GRADUATE STUDIES

Graduate education has been expanding but still is quite inadequate for the training of sufficient teachers and researchers of the future. As of this writing, we have 43 graduate students, and we can handle three times that many with ease. During this past year there have been drastic changes in federal funding policies. Priorities have shifted, and support of training programs in higher education has been cut severely. All federal training grants have been phased out or terminated abruptly. We lost $400,000 in that action, and with the loss of dollars, there has been a more important loss: the loss of opportunity to educate young people who must fill the teaching and research positions of the future.

There is paradox in graduate education. Brilliant and ambitious young colleagues are encouraged to forego the attractiveness of practice (and the earning power that it provides) and to spend 3 or 4 additional years in scholarly pursuit of advanced studies. These are on top of the seven or more years that they have completed at the college level when they qualify for the D.V.M. degree. The advanced education is essential for academic or research opportunities. The paradox is that in addition to the sacrifice of earning potential during the years of scholarly pursuit, the advanced studies prepare these bright minds for positions wherein the monetary compensation probably will always be less than that of practice. There are, of course, other compensations which make the sacrifice worthwhile, not the least of which is the pursuit of interests not for achievement but rather for fulfillment. However, the paradox is real and we sometimes lose the kind of enthusiastic, imaginative and productive young minds which the academic world needs. If it is true that our value systems are changing, and becoming less materialistic, it will soon be obvious that it really is unnecessary for me to call the dilemma of our present concern to your attention. But this is a report to you about 1973, and I imagine that you want to know something about our concerns as well as the triumphs.
MASTER PLAN

A Master Plan through 1985 was developed by the faculty Committee on Academic Policies and Priorities, under mandate from the State University of New York. In this plan, an orderly increase in enrollment for veterinary medical students was projected in increments as proposed in the program analysis completed for the Veterinary College in 1973 by Earl Walls Associates, Inc., Professional Programmers of La Jolla, California.

The following table, with a staffing and space caveat, summarizes the projections for D.V.M. degree candidates and advanced degree candidates through 1985.

<table>
<thead>
<tr>
<th>Date</th>
<th>Veterinary</th>
<th>Graduate</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>250</td>
<td>43</td>
<td>293</td>
</tr>
<tr>
<td>1975</td>
<td>260</td>
<td>60</td>
<td>320</td>
</tr>
<tr>
<td>1980a</td>
<td>305</td>
<td>100</td>
<td>405</td>
</tr>
<tr>
<td>1985b</td>
<td>384</td>
<td>120</td>
<td>504</td>
</tr>
</tbody>
</table>

a Assumes entering veterinary class size of 80 starting in 1978
b Assumes entering veterinary class size of 96 starting in 1982

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THE MULTICATEGORICAL RESEARCH BUILDING

In October the new multicategorical research (and teaching) building seemed to burst forth in life from lifelessness, like the dehiscence of a silicle in its final hour of fulfillment. Within the next few months its furnishings and equipment will begin to appear from the suppliers, and bit by bit we will be moving in. The building contains laboratories designed for mission-oriented research, much of which relates to problems of infertility, nutritional deficiencies, diagnostic problems, laboratory animal medicine, comparative medicine, surgical procedures and studies in infectious diseases. For the most part, the functions will have direct clinical relevance. It also has a fine dining area, offices for student administration, class-size laboratories, several seminar rooms particularly adaptable for
elective courses, a lecture amphitheatre, and an ample distribution of rooms for graduate students. In addition, it has splendid facilities for graduate and undergraduate programs in laboratory animal medicine. We hope you will come to see it, for we know you will be amazed by its splendor and practicality.

If you stare at the northwest face of the building, with its curtain of black glass windows, the question about how we will wash the glass unquestionably will cross your mind. Perhaps the program in laboratory animal medicine might offer a wild solution to that problem should it include something in sponge research. Marine sponges are animals, as you know, and even qualify as laboratory animals. There is a metabolite of 1-β-D-arabinofuranosylcytosine which occurs naturally in marine sponges. Its name is 1-β-D-arabinofuranosyluracil. The "parent compound" is an anti-leukemic drug, a known immunosuppressant, of proven effectiveness in man. And it is likely that the metabolite has immunosuppressant capacity. Our studies in leukemia have not encompassed chemotherapy, nor have we had occasion to focus attention on immunosuppressants for organ transplant research, but there is always tomorrow. I mention this not to resolve the window washing problem with a bevy of sponges, but to lead into a statement that our faculty is well aware of the potentials in laboratory animal medicine. Even the tenacious adhesive properties of the marine barnacle, which sticks to most anything in a moist environment, may shed light on new sources of bone cement or as adhesives for skin graft implants. So, we are interested in barnacles and primates, sponges and oppossums, rodents and ruminants; dogs and cats.

THE FEDERAL CAPITATION (HEAD COUNT AWARD) CARROT

In 1971, Congress authorized the National Institutes of Health to offer a monetary award to all health-related colleges if they would increase the class size by five students or 10%, whichever is the lesser amount. The faculty of the New York State Veterinary College agreed to increase the enrollment from 60 to 65 students in the entering class. The College was awarded $125,000, and it was understood that this award would be made annually, recognizing that the five additional students would be matriculating for a four-year period and recognizing that each entering class would require additional support to cover the costs of the five heretofore unplanned additional students.

In the following year, Congress withdrew its support of that program, and offered a substitute capitation grant program which promised $1100 per veterinary student if each College of Veterinary Medicine would agree to expand its enrollment by another 10% or more. At that time, the Earl Walls Associates were studying the program of the New York State Veterinary College in terms of faculty and space needs to fit the revised curriculum and to accommodate serial increments in student enrollment. Because the study was then in progress, and the information on faculty and space needs incomplete, an application for the capitation grant was filed with a
request for a waiver of the enrollment increase, pending the report of the consulting firm. The intent was to segregate the grant, if awarded, in an escrow account until Earl Walls Associates, Inc., would determine the size of faculty and space requirements for handling incremental increases in our enrollment. Concurrently, assurance was sought that there would be continuity in the grant beyond the two-year limit of accountability that the members of the present Congress could assure. That was necessary because additional faculty would have to be employed to handle the increasing enrollment, and such faculty would require long term salary commitment. An increase in enrollment, as has been indicated, would require extensive sectioning of classes, and the present faculty could not handle the sectioning without becoming exhausted by the increased workload.

The application was reviewed by the Bureau of Health Manpower Education of the National Institutes of Health (the agency designated by Congress to handle the federal capitation grant program). The request for a waiver of enrollment increase was denied and the capitation grant was not awarded. All other veterinary colleges in the United States, except the one at Texas A & M University, agreed to comply with the request for enrollment increases and were awarded capitation grants accordingly.

In the 1972–73 fiscal year, Congress altered the capitation program, making it available to Colleges of Medicine, Osteopathy and Dentistry only; colleges which are concerned with education of professionals involved in direct patient care. Veterinary Colleges were excluded. Those which had increased student enrollment thereby had to deal with an immediate phase-out of capitation grants and an over-burden of additional students upon a non-expanded faculty. Several now are concerned about accreditation since in this financial crisis they may not meet the acceptable minimum requirements for veterinary medical education established by the Council on Education of the American Veterinary Medical Association. Strong efforts are being made by the American Veterinary Medical Association and the Association of American Veterinary Medical Colleges, Inc., to have veterinary colleges re-included in the capitation program. There appears to be no assurance that this will be accomplished in the immediate future, however.

Should this be accomplished we must re-evaluate our position relative to the advantages and risks of participating in programs of long term commitment for us with short term commitment on the part of federal funding agencies. We surely can use the money but if it is to be used for the purpose intended, namely education of more students, we need assurances that Congress will not pull the rug out from under us again.

So much for the general report. Let’s turn now to a quick glimpse of each Department.

ANATOMY

Bob Habel has found a way to maintain his equilibrium in dealing with the assorted administrative responsibilities of the Department Chairmanship by testing his dexterity in white water canoeing. Howard Evans,
our genial Secretary of the College since 1960, decided as he left for his sabbatical leave, that he would like to turn that office over to a successor. So we prevailed upon Neil L. Norcross, Professor of Immunochemistry, to serve as Secretary, and he is doing the same splendid job that Howard did. Studies on peripheral nerve disease in the dog by John F. Cummings and Alexander deLahunta in the Department of Anatomy have revealed some very interesting similarities to neurological diseases in man. A hereditary neuronal dystrophy in dogs appears to have features in common with Werdnig-Hoffman disease, a fatal paralytic disease in infants. Results obtained with suppressive-silver staining of nervous tissue from affected dogs suggests that lesions in infants may be more widespread than was originally thought. Clinical manifestations of these lesions in infants may be masked, as they are in dogs, by marked lower motor neurone involvement. A study of canine brachial plexitis also revealed an interesting similarity to serum neuritis and neuralgic amyotrophy in man. Microscopic examination (including electron microscopic studies) of nerves from the affected dog revealed extensive Wallerian degeneration, fatty degeneration of nerve fibers, which commenced in the ventral branches of the spinal nerves. Cummings and deLahunta have called attention to this finding as one of special interest because histopathologic data on the human paralysis are lacking. Similar degeneration in man would explain the residual weakness and wasting that occurs in severe cases of serum neuritis and neuralgic amyotrophy. How gratifying it is to recognize that our colleagues in veterinary medicine have rolled up their sleeves to tackle these difficult disease problems. And, what is most important, they have unravelled the mysteries not only for the benefit of veterinary medicine, but with spin-off benefit for human medicine too.

PHYSIOLOGY, BIOCHEMISTRY AND PHARMACOLOGY
After having served thirteen years as Head of the Department, Alvin F. Sellers asked to be relieved of the administrative responsibilities so that he could return to full time teaching and research. Each year he found that he was moving further and further away from unresolved questions about blood flow, membrane transport and other ruminant digestive functions. He decided that he must roll up his sleeves and give these gnawing questions a bit of concentrated Sellers' attention. Al is such a superb and forthright colleague that it would have been unjust to him and to the benefits that will be derived from his brilliant scientific mind if we were to postpone a response to his wishes.

The entire professional staff in the Department was unanimous in its regrets about losing the administrative leadership which Al provided so marvelously over these years. It was also unanimous in suggesting that the mantle of Department Chairman be placed upon another very capable and dependable colleague, C. Edward Stevens. Ed, of course, suggested others of his colleagues, but was willing to accept the appointment for a five-year
period when we invited him to do so. He, like Al, is highly respected, has a keen sense of urgency, and a broad interest in College affairs. He has a spontaneous enthusiasm for team-teaching and team-research, to blend together the special talents of a variety of colleagues. We will continue to see stimulating activity in the Department of Physiology, Biochemistry and Pharmacology.

Among the studies on digestive functions which represent the principal thrust of the research activities in that Department, I have been intrigued by the investigations in the glucostatic mechanism of food intake control which are being carried out by Dick and Katherine Houpt. The mechanism is being studied in sheep. Swine are included in the studies for contrast purposes because they are particularly sensitive to glucose deprivation. The ruminant differs from the non-ruminant in that it absorbs relatively little glucose from its digestive tract. Also, its plasma concentration is normally only about one-half that of other animals. Further, ruminants seem to be resistant to the deleterious effects of insulin hypoglycemia. Nonetheless, it is necessary to distinguish between low glucose levels in the plasma and intracellular glucose deficiency. Comparative studies between sheep, on the one hand, and pigs on the other, using the analogue 2-deoxy-D-glucose as a biochemical “marker,” may elucidate the important mechanisms of feeding behavior. While these studies are going on in one laboratory, there is related activity in still another, with Bill Arion and company refining our knowledge about the role of the enzyme glucose 6-phosphatase, which catalyzes the terminal reaction of gluconeogenesis and glycogenolysis. The enzyme occupies a key place in the regulation of hepatic glucose production and the maintenance of blood glucose levels.

When these two studies are pieced together in the jig-saw puzzle of glucose metabolism we undoubtedly will understand something about the functional parameters of appetite control or lack of it and hopefully will have better understanding of the management of obesity on the one hand and the patient which will not eat on the other.

PHYSICAL BIOLOGY

Along with its academic programs relating to the biological effects of radiation, this Department is involved in establishing a College-wide system for computerized records and information. The College will soon have outstanding capability for application and development of a modern computer technology in the animal health sciences. A computerized clinical records system will ultimately provide easy recording and retrieval of case records from all clinics and laboratories and should prove to be extremely valuable as an instrument for teaching and research.

With the projected increases in the use of nuclear reactors for the production of energy, it is necessary to be able to answer questions relating to the metabolism of radioactive materials produced by fissioning of nuclear fuels. Radiocesium is one of the products likely to be produced and one
that has received comparatively little attention. Studies in the Department of Physical Biology are intended to determine metabolic pathways for this radio-nuclide. It is rather interesting to note, for example, that some of the studies have shown that age has a significant effect upon the rate at which radiocesium is released from the body and that potassium influences both retention and rate of elimination.

There is continued interest in the problem of parturient hypocalcemia in cattle. Using radioactive triiodothyronine in competitive protein-binding methods to monitor serum thyroxine levels in afflicted and normal cattle, it was observed that total serum thyroxine was significantly decreased in animals with milk fever. It is known that thyroid hormone does have some role in increasing the size of the exchangeable calcium pool. The current studies suggest that cows with a suboptimal level of thyroid gland activity may have less of an exchangeable calcium pool than cows with optimal thyroid function. These animals may be more susceptible to hypocalcemia when there is a large drain on a relatively small exchangeable calcium pool. Milk fever continues to be a perplexing problem, and these studies are most encouraging in elucidating the fundamental cause of the problem.

The tranquility of the Department was shaken up a bit when Alison P. Casarett was named Associate Dean of the Graduate School last summer. However, she still retains her academic appointment in our Department of Physical Biology, and that pleases us very much. She was tapped for that important position when Cyril Comar was on an extended trip away from the College. But he is calming down now and still retains his usual good nature.

MICROBIOLOGY

Last year we announced the retirement of Yankee fan Dorsey W. Bruner, who served so magnificently as helmsman for the Department of Microbiology and Editor of *The Cornell Veterinarian*. In our enthusiasm about that great colleague, we overlooked another most important announcement. Jim Gillespie was named as Dorsey’s successor! In his quiet and convincing manner, Jim has taken the wheel and continued to expand the functions and academic stability of the Department. During his military service prior to coming to Cornell, Jim spent a couple of years in China. He and his wife, Ginny, had a brief visit to Taiwan recently, where he had opportunity to expand his Chinese vocabulary. I do not know how fluent he is now, but before he left he was practicing two phrases, which sounded like Ding how and Boo how, meaning *very good* and *very bad* (but not necessarily in that respective translation).

When Dorsey retired we knew that we must search for a veterinary bacteriologist, inasmuch as that is Dorsey’s primary specialty. We found a splendid one on a bit of green sod southwest of Scotland. John F. Timoney, B.Sc., M.V.B., M.R.C.V.S., M.S., Ph.D., came to us from Dublin, Ireland. So now we have an Irish sword dancer in an office next to a
Scottish piper (S. Gordon Campbell). Each of them is amply endowed with a quick witty mind and a spirited twinkle in his eye, so the third floor will hum, indeed.

AVIAN DISEASES

Steve Hitchner departed on a slow boat for Australia as he began a sabbatical leave last summer and asked Bruce Calnek to serve as Acting Department Chairman during his absence. The ship had hardly cast off its lines before Bruce was spinning in a whirlwind of recruiting for a couple of staff members. But he is an effective and persuasive ambassador for the Department and it was not long before he had three new co-laborers on board.

During the year, the Department of Avian Diseases was asked to assume the responsibility for a new thrust in studies of diseases of economic importance to the fisheries industry. Louis Liebovitz, B.A., B.S., V.M.D., developed an impressive record, particularly in parasitologic and diagnostic studies, while on the staff of our Long Island Duck Research Laboratory, and has been transferred to the departmental activities in Ithaca where he was named Associate Professor of Avian Diseases. He has assumed the major responsibilities for the finfish and shellfish disease investigations.

It should be mentioned that prior to the designation of the Department of Avian Diseases for this new thrust, Clyde I. Boyer, Jr., Professor of Laboratory Animal Medicine and Director of the College program in Laboratory Animal Medicine, had devoted considerable effort to disease problems in finfish. So we have moved into another phase of studies by the process of evolution. Clyde is devoting a full measure of energy to the needs of Laboratory Animal Medicine.

LARGE ANIMAL MEDICINE, OBSTETRICS AND SURGERY

Having served for more than a half decade, first as Chairman of the Department of Large Animal Medicine, Obstetrics and Surgery, and then as Associate Dean for Clinical Studies, Kenneth McEntee asked to be relieved of these administrative duties so that he could return to full time teaching and research in problems of infertility. It was only fitting and proper that his wishes be respected, for his contributions to the College and to the profession have been outstanding. Among the most far-reaching effects of his search for excellence have been the discovery and appointment of several splendid new colleagues to the clinical staffs. I am sure that our colleagues in the pre-clinical sciences will not feel that the importance of their functions are lessened in any way if I were to say that the focal point of the academic mission of the College is medicine; the clinical arts and sciences. And Kenneth McEntee’s tireless efforts in adding strength to the clinical departments will always be identified in the pre-eminent stature of the veterinary clinical operations at Cornell.
When Ken completed his appointment as Associate Dean for Clinical Studies, we weighed the advantages and disadvantages of combining the Department of Large Animal Medicine, Obstetrics and Surgery and the Department of Small Animal Medicine and Surgery. It seemed best for our current operations to continue to maintain two separate Departments, since the nature of the operations differ considerably. But we do have integrated specialty programs, including radiology, epidemiology, clinical pathology, ophthalmology, cardiology and dermatology. Further, there is splendid interdepartmental collaboration in neurology, orthopedics and, with the appointment of Francis A. Kallfelz to the Mark Morris professorship in veterinary clinical nutrition, expanded collaboration in nutrition and comparative gastroenterology. This interaction of specialists within the clinical departments extends also to the pre-clinical departments.

Francis H. Fox, Professor of Medicine, was named Chairman of the Department of Large Animal Medicine, Obstetrics and Surgery. It takes a while to get one’s feet wet in all the nuances of College administration, especially with the ever-increasing demands for detailed fiscal accountability. But Francis is well able to do that, at the same time maintaining his interest and talents in clinical medicine. We all know that he has an enviable reputation for his remarkable ability in physical diagnosis and somehow that must not be submerged in the relentless demands of paper work. In addition to his responsibilities at the College, he was elected Chairman of the Executive Board, American Veterinary Medical Association.

The vacancy created by the retirement of Stephen J. Roberts, who is now a private practitioner in Woodstock, Vermont, will be filled in January, 1974, by Ingemar Settergren, Associate Professor of Obstetrics and Gynecology at the Royal Veterinary College, Stockholm, Sweden. Doctor Settergren spent one year as a visiting professor in our College (1969–70) and was such a popular teacher and colleague that the students awarded him a certificate for his outstanding performance. Work is just about finished on a new obstetrical laboratory, which he helped design and will use. It is located between two of the finger barns in the large animal hospital area.

Several innovative programs have been introduced during the past year. In June, a new 1000 milliampere X-ray unit was installed and now provides the hospital with the newest and safest radiologic facility, we believe, of any veterinary college in the United States. Special recording devices will permit a choice of supportive visual diagnostic and teaching media, including tapes for television and cinematography. A new teaching program, encompassing dynamic radiographic contrast studies, will be instituted for demonstrations of changes in form and function. Further, with a Elema-Schonander rapid film changer, our radiologists, Jack C. Geary and William J. Roenigk, will be able to expand their vascular contrast studies of the head and extremities in large animal patients.

Mary C. Smith and Maarten Drost, Visiting Professor from the University of California, instituted a regular reproductive system examination...
tion program, which is part of a herd health program in a 200 cow dairy herd established in Dryden as part of the teaching and research facility for the College of Agriculture and Life Sciences. This program provides a learning experience in herd health programming for senior students in the ambulatory clinic.

There is so much more to tell you, but we must move on. I would urge you to scan the pages of the Annual Report of the College for a more complete picture of the diversified activities in the pre-clinical and the clinical departments. You will find that our Annual Report has been changed considerably this year. Robert F. Kahrs, Associate Professor of Veterinary Epidemiology, agreed to serve as Editor and is responsible for the excellent document which will be in the mail soon. We would surely like to have your comments about the "new look" in this mandated report; the report for the 1972–73 fiscal year.

SMALL ANIMAL MEDICINE AND SURGERY

Plans for implementing the new record system throughout the clinics were initiated in the Small Animal Clinic and Hospital and now have been completed. This has involved re-equipping the clinic office and record facilities throughout the hospital. All medical forms were redesigned with a view toward subsequent adaptation to the computer facilities previously mentioned. This will make records immediately accessible for comparative study by students and staff without cumbersome searching of pages of accessions in a variety of records throughout the College.

Eric J. Trotter, a graduate of the University of Illinois, completed the requirements for a Master of Science degree at Cornell and became Assistant Professor, Anesthesiology and Small Animal Surgery. His thesis problem dealt with the effect of deep dorsal laminectomy and spinal stabilization by spinal plating on constrictive fibrosis of the spinal cord. The results were most encouraging and we feel particularly pleased that this excellent work was carried out as an advanced degree program in our College.

Robert W. Kirk, Chairman of the Department, has just been elected to the very important Council on Education of the American Veterinary Medical Association. He continues to be a very popular speaker and responded to a wonderful invitation to give 3 three-day short courses in internal medicine in Onderstepoort, Transvaal, South Africa and Nairobi, Kenya.

Not to be outdone by his eloquent Department Chairman, Steve Bistner presented a series of short courses in ophthalmology in Sweden and Finland. Some of our associates travel between continents with the same facility and nonchalance as others who pound the pavement between Day Hall and the eastern end of Tower Road. It would not be surprising to see a trip record indicating breakfast in Ithaca, lunch in Rome and dinner at the Dryden Hotel, same day.
PATHOLOGY

Charles G. Rickard, our tireless peripatetic Professor of Pathology, has been wearing two hats for the past five years. One hat represented the Chairmanship, Department of Pathology, and the other the diocesan miter of Associate Dean for Pre-Clinical Studies. When Kenneth McEntee asked to be relieved of his responsibilities as Associate Dean for Clinical Studies, we decided to reorganize our administrative operations. In this decision, Charles Rickard was redesignated Associate Dean. He was asked to assume responsibility for capital programs and for administrative surveillance over internal College fiscal operations, particularly as they relate to the operational interaction of the several Departments. He is a wonderful team worker, has a logical analytical approach and because of his good judgment and his expressive and convincing manner is highly respected in the faculty, in Day Hall and also in Albany. Further, he is a practical and yet imaginative thinker; a tremendous asset to the College.

With the added College-wide responsibilities in his role as Associate Dean, Charles Rickard soon concluded that he should relinquish his duties as Chairman of the Department of Pathology. Lennart P. Krook was duly nominated and invited to serve for a year as Acting Chairman, to see if he is interested in this assignment for four additional years as Chairman. Lennart is a splendid scientist, with special proficiency in the study of diseases of the musculo-skeletal system. He also has an enviable reputation for the scholarly performance of his graduate students, all of whom hold responsible positions in their professional careers. He is a decisive colleague who does not believe in putting off until tomorrow that which should be done today, and therefore deals forthrightly with matters that require attention. We look forward to his determination and leadership in continuing to build the preeminent reputation of the Department of Pathology. That Department has contributed much to the stature of the College since the time in its history that Peter Olafson served so effectively as its helmsman, and that reputation must be guarded carefully and promoted vigorously.

Funds in the amount of $120,000 to prepare plans for an expanded and new Veterinary Diagnostic Laboratory were provided this year by the Executive Division of Budget, State of New York. A bill endorsing the construction of this laboratory, under the auspices of the New York State Department of Agriculture and Markets, was passed by the Legislature and signed by Governor Nelson A. Rockefeller. It is anticipated that this new Diagnostic Laboratory facility will be built within the Veterinary College complex soon and at a cost of approximately $1.2 million. Sidney R. Nusbaum, Director of the Diagnostic Laboratory, and Charles G. Rickard are primarily responsible for the success of this effort.

As part of the activities of the expanding Diagnostic Laboratory service, an elaborate computer-based research and service program to detect drugs or their metabolites in the blood of race horses, using gas-liquid chromatography and mass spectrometry techniques, was established at the College in collaboration with the harness racing industry of New York
George A. Maylin, Associate Professor of Toxicology, is responsible for the program, which, even in its early stages of development, has achieved an international reputation for excellence.

In the near future we expect to expand the program in the study of diseases of the horse, including equine infectious anemia, respiratory and gastrointestinal diseases, bone and joint disease, and the effects of stimulant and depressant drugs, by developing a research facility on a tract of land on the Warren farm, near the campus. The facility will include an isolation unit for rearing specific pathogen-free foals, a harness track and a flat track and an enclosed equine ergometer for controlled studies on horses in motion.

You might like to know that in various experiments carried out by Charles Rickard, John Post, Fernando Noronha and Ellsworth Dougherty in the leukemia studies program during this past year, it has become apparent that cats have an endogenous leukemia virus which is inherent in the genetic composition of the cell, presumably coded by deoxyribonucleic acid. It is usually repressed and therefore not demonstrable. It has appeared spontaneously in placental tissues, in some long-term feline tissue cultures, and especially in tissue cultures stimulated by 5-iododeoxyuridine, a derepressor of viral repressor genes which ordinarily prevent the release of endogenous virus. The endogenous virus is not very infective for other cat cells but readily infects many human, dog or cow cells in tissue culture. Transmission among cats appears to be vertical.

The other kind of feline leukemia virus is the previously known exogenous virus. It is readily infectious for cat, human, dog, pig and monkey tissue cultures. During the past year evidence has accumulated to indicate that this virus is readily contagious by horizontal transmission among young and adolescent cats, and possibly adults. The endogenous and exogenous feline leukemia viruses share a group-specific interspecies C-type viral antigen common to the mouse, monkey and cat. And they can be distinguished serologically by two different species antigens of the cat. The mystery is unravelling slowly but methodically. Work such as this provides the opening wedge in resolving the perplexing questions about slow virus infections and the enigma of neoplastic diseases, particularly the malignant tumors.

LIBRARY

The Flower Veterinary Library collection now numbers almost 57,000 volumes. Periodicals and annuals numbered 1200. Our accessions increased during the past year by approximately 2000 volumes. With stack space limited to 60,000 volumes, we anticipate reaching the saturation point before the end of 1976. Currently we are storing some of our holdings that have historical value or just occasional reader demand in Olin and Mann Libraries. But those libraries are expanding too. Storage space is becoming alarmingly critical. There are several options that must be
weighed cautiously. Microphotography of part of the collection, so that seldom-used historical books and journals may be discarded, could resolve part of the storage space dilemma. But there are practical problems in usability of microfilm which make it preferable that we find ways of expanding the storage facilities if possible. Somehow the handling of a book and the manual manipulation of its pages is more conducive to the learning process than examining the same pages on film by peering through the magnifying system of microfilm readers.

EMERITI

You can see from the photographs of our distinguished emeriti that they are robust examples of vim, vitality and vigor. Maybe a little vinegar and spice too. During the past year we had testimonial celebrations at the College given for Hugh Dukes in the spring by his former graduate students and admirers and for Peter Olafson in the fall by members of the Olafson fans, an equally enthusiastic tribe of supporters. Mike and Evelyn Fincher had some glorious months on a horse breeding farm in Italy, where Mike served as a consultant, so you can see that he, too, still has the Master’s touch.

Phil Levine provided some anxious moments in a battle with a nest of gallstones early last summer but he survived an uncomfortable plane flight from Mexico to New York City where his problem was diagnosed and corrected surgically. His recovery was splendid, and on August 24, he was married to a college classmate, Yolanda Clapp, Cornell ’32. After a honeymoon in Europe, they traveled to Mexico City where Phil is engaged in avian disease studies at the Veterinary School, University of Mexico. He has been instrumental in establishing their first graduate program there.

Hadley Stephenson is still the senior ambassador for the Veterinary Virus Research Institute and, in traditional style, was pouring coffee and extolling the virtues of the new building at the Southern Tier Veterinary Medical Society meeting held at the College in recent weeks.

Donald Baker and his wife, Ruth, are on a new venture. They are building a home in Mexico (not New Mexico, but really Mexico) and are very excited about that. Donald was Peter Olafson’s first graduate student, so he flew in from Albuquerque, New Mexico, for the festivities honoring our great pathologist last August.

Dorsey and Bea Bruner had a marvelous trip around the world and particularly enjoyed the Orient. Dorsey is quite ecstatic about retirement and is so busy that we can hardly find him when we need him.

Steve Roberts is a busy practitioner but he still finds time to attend to University affairs in which he has an important role. A new riding hall was constructed this year on the site of the old building. It is a most impressive facility and Steve had much to do with that. He played a bit of polo here recently too. Beejay has had a long bout with polyradiculoneuritis, which hospitalized her for weeks, but she is regaining her abil-
Our Emeriti

Donald W. Baker

Dorsey W. Bruner

A. Gordon Danks

H. Hugh Dukes

Myron G. Fincher
ities to move around and we are all delighted to report her splendid progress. Her remarkably sunny disposition is an inspiration to everyone.

Gordon Danks has been actively engaged in veterinary medical affairs by serving as President of the New York State Veterinary Medical Society during this past year. And he flies in and out of Chicago like the proverbial swallows, participating as a Board member in matters relating to AVMA insurance programs. Somehow or other Peter Olafson talked Gordon into boarding his ram, and now the Olafsons do not have to listen to the old ram’s blatting. It is quite a circus to hear about the trade-offs that our two shepherds manage between their respective sheep operations.

Ellis Leonard has a variety of activities. The talented hands which were involved in surgical procedures for so many years are now busily engaged in woodworking. He has some fine woodworking equipment and, among other objects of craftsmanship, he turns out very popular nursery-rhyme figures in jig-saw puzzles for young children.

Herbert Gilman is still enamored by Florida. By this time he probably owns Hialeah but even if he does not own the place, we are sure he is a familiar figure at the track.

NECROLOGY

Word of the deaths of the following alumni reached us during the year:

Osman Babson ’34, Gloucester, Massachusetts
Arthur C. Davidson ’26, Horseheads, New York
Ward H. Dwight ’29, Chazy, New York
Burt English ’02, San Antonio, Texas
Richard A. Fish ’43, Duanesburg, New York
Earl W. Fitch ’09, Eureka, Kansas
Vernon C. Fobian ’41, Saratoga Springs, New York
Howard K. Fuller ’32, Interlaken, New York
Hyman W. Gardner ’18, New York, New York
Lyman L. Hoy ’39, Syracuse, New York
Frank McBride ’22, Tonawanda, New York
Douglas M. Overacker ’31, Antwerp, New York
Henry Polansky ’41, Lancaster, Massachusetts
William G. Robens ’23, Poland, New York
Marshall Fiske Wilkinson ’18, Clinton, New York
Edward L. Wilson ’12, Ridgewood, New Jersey

It is also our sad responsibility to report to you the death of Esther Lyons Hagan, widow of our distinguished colleague and former Dean of the Veterinary College, William Arthur Hagan, who died on February 1, 1963. On February 26, 1973, she and Mrs. Howard B. Meek, widow of the late Dean of the School of Hotel Administration, were killed in an automobile accident just northwest of the campus. Esther is survived by a daughter, Peggy, and son, Bill.
As we examine this list of names of our colleagues who are now part of the silent pages of history, we might pause for a moment in the thrum of life to pay tribute to those qualities which each possessed, even perhaps unknown to us, that most likely have had moving impact upon the lives of others. I have often wondered if Johann Sebastian Bach, who is acclaimed as the greatest of all Baroque composers, would have been able to fulfill his extraordinary creative ability without the influence of his contemporary composer, Antonio Vivaldi. Bach used Vivaldi as a model for study and transcriptions. Known as the "Red Priest" because of his red hair, Vivaldi suffered from angina and gave up his priestly duties after an attack caused him to leave the altar during Mass. He then spent most of his life as a composing musician at the Pietà, a girls' foundling home turned music school. Also, he was an itinerant conductor. He and his compositions remained obscure for a century, until, in the "discovery" of Bach in the 19th century, someone wondered if Bach had been inspired by any other contemporary or earlier musician. That led to the discovery of Vivaldi.

And then there was Abraham Lincoln's mentor, Jack Kelso. Lincoln's name is immortal, but who was Jack Kelso? Well, he was a "loner"; unconventional, unkempt and unambitious. Most people in New Salem during Lincoln's life there considered Kelso to be an irresponsible dreamer; a shiftless maverick who devoted much more time to thinking than he did to the support of his household. But he was Lincoln's friend. Lincoln was attracted to him by the provocative wisdom in his attitude toward a search for truth through logical reasoning. Perhaps the honesty in the personal qualities of "Honest Abe" Lincoln was made to glow by the same quality in the undiscovered personality of Jack Kelso.

Bach and Lincoln are giants in history whose figures reach clearly above the clouds of time perhaps because they stand in part on the backs of Vivaldi and Kelso.

The impact of a single personality upon the life of another is so often taken for granted. Consider for a moment that unknown Babylonian who conceived the sexagesimal base which we still retain in our angle measurements of degrees, minutes and seconds, and in our sixty minute subdivision of the hour. Have you ever wondered who he or she might have been?

I mention this because each year in recording those deaths of wonderful Cornellians, I wish we could immortalize their contributions to the benefit of mankind. What a marvelous record that would be! But even more important, how wonderful it would be if we could recognize the genius in each of our colleagues; in each life that touches ours.

AVE ET VALE

Much of what we are in later years reflects the imprint of impressions and experiences of childhood. To some of us, the excitement of the olympic foot races, with agile young athletes running at top speed to the limit of their endurance never diminishes, despite the accumulation of years. Especially vivid is the mental image of that critical moment in time when
a fresh runner in the relay grasps the torch from the racer in his final moment of thrust, and sprints on until he too hands the torch to still another. In that coordinated dash to achieve the victor’s prize, a crown of wild olive leaves, timing in the release and grasp of the torch by the two runners is critical. It must be done before the carrier falters and the cadence of the footbeats must be synchronized to maintain top speed during the interchange. Do your memories feel the same pulsations of excitement as mine in recalling the splendor in such races?

Well, there is quite a similarity between these ancient olympian relay races and the administration of a dynamic center of academic excellence like our Veterinary College. It is important that the chief administrative officer pass the torch to a fresh sprinter at the proper time, in full cadence, and without losing velocity. The crown of wild olive leaves in that race must be worn by the institution; not any single racer.

After fifteen years as Dean of the Veterinary College, I find the track a bit less resilient and with somewhat of an acclivitous grade instead of being flat. Also, the buffeting winds are slowing the cadence. It is time to transfer the torch to a fresh sprinter.

In July, President Dale R. Corson, Provost Robert A. Plane and I examined the crystal ball of the future together and we reached unanimous agreement that I should take on a new and exciting responsibility, while at the same time relinquishing my position as Dean. The President has been anxious to build an interprofessional alliance between Cornell’s Veterinary College and its Medical College, particularly in a planned program in comparative medicine. I feel especially fascinated by the collaborative opportunities in such an alliance. With great interest in this program, the President has proposed that I be promoted to a distinguished professorship to be known as the James Law Professorship in Comparative Medicine. This professorship includes supportive staff and an operating budget. Also, I have been offered a professorial appointment in the Cornell University Medical College. This joint appointment should facilitate a splendid collaborative interaction in which I trust there will be enthusiastic faculty participation. Let me assure you that it is not the intent that this new intercollegiate thrust in comparative medicine overpower our other responsibilities. We need only remember that research is not an arcane mystery but simply a disciplined approach to acquisition of knowledge. Our job is to develop it, test it and teach that which meets the test, in all aspects of the professional life of the College.

We recognize, of course, that we must maintain a proper balance between our responsibilities in public health and in the control of diseases of food-producing animals. And we have a large pet population to which the veterinary profession must minister, an important role in laboratory animal medicine, and more recently new opportunities in aquatic animal health. Our faculty is well aware of all those responsibilities and opportunities, and is anxious to deal with them properly. Our progress depends upon how well we respond when new opportunity taps us on the shoulder.

By the time this message reaches you, a search committee will have
been appointed for the new Dean. I will remain as Dean until July 1, 1974, or until a successor can be appointed as soon thereafter as possible.

In the silent steady march of time, some Deans reach retirement age in their positions and the hour comes when they must say farewell. But it is my good fortune to change course without saying farewell, even though this letter will be my last as Dean. *Ave et Vale!*

**POSTLUDE**

Recently a commentary on the *plimsoll line* of a cargo ship attracted my attention. That line is a marking on the hull. If a ship is loaded so that the plimsoll line is submerged, the vessel is considered unseaworthy. It may sink in rough weather and it certainly will prove unmaneuverable.

Sometimes we overload our personal *ships o' state* with splendid New Years resolutions. If you must discard a few to keep the plimsoll line from dipping below the water line, we hope you will retain that most important one which promises that you will return to the Cornell campus for a visit in the year ahead.

As we draft the last pages of the record for 1973 and look with confident expectancy to the opportunities and challenges of 1974, I would close my final Christmas letter to you with some words which you have all heard before but which have never lost their warm glow of happiness, hope and reassurance. They are found in the *Old Testament*, in the Book of Numbers:

"The Lord bless thee, and keep thee:
The Lord make His face shine upon thee, and be gracious unto thee:
The Lord lift up His countenance upon thee,
And give thee peace."

Sincerely,

George C. Poppensiek, Dean
"Nothing is finished . . ."
EZRA CORNELL