



Anbetung der Hirten  
Adoration of the Shepherds

Gerhardt van Honthorst  
1590-1656

**NEW YORK STATE VETERINARY COLLEGE**

*A Statutory College of the State University*

at

**CORNELL UNIVERSITY**

**ITHACA, N.Y.**

**Christmas, 1971**

**Dear Cornellian,**

His name has drifted into the mist of time, and even the image of his face is blurred by the caravan of years which have passed. But the sincerity and enthusiasm in his voice as he spoke about *Christmas* are unforgettable experiences. You know how it is when a radiant smile on a strong face can make words smile too. Well, so it was with him when he reflected on the mixing of observances.

He spoke about the decorating of conifers, a custom that reaches back into antiquity; really a part of ancient pagan ritual. And yet that has been transformed to represent a symbol of eternity; indeed, a symbol of hope. Unlike the deciduous trees, the conifers seem to represent everlasting life, for their leaves are ever green. He spoke of the carols which really began as folk dances, without any special religious significance whatsoever. But they too have become transformed to represent the spirit of happiness that quickens the feeling of brotherhood at Christmastime. And the gifts, outward expressions of inner feelings that usually cannot really be put into words, remind us of the Magi and a child in a manger, and what the spirit of giving really means.

He spoke of the unchartered, inexplicable divine capacity in all men; a capacity that is unborn; a capacity which seems to be locked up in overlapping ages of materialistic patterns in ethnic behavior; yet a capacity which at Christmastime seems to be released and utilized and experienced. So Christmas is a time for reflection about something glorious within us boxed away from the mainstream of life. It is a time for humility; for awareness that we must be our brothers' keepers. What if we should find that in the keeping of our brother we experience the miracle of self-renewal? What an architecture on which to build! And for the construction of the experience of Christmas, we look with gratitude to a Carpenter of Galilee.

Paraphrasing the words of Margaret Cousins, who paraphrased the words of that Carpenter of Galilee, "Let us build attention. *Listen*. Maybe we can restore or reassure someone's wavering self-esteem.

"Let us build confidence; *believe* in someone. Confidence assures encouragement. And what are the limits of possibility with just one ounce of encouragement? Build *enthusiasm*! Care enough to express your caring with enthusiasm. It is contagious excitement. It is approval polished to a shiny brilliance. Build *kindness*. Show compassion by trying to ameliorate the dismays of others. Perhaps our own dismays will disappear in that determination to lift one less fortunate. Build *recognition*. Sincere praise is a gift for which there is unassuaged hunger in all people. And let us build *understanding*, for it is the fountainhead of all structure. To be able to build it we must have acquired it."

And that is what Christmas is all about. *Merry Christmas!*

This year, as we stroll through the College together on the feet of our imaginations, you will not meet every member of the staff, as we have tried to make possible in past years. Instead, we will hit highlights and developments which might provide diverse examples of the breadth and scope of interest and talent. The staff has grown so large and the story of the multifaceted operations so great that it just cannot be fully contained in one message. So, once again we hope you will grasp the spirit of vitality which still characterizes your Alma Mater and then will make firm plans to visit this grand old campus.

We will move through the corridors first, visiting each Department briefly. Then we will spend a few moments on curriculum, preparation to increase our class size, the Earl Walls' study, and something about our concerns. Also

there are new actions in admissions and a report on our stalwart cadre of emeriti.

## ANATOMY

Our anatomists devote most of their time to teaching and to the preparation of books and manuals that are so essential to the learning process. In addition we have an impressive thrust in neurology in that Department which I would like to illustrate.

The term *abiotrophy* is a generic term applied to hereditary degenerative diseases. As one example of the collaborative interaction between Departments in the College, Alexander de Lahunta, who is Associate Professor of Anatomy and John F. Cummings, also Associate Professor of Anatomy, have strong interests in neurological diseases. They consult regularly with members of the clinical departments on such cases. For example, they are following a progressive neuronal abiotrophy seen in Kerry Blue terriers by electron microscopic and histochemical procedures. They continue to be interested in the polyradiculoneuritis which is called "Coon-Hound paralysis," occurring in hunting dogs bitten by raccoons. This disease, as you will recall, is similar to the Guillain-Barré syndrome in man, an infectious polyradiculoneuritis of unknown etiology. And they are on the trail of a hereditary neuronal abiotrophy in Swedish Lapland dogs, wherein motor and sensory neurons undergo degeneration in the first five to seven weeks of life. The disease is comparable to the neuronal abiotrophies in man which included the spinal muscular atrophies and hereditary ataxias.

The existence of *retinohypothalamic projections* has been greatly debated. Many workers have searched for such fibers in the brain (from the retina to the hypothalamus) to explain photic influence on endocrine functions, including the mating impulses and the production of eggs, particularly in chickens. A study was carried out by John Cummings in collaboration with Ari van Tienhoven of the College of Agriculture and H. J. Kurten of the Massachusetts Institute of Technology. Nerve fiber degeneration was noted near the ventrolateral border of the hypothalamus following unilateral enucleation of the eye in chickens. The findings confirm the early observations of Kurten in the pigeon. It appears, therefore, that there is confirmed evidence of a photic influence on endocrine function, mediated by retinohypothalamic projections.

Distinctive recognition still comes to the outstanding scholars in the College. Robert E. Habel was elected President of the World Association of Veterinary Anatomists and Howard E. Evans serves as its Secretary. Wolf Sack was awarded the degree of *Dr.med.vet.* from the University of Munich where he spent a sabbatical year.

## PHYSIOLOGY

If one were to underline the highlights of strength and preeminence in the Department of Physiology, Biochemistry and Pharmacology, it would become apparent immediately that a strong departmental thrust is in gastroenterology. This, of course, includes cross-departmental and cross-collegiate collaboration, and covers monogastric and polygastric animals. C. Edward



*"When the sun fades far away, in the crimson of the west,  
And the voices of the day murmur low and sink to rest,  
Music with the twilight falls; o'er the dreaming lake and dell,  
'Tis an echo from the wall of our own, our fair Cornell"*

Stevens was recognized for his scholarly accomplishments by election to the American Gastroenterological Association.

Blood flow and membrane transport are systems which must be monitored with controlled precision, so our colleagues in this Department must be good biochemists, physical chemists, physiologists, biophysicists, engineers, surgeons, animal behaviorists and quite rugged acrobats (to handle some of the species they elect to study, including alpacas).

Bill Arion has been launching out on an interesting tack to explain the dramatic increase of liver glucose 6-phosphatase seen in diabetes. This enzyme is intimately associated with the endoplasmic reticulum in the liver cells; structures which are best known to most of us as microsomes. Anyway, he is hoping to uncover the elusive cause of this dramatic increase in the outpouring of that enzyme.

And Arthur Aronson has made an extremely interesting finding in his continued studies with chelating agents, drugs which promote the urinary excretion of toxic metals (as reported last year). He found that *collagen* is degraded at an accelerated rate during the use of (now brace yourself for this one) ethylenediaminetetraacetate. Well, you have seen that compound mentioned in previous Christmas letters. It is Art Aronson's old friend. Anyway, it is the chelating agent that must be used at near-toxic levels to displace heavy metals from the body. If he can elucidate the mechanism by which collagen degradation occurs, he may also shed light on the pathogenesis or therapeutic management of some of the perplexing connective tissue diseases. These, of course, include those of the vascular tree, skin and articular tissues. You will remember that collagen is the principle tension-resistant component of cartilage and you are probably way ahead of these words in wondering what his studies will mean to an understanding of rheumatoid arthritis, some of the collagen-associated chronic skin diseases, and other connective tissue maladies. What potential in his observations!

Well, it would be good to tell you a bit about the work of every one of our colleagues here, including John Wootton's establishing the nature of the alkaline Bohr effect. This is concerned with the uptake of hydrogen ions when oxygen is removed from hemoglobin in a process that permits the transport of carbon dioxide to the lungs *without drastic alteration in the blood pH*. But I must shorten the Christmas letter this year and we will have to invite you to read the Annual Report of the College and the full publications in the scientific literature, for the details.

## PHYSICAL BIOLOGY

This Department serves as a bridge between the interests of veterinary medicine, agriculture and medicine in studying the impact of radionuclides on man and his environment. Every once in a while I get the feeling that the broad implications of the sphere of science in which the staff is working seem to pull the objectives a bit tangential to those of veterinary medicine. But when one examines a number of the studies, it becomes apparent that there are extremely important medically-oriented projects under study.

For example, ferric ferrocyanide (Prussian Blue) has been shown to reduce radioactive cesium in cow's milk and retention by hogs and sheep by

90-99 percent. And sodium alginate was found to be moderately effective in reducing retention of radioactive strontium in these same species. Current efforts include the investigation of the use of an isotope exchange resin against radioiodine uptake by livestock.

Further, agents such as aminopropylaminoethylthiophosphate (WR-2721 for short) have subtle radioprotective capacity, detectable by behavioral patterns in conditioned animals.

So, should there be a problem of nuclear fission product contamination, it is reassuring to know that our colleagues in this Veterinary College have developed some means to deal with the matter. And it is important to tell you that the staff of the Department is highly regarded in national and international scientific circles. Cyril L. Comar was invited to serve on a panel appointed by Secretary of State William P. Rogers to reexamine the relationships of the International Atomic Energy Agency.

There is still preeminent work under way in the study of the calcium binding protein and the vitamin-D-mediated calcium absorption mechanism. With Bob Wasserman and his colleagues studying calcium absorption, Lenart Krook studying calcium metabolism and bone diseases, and Howard Evans studying bone and tooth neogenesis, you can see the professional interaction that the College environment provides. Bob Wasserman was invited to give the opening lecture of the session on Calcium Transport in Biological Systems, Eighth European Symposium on Calcified Tissues, Jerusalem, last March. Three of our universities have sought him out as a nominee for Department Chairman. He declined all three inquiries, and we feel great about that.

## MICROBIOLOGY

If one were to scan the talent representing microbiology, it would not be difficult to see that our College has considerable strength in that discipline. Our bacteriologists are fewer in number than our virologists, but they are men and women of quality, indeed not working in a vacuum. Bacteriologists, virologists, immunologists, immunochemists, epidemiologists, serologists and cytobiologists are all members of the team, with Dorsey W. Bruner as fearless leader. And speaking of Dorsey, he plans to retire next year and we will surely lose another Cornell great when he joins that esoteric group of world wanderers, our emeriti.

The departmental staff is concerned with the full spectrum of microbes, including the enteric bacteria, the identification and classification of feline viruses, infectious causes of infertility, degenerative and neoplastic diseases of the haemopoietic system; infectious diseases of the dog, fishes, horses and cattle. I would imagine that you will agree that we have one of the strongest centers for infectious diseases in any veterinary college existent today. Were it not for the traditional process by which staff members have to generate most of their own research support, we could do even more. Perhaps that day will come. At least we look forward to the time of euphoria when we will have enough knowledgeable supportive personnel to relieve the scientists of the onerous tasks of writing requests, justifications and re-

ports. Competition keeps the cutting edge keen, but it has been known for a long time that sharp knives are ultimately dulled by paper.

Jim Gillespie was presented with the American Animal Hospital Association *Merit Award* this year for his contributions to canine and feline virology. And, the American Veterinary Medical Association recognized him in the same year by giving him the *Gaines Award*. Two awards like that would make some people's heads swell, but not Jim. He is still the same gracious competent colleague who inspires confidence and wins a friend in everyone he meets. He was palpated for the Deanship at Kansas and Purdue too, and we had cyanotic dyspnea while he was thinking about those fine sister institutions. Fortunately for us, he likes the magnificent Gillespie woodland home in Ithaca!

The Gordon Campbells have three robust and rugged boys who will probably out-skirl their dad on the pipes before long. They all agreed that it would be nice to have a sister in the home. But as far as we know there is only one sure way of getting a sister, and that is to find one who likes Campbells. And that they did. So Kirsty, at 14 months of age, has taken over the chair of authority in the Campbell clan.

If you are as anxious for progress reports as I am about the studies which Catherine Fabricant and Jim Gillespie are continuing on feline urolithiasis, I do have one for you. They now have two viruses which they have isolated and which will induce intracytoplasmic crystal formation in feline kidney and bladder cell cultures. Somehow feline urolithiasis is associated with crystal-inducing viruses. One is a syncytium-forming virus and the other an adenovirus. Well—time to shift gears and peer in on the Department of Avian Diseases.

## AVIAN DISEASES

With Steve Hitchner working on infectious bronchitis, Bruce Calnek on Marek's Disease and Julius Fabricant on his elusive mycoplasmas, one might be convinced that all efforts in the Department of Avian Diseases relate to infrabacterial disease. Well, that is nearly true, but Phil Levine (who is now on leave in Israel) never lost his enthusiasm for the coccidia, so we do have diversity in the problem-solving research projects in Avian Diseases.

When one considers the extent and impact of Bruce Calnek's work on avian lymphomatosis (Marek's Disease) and the extent and impact of the program in feline leukemia and sarcoma studies under Charles Rickard's able direction, you can see that we have a major effort in progress at the College studying *neoplastic diseases* of the hemopoietic system.

During the year Mal Peckham has uncovered another very interesting disease. Mal has quite a few of these unusual cases to his credit. He is an excellent diagnostician. I would like to review this one with you. He identified a disease in pigeons as "temporary tumor disease." It is characterized by single or multiple firm, reddish nodules which enlarge rapidly on the feathered portions of the skin. Early lesions are highly vascular and bleed profusely upon incision. Old lesions, on the other hand, are large, black, pedunculated masses about 10–25 centimeters in diameter. The lesions persist for 3–4 weeks and then drop off. Affected birds show no ill effects and mor-



The White Art Museum

formerly President's Home

tality never occurs. The disease is caused by a virus which has some relationship to pigeon pox virus. The pox viruses in birds do have a tendency to cause hyperplasia of affected tissue, but not to this extent. Anyway, perhaps an understanding of the control mechanisms in this *regressive hyperplasia* may shed some light on the process of *non-regressive neoplasia*.

During this past year we have had serious budgetary problems due to financial reverses in the State of New York. As part of a large cut in the appropriation for the operating budget, it was necessary to close the regional poultry laboratories at East Aurora and Oneonta and the regional mastitis control laboratories in East Aurora and Amsterdam. These are laboratories which served the poultrymen and dairymen in those regions for more than two decades. It was a painful experience for us to be forced to take this action, but there was no other option that would be less painful and less damaging to the responsibilities of the College. These laboratories were selected because they had the lightest workloads.

## PATHOLOGY

Each time that one hears our pathologists review the findings in a particular necropsy it is soon apparent that the influence of a great practical scholar, a great thinker, a great pathologist, is still strong at Cornell. There is a unique approach to an understanding of structural and functional interactions which characterize the Olafson scholars, and which, of course, characterize him. Even those from other training soon fit the pattern, if their training had been different. This, of course, is my personal observation, perhaps strongly biased, but if so, there are no apologies offered. It is an exhilarating feeling to be part of a group that asks *why* for every lesion. And it is reassuring to have that approach to pathology undergirded by an outstanding pathologist who was a disciple of Peter Olafson, Associate Dean Charles G. Rickard.

In a way, our pathologists *must* be inquisitive scholars because their colleagues, the clinicians, also want to know *what* happened and *why* and *how*. And with each incoming class of students being just a bit better educated than the class which preceded them, the teacher must be on his toes every minute. So we live in a time of challenge and there seems to be a spirit of open inquiry in the laboratories, hospital and clinics which keeps our College a dynamic institution.

Were one to ask us to point out the primary areas of study in pathology today we would have to point to oncologic virology and immunopathology (as it relates to oncology and diseases of the haemopoietic system). Also there is still great interest in autoimmune disease, especially as it relates to insidious reproductive tract maladies. We do not want to overlook the keen abilities of John King, Tom Pulley, Al Britt and Peter Craig in diagnostic pathology either, for they are the primary trainers of our veterinary students.

Reproductive pathology is still part of Kenneth McEntee's academic interest. Lennart Krook's studies in periodontal disease are still classical, and he is also working in other nutritional deficiency diseases. Charles Rickard's extensive program in the study of feline leukemia and feline sarcoma, sup-

ported by a fine group of competent colleagues, is outstanding. Sometimes when I think about the demands that we impose upon Charlie Rickard's time and the tremendous amount of effort that he gives to anything asked of him, I feel that we should award him the J.F.T. degree. In Latin it reads *Johannes fac totum*; in English, Johnny-do-everything. We are grateful indeed for his talents, judgment and gracious disposition.

James N. Shively was appointed Associate Professor of Pathology. He is developing a teaching and research program in the electron microscopy of animal diseases. He offered a graduate course in ultrastructural pathology for the first time in the fall term, 1971, and will contribute to the regular veterinary courses in General Pathology.

L. Thomas Pulley, who came eastward all the way from California, was appointed Assistant Professor of Pathology. He is responsible for the examination of histopathological specimens submitted through the Diagnostic Laboratory, and is involved in departmental teaching and research.

The equine infectious anemia program was expanded into a *Research Laboratory for Equine Infectious Diseases*, with Leroy Coggins as Director. Epidemiologist Matthew J. Kemen and immunopathologist Bruce N. Wilkie were added to the staff during this past year. The laboratory has initiated a program in the study of equine respiratory infections. Roy Coggins was given a *Meritorious Achievement Award* by the New York State Harness Racing Commission, and was named *Man of the Year* by the Harness Horse Breeders of New York State for his development of the very effective laboratory diagnostic test for equine infectious anemia.

Increased support by the New York State Department of Agriculture and Markets permitted the Diagnostic Laboratory, with Sidney R. Nusbaum as Director, to enlarge its staff and facilities. Alfred L. Britt, Beverly A. Coote and Robert W. Dellers filled the newly created positions of pathologist, serologist and virologist respectively.

An agreement was concluded with the New York State Council of Harness Tracks to conduct a two-phase equine drug research and testing program. The program will consist of basic investigations in drug action and in detection methods in horses, and the application of these methods to testing at race tracks. This is to insure that the racing performance of horses has not been influenced by the administration of drugs. George A. Maylin has been appointed as a veterinary toxicologist in the research program, and it functions as a unit of the Diagnostic Laboratory.

Preliminary plans have been formulated to establish a graduate training program in fish pathology. This is being done by Clyde I. Boyer, Jr., Professor of Laboratory Animal Medicine, in cooperation with Kenneth Wolf at the Eastern Fish Disease Laboratory, Department of the Interior, Leetown, West Virginia. Federal funds were also sought for an expanded program of instruction for veterinary students in laboratory animal medicine.

John H. Whitlock was elected Speaker of the Cornell University Faculty Council of Representatives and of the University Faculty. He spends a great deal of effort in University affairs and serves also as a member of the Board of Trustees. Even with all of that he is able to keep his teaching and research in parasitology up-to-date and active.

In this year, a larger number of the faculty were engaged in teaching fourth-year veterinary students in small seminar groups. Doctors Krook, Boyer, Nusbaum, Britt, Post, Coggins, King, Pulley, Shively, Brown and Wilkie held regular discussion sessions once or twice a week for more detailed instruction in various aspects of pathology and animal disease diagnosis. The fourth-year class was divided into sections which rotated among these discussion groups so that all members of the class benefitted from the material presented.

We regret to report to you that Walter J. Sickles '50, who served as a senior research associate in the Department of Pathology, died on October 23. During his pre-veterinary years, he was a reserve back in the 1938-40 football team at Cornell and starred as a baseball pitcher for Cornell when it shared the Eastern Intercollegiate League title in 1939 and won it outright in 1940. He also pitched for the Baltimore Orioles of the old International League. He practiced in McLean and Windsor until 1968, when he joined our staff.

### LARGE ANIMAL MEDICINE, OBSTETRICS AND SURGERY

It seems only fitting and proper to introduce the section on Clinical Studies by reporting to you that Kenneth McEntee, Associate Dean for Clinical Studies, was awarded the distinguished *Borden Award* by the American Veterinary Association for his outstanding contributions in research on diseases of dairy cattle. And having introduced the section and him in this way, let me add the next several paragraphs in his words, slightly changed to fit my style of reporting to you.

"Dr. Gustaf Bjorck, formerly Associate Professor of Surgery at the Royal Veterinary College in Stockholm, Sweden completed the second year of his two-year appointment as Visiting Professor of Veterinary Surgery. He has made significant contributions to the undergraduate and graduate teaching program in large animal surgery and medicine. Doctor Bjorck's presence together with that of Assistant Professor Robert H. Whitlock greatly strengthened the service and instruction in internal medicine in the Large Animal Hospital Clinic and for the first time sufficient cases and study material were developed for adequate coverage of clinical internal medicine in the teaching program.

"At the Honor Day Exercises for the Veterinary College on May 11, 1971, the graduating class honored seven faculty members by designating them as outstanding teachers. In the group, the Department of Large Animal Medicine, Obstetrics and Surgery was well represented by Gustaf Bjorck, Ingemar Settergren, Francis H. Fox and Robert F. Kahrs. The other three were Alexander deLahunta of Anatomy, Arthur L. Aronson of Physiology and George E. Ross, Jr. of Small Animal Medicine and Surgery. The dedication of these professors to their responsibility in undergraduate instruction merits special attention and appreciation.

"The Nordel synthetic-rubber flooring for the breezeway, surgery, treatment rooms, radiology room and finger barns was installed in the late summer and fall of last year and is proving to be excellent. This has made a great difference in the safety and comfort of the animal patients. Vehicular

traffic through the breezeway excluding emergencies was also discontinued. The combined effect of this policy and the Nordel rubber flooring in the breezeway has greatly improved the cleanliness, sanitation and orderliness in the Large Animal Hospital. It has significantly reduced the time and cost of maintenance.

"A new pharmacy was constructed by renovation of storage space. It is staffed continuously during the day (7:00 a.m. to 6:00 p.m.) by Mr. Paul Seland or Mr. Luther Bayley, pharmacy superintendent and assistant, respectively. New partitioning, shelves and cabinets, centralization of stock, and the continuous service of a pharmacy attendant has greatly improved control of stock, sterilization techniques and maintenance of standard instrument packs.

"Gustaf Bjorck and Robert Kahrs developed a set of recommendations for sanitation and disease control in the large animal hospital. These plans were developed through inquiries about similar programs currently favored or in use by other large animal veterinary hospitals in the United States and Canada. Implementation of some of these procedures has already been accomplished.

"Initial plans were developed for a communicable disease isolation facility for the large animal hospital. This is another pressing need, emphasized by the increasing population of farm animals, especially horses, in New York State and the great traffic in animal which predisposes to greater spread of communicable diseases. The protection of the health of hospitalized patients is jeopardized by the lack of these facilities. Q-barn, previously used to house bulls for the Veterinary College, is now being used to provide three stalls, somewhat isolated from the hospital, to house patients suspected or known to have communicable diseases. This is only a temporary relief measure and not a permanent or satisfactory solution.

"Careful study has been initiated on a complete revision of the clinics' medical record systems. This is being done in cooperation with the Small Animal Hospital and the Business Office. A number of human and veterinary hospital record systems have been reviewed and some ideas formulated. Some changes have been made, including a new improved daily log book for registration of new patients, improvements of the records desk in the treatment room, revisions of daily treatment records, treatment order sheets, surgery record forms, and operating room schedules.

"In preparation for the current academic year a *Schedule and Instruction Manual* was developed for the students. This is a collection of information essential for all students assigned to the clinics for the first time. It is designed to facilitate and standardize orientation of the students in the clinics. This is a joint venture by Large and Small Animal Clinics and the Ancillary Services.

"J. Thomas Vaughan established liaison with the College of Engineering to initiate joint projects in bioengineering. Five study proposals have been submitted and one has been accepted at this time. It relates to the fabrication of a prototype large animal operating table of intermediate specifications, as required for the student surgery laboratory.

"Robert H. Whitlock assumed responsibility for reporting adverse drug reactions in clinic patients to the Federal Food and Drug Administration.



“Reared against the arch of heaven, looks she proudly down.”

Fred B. McCashin attended an orthopedic course on compression osteosynthesis in Davos, Switzerland, in January.

"Jack C. Geary was elected President of the American College of Veterinary Radiology. He is also an examiner for the American Board (College) of Veterinary Radiology and a member of the AVMA Second Panel on Canine Hip Dysplasia.

"Detailed plans and specifications for a sterile large animal surgical suite and a student surgery laboratory, started last year, have been refined. The design has been improved, borrowing ideas from a number of veterinary hospitals in the United States and Europe. These plans have been accepted in their preliminary form by Cornell University and by the State University of New York. Further development is delayed by budget restrictions.

"This year three of the ambulatory clinicians, Robert B. Hillman, Allen D. McCauley and John R. Woodworth, continued to enlarge the clinic's *dairy herd health program* so that 25 herds consisting of approximately 1800 head of adult cattle were served by this programmed approach to herd health. This included monthly or semimonthly scheduled visits. During these visits reproductive, mastitis and nutritional problems were handled. Multiple calfhooed vaccinations and other procedures were carried out through collaborative plans developed with the herd owners. Students with interests along these lines were provided ample opportunity to gain first hand experience in this type of program.

"The addition of another intern to our Ambulatory staff allowed each clinician one regular day off each week. This was provided so that each colleague could improve his knowledge in whatever areas he chose. Some did extra work with Charles Hall in reproductive problems; some utilized the library; some consulted with other clinicians; some carried out research activities in specific problem areas, and one, Robert B. Hillman, frequently utilized the time to prepare his lectures for his course in medicine. It is hoped that we can continue this program with slight alterations. It provided necessary time for the self-improvement of the intern or professor. Also, it improved the overall performance in the teaching duties.

"Neil L. Norcross, Alexander J. Winter and S. Gordon Campbell have added two new three-hour elective courses in advanced immunology for undergraduate and graduate students.

"Donald D. Delahanty inaugurated an innovative teaching method in the Special Surgery course. The classical five-hour lecture course was presented in a seminar, identified as a *Marcham Tutorial* offering, including small discussion groups that met three times per week. A complete set of indexed class notes was provided to each student at the first class meeting, enabling the students to concentrate on the course content during lecture time, and to prepare in advance for the small group discussions. Lectures were heavily supplemented with color slides and class demonstrations. A critique of the course offering by the students afterward indicated the course was well received and much appreciated.

"Timothy H. Brasmer, Arthur L. Aronson, George A. Maylin, Fred B. McCashin, Gustaf Bjorck and J. Thomas Vaughan presented a two-day short course in anesthesiology to the Junior students at the start of the fall

semester, as an introduction to General Surgery, and prior to initiation of the Small Animal Surgery Exercises.

"Edward J. Wiebe and Tex S. Taylor taught the General Surgery and Restraint Laboratory Course in accordance with a new schedule developed by Doctors Bjorck, Delahanty and Vaughan. This was coordinated with the teaching of applied anatomy in collaboration with Robert Habel and James Ingram of the Department of Anatomy. Fred B. McCashin taught Large Animal Surgical Exercises, as revised in collaboration with Doctors Bjorck and Vaughan. A new syllabus consisting of 140 typed pages and illustrations was completed and provided to each student.

"J. Thomas Vaughan was appointed to the Graduate Faculty, and has had two new graduate course offerings accepted for presentation during the next academic year by the Graduate Faculty of the Veterinary College. The subjects of these courses are *urogenital surgery* of the horse and *surgery of the digestive system* of the horse.

"Robert H. Whitlock, in collaboration with John B. Tasker, Gustaf Bjorck and John Bentinck-Smith, developed a two-hour per week clinicopathological-medical conference for the seniors in the daily large animal rounds.

"The Large Animal Clinic course taught in the spring semester included the innovation of a new objective grading system, which was based partly on a practical examination conducted at the end of the four-week tour of duty in the Large Animal Clinic. It followed the methods used by the New York State Board of Veterinary Medicine. The remainder of the objective grade was based on a comprehensive written final examination at the end of the semester.

"The fourth year students, while assigned to the radiology section, have been given additional laboratory type experience with important technical aspects of radiology.

"The completion and publication of the Second Edition of the textbook, "Veterinary Obstetrics and Genital Diseases" by Stephen J. Roberts will be a splendid reference text in the presentation of the course in obstetrics to the veterinary undergraduates. The clinical instruction of senior veterinary students in mastitis diagnosis and control has been revamped and reorganized by Donald S. Postle and Lincoln E. Field, with the assistance of Research Technician Frances Barnes, to provide a more comprehensive overview of mastitis control programs. Further, it will increase the students' participation in developing control recommendations." Incidentally, Linc Field is a great golf enthusiast and unmatched trout fisherman. And he supports all the sports, knows everyone in Ithaca, enjoys ice cream and a toddy now and then and is going to retire this year. He is a great colleague.

For the second year, N. Bruce Haynes has taught the course on Jurisprudence to senior veterinary students. The course was reorganized and fewer guest lecturers were used. This permitted better continuity in the presentation of subject matter and was well received by the students. When the new proposed "core" curriculum goes into effect it is expected that the course in Jurisprudence will be deleted. At that time, first year students will be given instruction in the Principles of Veterinary Medical Ethics, Veterinary Law, and Animal Humane Laws. At the same time a three



P. Philip Levine '32, Professor of Avian Diseases and formerly Chairman, Department of Avian Diseases, awaiting conferral of an honorary degree by the University of Munich, Germany, in recognition of his outstanding contributions to knowledge about avian diseases. To his left is Professor P. Walter, Rektor of the University of Munich. Photo is through the courtesy of Dr. Wolfgang O. Sack.

credit hour elective course in Practice Management will be offered to fourth year students. During the spring term, Bruce Haynes organized a series of evening seminars for senior students interested in dairy herd health management.

In the fall term, the science of mammalian cytogenetics in domestic animals was discussed by Henry O. Dunn in weekly sessions with groups of four seniors. In the spring term, he discussed the philosophy of experimentation and statistical analysis.

Steve Roberts carries an enormous teaching and professionally supervisory load as Chairman, Department of Large Animal Medicine, Obstetrics and Surgery. He has decided that he would like to practice with his brother in Vermont, so plans to retire in June next year. It is difficult to imagine not having Steve teaching obstetrics, active in mastitis control, working in equine bone and joint disease studies, serving as a clinician and coaching the polo team. Somehow, like the other Cornell greats who have given so much of themselves to Cornell, Steve will always be part of the College.

One day in October, our genial Chief of Medicine, Francis H. Fox dashed out early in the morning for a surgical appointment at Tompkins County Memorial Hospital. But instead of being the surgeon, he was the patient, and parted company with an obstreperous appendix. He had a couple of mighty rough days post-operatively but is back in the harness again now. We are all grateful for that.

#### SMALL ANIMAL MEDICINE AND SURGERY

During the time that a search committee was looking for a new Dean at the College of Veterinary Medicine and Biomedical Sciences at Colorado State University our own Robert W. Kirk, Chairman of the Department of Small Animal Medicine and Surgery, was nominated. And that was repeated again for Kansas. And the University of Georgia considered him for the Head of Clinics position that was open there. We had our anxious moments! Fortunately for us, he declined these nominations and despite the fact that the Department is severely short-staffed at the moment, has decided to continue to cast his lot with his associates here.

Michael D. Lorenz was appointed Assistant Professor of Small Animal Medicine, effective July 1, 1971. That gives us two men in medicine, Bob Kirk and Mike; two in surgery, Timothy H. Brasmer and George E. Ross; one on ophthalmology, Stephen I. Bistner; and one in cardiology and exotic pet medicine, Gary R. Bolton. To facilitate Gary Bolton's work, a cardiac station was developed, with special electronic equipment for cardiac catheterization and other diagnostic procedures.

For six months of the fall and spring terms, the clinic out-patient area has been disrupted during the early construction phases of the multicategorical research wing. This has caused some reduction in office call volume; but the appointment system, implemented in June last year, has enabled us to control volume to more satisfactory levels. In the construction on the new wing, we have had landscape changes. With these, the entrance stairway to the waiting room for the Small Animal Clinic was replaced by an outdoor ramp-approach to the clinic from a new parking area.

To initiate a self-teaching program with stereoscopic equipment, a camera and viewer for three-dimensional projection of slides were purchased. Also, equipment was procured for teaching carrels, wherein this equipment can be used. It will be especially useful for teaching surgery, ophthalmology and dermatology, and should relieve some of the lecture pressure in those subjects. The camera and viewer supplement other specialized ophthalmic equipment used by Stephen I. Bistner. He has continued to develop the comparative ophthalmology program, and in addition to teaching and operating the large and small animal ophthalmology clinics, he has been awarded two sizeable research grants.

Use of the intensive care unit as a teaching mechanism has been reduced due to the extreme costs and the demands on staff time.

### CENTAUR AND PENGUIN

There was a time in the history of veterinary medicine that the *Centaur* was used as the symbol of a patient which brought the veterinarian and physician together, for it was said to be one of a race fabled to be half man and half horse, dwelling in the mountains of Thessaly. In the last 25 years, since the National Institutes of Health recognized all of medicine as "one medicine," scientists in veterinary colleges have been privileged to compete for funds to study animal diseases, provided that they show some relationship to diseases of man. That has been fortuitous and we have contributed substantially to new biomedical knowledge through such funding. The centaur symbol has even more meaning in *this* collaborative relationship between veterinarians and physicians today.

But many of us have been greatly concerned because we have not had the same support for studies of diseases of animals important to the agricultural economy, and ultimately the wholesome food supply for the consumer. There is very little money to study mastitis, problems of infertility; gastrointestinal disease in dairy cattle and livestock; little to study poultry disease. We are constantly searching for modest support or even immodest support—to carry out such studies. Our search has not been overly lucrative.

And in more recent days, those who are anxious about the availability of animal protein to feed the burgeoning population of the next half century are asking about the fishes of the sea. Will finfish and shellfish numbers be adequate to feed man or the animals which he ultimately may have to consume for survival? And what about diseases which threaten the animal resources of the sea? Who is investigating them? Do veterinarians have an opportunity to serve in such studies? They do in Scandinavia and Russia and other north European and Oriental countries. What about ours?

In considering all of this I have wondered time and time again what we might do to change the indifference which we face in presenting our concerns before non-health related federal funding agencies. They are so rigidly locked into formula-funding and ancient laws which seem to provide double benefit for the plant sciences, that attempts to bring about change are like shoveling against a bulldozer with a spoon.

Not long ago, some of us became firmly convinced that we need a lot of

noise to attract attention. Ironically we are liable to get that noise from the public when a devastating disease strikes and we do not have the answers that are needed. How sensible it would be if we could do something constructive before such a calamity might hit us, or before we have no support at all for studies in diseases of meat and milk-producing animals and poultry.

In a facetious moment I found the noise, and with it a symbol to place alongside the centaur. Surely it might represent animal agriculture, the animals of the sea and the birds of the air. Let me explain.

In 1620 the French explorer Beaulieu described the *jackass penguin* of South African coasts, and called it a "feathered fish." It got its name from its call, which sounds like the braying of a donkey. The noise is not heard by day because the jackass penguin spends most of its day in its burrow, or out at sea fishing for the few pilchards and anchovies that escape the nets of the local fishing fleets. But after dark the number of penguins on shore builds up and the chorus of braying makes some of the islands sound like overcrowded farmyards. Do you suppose we could get a few for Washington? Well, now this might seem to be cynical rather than facetious, and we cannot let that happen in a Christmas letter. So, I will just leave this with you as a ridiculous thought, hoping that you might agree that it is so ridiculous that it will remind you to think about the dilemma with us. Together we may find the real key to unlock that massive immovable door to the money vaults.

#### TEAM BALANCE IN RESEARCH

Problem-oriented research is a statutory mandate for the College; a mandate citing the responsibilities given to the faculty by the State legislature. Most of it is done by pre-clinical departments and that causes the clinicians to wonder where they fit into the sometimes esoteric world of the research laboratory. So just to keep the perspective right let us not forget that no studies in animal disease can be carried out beyond limited levels unless they are done on the living animal. And a key scientist in the entire procedure is the clinician; the diagnostician. Without his talents the research effort would be limited to a laboratory phenomenon; perhaps an exercise in biology. Diseases cannot be studied unless they are identified and described as field cases by clinicians. Field cases rarely show identical signs of illness and the judgment of the clinician in reaching a diagnosis is an artistic talent needed to supplement the quantitative and detailed technology of the laboratory scientist. The clinician is in the vanguard position. Though he is out in front, he also must interact as a partner on the team that is handling the laboratory investigations under controlled conditions. One without the other is incomplete.

Both the clinician and the basic scientist must know that what he is doing is important and indeed part of the team effort. Our clinicians have been greatly overworked and have had little or no time for participative research and self-improvement. We are endeavoring to change that by expanding our clinical staff. At the moment money is tight, but we are determined to establish our plans and make every effort to implement them.



"Here, by flood and foaming torrent, gorge and rocky dell,  
Pledge we faith and homage ever to our loved Cornell."

ALMA MATER

WEEKS '72 and SMITH '74

## CURRICULUM: PROGRESS REPORT

Historically the veterinary curriculum has been of the lock-step type, with each student in each class being processed through an essentially identical series of courses. The last major curriculum change occurred approximately fifteen years ago. Changes since that time have been primarily evolutionary in character; additive rather than substitutive or lessened.

The Committee for Curriculum was reconstituted in October 1969 and charged with the responsibility for review and revision of the professional curriculum. The new committee consists of eight faculty members (one from each department of the College) and four students (one from each class). Generally speaking, the younger members of the departments were chosen for the committee assignment. Our two Associate Deans served in an *ex-officio* capacity.

The Committee accepted three working goals:

1. Review of the subject matter of the current curriculum to identify redundancy, obsolescent material, and the need for inclusion of new subject matter of current interest.
2. Reduction of contact time from that of the presently overloaded class schedules, with identification of a variety of devices that might be used to foster independent study habits.
3. The establishment of flexibility within the professional veterinary curriculum.

Having the approval of the faculty for a core-elective course structure as an appropriate working base, the Curriculum Committee established a long range plan which incorporated a minimal professional core and an appropriately large number of elective subjects. Although desirable, the long range plan is not currently feasible because of limitations in staff and facilities. We are endeavoring to correct these limitations.

The Committee also established a short range plan which is a *core curriculum* modeled after the present one, with a limited choice of *elective* subjects. The short range plan constitutes a considerable step in the direction of the long range plan, and can be implemented within a year or so, if it is approved by the faculty. The long range plan requires additional space, staff and money for implementation but it dovetails well with the short range plan, and can be instituted without revision of the latter.

In our deliberations on curriculum, we found many questions appearing for which we did not have ready answers. For example, it is imperative that we know how many teachers we will need for the revised curriculum; how many if we are to increase the class size by programmed increments of sixteen. We must know what additional facilities will be needed; what courses can be sectioned, and what supportive space will be needed if classes are sectioned. And, of course, with the new research wing now under construction, we will be able to redistribute our faculty and staff to an appreciable extent. That will release space for other purposes.

It soon became obvious to us that we should engage a professional programmer, so we entered into a contractual agreement with Earl Walls

Associates of La Jolla, California, to conduct the study needed for the development of pertinent data. That report should be completed before the end of this year.

The nominal reduction in contact time to a core curriculum will be augmented not only by electives but also by increased requirements for independent forms of learning. New teaching methods and materials for independent study are becoming available at an increasing pace.

Utilization of the summer between the junior and senior years will expand considerably the total time available for clinical teaching, and will provide greater student experience with seasonally-limited animal diseases.

Although the electives, appropriately aligned, should provide a noticeable enrichment of skills for neophyte veterinarians, it will not be the purpose of the faculty to attempt to produce specialists in particular areas of veterinary medicine. All students must continue to be familiar with a wide range of domesticated species, and there is every intention to expect excellence of academic performance in the basic and the clinical sciences. Students will be given opportunity to select elective course tracks for studies in depth, but they cannot expect to qualify as specialists in this experience.

## STUDENTS

In recent years, most of the students admitted to the study of veterinary medicine have had three or more years of college education prior to matriculation in this College. The distribution among the present classes is as follows:

	Students with 3 or More Years of Pre-Veterinary College Preparation	Students with 2 Years of Pre-Veterinary College Preparation
Class of 1972 ..	49	11
Class of 1973 ..	51	9
Class of 1974 ..	57	8
Class of 1975 ..	60	5

The number of applications has been increasing each year. Last year there were 609 applicants for the 65 spots in the class.

In view of the plans for revising the curriculum, the faculty decided to increase the pre-veterinary requirements from two years to three, beginning with the class entering in the fall of 1972.

There are six girls in the class of 1975, five in the class of 1974, three in the class of 1973 and two in the class of 1972.

With more than 600 dossiers to review, the Committee on Admissions devoted many long hours to its deliberations last year, as it has each year since the selective admissions policy was introduced two and a half decades ago. We are extremely well pleased with the calibre and capacity of the majority of the young people who are matriculates in the College now. Next year, too, holds promise in being a "banner year," judging from the numbers of applications which are coming in.

## LIBRARY

The staff of professional librarians, with Mia Reinap as Librarian, has been spending hours in careful review, with the faculty Committee on Library, of the problems incidental to escalating costs of new acquisitions and subscription renewals. Financial resources have not been provided adequately to keep pace with the increases in costs. That has forced us to pare the list of subscriptions. And when that happens we face all the annoyances and aggravations of interrupted serials. But we have no choice. Periodicals which are duplicated elsewhere on the campus must be cancelled from our list unless the demand is so great that such cancellation will cause hardships.

Despite the paring, we hold more than 52,000 acquisitions. We shelve more than 800 periodicals and almost 400 annual serials. You can see that the Flower Veterinary Library is a bustling place. At long last, it is now air-conditioned, and we are grateful to the State University Construction Fund for that.

Generous donations from our alumni—you who read this letter—included 25 memorial gifts. Also, the class of 1940 completed its goal of a \$1,000 gift to the Library and the class of 1946 joined this tradition by donating \$400. We are thankful for these generous expressions.

## MEXICO

Seven members of our faculty, Robert E. Habel, Howard E. Evans, Julius Fabricant, Stephen B. Hitchner, P. Philip Levine, Harold F. Hintz and Stephen J. Roberts, presented papers at the XIX World Veterinary Congress in Mexico City last August. When they returned to Ithaca, we heard enthusiastic murmurings about *nopalitos*, tender chunks of cactus served by Mexican gourmets in a salad with lettuce, beans and rice. Also, our enthusiasts are convinced that no breakfast is complete without *chilaquiles*, which are tortillas cut up and scrambled with eggs, onions, tomatoes and green peppers. For *breakfast*?

Someone tried to impress Howard Evans with a dish called *cocido de res*, but he said that it is just a New England boiled dinner with a Mexican name.

Anyway, the journey south of the border was a very interesting experience for those few faculty members who had papers to present, and therefore were able to go. With our severe budget cuts, out-of-State travel has been curtailed drastically this year. We were a bit surprised that not one of our colleagues returned able to speak *nahuatl*, the Aztec language still spoken in remote parts of Mexico. Our College ambassadors can hardly be classified as shrinking violets, so we expected them to strike up conversations and come home fluent in the ancient dialect. Guess they spent too much time with *nopalitos* and *chilaquiles*.

## OUR EMERITI

In Ireland, you put fern seeds in your shoes to make you invisible. And in America, emeritus professors who give so much of themselves to the campus remain forever part of it, though usually invisible, as though they had fern seeds in their shoes. Yet, to those sensitive enough to be aware of the



Remember the first time you checked the molars?

presence of those great men of everlasting influence, their talents and scholarliness are still reflected in the classrooms, laboratories and clinics. During this past year all have been on and off the campus in spurts, but all of us do not see them during their lightning-bolt visits. They all seem to be actively pursuing a variety of interests and responsibilities. Gordon Danks, for example, is President-elect of the New York State Veterinary Medical Society, so you can see what he will be doing for the next couple of years. Hugh Dukes and Donald Baker popped in for quick visits earlier in the fall. Donald has just completed an extensive trip by train. Most of you know that he is a devoted enthusiast of the railroads.

DeEtte Stephenson has not been well in recent months so Steve is giving her his full attention. Mike Fincher stopped in for a quick visit and looks great.

We thought that perhaps you might like the addresses of our scattered emeriti ambassadors at large:

Dr. Donald W. Baker  
206 Girard Boulevard, N.E.  
Albuquerque, New Mexico 87106

Dr. A. Gordon Danks  
1620 Hanshaw Road  
Ithaca, New York 14850

Dr. H. Hugh Dukes  
4434 N.W. 6th Drive  
Des Moines, Iowa 50313

Dr. Myron G. Fincher  
2000 S. Eads Street, Apt. 715  
Arlington, Virginia 22202

Dr. Herbert L. Gilman  
Bahia Vista, Apt. 507  
1750 N.E. 115th Street  
Miami, Florida 33161

Dr. Ellis P. Leonard  
310 Comstock Road  
Ithaca, New York 14850

Dr. Peter Olafson  
72 Bush Lane  
Ithaca, New York 14850

Dr. Hadley C. Stephenson  
105 Cornell Street  
Ithaca, New York 14850

## NEW CONSTRUCTION

Despite the painful budgetary cuts which we have had to face this year, we are grateful that we can report to you that the new ten-level research



The new multicategorical research building under construction.

building is well under construction. You will find a photograph showing the state of construction at the time this Christmas letter was sent to press. It is scheduled for completion in the fall of 1973.

## NECROLOGY

*"This learned I from the shadow of a tree  
that to and fro did sway upon a wall:  
Our shadow selves, our influence, may fall  
where we can never be."*

A. E. Hamilton

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

William A. Billings '18, St. Petersburg, Florida  
Maurice D. Canary '24, Olean, New York  
Leonard N. Case '08, Kamuela, Hawaii  
David W. Cheney '22, Bath, New York  
Gaylord E. Cooke '18, Berkeley, California  
Benjamin J. Finkelstein '18, Forest Hills, New York  
Robert J. Foster '02, San Rafael, California  
Michael J. Hastings '09, New Hartford, New York  
Thomas E. Hickey '37, Sea Cliff, New York  
Frederick J. Hoyt '33, Little Valley, New York  
Dov Karpas '67, Jerusalem, Israel  
Robert J. Kohler '55, New York, New York  
Edward I. Nesperke '47, Baltimore, Maryland  
Edwin D. Peck '30, Olympia, Washington  
John W. Richards '43, Millbrook, New York  
James F. Shigley '15, State College, Pennsylvania  
Walter J. Sickles '50, Ithaca, New York  
Clyde E. Smith '08, Colorado Springs, Colorado  
Albert M. Snelling '31, Knoxville, Tennessee  
Michael W. Sullivan '12, Daytona Beach, Florida  
Frederic C. Willson '07, Cliffside Park, New Jersey  
Ralph E. Witter '40, Alexandria, Virginia  
Robert M. York '56, Mill Valley, California

## THE ADVISORY COUNCIL TO THE VETERINARY COLLEGE

When Robert A. Squire '56, Chairman of the Advisory Council to the Veterinary College, submitted the report of the Council to President Dale R. Corson, the following excerpts were part of that report. We thought you might like to see them.

"The Council feels that the training of veterinarians should remain the primary goal of the Veterinary College and efforts to maintain a high level of professional education should be continued. The demands upon veterinary medicine are now more extensive and sophisticated than in the past. The relatively new, but essential roles of veterinarians in comparative medicine, biomedical research and laboratory animal medicine have been added to the continued need to care for the nation's livestock and pleasure animals. The

veterinarian's unique training in comparative biology and medicine gives him a very essential role in all of these areas, and this larger scope of responsibilities has imposed increased scientific and fiscal burdens upon all veterinary colleges.

"It is recognized that clinical departments at this and other veterinary colleges have found it difficult to keep pace with the progress made in pre-clinical areas. This is apparently due to the demands made upon relatively small faculties. Clinics are required to be largely self-supporting which requires extensive service efforts, and this together with teaching responsibilities limits faculty opportunities for clinical investigation, seminars, publications, etc. It is essential for the success of the proposed elective periods that clinical departments enlarge the scope and depth of teaching and research, for much of the responsibility for the elective periods will rest in these departments.

"The livestock industry is of vital importance to the human population in New York State and elsewhere and the role of veterinary colleges in disease prevention and control is essential. The Council feels that the Veterinary College must maintain its commitment to the diagnosis and treatment and also the research and teaching of livestock health problems. These activities will be increasingly essential to the health and nutrition of the expanding human population, and long range planning must give them serious consideration. The diagnostic laboratory should receive particular attention and should serve as a central resource for the control of animal health problems throughout the State."

And with that as the final stroke of the brush, it is time to say:

All good wishes for a Happy New Year!

Sincerely,

A handwritten signature in cursive script, reading "George C. Poppensiek". The signature is written in dark ink and is positioned above the printed name.

George C. Poppensiek