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Number 3, 1990

A Statutory College of the State University of New York

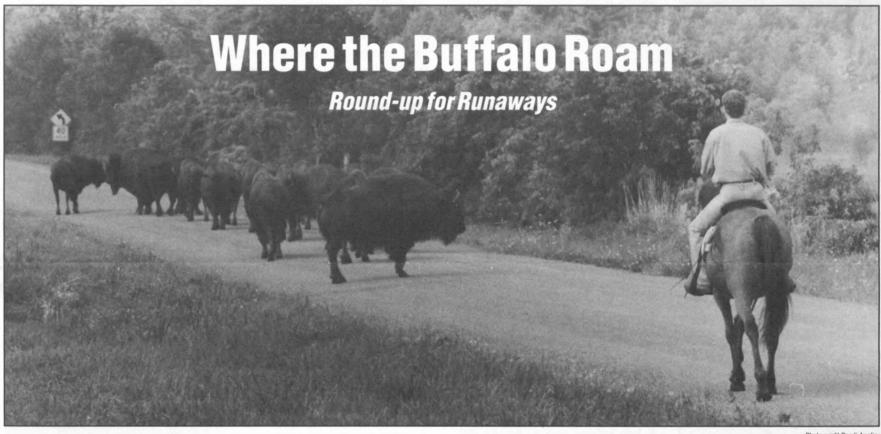


Photo credit Randi Anglin

career in veterinary medicine can require unusual skills. Skills in herding, for example. On September 11, the director of the Veterinary Medical Teaching Hospital, Dr. Francis Kallfelz, received a request for help from the Onondaga County Sheriff's Office. A herd of 16 buffalo had escaped from their pasture on the Onondaga Indian Nation south of Syracuse, New York. The buffalo had caused extensive damage to property in the area, grazing their way through one family's evergreen nursery, damaging trees intended for sale to landscapers. The biggest worry, however, was that the herd would attempt to cross a well-traveled highway, Interstate 81.

The sheriff's office asked for veterinarians who could tranquilize the buffalo. The initial plan was to load the tranquilized animals on a truck and transport them back to the reservation.

Dr. John Descanio, an ambulatory clinician, and Dr. Peter Rakestraw, an instructor in large animal surgery, answered the call. But not without reinforcements. Dr. Rakestraw, who has worked on cattle ranches in Wyoming and Montana, borrowed horses from Cornell's Equestrian Center. After assessing the situation and consulting with members of both the Onondaga Indian Nation and the sheriff's department, the veterinarians pro-

posed an alternate plan. On horseback, they would herd the buffalo back to the reservation.

Said Dr. Rakestraw, "The buffalo acted very much like range cattle that hadn't been worked with. We got them moving, and they really retraced their own path back to the reservation." Despite their size, Dr. Rakestraw explained, "These buffalo were at no time aggressive," although buffalo have been known to charge when they sense that the young in the herd are threatened.

The Syracuse Police Department's mounted patrol assisted in round-up and the buffalo

were returned safely to their home pasture. In a letter, Onondaga County Sheriff John C. Dillon thanked the veterinarians, saying, "Your advice and your participation in returning the herd to the Onondaga Nation were invaluable in bringing this incident to a successful conclusion. The fact that the herd was returned without injury to any person, or the animals themselves, as well as no further damage to property, attests to the success of the operation. This might not have been the result without your assistance."

▲ Dr. Peter Rakestraw moves the escaped buffalo herd back toward their home on the Onondaga Indian Reservation.

Dr. Eugenia Kelman

New assistant dean for student affairs



Dr. E. Kelman

hile she was the assistant dean for student administration at Colorado State University's College of Veterinary Medicine and Biomedical Sciences, Dr. Eugenia Kelman asked students to fill out time sheets on their weekly study hours. The time spent turned out to be the same as for medical students—between 60 and 65 hours a week of learning activity, including lecture and lab. Although Dr. Kelman was interested in how much students study, she was actually trying to determine why veterinary medical education is perceived as stressful. She found out it may be stressful because students are simply working longer hours than most people in our society.

Service is Key for Office of Student Administration

Dr. Kelman explained, "Most undergraduates spend less than 40 hours a week in some form of studying, so that's a big change. It's the adjustment of working up to 20, 25 hours more a week that makes veterinary school stressful. Fortunately, most students make the adjustment and become very efficient people in the process."

At Colorado and more recently at the University of Texas School of Medicine at Galveston, Dr. Kelman taught classes on survival skills to help first-year students face the challenges of professional school. Now she brings those skills and insights to Cornell's College of Veterinary Medicine as the assistant dean for student affairs. This new position consolidates the various student services—including registrar, financial aid, admissions, job placement and intercultural affairs—under a single administrative unit within the college.

In Texas, Dr. Kelman was the director of academic counseling services in the School of Medicine, and an assistant professor in the department of psychiatry and behavioral sciences. Dr. Kelman earned her undergraduate degree at the University of Califor-

nia-Berkeley, and a master's from the University of Illinois-Urbana, both in English literature. She also holds a master's and doctorate in psychology from Colorado State University (CSU).

Her ties to the veterinary profession began at CSU's College of Veterinary Medicine, where she was assistant dean of student administration. In this position, Dr. Kelman supervised admissions to the veterinary medical professional school and the advising program for undergraduate majors. She also coordinated scholarships and awards, financial aid, loans, employment placement service and minority student recruitment. Dr. Kelman will provide personal and academic counseling for veterinary medical students. The author of several papers on veterinary medical education, she plans to conduct workshops to help students with time management, study skills and stress management.

"Veterinary school is demanding, "said Dr. Kelman. "Making the shift to the new curriculum may be even more stressful. It will be important that admissions, registration and financial aid programs be managed so effectively that they do not pose problems or provide unnecessary distractions to faculty and students. It may also be useful to develop new programs in the area of advising and recruitment, or to provide additional personal and academic support services to veterinary students, since the proposed curriculum will require them to make more choices and to take more responsibility for their education."

Student recruiting will also be a high priority. Said Dr. Kelman, "I think it's well to look to the future and plan ahead, and to make very good contacts with pre-professional advisors and student groups. I have a particular interest in vocational counseling. Many young people who are interested in science careers haven't thought of veterinary medicine as a way to achieve their goals."

Finally, Dr. Kelman's philosophy is easily summarized. She explains, "It's service. All student affairs programs exist to help students."

International Symposium Focuses on Animal Pain and Its Control

nimal pain and its control was the topic of an international symposium held at Cornell University from June 25 through 28. Organized under the auspices of Cornell's Colleges of Medicine and Veterinary Medicine, the symposium attracted participants from over 16 countries. Ninety-five lectures and speakers from the basic sciences and clinical medicine were featured over four days.

Dr. Charles Short, professor of anesthesiology at the College of Veterinary Medicine, was pleased with both the symposium's turnout and the influence it may have on future pain alleviation studies. According to Dr. Short, the program provided a forum for improved understanding of animal pain and a stimulus for advances in teaching and clinical practice of pain management in animals.

Symposium presentations emphasized the physiology, pharmacology and clinical applications of pain control, in particular the neuroscience of pain and its control using opiates, a-adrenergic agonists, and other medications and techniques. The scientific program was followed by planning sessions on ways to improve knowledge of the prevention or control of pain and the development of additional medications. Concerns for a reduction in the number of animals needed for research were also addressed.

The Symposium was co-sponsored by the American Veterinary Medical Association, the Geraldine R. Dodge Foundation, the Harry M. Zweig Memorial Fund, the Food and Drug Administration, the National Institutes of Health, and 14 pharmaceutical companies.

Veterinary

Veterinary Viewpoints is published three times a year for friends and alumni of the College of Veterinary Medicine, Cornell University. Correspondence may be addressed to:

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Survey Looks at Applicants

An analysis of 1989-90 applications and admissions to U.S. Colleges of Veterinary Medicine was recently conducted for the Association of American Veterinary Medical Colleges. Here is a summary of the survey's highlight's, comparing Cornell's experience with national averages. These statistics support the common assumption that admission to veterinary colleges is as competitive as selection to medical schools in terms of applicant: accepted accepted student ratio.

*This is the only increase in applicants in a decade. The number of applicants in 1980, was

** Most recent year for which statistics are avail-

Nationwide—Veterinary Schools

1989-1990 Number of applicants: 3,955* 1988-1989 Number of applicants: 3,922 Percentage accepted: 56.45

Percentage of female applicants: 63% Percentage of minorities: 7.98%

Nationwide—Medical Schools

**1989 Number of applicants: 29.915 Number enrolled: 15,867

Percentage accepted: 53%

Percentage of female applicants: 39.2% Percentage of racial minorities: 11.2%

VELERILLRY MEDICINE

College of Veterinary **Medicine at Cornell**

1989-90 Number of applicants: 447 1988-89 Number of applicants: 451 1990 Percentage accepted: 18% Percentage of female applicants: 69% Percentage minority applicants: 10.29

Class of 1994

Gender ratio: 25 males: 55 females

Minority students: 21% Cornell undergraduates: 38%

Avg. GPA: 3.43

Avg. GRE: 1278 (Combined verbal and

quantitative scores)

Avg. years of post-secondary education: 4.63

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Learning to Learn

Director Guides Educational Development



Dr. Katherine Edmondson

omputer simulations...small group discussions . . . tutorial programs . . . problem-based learning. . . A conversation with Dr. Katherine M. Edmondson is peppered with phrases like those. As the new Director of the Office of Educational Development at the College she uses such terminology to emphasize her interest in student learning strategies and student conceptions of knowledge. It's an interest she hopes to share with faculty members and students.

Dr. Edmondson joins the college's staff at a time of expanding curricular and educational initiatives. Faculty members are searching for new ways to teach and for students to learn information that will prepare them for the future. Says Dr. Edmondson, who holds master's and doctoral degrees in curriculum and instruction, "Professors are faced with the enormous challenge of trying to isolate the main ideas and key issues to problems students may face years later as practitioners. So now instead of the old model—which was, You come as a student and I'll teach you everything you need to know to be a doctor-students now need to learn the skills to think as doctors. Students need the skills to figure out what they need to know, how to find that out and learn it effectively, then evaluate what they're finding. We're teaching thinking skills in addition to information and clinical skills-a way of learning how to learn."

The computer will be part of the learning process. "Computer simulations are a much more real illustration than a static two-dimensional drawing," explains Dr. Edmondson. "Students will actually see and experience a process. Simulations are not going to replace textbooks or lectures, but they may free up some lecture time, so the professor can concentrate on other things or allow the students to work in small groups. They provide one alternative to traditional methods."

Other alternatives might include the development of tutorial programs to accompany lectures and be made available in the microcomputing center for students to review material they were unsure of or skip to new areas. Problem-based learning, another option, has already been the focus of a workshop organized over the summer. Cooperative learning—where students essentially teach each other—is still another innovation to consider.

Explains Dr. Edmondson, "There are many different kinds of methods that can be tried and some faculty members are already using such innovations. I think part of challenge is to help the rest of the faculty understand what those individuals are doing. This interchange can be productive, enlightening, and save everyone the process of re-inventing the wheel."

With this in mind, twice-monthly luncheons are planned where faculty members who are trying different teaching methods can share their work with colleagues . Dr. Edmondson is also surveying faculty members to determine interests and discover what faculty would find helpful. She hopes to begin addressing those issues soon.

The process may not be easy but the goals are worthwhile and a smooth transition is possible. Edmondson says, "Faculty are already thinking about their classes, their students, about what they're going to do in their next lecture. There is an effort to move away from the lock-step curriculum to a more flexible plan. It's not so much that professors will have an additional volume of information, techniques and strategies to learn and then apply to their classrooms. It's more learning to ask new questions and take a new angle on something in which they're already familiar. Ithink it's an effort to try and keep the best of both worlds-to take a good, solid basic education and complement it with a very strong, but more specialized and flexible approach. And that's part of the challenge."

Centennial Medallions Awarded



Dr. S. Aldrich



Dr. M. Holmes



Dr. A. Weinberg

hree individuals were recently honored for their contributions to the veterinary medical profession in New York State. At the September Advisory Council meeting of the College of Veterinary Medicine at Cornell, they each received the New York State Veterinary Medical Society's Centennial Gold Medallion "for exemplary service in the guest for a better life for man and animals." In 1990, the society celebrates its centennial year by paying tribute to people who, through dedicated work and commitment, have helped to ensure the continued strength and health of the veterinary profession. The recipients are Dr. Stanley Aldrich, Dr. MacDonald Holmes and Dr. Arnold Weinberg:

Dr. Aldrich, a 1950 graduate of the College of Veterinary Medicine and a Long Island practitioner, has been active for a number of years in state and national veterinary medical organizations. He was president of the Long Island Veterinary Medical Association in 1961, president of the New York State Veterinary Medical Society in 1972, and president of the American Veterinary Medical Association in 1980-81. From 1977 to 1987, Dr. Aldrich served on the New York State Board for Veterinary Medicine, the body that administers official examinations for veterinarians wishing to practice in the state. He was named Veterinarian of the Year by the New York State Veterinary Medical Society in 1981 and Outstanding Practitioner of the Northeast Region by the American Animal Hospital Association in 1982.

At Cornell's College of Veterinary Medicine Dr. Aldrich has also been active in college and alumni affairs. He served as president of the college's Alumni Association in 1974 and 1975 and co-chair of the college's 1976 Campaign for Excellence. A member of the college's Advisory Council, he served as its chair in 1986 and 1987. He presently serves on the Cornell University Council.

Dr. MacDonald Holmes, Dean of the Division of Agriculture and Natural Resources, College of Agriculture and Technology at SUNY Cobleskill, is an alumnus of Cornell's College of Agriculture and Life Sciences and a 1961 graduate of the University's College of Veterinary Medicine. A former member of the college's Advisory Council, Dr. Holmes chaired the council from 1982 to 1985.

Dr. Holmes practiced veterinary medicine for 27 years in Lawyersville, near Cobleskill, New York. During those years, he served eight years on the Executive Board of the New York State Veterinary Medical Society and as president of the Catskill Mountain Veterinary Medical Association. In 1988, he left veterinary medical practice to assume his present responsibilities as dean at SUNY Cobleskill. He is currently chair of the New York State Board for Veterinary Medicine and a member of the American Veterinary Medical Association, New York State Veterinary Medical Society, the joint staff in Agricultural Education, Gamma Sigma Delta, and Cornell Cooperative Extension.

Dr. Arnold Weinberg is a professor of medicine at Harvard Medical School, and served as chair of the College's Advisory Council from 1988 until 1990. Dr. Weinberg's leadership supported initiatives that led to a re-

They've helped to ensure the continued strength and health of the veterinary profession.

vamped college curriculum, the construction of new college facilities and the necessary funding to achieve these goals.

Dr. Weinberg completed his undergraduate work at Cornell University and received his medical degree from Harvard in 1956. His ties with Cornell were strengthened when his daughter Carolyn, Class of 1981, entered Cornell's College of Veterinary Medicine.

In addition to his academic and administrative responsibilities as professor of medicine at Harvard Medical School and medical director at MIT, Dr. Weinberg serves as a senior physician at Massachusetts General Hospital and on the boards of consultation at a number of Boston area teaching hospitals and Harvard University. The recipient of numerous teaching awards in medicine, Dr. Weinberg has published extensively in the area of clinical infectious disease and medical microbiology, two of his research interests.

Empire Games Entry

Sandy Young '93 Swims the Fast Lane

eing a female swimmer you're probably over the hill at 16," says Sandy Young '93. Even so, at the advanced age of 23 Sandy began competitive swimming and qualified for the master's division in the Empire State Games this past summer. The master's division is for people 21 years of age and older, and offers a way to swim competitively with people in the same age group.

Sandy began swimming because of an unfortunate occurrence. As a first-year veterinary student she had to take a leave of absence in the academic year of 1988-89 to undergo intestinal surgery. It was during her recuperation that she joined the Ithaca YMCA and started swimming laps in the mornings. When she returned to veterinary college in the fall of 1989, she continued swimming. "Then I saw a notice that the YMCA was starting a master's group in swimming," she recalls. "I'd heard people say if I ever had a chance to join a master's group, it would really improve my stroke. So I said I'd try it."

Sandy swam laps during the week and attended team practice once a week. Towards the end of the spring semester, however, academic pressures made her cut back. Much to her surprise, in the beginning of the summer she received a letter from the team coach notifying swimmers of preparations for the Empire State Games. By mid-June Sandy was back in the swim with twice-weekly training practices and workouts in the mornings.

Less than a month and a half later, she swam in her first competitive meet. She explains, "The Empire State Games have a set of times per distance per age group, so if you want to swim that distance in the Games, you must have a time that is under such and such. I had to do a qualifying meet to have certified times, so I swam in a meet in Rochester in the beginning of July."



Sandy Young '93

Sandy qualified for the Empire Games and competed in the freestyle 50-, 100-, 400- and 800 meter events. (Eight-hundred meters is half a mile.) She won gold medals in the 50 and 800 meters freestyle and bronze medals in the 100 and 400 meters. "I really put a lot of effort into this summer," Sandy says. "I said this is something I want to do. I liked the feeling of being on a team. We encouraged each other, got each other ready, and just had a great time. Not having competed in swimming before I didn't know how I would do compared to everyone else. But I beat my personal best times, so I was really happy about that."

A new master's swimming program began in October at the YMCA. Sandy isn't sure she'll make all the practices—a busy second-year veterinary student, she's coordinator of the Avian Clinic, a student-run clinic for injured wild birds. The recipient of three scholarships* awarded on the basis of financial need and academic standing, Sandy is also committed to her studies. "The workouts in the morning, "she says, "give me a good routine. I feel better about myself and have more confidence and a little more energy because I have that exercise." Looking back on her foray into competitive swimming, she adds, "I never thought it would be anything I could do. You're just never too old."

* Sandy Young has received the Dr. John W. and Vivian M. Earl Scholarship, the Hilda G. and Walter D. Way Scholarship and the Joel Rosenman Leventhal Scholarship.

Summertime Researchers

By Metta Winter

ach summer seven veterinary students from the first, second and third year classes have an opportunity to try their hand at their own research projects through the National Research Service Summer Student Research Fellowship Program.

"The purpose of the program is to expose students to the research environment by giving them responsibility for organizing and carrying out a separate research project during the three summer months," said program director Dr. Robert M. Lewis, professor of pathology.

Taking on more than just a summer job, fellowship recipients become full-fledged members of the "research family," working side by side with faculty, graduate students, post-doctoral fellows, and research and animal technicians on their own mini-projects derived from ongoing research programs in the labs where they work. Fellows learn appropriate laboratory techniques and how to generate and analyze data. At the end of the summer, they present a 20-minute seminar on their results to the faculty.

The program also offers the opportunity for public recognition of a fellow's contribution to the larger research endeavor. "If the results are positive and their work is part of published scientific papers, then they are identified as co-authors of the published work," Lewis said.

Fellows are encouraged to further their involvement in research activities during subsequent academic years through invitations to departmental seminars and other events. Sometimes funding is even available for continued research projects.

Typically, potential fellowship recipients are identified by faculty members through classroom contact. The student and the faculty-



▲ Dr. S. Gordon Campbell, the college's new director of international programs, heard from friends down-under recently in the person of Dr. Helen Jones-Fairnie from Curtin University, Western Australia. Dr. Jones, who was a student of Dr. Campbell's at Melbourne University, was the first woman president of the Australian Veterinary Medical Association.

"The purpose of the program is to expose students to the research environment"

sponsor then formulate a competitive research proposal which is reviewed by Dr. Lewis and a three-person advisory committee. This year's committee members are Dr. Donald Schlafer, associate professor of pathology; Dr. Drew Noden, professor of anatomy; and Dr. Dwight Bowman, assistant professor of microbiology, immunology and parasitology. The selection of fellows occurs in April of each year.

Any faculty member in the college actively engaged in applied clinical or basic, benchtype research can sponsor a summer research fellow. This past summer's fellowsponsor teams conducted projects in the areas of pharmacology, pathology, anatomy and reproductive physiology.

Cornell University's College of Veterinary Medicine has offered Summer Student Research Fellowships for seven years and has funding for three more. The idea behind the fellowships is to spark students' interest in research early in their medical education. "First-year students come to veterinary school with one focus, that is to become a practicing veterinarian," said Dr. Lewis. "The National Institutes of Health established the fellowships as part of a National Health Sciences Manpower Program so that students could see a different end point to their training, to influence some to consider research and eventual employment in an academic setting."

According to Dr. Lewis, the program's long range goal is to maintain the health of the profession by keeping academia supplied with the next generation of young faculty. "Without a steady influx of bright young faculty, veterinary schools would become stagnant," he said.

Conducting their own research projects is an eye-opener for students. "Most are amazed at how much work is involved in getting a little bit of information," said Dr. Lewis. "Some are turned on by this while others come away saying, 'I can't understand why anybody would go into this business!" But either way, fellows and faculty alike enthusiastically endorse this successful program.

Academic Notes



Dr. Peter Daels



Dr. Harold Hintz



Dr. Francis Kallfelz



Dr. Bud Tennant

Biosafety Director Appointed

Dr. Larry Thompson has joined the staff of the Diagnostic Laboratory as biosafety director and clinical toxicologist. Dr. Thompson will develop, implement and supervise programs relating to the protection of employees from occupational and environmental hazards. He will also be involved in extension services in the area of clinical toxicology.

Dr. Thompson is a graduate of the University of Wisconsin-River Falls and the College of Veterinary Medicine at the University of Illinois where he is completing the Ph.D. in veterinary toxicology. He also has been associated in a research and teaching capacity with the Illinois Animal Poison Information Center and the Laboratories of Veterinary Diagnostic Medicine at the University of Illinois. Dr. Thompson is a diplomate of the American Board of Veterinary Toxicology.

Dr. Hintz Inducted into Equine Research Hall of Fame

Dr. Harold Hintz, professor of animal nutrition, is one of the first inductees into the Equine Research Hall of Fame at the University of Kentucky. In this the inaugural year of the award, a total of 12 equine research scientists will be honored at ceremonies in Lexington in December.

Dr. Hintz is recognized for the major influence he has had on the direction of and rapid advancement in the field of equine nutrition. Plaques honoring each inductee will be hung in the Equine Research Hall of Fame, located in the University's Maxwell H. Gluck Equine Research Center. The criteria for eligibility for induction into the Equine Research Hall of Fame requires that nominees be researchers who have contributed a significant body of research over an extended period and that they be scientists who have "dedicated their careers to expanding the body of knowledge of equine science through their contributions to basic or applied research."

On AVMA Council For Research

Dr. Bud Tennant, the James Law Professor of Comparative Medicine, has been elected to a six-year term as a member of the American Veterinary Medical Association's Council on Research.

For almost a decade, Dr. Tennant has been studying the link between the hepatitis B virus group and liver cancer. It is estimated that, worldwide, more than 250 million people are chronic carriers of the hepatitis B virus, and more than 300,000 die each year from liver cancer attributed to the viral infection. His project currently is funded by an \$8.9 million NIH grant to study the woodchuck hepatitis virus, a virus similar to the hepatitis B virus that affects humans. The work may lead to improved methods of combating hepatitis and liver cancer.

Dr. Tennant is a diplomate and past-president of the American College of Veterinary Internal Medicine He has been a member of the Cornell faculty since 1972. He is a member of the American Gastroenterological Association, the American Association for the Study of Liver Diseases, the American Institute of Nutrition, the AVMA, and the New York Academy of Sciences. He was nominated for the council position by the New York State Veterinary Medical Society, of which he is also a member.

Theriogenologist Joins Faculty

Dr. Peter Daelshas been appointed assistant professor of theriogenology at the College of Veterinary Medicine. A native of Ghent, Belgium, Dr. Daels graduated from the State University of Ghent with a degree in veterinary medicine. He completed an internship in large animal medicine at Washington State University and a residency in equine reproduction at the University of California-Davis. He recently completed his Ph.D. degree.

■ Dr. Cooper Receives Ralston Purina Research Award

Dr. Barry Cooper, associate professor of pathology, College of Veterinary Medicine, Cornell University, was honored recently a recipient of the 13th Annual Ralston Purina Small Animal Research Awards.

Dr. Cooper received his award for research in pathogenesis of neuromuscular diseases in small animals. His characterization of an inherited myopathy of canines at the phenotypic and molecular levels has provided the first definitive evidence that muscular dystrophy occurs in domestic animals.

The Ralston Purina Small Animal Research Awards are given annually to five veterinarians, nutritionists and other professionals in the small animal veterinary field. Recipients are selected for originality and significance of research performed, as well as for the quality of the publications printing such research. Award winners are selected by the American Veterinary Medical Association Council on Research.

Kallfelz Interim Director VMTH

Dr. Francis A. Kallfelz will serve as interim director of the Veterinary Medical Teaching Hospital until a new director is appointed sometime next spring. Dr. Kallfelz replaces the hospital's former director, Dr. Robert Playter, who is now the associate dean for clinical and outreach programs at Texas A&M's College of Veterinary Medicine. Dr. Kallfelz is a professor of clinical nutrition and chief of the section of radiological and physical diagnostics.



Dr. Edward Dubovi



Dr. Howard E. Evans

■ Dubovi Named Associate Director

Dr. Edward E. Dubovi has been named associate director of the Diagnostic Laboratory. In addition to his continued responsibilities as director of the virology section, Dr. Dubovi will assist the laboratory's director, Dr. Donald Lein, in the administration of daily operations. These include direction of the laboratory's research efforts, extension services and interaction with the public, public agencies and industry groups.

Dr. Dubovi received a B.A. in biology from the University of Pennsylvania in 1967 and a master's degree in virology from Purdue University the following year. In 1975 he earned a doctorate in microbiology at the University of Pittsburgh.

Dr. Evans Honored by AAVA

Dr. Howard E. Evans professor emeritus of veterinary and comparative anatomy, has received the "Outstanding Achievement Award" from the American Association of Veterinary Anatomists (AAVA). The award acknowledges individuals for outstanding contributions in teaching, research or service to the discipline of veterinary anatomy.

In presenting the award, the AAVA praised Dr. Evans's contribution to such outstanding books as *Miller's Anatomy of the Dog*, and *Miller's Guide to the Dissection of the Dog* which are widely used throughout the world. His "infectious" dedication and enthusiasm for comparative anatomic research were cited, as well as Dr. Evans's contributions to investigations into the prenatal development of

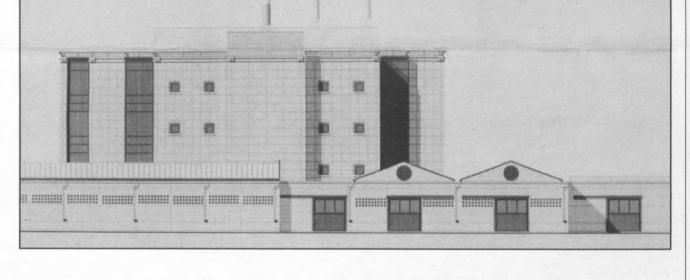
several domestic species and his anatomic studies in the non-domestic species.

Dr. Evans has served as president of both the AAVA and the World Association of Veterinary Anatomists (WAVA), was an associate editor of the *American Journal of Anatomy* and is still an associate editor of the *Journal of Morphology*. He is an honorary member of Phi Zeta, and an honorary life member of the AVMA

Update on Construction Pipes and planning



Architect's drawing showing eastern view of the Hospital/Research Building with entrances to the food animal and equine animal barns.



all and early winter saw the first signs of construction on the College's new facilities. Utility lines were relocated out of the path of future building sites and work began on the removal of asbestos from an abandoned steam line running along the south side of the campus. Construction of the new hospital/research building will expose this line and, for health and safety reasons, the asbestos must be removed.

The first of the new buildings, the Primary Teaching Center (PTC) will become the geographic center and traffic hub of the college. Plans for the PTC were completed and submitted in November for review by the State University Construction Fund. At this pace, the project could go to bid by the first of the year, with construction starting in April. Planning for the largest component, the hospital/research building, is also progressing and construction on that facility could begin by midsummer. 1991.

In the meantime, the New York State Department of Agriculture and Markets has received an appropriation of \$500,000 for the planning of expanded Diagnostic Laboratory facilities. New facilities for the laboratory were not in-

cluded in the College's original \$82 million construction program. To compensate for a critical space shortage, several Diagnostic Laboratory services and programs have moved to off-campus laboratories. Expansion of the Diagnostic Laboratory at the college would bring these programs back to campus.

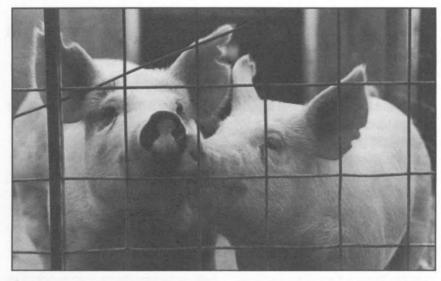
Visitors to campus should be aware that many offices and departments will be moving to avoid construction. Access routes to buildings may also be disrupted. Your patience and tolerance are requested as the college makes this transition.

Compters & Pigs Improving Diagnostic Skills

r. Barbara Straw is making a case that pigs are a neglected species—at least in the classroom.

"In the present curriculum, little time has been allocated to swine," she says. Dr. Straw, swine extension veterinarian in the college's Diagnostic Laboratory, explains that only a few hours in the entire four-year DVM curriculum deal specifically with pigs. Available class time restricts lectures to the salient features of various diseases and gives students little or no practice in diagnosis. Dr. Straw feels that such instruction is insufficient and she's doing something about it.

Dr. Straw recently received alumni funds to develop an interactive computer simulation that teaches users how to diagnose swine diseases by showing a sick animal and re-



A new interactive computer simulation will teach users how to diagnose swine diseases

sponding to questions on the animal's history. The simulation uses an IBM or IBMcompatible computer with an interactive software program, linked to a random access slide projector. Because the computer can direct the slide projector to display any desired slide, users can ask to sees the affected animal, environmental conditions on the pig's home farm or information from on-farm diagnostic tests like necropsies, blood and impression smears and fecal examinations. This is where diagnostic skills are developed. Says Dr. Straw, "Because they're looking at a slide, users will have to determine for themselves the condition of the pig's eyes, skin or mucosa. They'll learn to assess conditions by seeing the affected animal rather than through written information on the computer screen."

In the simulations, users will also learn the effective questions to ask to solve a problem. "For instance," says Dr. Straw, "the program has 120 possible history questions that could be pertinent. The person using this system will quickly learn what questions are pertinent to what kinds of problems. It's the same with the physical examination. There are so many things they could look at, they'll learn to narrow that down. In the process they'll learn what 'normals' are."

The information the user accumulates aids in making a diagnosis. If the diagnosis is correct, the computer rates how efficiently the user determined the correct diagnosis. If incorrect, the user is encouraged to return to the simulation to collect more information.

When the interactive program is completed there will be 125 different simulations; sometime in late spring 1991, a modified program will be available. Explains Dr. Straw. "The number of diseases, the history, the physical and the clinical testing that can be done have been planned out. We're taking the pictures and I've put a few simulations together to see how they work." Dr. Straw had originally thought one farm could be used for all simulations but as it turns out, that doesn't work. "For each problem, you really need a different farm. It means a better simulation in the long run and it allows the user to see more farms with a number of different diseases," she says.

The interactive computer simulation will be housed at the College where it will be available to veterinary students. Dr. Straw also sees the program being of value to practitioners, especially practitioners who may not have many herds in their practice but who wish they had an opportunity to see more. She hopes to have a program with slide projector available for loan to practitioners and at professional meetings.

Veterinary

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