

Veterinary Viewpoints

N. Y. S. COLLEGE OF
VETERINARY MEDICINE

MAR 25 1986

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The New York State College of Veterinary Medicine at Cornell University

Winter 1983

Nikka

With every heartbeat, the right ventricle struggled to push blood toward the lungs, it's enlarged muscles working against the backflow of blood through a small hole in the chamber wall. In a short time, with too much exertion and too little oxygen in its tissues, the heart would fail.

Nikka was a friendly armful of four month old Siberian Husky puppy. Her owners noticed that she tired easily and her mucous membranes became blue whenever she exerted herself. Her hometown veterinarian detected a cardiac murmur and diagnosed congenital heart disease. He recommended that Nikka be referred to the New York State College of Veterinary Medicine for definitive diagnosis and treatment.

At the College's Veterinary Clinic, Nikka was examined by a team of veterinarians including Dr. Sydney Moise, an internist, Dr. Victor Rendano, a radiologist, and Dr. Jay Harvey, a surgeon. Standard electrocardiogram (EKG) tracings were made. Dr. Moise performed and interpreted a new technique called echocardiography, where sound waves are used to outline the size and shape of the heart. Nikka's final diagnostic test was an angiogram, a radiograph made after injecting a dye into the inner chamber of the heart. These tests showed that Nikka had two serious defects affecting the performance of her heart.

One of the defects was a narrowing of her pulmonary artery, the main conduit for blood to reach her lungs to be oxygenated. The other defect consisted of a hole in the partition between the two major chambers of her heart. Together these two defects reduced the flow of blood to her lungs and allowed oxygen deficient blood to reach the rest of her body.

Surgery was Nikka's only hope for a lifespan of normal length and activity. If the defects remained uncorrected, Nikka had less than a 5-10% chance of surviving to maturity. Unfortunately, the surgery itself carried a very high risk since less than 20-25% of puppies with Nikka's combination of defects survive open heart surgery.

Dr. Harvey and a team of anesthesiologists headed by Dr. Bob Meyer and Dr. Robin Gleed considered two options that would allow Nikka's heart to be stopped, opened and repaired from within. Cardiopulmonary bypass, the heart-lung machine, was rejected because Nikka was too small and because dogs do not tolerate the procedure well.



The option chosen by the team is called hypothermic open heart surgery. In this technique, Nikka's body would be cooled from a normal temperature of 39 degrees Celsius to a temperature of 20 degrees Celsius. At the lower temperature, the body's demands for oxygen are much less. Hypothermia allows the heart to be stopped for up to 60 minutes before brain damage occurs. In a small puppy like Nikka, a longer delay could mean blindness, slowed responses and incoordination.

On the day of surgery, Nikka was anesthetized and the cooling process was begun by placing her in an ice water bath. Nearly two hours were required for her body to reach the desired temperature. Her blood

pressure, tissue perfusion, respiration and EKG were monitored continuously. Nikka's chest cavity was opened and her heart was stopped by occluding the flow of blood to it. Dr. Harvey surgically exposed the inside of the heart and sutured close the hole between the two chambers. Then he enlarged the narrowed pulmonary artery, thus increasing the flow of blood to her lungs. Finally, the incision in the heart was closed, Nikka's body was rewarmed and the heartbeat was restored. Blood was again flowing to Nikka's brain just 15 minutes short of the critical time limit.

Nikka is still a friendly puppy, though she won't be puppy-size for long. Since the operation, she's grown from 21 lbs. to 35

lbs. of rambunctious Siberian Husky. She visits the Clinic every few months for a check-up and so far, her heart is performing normally. On the Clinic wall, next to the surgery room, there is a color photo of Nikka and an inscription that says simply "Thanks everyone, for giving me my life. Nikka" . . .

Photo: Nikka and Joseph Bertone '83

Photo by John Metzger



Dr. Charles Short and Pitman-Moore's Edward B. Haddad

MODEL 990 GIFT TO COLLEGE

The Anesthesiology Section at the New York State College of Veterinary Medicine was recently presented with a Model 990 Fraser-Harlake Small Animal Anesthesia Unit developed and produced through the cooperative efforts of Fraser-Harlake and Pitman-Moore. Dr. Charles E. Short, Professor and Chief of Anesthesiology, was consultant on the project. Pitman-Moore donated the Unit in appreciation for Dr. Short's assistance, and as a contribution to the College's professional training program in anesthesiology.

The Model 990 replaces the Ohio 960, 970 and 980 Units previously marketed by Pitman-Moore for use with methoxyflurane anesthesia in Small Animal Clinics. The new model uses methoxyflurane anesthesia or may be purchased with an appropriate vaporizer to be used with a mechanical ventilator for use in assisted or controlled ventilation as an additional option.

Anesthesiology teams in the Small Animal Clinic will be familiarizing themselves with the new Unit, Model 990, as part of the teaching program.

Veterinary Viewpoints

Veterinary Viewpoints is published four times a year for friends and alumni of the New York State College of Veterinary Medicine, a Statutory College of the State University of New York. Correspondence may be addressed to Karen Redmond, Editor, Schurman Hall, New York State College of Veterinary Medicine, Cornell University, Ithaca, New York 14853. Telephone: 607/256-7699.

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BABISH TO HEAD NORTHEAST DRUG RESEARCH PROGRAM

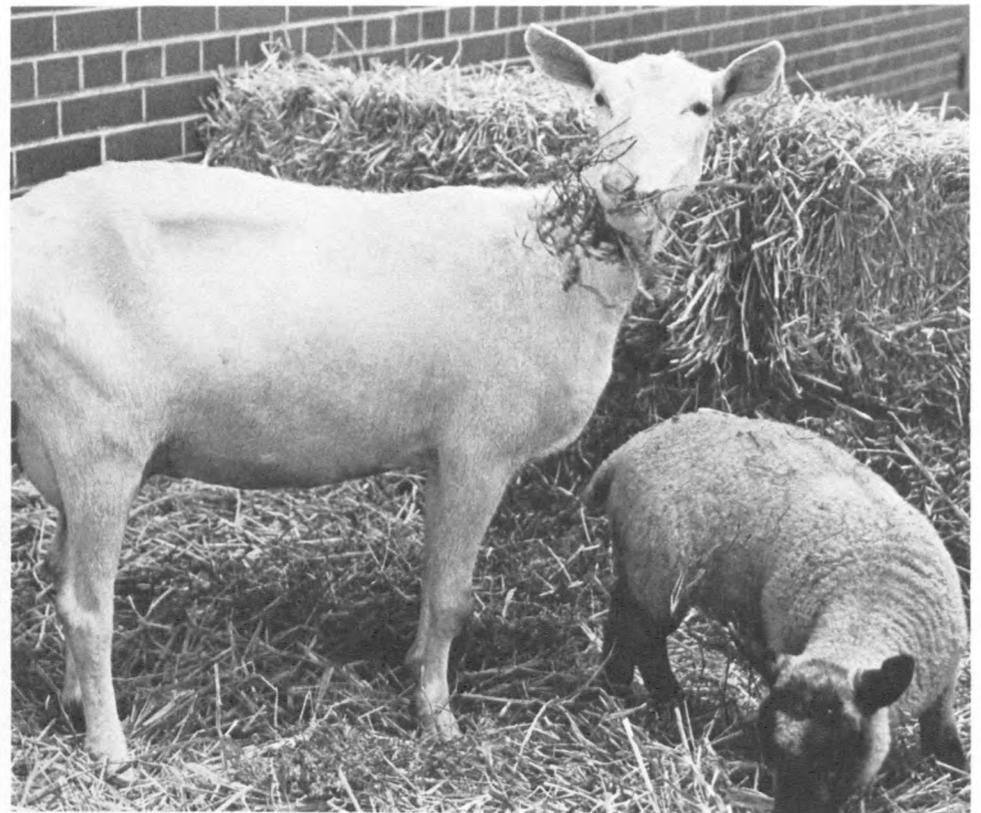
The New York State College of Veterinary Medicine at Cornell University has been selected as the Center for a new program designed to serve the pharmaceutical needs of minor food species which are economically important to the Northeast. At present, most minor species of food animals (such as rabbits, ducks, pheasants, goats and sheep) do not have the benefit of many of the safe and effective drugs available for cattle, swine and poultry. This situation has had an adverse effect upon both the producers and consumers of those minor species animals.

Currently funded for five years by the Department of Agriculture, the Center at Cornell will be one of four across the country. Dr. John Babish, Assistant Professor in the Department of Preventive Medicine at the College, has been selected as the Northeast Regional Animal Drug Coordinator. In this capacity, he will direct the research leading to FDA approval of candi-

date drugs for the seven states of the Northeast Region.

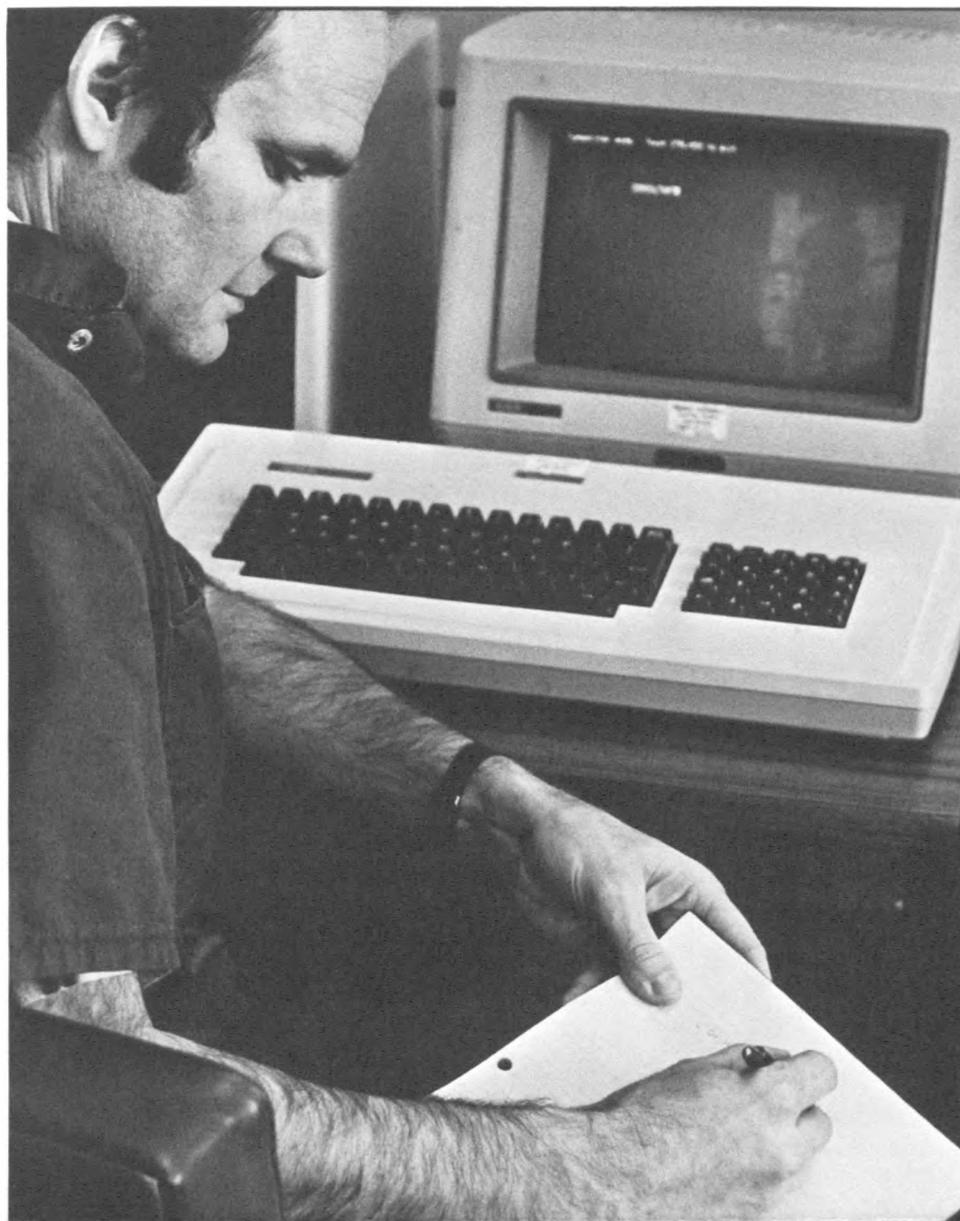
Federal regulations require extensive data on efficacy, safety and residue levels before any drug can be used in food animals. Research at the College of Veterinary Medicine will provide the data necessary for the registration of drugs for safe use in these minor species.

Through the unique opportunities of this program, Dr. Babish will also direct basic research into the development of a biochemical basis for interspecies extrapolation of drug therapy. The data base generated by this research will be used to develop mathematical and biochemical models to predict effective drug regimens as well as results of toxicity and residue studies. Results of such research may eliminate the need for experiments requiring use of large numbers of animals for the registration of drugs.



Open House

The 16th Annual Open House at the New York State College of Veterinary Medicine is scheduled for Saturday, April 16th. Each year, this event attracts thousands of visitors who come to see the "painted horse", exotic birds and farm animals, the fistulated cow, a garden of poisonous plants, and many presentations on veterinary medicine. Admissions counselors will also be available to discuss careers in veterinary medicine and admissions requirements. Tours of the College's research, surgical and teaching facilities begin at 9:00 a.m., continuing until 4:00 p.m. Admission is free with free parking in the "B" lot, off New York Route 366.



Left:
Dr. Maurice White

Below: Dr. Roy Pollock

The Clinician's Computer

Time Magazine substituted it for their "Man of the Year", a strange honor for a collection of memory chips and circuits, yet it illustrates the new importance computers have assumed in our lives. They teach us, regulate our environments, balance our accounts, jog our memories and hopefully do us a world of good. Curse their complexities or rejoice in their possibilities, you cannot deny their influence.

Veterinary Medicine has also joined the computer age. At the New York State College of Veterinary Medicine, Drs. Roy Pollock and Maurice White, in partnership with John Lewkowicz, Director of the Veterinary College Computer Facility, have independently originated two different computer programs to be used by practitioners and students. One program, by Dr. White, presently focuses on large animal medicine, while Dr. Pollock's is small animal oriented.

These programs were two of the most exciting applications of computer technology presented at the recent National Symposium on Computer Application in Veterinary Medicine.

Dr. White's computer-assisted-differential-diagnosis system is called CONSULTANT. Like a human consultant, the program is designed to give professional advice on request. Using the keyboard, the veterinarian types in a sign or condition exhibited by the patient. The program responds by giving a list of diseases in which the sign is present. Further information and appropriate

references are available on-line for each disease.

While practitioners will find CONSULTANT indispensable as a memory jogger, students can use the program to learn. An unfamiliar disease listing can be researched in seconds. A brief description of the disease will appear on the screen along with key references for further study. As simple as CONSULTANT may appear to be to use, a skilled clinician is still needed to pinpoint the important signs and narrow the list of possible disease. Practitioners should not be overly concerned that, armed with the appropriate software, a client could become an overnight diagnostician.

The password for access to Dr. Roy Pollock's program is PROVIDES, Program Oriented Veterinary Information and Decision Support. The program provides problem oriented diagnostic, therapeutic and prognostic information and analysis. Like CONSULTANT, the program uses the computer's capabilities to reduce the need for rote memorization. It functions by collecting pertinent patient attributes and matching them against an array of all known conditions that could produce the presenting problem, a process called "problem-knowledge coupling". Historical, physical and routine laboratory data are collected through a series of predetermined questions to ensure that no relevant findings are neglected. Only those findings known to help discriminate among diseases are collected. Each question is essential for the complete

analysis of the problem at hand; extraneous data is not gathered. The computer's subsequent list of causes is not limited by the clinician's ability to recall them, or by their frequency of occurrence, but solely by their applicability to this patient.

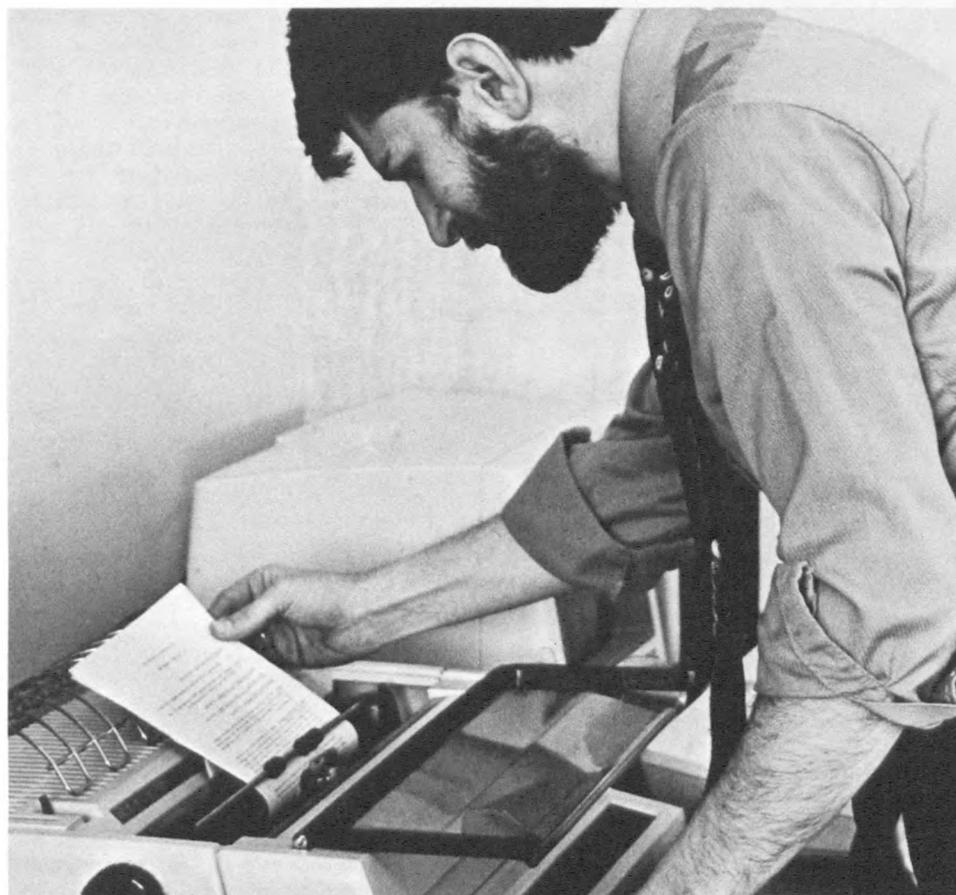
A brief example of the information gathering process can be seen when the "coupler" CANINE DIARRHEA is chosen from the initial "menu". Once in the program for Canine Diarrhea, a choice of five categories is offered: Age, Breed & Sex; History; Physical Exam; Routine Lab; Temperature, Pulse & Respiratory. After filling in the appropriate information under "Age, etc", the user moves on to "History" and an extensive list of qualifiers, which can be completed by the owner. PROVIDES requires information about the duration of the illness, response to treatment, environment, behavior, appetite, bowel movements, digestive problems and whether other animals or humans are affected in the same household. In all, 19 categories are listed. Every relationship between the various facts is documented, a processing of approximately 3,000 or more bits of information.

After information gathering is completed, the option "COUPLE" is selected by the user and the computer matches the unique characterizations recorded against descriptions of an exhaustive list of causes of diarrhea. Probable causes are then listed in order of "best fit", together with their chance

of fatality and possibility of treatment. This is important since highly fatal but treatable diseases should probably be ruled out first, even if the patient does not have all of the expected findings. Again, the clinician's judgment must always supercede the computer's. Information on further diagnostic tests, treatments and outcomes are available "on-line" for each disease.

Both CONSULTANT and PROVIDES are designed to operate on personal microcomputers. They will be continuously updated, with revised versions available on floppy discs. Both programs provide important information when it is most needed—at the time it can solve a problem. They are therefore excellent educational tools, presenting new or review information at the ideal moment. Efforts are underway to find means to produce and distribute these programs to veterinary practitioners.

Users will also discover that software programs, like CONSULTANT and PROVIDES, are efficient and practical means to provide better veterinary care because a computer can be textbook, veterinary medical journal, and memory, all at the same time. As the information explosion continues in Veterinary Medicine it will no longer be humanly possible to assimilate all the new information available. We will increasingly rely on our computers to store this information and deliver when needed to augment the clinician's skill.



75TH CONFERENCE

REUNIONS, RENEWALS & A ROUND OF APPLAUSE

Once more, Dr. Charles Short, Director of Continuing Education, and Linda Ritzler, Conference Coordinator, displayed their considerable talents and organized an extravaganza of an Annual Conference. This year, 500 veterinarians attended the conference, accompanied by 125 spouses, to make this the biggest and best attended event in several years. And thanks to the whole-hearted participation of faculty members, staff, spouses and students, January 18-20 were three days to remember.

As the 75th Annual Conference for veterinarians, and our anniversary celebration, an expanded program was planned by the Conference Advisory Board—with sessions on avian and aquatic disease and management, and an emphasis on equine performance and training problems, along with small animal medicine and surgery, food animal medicine and surgery, equine surgery and lectures on special disciplines.

Several laboratory exercises were held as well. Dr. David Graham presented a well-attended lab on the "Diagnostic, Medical, Surgical and Pathologic Techniques in Pet Bird Practice. Labs were kept small, limiting the number of participants. In Dr. Graham's session, this allowed each participant to work with his or her own budgerigar throughout several demonstrations of techniques. An extensive wet-lab on the "Management of Equine Injuries" had participants plating bone fractures and casting legs, along with other procedures. 3M's Orthopedic Products and Surgical Products Division sponsored the lab and their sales representatives were on-hand to demonstrate drills and 3M bandage and casting materials.

The 75th Annual Conference for Veterinarians also featured the veterinary medical debut of a canine patient who won't bark, bite or go for walks. This model of decorum spends most of the day in lateral recumbency helping people learn cardiopulmonary resuscitation and related emergency care. The prototype is being developed by Dr. Short and the Nasco Company and is modelled in soft plastic to look like a small mongrel dog. An attached monitor tells when enough pressure is being exerted in resuscitation efforts and whether or not it is being applied in the correct spot on the dog. The correct rate of respiratory assistance can also be monitored.



Dr. Short demonstrates CPR

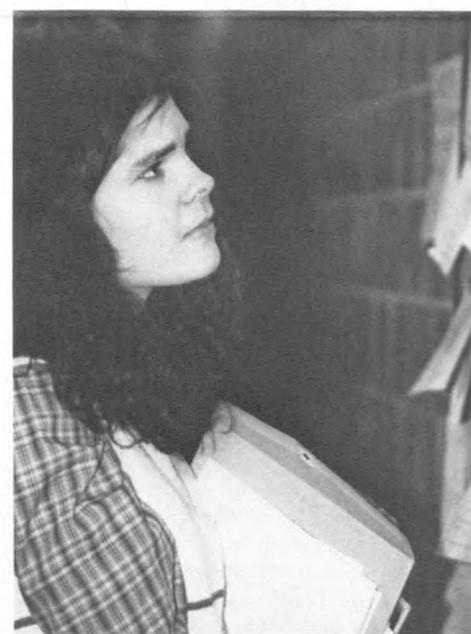
Notable speakers at the Conference were numerous, among them Dr. William Buck who spoke on "Household Poisons and the Veterinarian." Dr. Buck is from the Poison Control Center at the University of Illinois. James H. Steele, DVM, MPH, delivered the James Law Distinguished Lecture on the second day of the Conference, speaking on "Zoonoses 1883-1983, An Update of the James Law Report of 1879 on Diseases Common to Animals and Man." Dr. Steele is Professor of Environmental Health at the School of Public, University of Texas at Houston.

On the social side, a black tie banquet welcomed all participants on the first night of the Conference. The 75th Anniversary of the Conference was duly noted with a champagne toast, a sumptuous buffet, the lighting of the candles on the anniversary cake by Dr. Edgar Tucker and dancing to the music of the "big bands." Throughout all three days of the Conference, the veterinary fraternities welcomed their returning alumni with happy hours, banquets and informal gatherings.

Seniors had additional opportunities to speak with Conference visitors. Practitioners were invited to post their job openings with the Office of Student Affairs and most students were eager to interview with potential employers. After establishing the initial contact, fourth year students will now spend time visiting the practices of interest to them while, in effect, "auditioning" for the position.

Rounds of applause are now in order for the many individuals who contributed to the success of the Conference.

Especially for **Dr. Charles Short** who has been in charge of three Annual Conferences—and made outstanding successes of them all.



And for **Linda Ritzler**, who brought order out of a chaos of reservations, menus, exhibits, and myriad details.

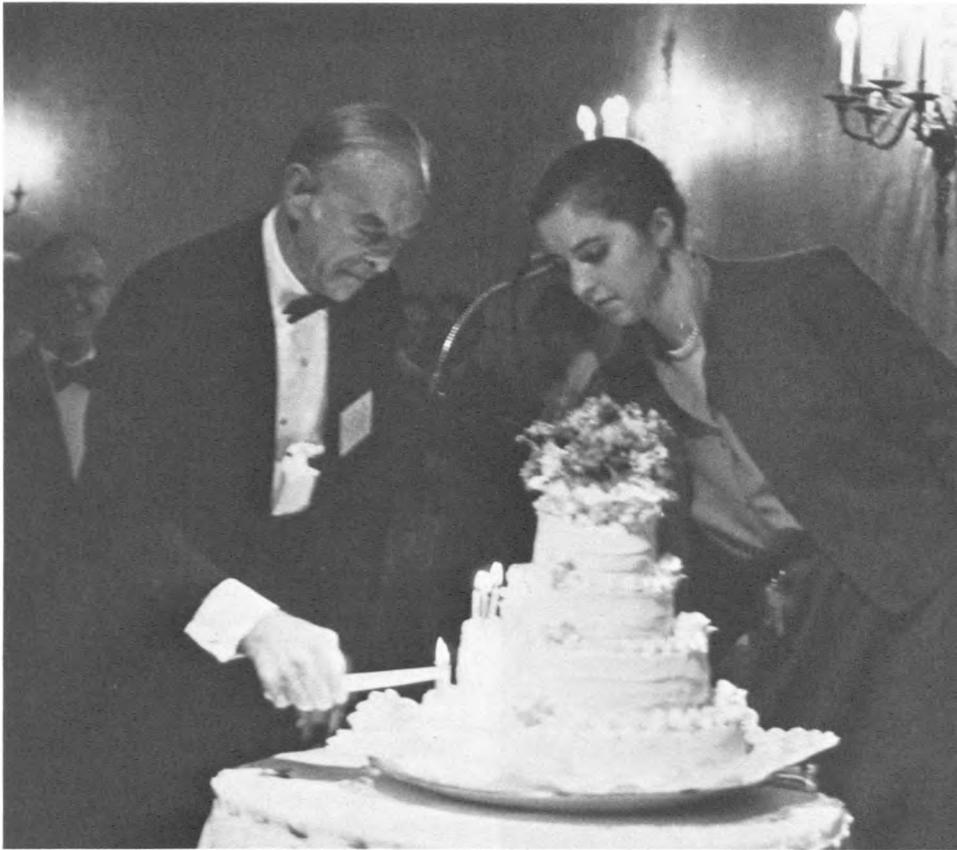
For the Conference Advisory Board, **Drs. Michael Collier, G. Frederick Fregin, David Graham, H. Jay Harvey, Danny Scott and Maurice White.**

For **Mrs. Charles E. Short**, Coordinator of Food and Hospitality Services, whose southern charm never faltered through fire alarms, sub-zero weather and non-stop demands for coffee.

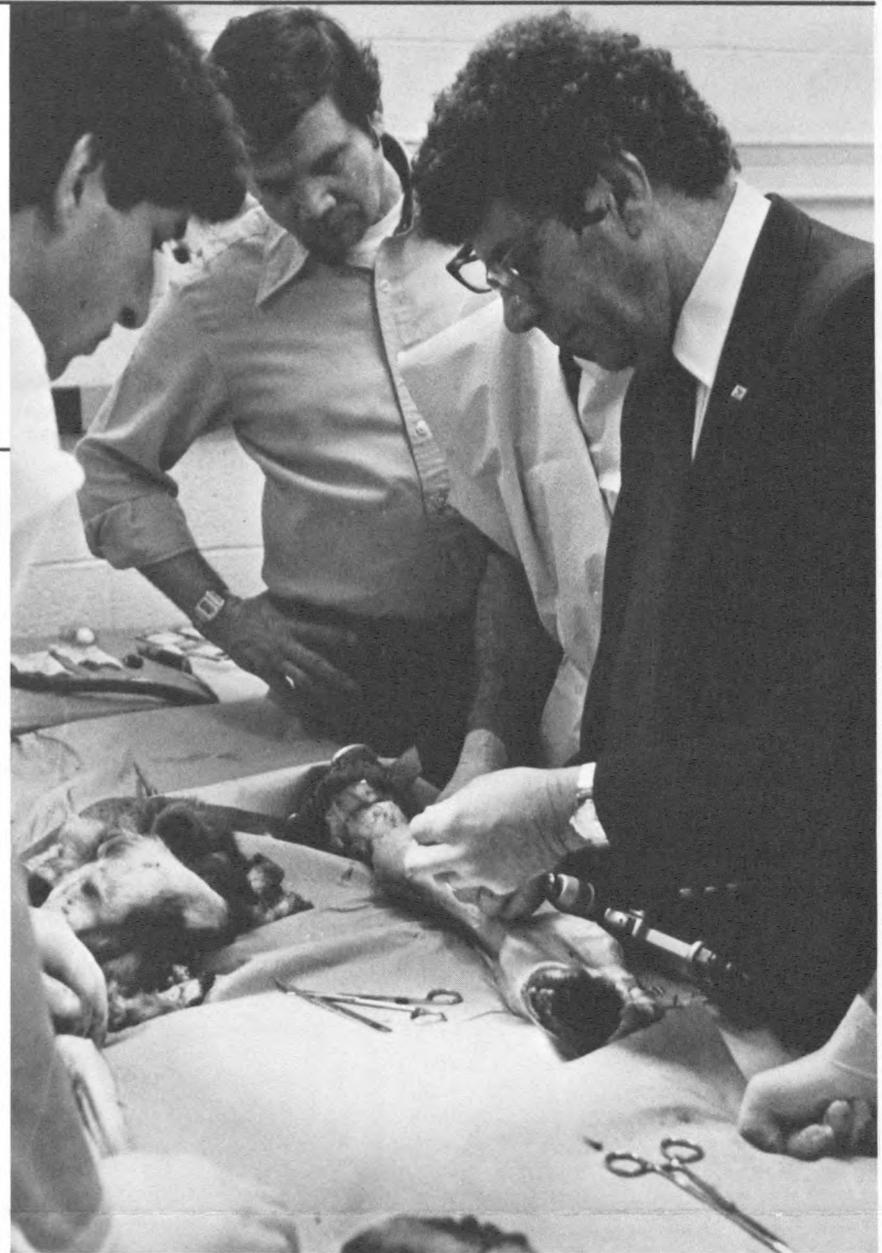
For **Mrs. Wolfgang Sack** and the Veterinary Faculty Wives Conference Committee who organized the Spouses' Program.

For **Sandy Berry** and her staff in Biomedical Communications who orchestrated,





Dr. Edgar Tucker cuts the Anniversary Cake



Equine wet lab with 3M



Pet Bird Lab

Lorraine Socci '83 job hunts

maintained and double-checked every piece of audio-visual equipment during the Conference and who cheerfully and competently filled any and all special requests in the A-V line.

For **Marcia Sawyer** and her staff in Student Affairs, who brought students and potential employers together in three hectic days of interviews. And finally a round of applause for all those individuals, especially our staff and faculty and the members of the Conference Advisory Board, who devoted their time and energy and made the 75th Annual Conference for Veterinarians an enjoyable, educational and entertaining experience.



Drs. Leonard & James H. Steele

Craft show

Les savants ne sont pas curieux*

(The know-it-alls are not curious.)

Scientific curiosity about an unidentified body, some similar, yet dissimilar, organisms and the chemotherapeutic agent that works against them, led Associate Professor of Protozoology, Dr. Donald G. Lindmark to the 1982 S. H. Hutner Prize for excellence in research in protozoology. This international prize is awarded yearly by the Society of Protozoologists to an outstanding scientist in the field of Protozoology.

Dr. Lindmark's study started simply enough with *Trichomonas foetus*, a protozoan bovine parasite that is best known to veterinarians as the causative agent of a venereal disease in cattle. *T. foetus* is also an aerotolerant, anaerobic parasite that can be easily grown in a nutrient medium, producing large quantities for biochemical investigation. *T. foetus* caught Dr. Lindmark's eye because of its vibrant nature when observed under the microscope. Electron micrographs showed even more intriguing aspects of the parasite—it was abundant with organelles that looked like microbodies: that is organelles with a single membrane and a fine granular matrix.

To answer some basic questions concerning the nature of the organelles, Dr. Lindmark proceeded as cell biologists had done with mammalian cells. He first obtained the parasites in large quantities, homogenized them in such a way as to maintain intact subcellular organelles, then separated the organelle types according to size differences by centrifugation. These size differences resulted in fractions, or a series of particle deposits. It was already known that a cell's enzymes have specific locations in the cell and can be used as probable markers for that location. Therefore, biochemical analysis of the fractions determined that certain enzymes were associated with microbodies. Electron microscopy was then used to correlate biochemical and morphological information.

Dr. Lindmark found that the microbodies contained enzymes responsible for cell energy production, acetic acid production and hydrogen production; he called the organelles "hydrogenosomes" because of their ability to produce hydrogen. Production of hydrogen is rare in eukaryotes, or cells containing a nuclear membrane. "Hydrogenosomes" are ONLY found in eukaryotic, hydrogen-producing organisms and may function as the anaerobic version of the mitochondrion in the cell. Of interest is the fact that a number of the enzymes found in hydrogenosomes are sensitive to oxygen and were formerly found only in bacteria. Dr. Lindmark's research has not only revealed the character of "hydrogenosomes," he has also shown how these



Dr. Donald G. Lindmark

particular cells utilize carbohydrates and produce energy through their hydrogenosomes.

In pursuit of similar trichomonads and their hydrogenosomes, Dr. Lindmark next concentrated on *Trichomonas vaginalis*, the causative agent of a common human venereal disease found in approximately 20% of the female population over 25 years of age. Here, he found a metabolic pattern similar to *T. foetus* with hydrogen production in connection with hydrogenosomes. Both parasites are aerotolerant, as is the third parasite Dr. Lindmark studied, *Giardia lamblia*.

However, though metabolically similar and closely related to the two parasites, *T. vaginalis* and *T. foetus*, *G. lamblia* does not produce hydrogen nor possess hydrogenosomes.

G. lamblia is the most common intestinal protozoan parasite in this country. Passed by the fecal-oral route, it is zoonotic, or transmissible to man from animals causing epidemics of diarrhea in human populations. The parasite exists in two forms, the actively growing (trophozoite) and the resistant cyst form. Cysts are ingested by the host and activated by stomach acid to form trophozoites in the small intestine.

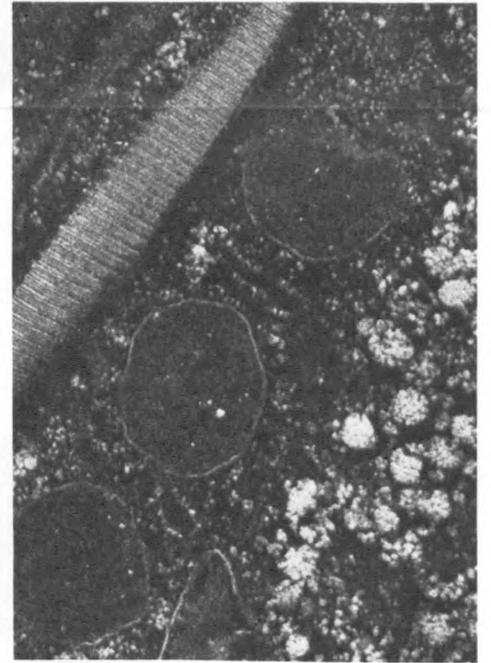
Epidemics of giardiasis have occurred in Rome, NY; Aspen and Vail, Colorado; and Portland, Oregon. Outbreaks have been associated with human-animal associations to the degree that in Oregon, giardiasis is called "beaver fever" since beavers are implicated in the transmission. Hikers and skiers can easily ingest *G. lamblia* cysts when they drink from contaminated streams, lakes or other water sources.

Physicians normally prescribe the medication Flagyl (Metronidazole) for both Giardiasis and Trichomoniasis. This chemotherapeutic agent is active against trichomonads, *Giardia* and other microbes that reproduce anaerobically. Flagyl's mechanism of action appeared to be associated with the organism's metabolism of carbohydrates. How did Flagyl work on all three parasites, which differ in subcellular organization, as well as other anaerobic microbes?

Dr. Lindmark's studies demonstrated the occurrence of ferredoxin, a protein with the ability to transfer electrons under anaerobic conditions in organisms sensitive to Flagyl. When Flagyl is present in the cell, ferredoxin readily transfers electrons to it, altering the chemotherapeutic agent and producing a different, but toxic, substance. It is this altered product that causes the death of

the cell. Dr. Lindmark found that if the original Flagyl is chemically altered, changing its concentration within the cell, Flagyl from the outside floods across the cell membrane and concentrates in the sensitive cell. Flagyl is highly selective, and specific for organisms having ferredoxin—such as anaerobes—and does not affect aerobes. Best of all, it is effective in low concentrations and can be used in the treatment of trichomoniasis, giardiasis, amoebiasis and clostridial and anaerobic cocci infections.

Dr. Lindmark now pursues other questions in protozoology. This time his studies are involved with the nuclear organization and structural arrangement of *Giardia*, incorporating techniques of molecular biology. In addition, he is exploring the use of *T. foetus* as a model for biomembrane function.



An electron micrograph reveals hydrogenosomes (round bodies in center of photo) in the parasite *T. foetus*.

*Anatole France

Photos by K. Redmond

FOOTNOTES

DIPLOMATES

Ten faculty and staff members at the New York State College of Veterinary Medicine have successfully completed certification exams in either Internal Medicine or Veterinary Pathology.

The American College of Veterinary Internal Medicine named as new diplomates, Drs. Sharon Center, William E. Hornbuckle, Sidney Moise, and John Randolph and former residents in the College's program, Drs. Sue Bunch and Rocky DiFruscia. In Veterinary Pathology, the new diplomates certified by the American College of Veterinary Pathologists are Drs. Neil Allison, William L. Castleman, Paul C. Meunier, and Greg Parker Sykes, and also Thomas J. Van Winkle presently on staff of the Charles River Breeding Lab.

DIAL 256-5454

The installation of a new campus-wide phone system has changed the way we answer the incoming calls at the New York State College of Veterinary Medicine. A new central number has been created—(607) 256-5454—where Eileen Wainwright takes all calls as the Central Telephone Console Operator. With Eileen's assistance, calls are put through to the desired extension number, eliminating information searches by callers unfamiliar with the College's many departments, staff and faculty members. A brand-new inter-office phone system is also operational and is coordinated by a central computer within Schurman Hall.

Eileen operates the Central Console from 8 a.m. to 5 p.m., Monday through Thursday and until 4:00 p.m. on Fridays. Calls received after those hours and on weekends and holidays are taken by the night answering service. Individual night numbers have also been assigned.

To contact the College's Clinics during the day, callers should dial 256-5454 and request either the Small, Large or Ambulatory Clinic. Callers may also continue to dial the old numbers: 256-3237 (SAC), 256-5402 (LAC), 256-2175 (Ambulatory). The New York State Diagnostic Laboratory may be reached at either the old number, 256-6541 or through the Central Console at 256-5454.

CORNELL AWARDS

Professor & Chairman of Veterinary Physiology, William Hansel, has received a grant of \$27,000 from BARD for the study of "Hormone Production by the Bovine Blastocyst." He is also the recipient of a three year National Institutes of Health grant to study "Regulation of Hormone Synthesis by the Bovine Placenta." The current year's grant will be for \$110,000.

Associate Professor and Director of the Center for Research Animal Resources, Fred W. Quimby, will study the "Etiopathogenesis of Toxic Shock Syndrome" with a new one year grant of \$42,965 from Personal Products.

Dr. Charles G. Rickard, Associate Dean of the College, has had two New York State grants renewed, for the "Collection of Brucellosis Ring Test Samples," and technicians' salaries connected with the project.

Dr. Charles Short, Department of Clinical Sciences, has received a new \$37,287 grant from Philips-Roxane for the "Evaluation of Clenbuterol for Producing Bronchodilation in Horses."

Professor of Veterinary Physiology, Robert H. Wasserman, will begin the study of "Calcinogenic Solanum Plants Source of Vit-D-Like Derivative" with a new \$50,000 grant from BARD.

FIRST FORUM FOR INTERNAL MEDICINE

The American College of Veterinary Internal Medicine's first educational forum will take place May 8-12, 1983, in New Orleans, Louisiana, at the Marriott Hotel.

This debut of an outstanding educational series will feature many timely topics in both large and small animal medicine, presented by nationally-known clinicians, in areas such as urology, dermatology, anesthesiology, immunization, cardiology and diagnostic techniques. Registrants will be able to meet with speakers to discuss problem cases.

The fee for the three-day program is \$225. Full payment must be made in advance. Early registrants, prior to April 1, receive a \$25 discount. The daily rate is \$100. ACVIM candidates, residents, interns and senior veterinary students pay \$100; early registration, \$80; daily rate \$50. A \$50 deposit reserves hotel accommodations. Registration at the door is permissible.

Contact Dr. William J. Kay, general forum chairman, at (212) 838-8100; Dr. John E. Oliver, program chairman, at (404) 542-3221; or Ruth Asher of Alice Travel, for registration and hotel information, at (800) 526-6453.



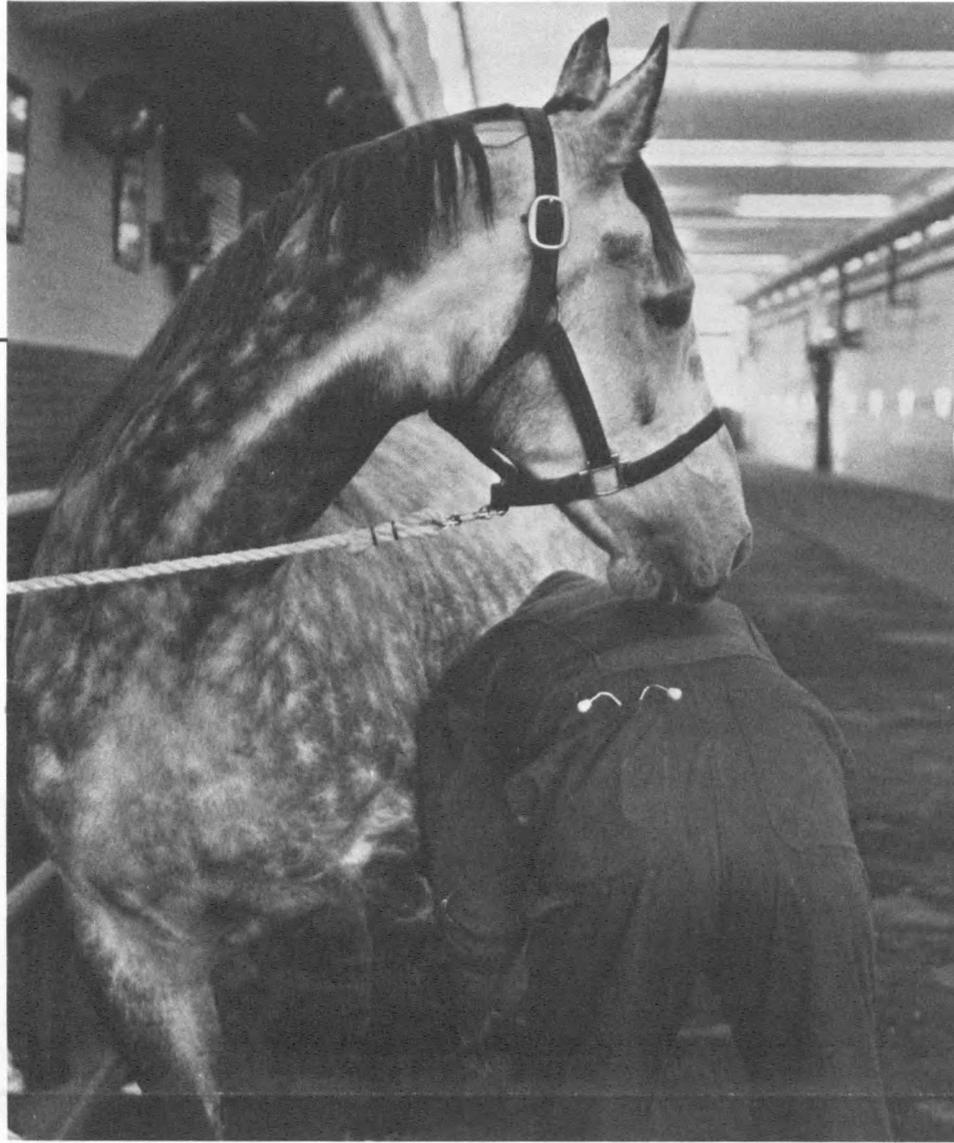
**HERBERT LESTER
GILMAN, DVM
1894-1982**

Herbert L. Gilman, DVM, Emeritus Professor of the New York State College of Veterinary Medicine at Cornell, died October 27th, 1982 in Miami, Florida after a long illness. Dr. Gilman was 87 years old.

Dr. Gilman was a native of New York State and served on the faculty of Cornell University for 47 years. Before his retirement in July, 1962, he had devoted most of his professional life to research on the diseases of dairy cattle, especially brucellosis, trichomoniasis, vibriosis and other

infectious diseases associated with sterility problems. In collaboration with the late Dr. Raymond R. Birch, he participated in fundamental research on brucellosis, helping to lay the groundwork for our present day understanding of this disease. In 1956, he was the recipient of the AVMA Borden Award for his contributions to knowledge about diseases of dairy cattle.

Dr. Gilman is survived by his wife, Edwina Julian Haggard.



SCHOLARSHIPS FOR HARD WORK

An Equine Scholarship program to give veterinary students a summer of equine experience has been an overwhelming success. Last summer, five scholarships provided by equine industry organizations and veterinary practitioners were awarded to students in their second and third years at the New York State College of Veterinary Medicine.

Daniel Keenan, Class of '84, through support by the Horsemen's Benevolent and Protective Association, spent the summer working with Dr. John Steiner of Mahopac, New York. Dan reported back that the experience "really increased my motivation and desire to return to school and to practice equine medicine in the future." During the summer, Dan participated in demonstrations of ultrasonography and electrostimulation while performing the day-to-day duties of an equine practitioner.

Jay Baldwin, '83, thanks to a scholarship contribution from the Cavanaugh Trust, enjoyed his summer as an intern in the Laboratory of Equine Reproduction, Department of Veterinary Science, University of Wisconsin. Working with Professor O.J. Ginther and Dr. Gordon L. Woods, Jay regularly spent an average of 68 hours per week on palpations and infusions of mares, collections from stallions, castrations, surgery, herd health and record keeping.

Lenka Babuska, '84 was employed in the Delaware Equine Center of Cochranville, Pennsylvania and supported by Fasig-

Tipton Company, Inc. Her experiences at the Center, "enabled me to apply the material I have already learned, [providing] background which will make future school experiences more meaningful." She felt that in the long run, this summer experience would make her "a better qualified equine veterinarian, able to perform a better service for my clients in the equine industry."

Ann Dwyer, with support from the New York Thoroughbred Breeders, spent the summer learning about an equine practice with Dr. Hammond of Millbrook, New York. She called it "a very great education experience." Ann had the opportunity to round out her practical skills, assist on calls and in surgery, attend to a variety of orthopedic problems and observe breeding.

Brad Davis, worked for Dr. Harold Holbrook at his practice in Olney, Maryland, with support provided by Dr. Holbrook and the New York State College of Veterinary Medicine. Halfway through the summer, Brad wrote, "I am working long hours, but the way this summer has pulled together all the material of my third year is very rewarding." Brad was able to benefit from Dr. Holbrook's 40 years of experience and he feels he'll make a better veterinarian because of it.

Five scholarships to support students' experience in the equine industry during the summer months were awarded for 1983. This year, Dale Rubin '84, Amy Hurd '85, Geoffrey Tucker '84, Kathleen Hall '84, and Darice Wiltse '84 will receive stipends of \$2,000 while working with one or more equine practitioners. Two alternates, Patricia Kenney '85 and Sue Morrison '84, were also chosen. Veterinary practices are still being sought to offer equine experience to students. For more information on sponsoring a Summer Equine Experience Scholarship and/or providing a summer opportunity, please contact Dr. Donald Postle, Director of Student Financial Aid, New York State College of Veterinary Medicine, Ithaca, New York 14853.

Photo—K. Redmond

Veterinary
Viewpoints

The New York State College of Veterinary Medicine
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