

Dr. Blair Honored for Work in Research and Advising

Glancing out her wall of windows at the passing students, Dr. Carol Blair, head of the Department of Microbiology in the College of Veterinary Medicine and Biomedical Sciences, notes that the location of her office is just about perfect. Occasionally, a familiar face peeks in, or a hand waves, as students bustle between classes. The nods, smiles, and gestures are reminders of how many lives Dr. Blair has touched in her years as a faculty member, department head, and mentor.



Dr. Carol Blair with student Kim Heid

The scene in the research facility at the Arthropod-Borne and Infectious Diseases Laboratory (AIDL) is quite different. Here, with quiet determination, Dr. Blair pursues her work as a virologist, striving to understand the molecular interactions between arthropods and the viruses they transmit. She works closely with graduate students, delving into the insidious world of arboviruses. Much of her work focuses on the mosquito, and diseases like LaCrosse encephalitis and dengue fever spread by these arthropods. Her determination is fueled by the inconceivable amount of worldwide human suffering caused by arthropod-borne diseases.

This year, Dr. Blair was honored for both aspects of her work. She is the recipient of the Sigma Xi Researcher of the Year Award and of a Jack Cermak Advising Award. Both awards reflect the acceptance women have gained in the field of scientific research and as faculty members in once male-dominated departments. And, both awards emphasize the distance traveled since Dr. Blair was a graduate student at the University of California.

“At that time, all the women I saw with Ph.D.’s were permanent post docs,” Dr. Blair said. “They had proven themselves capable, but they had no job security, no involvement in the life of the university, they didn’t serve on committees, and they weren’t even allowed to submit grant applications. I had hope for more.”

Dr. Blair said she was fortunate as an undergraduate at the University of Utah. She was hired as a lab technician and mentored by two male graduate students who took her under their wings. In time, she would learn to fly. At the University of California at Berkeley, she completed her studies and was introduced to her future husband, Dr. Patrick Brennan. He had come to Berkeley from Ireland, and the faculty job waiting for him in Ireland linked their immediate future to the Emerald Isle. Dr. Blair looked for opportunities and received an American Cancer Society grant which she took to Ireland, along with her work in viruses.

When a position opened for a virologist at Trinity College in Dublin, Dr. Blair joined the faculty. After five years, Drs. Blair and Brennan began to look at the possibility of returning to

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College
of
Veterinary
Medicine
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Biomedical
Sciences



Dr. Blair Honored

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the United States when they learned of a position at Colorado State. Dr. Blair said friends thought they were crazy to consider moving to Colorado with only an untenured position for her, and nothing for her husband.

“But, it worked out,” Dr. Blair said. “I became an assistant professor in microbiology and Pat received a position at the National Jewish (Hospital) in Denver. When I came on, there were few women on the faculty in this College or in science in general. I think I was put on every committee. Talk about getting what you wish for! I had to learn to say no, but the committee experiences were very valuable.”

Over the years, nearly 22 at Colorado State, Dr. Blair has juggled the responsibilities of teaching, public outreach, research in virology, administrative work, and advising. She is especially proud of her department and the advising program in place now.

“Undergraduate students used to be assigned to faculty advisers at random, but now we have advisers who serve as mentors, and they are really into seeing their students succeed,” Dr. Blair said. “We like to introduce students to opportunities. We want them to take advantage of all the things they can do, make wise decisions, look at their options, and shape their careers from that knowledge. Our students also take an introductory seminar to introduce them to microbiology and the career

possibilities in the field. We really try to equip them with what they need to make smart decisions.”

Dr. Blair’s other joy is her research work and she’s excited about the work in progress at the AIDL to understand and fight arthropod-borne diseases. Working closely with Drs. Barry Beaty, Ken Olson, Steve Higgs, and others, she is part of a multi-disciplinary team fighting a common enemy from all fronts.

“Quick fixes for these diseases have been tried and have failed,” Dr. Blair said. “We are in this for the long-term, looking for new ways to fight malaria, dengue fever, and other arthropod-borne diseases. The impact these diseases have on populations around the world is staggering. The United States, as part of the world community, needs to help other nations and their people who suffer so acutely from these devastating illnesses. We also have to realize that we are not insular, and acting now is in our own best interest as well.”

Dr. Blair knows women in the 1990s have come a long way. Years ago, she never could have imagined herself as head of a microbiology department, much less the recipient of prestigious research and advising awards. She considers herself fortunate to have been able to accomplish so much, and to be able to share those lessons with others. It just goes to show what a lot of determination, a little bit of luck, and just plain persistence can do.

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Colorado State University - 59th Annual Conference for Veterinarians January 10-12, 1998

Lory Student Center, Colorado State University

Registration: \$195 prior to December 12, 1997
\$225 after December 12, 1997

Keynote Speaker: Dr. Corrie Brown - “Emerging Animal Disease”
Dr. Scott Brown - “Food Animal Pharmacology”
Dr. Bill Rebuhn - “Equine Ophthalmology”
Dr. Alice Wolf - “Feline Infectious Diseases”

A variety of topics will also be covered by Colorado State University faculty.

Colorado State University - 8th Annual Conference for Veterinary Technicians January 11, 1998

Colorado State University Veterinary Teaching Hospital

Registration: \$65 prior to December 12, 1997
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One full day of lectures and labs especially for veterinary technicians.

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Message from the Dean

When Dr. Carol Blair came to Colorado State University almost 22 years ago, she did not entertain thoughts of becoming a department head. She had no illusions about the struggle women endured, especially women in the sciences, to gain acceptance in a world dominated by tradition and men.



When Dr. Blair was a graduate student at the University of California at Berkeley, women as tenured faculty members were as rare as flamingos in the Colorado State University Student Center's Lagoon. She hoped things would change, worked toward that change, but knew she was facing an uphill battle. How especially sweet it is then to celebrate Dr. Blair and others like her who have made significant accomplishments, sometimes against great odds.

In this edition of *Insight*, you will meet Dr. Blair, now head of the Department of Microbiology and this year's recipient of the Sigma Xi Honored Scientist Award, as well as the Jack Cermak Advising Award. We will introduce you to Dr. Patrick Brennan, an internationally renowned tuberculosis research scientist who was chosen this year to receive the University's highest honor of Distinguished Professor.

We also celebrate Dr. Mortimer Elkind, a professor in the Department of Radiological Health Sciences, who this spring received the prestigious Roentgen-Plakette Award and the

Fermi Award. Dr. Elkind's cancer research work has been groundbreaking, shaping cancer radiation treatment and advancing efforts to find treatments and cures for cancer.

This spring, the College also hosted its annual Scholarship and Awards Night. More than 160 awards were given this year and we'll share with you here the story of Kyra Royals

who received the Young Postgraduate Award, as well as stories of the families who created the memorial funds that made these scholarships possible. These are stories of human hopes and dreams, hopes of finding a good place in the world and then dreams of making it better. All of these stories celebrate the people of the College of Veterinary Medicine and Biomedical Sciences at Colorado State

University – our faculty, students, staff, friends, alumni, and donors – who work hard to make this place special.

But is it the people who make the place, or the place that makes the people? Once you have read the inspiring stories of the individuals featured here, you will surely agree with me. The College is what it is today because of the people who make it so. How fortunate we are to be blessed with such a rich fountain of intelligence, talent, perseverance, and integrity. Congratulations to our friends and colleagues, to our students, and to the others who contribute every day to the improvement of society. Your accomplishments are truly worthy of celebration.

Best Regards,

Dr. James Voss, D.V.M., M.S.
Dean, College of Veterinary Medicine and Biomedical Sciences

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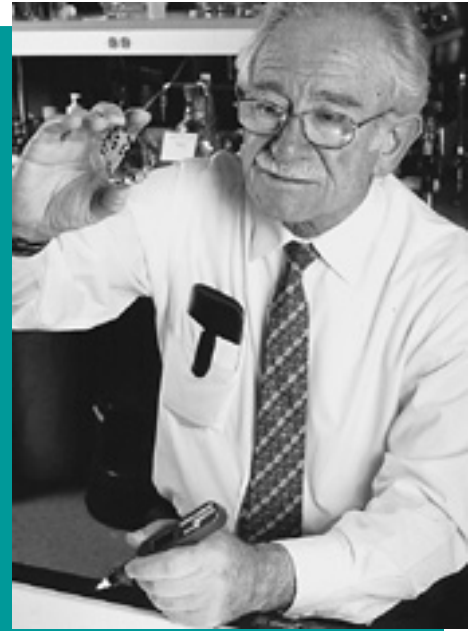
Dr. Elkind Receives National and International Honors for Work in Radiation

When Dr. Mortimer Elkind thinks about radiation at its most basic level, he is reminded of the story of Dr. Jekyll and Mr. Hyde, and the similarities radiation holds to this “good versus evil” tale. As Dr. Jekyll, radiation has the potential to cure cancer, and to preserve lives which otherwise might be lost. As Mr. Hyde, radiation can be the embodiment of human misery, causing some of the very cancers it is called upon to treat. Understanding the biological effects of radiation – good and bad – is the base of Dr. Elkind’s life’s work. This work garnered two prestigious honors for him this year, the Roentgen-Plakette Award and the Enrico Fermi Award.

“Dr. Elkind has contributed so much to the field of radiation biology,” said Dr. James Voss, dean of the College of Veterinary Medicine and Biomedical Sciences. “Due in large part to his groundbreaking work, radiation therapies commonly used in cancer treatment today are safer and more effective. We also have a much greater understanding of how radiation affects mammalian cells, and how cells repair themselves after radiation exposure. The fact that, to this day, almost 50 percent of cancer patients still receive radiotherapy as part of their treatment underlines the continuing value of Dr. Elkind’s achievements in this field.”

The Enrico Fermi Award is given for lifetime achievement in the field of nuclear energy. Dr. Elkind, a University Distinguished Professor in the Department of Radiological Health Sciences, received the Fermi Award and was presented with a gold medal and an honorarium in July at a ceremony in Washington, D.C. Dr. Elkind received the award jointly with Dr. H. Rodney Withers, an oncologist at the Jonsson Comprehensive Cancer Center at UCLA. Dr. Withers worked with Dr. Elkind on improving radiation therapy for cancer. The Fermi Award was created in 1956 and honors the memory of Enrico Fermi, who led a group of scientists at the University of Chicago to achieve a self-sustained, controlled nuclear reaction in 1942.

In April, Dr. Elkind received the Roentgen-Plakette Award in a ceremony at the German Roentgen Museum in Remscheid-Lennep, the birthplace of physicist Wilhelm Conrad Roentgen. Dr. Elkind is only the sixth American scientist to receive the Roentgen-Plakette award over its 46-year history. Roentgen discovered X-rays in 1895, a discovery for which



Dr. Mortimer Elkind

he received the first Nobel Prize for physics in 1901.

“To receive both of these awards this year, well, it’s simply been overwhelming,” said Dr. Elkind. “It makes me very proud of the work I have done over the past 50 years, and very pleased that I have been able to contribute something of value to the efforts to prevent and treat cancer. I also am honored to be a part of such an elite group of scientists, both for the Fermi Award and the Roentgen-Plakette Award, in the field of physics and, more specifically, radiological sciences.”

Dr. Elkind’s own exploration’s into nuclear medicine began after his father developed bladder cancer. The radiation treatments used to treat his father made quite an impression on the younger Elkind. In the ensuing years, Dr. Elkind would make several key scientific contributions to radiation therapy for cancer. One of his most noted studies showed that surviving cells repair themselves after exposure to radiation, a finding that led to a better understanding of how to adjust radiation exposures for maximum effect on tumors with minimum harm to normal tissue. A consistent theme of his research over the years has been the study of radiation damage to the genome; the delineation of repairable and non-repairable damage, factors influencing the ex-

Dr. Elkind’s contributions are so significant that the process by which cells repair radiation damage is commonly known as “Elkind Repair.”

tent, rate, and fidelity of repair, and the biological consequences of unrepaired or misrepaired damage. His contributions are so significant that the process by which cells repair radiation damage is commonly known as “Elkind Repair.”

Currently, Dr. Elkind’s research looks deeper into how cells repair themselves after exposure to radiation. His studies in radiation-induced breast cancer suggest that, unlike other tissues in the body, breast cells in susceptible women do not fully repair themselves, even when there are long periods between radiation exposures. This could suggest some reasons why breast cancer is one of the leading causes of death in women today.

“In the 50s and 60s, radiation was used in many ways,” Dr. Elkind said. “It was used to treat postpartum mastitis, scoliosis of the spine, as a diagnostic tool for tuberculosis, and for other purposes. Because of the latency period, which can be from 10 to 40 years, the effects of such practices are largely being seen now. Today, radiation technology has reduced the dosages one is exposed to in routine preventive medicine, such as mammograms.”

Dr. Elkind said that valuable molecular work has led to the discovery of breast cancer genes which may be inherited in a mutated

form, but these genes account for only 10 percent of all breast cancers. His theory is that some kind of external event, like the massive doses of radiation experienced by women at Hiroshima and Nagasaki, is required to trigger these genes.

“My research focus now is to better understand repair deficiency and to test cells for repair ability, both normal breast cells and cells from women who have breast cancer,” said Dr. Elkind. “I hope to understand better the functioning of cells that have repair deficiencies, and maybe set a course for therapeutic measures that can help breast cells repair damage and stay healthy.”

Dr. Elkind, who has been with Colorado State University since 1981, has received many distinguished national and international awards in addition to the Fermi Award and the Roentgen-Plakette Award. These awards include the E.O. Lawrence Award from the U.S. Atomic Energy Commission in 1967 and the Charles F. Kettering Prize from the General Motors Cancer Research Foundation in 1989. In 1986, Dr. Elkind was named a University Distinguished Professor, a rank held by only 12 faculty members at Colorado State. Dr. Elkind currently is on the board of directors of the National Coalition for Cancer Research.

Dr. Spurgeon Receives Norden Award – Memorial Scholarship Created

The Carl J. Norden Distinguished Teacher Award, which recognizes outstanding teachers in veterinary education, has been posthumously awarded to Dr. Thomas Spurgeon, Department of Anatomy and Neurobiology.

“Tom had great respect for his students and a great love of teaching,” said Dr. James Voss, dean of the College of Veterinary Medicine and Biomedical Sciences. “These feelings were shared equally by his students, who respected and cared for him deeply. I am glad that we are able to remember Tom with the Norden Award because it pays well-deserved homage to the individual he was and the importance education played in his life.”

The award, sponsored by Pfizer Animal Health, works to improve veterinary medical education by recognizing outstanding teachers who, through their ability, dedication, character, and leadership, contribute significantly to the advancement of the profession. Individuals at Colorado State are initially nominated for the award by students, with the final selection made by a faculty committee based

on student input. The award consists of an engraved plaque and a cash award of \$1,000. The cash award has been contributed to a memorial scholarship established in the names of Dr. Spurgeon and Dr. Patricia Brooks, both of whom died in January 1997.

Dr. Spurgeon, who joined Colorado State in 1983, was a previous recipient of numerous teaching awards including the SCAVMA National Teaching Award, and the MSD AGVET Award for Creativity in Teaching. He had previously twice received the Norden Distinguished Teaching Award. His special passion was the development of computer technology for classroom use, and his students benefitted greatly from his insight and dedication to their education.

The scholarship established for Dr. Spurgeon and Dr. Brooks is nearing the amount needed to create a named memorial scholarship. If you wish to make a contribution, contact Paul Maffey, the College’s Director of Development, at (970) 491-0663.

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Dr. Patrick Brennan Joins Ranks of University Distinguished Professors

Patrick Brennan writes down a list of names: Ian Orme, Julia Inamine, John Belisle, Michael McNeil, Delphi Chatterjee, Andrea Cooper, and Del Besra. They are the heart of the Mycobacteria Research Laboratory. And, though it was Dr. Brennan who recently was selected as a University Distinguished Professor, these are the individuals with whom he wishes to share the honor, along with the Department of Microbiology and the College of Veterinary Medicine and Biomedical Sciences. These are the individuals and organizations who share his dedication to unraveling the mysteries of leprosy and tuberculosis.

“We have an extraordinary environment here, one that is unique at this University,” said Dr. Brennan, a professor in the Department of Microbiology and director of the Mycobacteria Research Laboratory. “I look upon this honor as a reflection of the quality of work our research group has been able to accomplish – quality due in great part to the multidisciplinary nature of our group, support from the department, and strong leadership from the College.”

Strong leadership has enabled the Department of Microbiology to create an internationally renowned center of research dedicated to studying the bacteria that cause leprosy and tuberculosis, as well as developing potential vaccines, diagnostic tools, and treatments for these diseases. The Mycobacteria Research Laboratory brings together researchers from a

and treatment of mycobacteria-caused diseases, and that is exactly what Patrick Brennan set out to do.

A native of Ireland, Dr. Brennan came to Colorado State in 1980 to investigate the infectious agents that cause tuberculosis and leprosy, and to study the body’s immune response to these mycobacteria. TB remains a great source of illness and death in most developing countries, annually spawning 8 million new cases and causing 3 million deaths. In the United States, approximately 25,000 new cases of TB are reported each year, and concerns are rising that new, hardier strains are infecting at-risk populations.

Dr. Brennan’s research also focuses on leprosy, a disease caused by a bacterium very similar to that which causes tuberculosis. Though often considered a disease of biblical times, leprosy is still found in select areas of the world, including India and Africa. In the United States, new cases of leprosy are rare, though two leper colonies still exist to provide homes to surviving early victims of the disease.

“When you see the human toll extracted by these devastating diseases – the suffering and death almost is incomprehensible – you realize you must push forward and work to eradicate the sources of this suffering,” Dr. Brennan said. “There simply is no other choice.”

The Mycobacteria Research Laboratory is accomplishing a great deal. They have solved some of the mysteries surrounding the bacterium that causes tuberculosis. The bacterium is characterized by a tough cell wall, similar in effect to chicken wire, that acts as a protective covering. Antibiotics currently in use to treat TB prevent these bacteria from spreading to normal human cells, but the long-term drug treatments needed to cure the disease give the bacteria enough time to mutate into new, resistant forms.

Under Dr. Brennan’s direction, the laboratory’s research group was the first to create a model of the bacterium’s cell wall and define which parts are responsible for interacting with normal human cells to cause TB. Using the model, the laboratory focuses on three main areas: developing new drug treatments that do not develop resistance, creating vaccines that inhibit parts of the bacterium’s cell wall from reaching normal cells, and improving tests that detect disease at an earlier stage.

The laboratory has created a skin test for early detection of leprosy and TB that does not

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Julia Inamine, John Belisle, Patrick Brennan, Marilyn Hein, Delphi Chatterjee, and Del Besra.



variety of specialties including genetics, immunology, microbiology, and chemistry, to study the diseases from every possible angle. This approach results in findings that are changing the medical possibilities for prevention

cause false-positive test results, and is analyzing both these tests before requesting permission from the federal government to begin human trials. Brennan and his research team also were the first to identify a molecule present in people with leprosy, a finding that led to a new blood test that detects the disease at a much earlier stage.

“Dr. Brennan has been, and continues to be, a bright light in our tuberculosis and leprosy research programs,” said Dr. James Voss, dean of the College of Veterinary Medicine and Biomedical Sciences. “Through his efforts and collaborations with other researchers worldwide, we are making real progress in the battle against these deadly diseases. We are honored to have him as a faculty member in the College, and very proud the University has chosen to honor him as a University Distinguished Professor.”

Dr. Brennan is one of only 12 professors universitywide to achieve this status. The honor is reserved for those considered to be among the finest scholars to teach and conduct research at Colorado State. Over the course of his 30-year career, Dr. Brennan has received numerous other awards including the Colorado State University Researcher of the Year, the Alumni Honor Faculty Award, and the Sigma Xi Honored Scientist Award. He is active in the World Health Organization, and recently was named to WHO’s Leprosy Elimination Advisory Group. He is chairman of the United States-Japan Cooperative Medical Science Leprosy and Tuberculosis Program, a consultant to the National Jewish Center for Immunology and Respiratory Medicine in Denver, and sits on the scientific advisory boards for the Leonard Wood Memorial, and the Heiser, Foundations.

“I look upon this honor as a reflection of the quality of work our research group has been able to accomplish....”

Career Counselor Joins CVMBS Staff

The transition from an educational environment to the professional arena can stymie many students. Basics from where to start and how to write a resume, to job searches and interviews, can overwhelm even the most industrious. But students and alumni of the College of Veterinary Medicine and Biomedical Sciences just got some help for their team in the form of Ruth White, the College’s new career liaison with the University’s Career Services Center.

As a liaison, White is responsible for helping CVMBS students and alumni with job searches, internships, preceptorships, externships, interview techniques, resume development, database development, and a multitude of tasks necessary to define and develop an innovative career program at the College. White joined Colorado State University in January and has been busy establishing her office and services ever since.

“The toughest part is that this is a new position that was needed yesterday, and there are lots of demands,” said White. “We are balancing the needs of everyone, including students in veterinary medicine, microbiology, and environmental health, so it’s really busy. But the job is also very rewarding and I love being here. I really enjoy the students and their motivation to get things done. Also, in my past two jobs, I was working as the Lone Ranger on developing career centers. Here, I am part of a team and that is really exciting.”

White grew up in Greeley and graduated from the University of Northern Colorado with a degree in elementary education. She taught in Houston for eight years, then graduated with a master’s of education with a specialty in counseling from the University of

Houston at Clearlake. She worked in the North Harris Community College System in Houston for eight years where she developed a career center.

She took early retirement and returned to Colorado, to Cortez, where she operated a satellite office for Pueblo Community College until a position became available in Pueblo at the College’s main campus. White was with the career center there for two years. Now, with Colorado State University, White is committed to creating a career services center that meets the needs of students and alumni of the College, as well as creating a place for potential employers to recruit quality individuals.

“We are creating a career resource area with books, a computer workstation, reference materials, and resources students may need,” White said. “In addition, we are working hard to develop internship programs, particularly in microbiology, and build our job database.”

White is asking individuals and companies who have possible job openings or internships they wish to list in the College’s database, to contact her at (970) 491-3919. Students and alumni who wish access to the database and need to register and obtain the database password, should also contact White at this number.



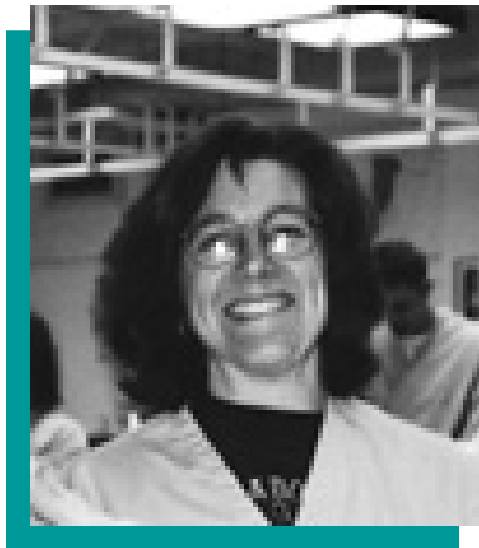
Ruth White assists a student.

“After the accident, I thought my life was over. All my dreams died. Sometimes, now, I look back and can’t believe what happened, it’s almost like that was someone else in the accident. But it wasn’t, and it has shaped my life in ways I hadn’t thought possible.”

Amy Leider Personifies Hope, Perseverance, and the Power of Friendships

Two-and-a-half years ago, Amy Leider lay in a hospital bed at the brink of death. A victim of an automobile/pedestrian accident, she was injured so severely her physicians questioned whether she would survive the day. For two weeks, Amy drifted in a drug-induced coma designed to allow her brain time to heal. When she regained consciousness, she could not talk, walk, or move, and her prognosis was guarded.

Today, Amy is a student at Colorado State University, in the College of Veterinary Medicine and Biomedical Sciences’ Professional Veterinary Medical program. She has completed her freshman year and is off for summer



Amy Leider

break and a trip with her aunt to Africa. Amy’s recovery from her life-threatening injuries is nothing short of miraculous, and a valuable lesson to others – our lives are not so much defined by what happens to us, but rather by what we choose to do with the consequences. Amy chose life and she is a celebration of what the human spirit can accomplish, against all odds.

Amy was born and raised in Livermore, California, and attended the University of California at Davis, where she received her bachelor’s degree in zoology. She went on to the University of Montana where she graduated with a master’s degree in zoology, and transferred to a doctoral program at the University of New Mexico in Las Cruces. Amy, who thought she had wanted to be a professor, confessed her true love was being with people and animals and decided to move to Colorado

where she hoped to attend Colorado State University as a veterinary student. In 1994, Amy started her veterinary studies and was on her way to becoming a veterinarian.

Her first semester went well, and Amy knew she was finally on the right path. At the start of her second semester, Amy was walking to a parasitology test when she was struck in the back of the head by the sideview mirror of a car. Amy was in the crosswalk, but the driver of the car never looked and never saw her. Paramedics arrived and rushed Amy to Poudre Valley Hospital, one of 10 in the nation with a neurological intensive care unit, where she began treatment for a massive head injury. At first, her very survival was questionable. She made it through the first few days, but no one knew what the extent of her disabilities would be even if she did survive. Amy’s improvement was slow but steady, though she has little memory of the first six weeks after the accident. Amy was alive, but she would have to learn how to live again – everything from feeding herself, to forming words, to putting on shoes. Her mind could see all the tasks, could visualize the words, but it couldn’t make her body do them. The frustration and depression were sometimes almost overwhelming.

“I remember not being able to talk, and that was ghastly,” said Amy. “We combated that by bringing in a laptop computer that I could operate, although slowly, to communicate. I couldn’t move the right side of my body, I couldn’t walk, I was just in bed. The most frightening thing was that I didn’t know if I would ever be able to get up. If I could at least get in a wheel chair, I could practice veterinary medicine. But I would never be able to do it lying in a bed.”

Like most physical therapy patients, Amy found her course of exercises difficult and painful, but she was getting results. Mental therapy helped fight the depression that often accompanies a debilitating injury, and the support from Amy’s family and friends was overwhelming.

“My parents took turns staying with me, and my aunts and sisters came, the whole freshman class visited, and I just had people supporting me the whole time,” Amy said. “It really touched me to know that so many faculty members also visited, everyone was so caring and concerned.”

Amy progressed enough to leave the hospital on Memorial Day, almost four months after the accident. She moved to a rehabilitation center where she continued to heal, regain her strength, and develop her powers of con-

centration. Amy stayed at the rehab center until September, 1995, and then was ready to get on with her life. Amy worked with Dr. Sherry McConnell to get back to school, and was able to audit a class in the winter of 1996. She did well and was re-admitted into the professional veterinary medical program in the fall.

“I was unsure if I could do it,” Amy said. “I didn’t know if I had the stamina or concentration, and I didn’t know if the class would accept me or treat me like a weirdo. I still had a limp, but the attitude was pretty much, ‘so what’. No one treated me any differently.”

Amy was delighted when she repeated her first semester and found she remembered most of the material she had studied before the accident. She found it very reassuring as she braced herself for the rigors of the second semester. She completed her second semester very successfully this spring and is spending the summer doing an internship as well as taking a special trip to Botswana with her aunt

to birdwatch – something she thought she might never be able to do again.

“After the accident, I thought my life was over,” Amy said. “All my dreams died. Sometimes, now, I look back and can’t believe what happened, it’s almost like that was someone else in the accident. But it wasn’t, and it has shaped my life in ways I hadn’t thought possible.”

Because of her experiences, Amy is interested in specializing in neurology after she graduates from veterinary school. She says the specialty is very relevant to her and holds particular interest because she is so sympathetic to dogs and cats with neurological problems. Amy also has special plans for her graduation from Colorado State University. She has received permission from the dean of the College, Dr. James Voss, to have her father hood her at commencement.

“It’s really been a long road back, but the way was made so much better by all the support I received, especially from my family and friends here at the University,” Amy said.

Scholarship and Awards Night Brings Students and Donors Together

Celebrating their investment in the future, students and donors joined together April 24 for the College of Veterinary Medicine and Biomedical Sciences’ annual Scholarship and Awards Night.

The evening proved to be a joyous occasion, as students received their scholarships and awards, and met the donors who made it all possible. Friendships were started, and lasting memories created. Stories of loved ones, for whom memorial scholarships had been established, were shared by those who came to bestow these lasting gifts. Students and donors alike joined in the excitement of a common goal—the pursuit of a higher education in the College of Veterinary Medicine and Biomedical Sciences to better themselves and society.

“This year, the College was able to increase the amount of funds provided to students through scholarships and awards by more than \$140,000,” said Dr. James Voss, dean of the College. “This represents a 45 percent increase in total funds distributed and a 16 percent increase in the number of individual awards. I want to say thank you to all the donors who made this possible, and congratulations to the students who received the honors and scholarships.”

This year, the College distributed a total of \$459,386 to support 242 scholarships. Several new scholarships were also established and deserve special recognition. New endowed scholarships included the Joseph P. and Mabel

C. Howe Memorial Endowment, the Dr. Merrill and Elizabeth Koster Scholarship, the Dr. Timothy Dwayne Muhr Memorial Scholarship, and the Dr. Virgil L. Pennell Memorial Scholarship. Pending endowed scholarships were the Dr. Downing Glover Scholarship and the D.V.M. Class of 1998 Scholarship. Scholarships and awards given for the first time this year were the Dr. Robert G. Hutchinson Memorial Scholarship, the D.V.M. Class of 1944 Scholarship, Pfizer’s Outstanding Clinical Resident Award, and the Dr. John A. Utterback Memorial Scholarship.

“The continued development of our scholarship funds is critical to the success of our students, and to the College’s ability to attract the best students to our programs,” Dr. Voss said. “The new scholarships and awards represent continued faith, by friends of the College, in our commitment to excellence in serving the needs of the veterinary and biomedical sciences professions, improving our collective society, and in the comprehensive preparation of our students for the challenges that await them upon graduation.”

For additional information on donor opportunities in scholarships and awards at the College of Veterinary Medicine and Biomedical Sciences, contact Paul Maffey, Director of Development for the College, at (970) 491-0663; or send an e-mail to: pmaffey@vines.colostate.edu

“The continued development of our scholarship funds is critical to the success of our students, and to the College’s ability to attract the best students to our programs.”

Scholarship a Testament to “Doc” Abner Utterback’s Values

“Because of what my father stood for and believed, I wanted to establish this scholarship in his memory to give individuals who might otherwise be unable to finish an opportunity to succeed in veterinary school.”

John “Doc” Abner Utterback knew what it was like to struggle to get an education. As a child growing up near Steamboat Springs, he and his siblings went to school for four months in the summer and then helped work the family ranch the rest of the year. As high school students, he and his brother Claude lived in the family cabin in Fairview while attending school during the week. At the end of the week they would hitch a ride on a freight train, work on the family ranch for two days, then return to school with a fresh supply of food and clothes.

After graduating from high school, Doc Utterback spent a year working on the family ranch and raising 50 pigs. The pigs, destined to be sold at market, were his ticket to the Colorado State College of Agricultural and Mechanical Arts (now Colorado State). A neighbor hauled Doc and the pigs to town, dropping off the green country kid in Fort Collins, and taking the pigs to Denver for sale.

In 1934, Doc Utterback graduated from the College with a degree in veterinary medicine. It was an achievement he was proud of; one he helps others realize today through the memorial scholarship established in his name by his daughter Karin Dee Utterback-Normann.

“Education was such an important part of life for his family,” said Utterback-Normann. “Even during the Depression, his parents emphasized the value of education, although it

was such a hardship during those times. Because of what my father stood for and believed, I wanted to establish this scholarship in his memory to give individuals who might otherwise be unable to finish an opportunity to succeed in veterinary school,” said Karin.

The Dr. John A. Utterback Memorial Scholarship is given

annually to a second-year P.V.M. student who is a single parent or nontraditional student. The student must also be a Colorado resident in good academic standing, exhibit financial need, and be interested in large animal practice. Because of the high cost of veterinary school, such scholarships are extremely important to students faced with the many financial chal-

lenges of supporting a family and attending school.

Doc Utterback came to Colorado with his own family in 1908 at the age of 10 months. He often told the story of how he came to Steamboat, a babe in arms on a four-horse stage-coach. After he graduated from College, he returned to Steamboat to set up a practice. Within months though, he went to work for the federal government helping to clean up tuberculosis and Bang’s disease, a contagious bacterial disease, in livestock herds throughout Colorado, Texas, Idaho, and Louisiana. He was then sent to the Meat Inspection Bureau in Minnesota, before returning to Steamboat four years later.

Doc Utterback and his wife Doris Evangeline Simmons left Steamboat once again for Iowa State University where Doc graduated with a master of science in veterinary medicine, specializing in anatomy and surgery with a minor in chemistry. In 1940, he returned to Steamboat Springs to attempt again to set up his private practice, but he was drafted into the U.S. Army.

He served at Fort Bliss, Texas, and the Edgewood Arsenal in Maryland before shipping out to England in 1942. He worked as an inspector and with the medical corps. In 1945, he enrolled in the University of Edinburgh in Scotland, studying comparative medicine. When the war ended, he was assigned to a rehabilitation team based in the Rhine Province of Germany. He returned to Steamboat in 1946. Upon his return, Doc Utterback resumed his veterinary practice full time. He was active in politics, and was elected a county commissioner in 1970, an office he held for eight years. Through it all, Doc Utterback took continuing education courses to improve his mind and his skills, and read veterinary journals voraciously. He was an active member of several organizations including Toastmasters International, Rotary Club, Masonic Lodge, El Jebel Shriners, and he was instrumental in the formation of the Yampa Valley Cutter and Chariot Racing Association.

Doc Utterback was fixing fence on his ranch when he died at the age of 88 on May 20, 1996. In addition to the scholarship established in his name, Utterback-Normann said she is donating thousands of her father’s journals to third-world veterinary schools – another fitting tribute to a man who believed education was the key to success.



**John “Doc” Abner
Utterback**

Flood Creates Muddy Mess at Colorado State

To those used to the semi-arid climate in Fort Collins, the scene on August 4 was almost surreal. Sheets of rain pounded Larimer County creating the worst flooding in the city's recorded history. Five people were killed as a swollen creek bed swept through a mobile home park, creating devastation that stunned the people of Fort Collins. As news footage spread across the nation, friends and alumni called their Colorado State campus connections to get the story and find out how the University had withstood the onslaught of rain and flood waters.

It's a tale of two cities. Some parts of campus are unscathed, others were under 8-12 feet of water and are now showing heavy losses. All told, the University estimates total damage to be \$135 million. That figure includes the costs to clean up, recoup, and restore. A total of 25 buildings on campus received water damage and, of those, 15 are severely damaged. The two big-ticket items are the Lory Student Center and the Morgan Library, which withstood the brunt of the flood waters.

At the Lory Student Center, the Book Store is a complete loss. A temporary book store is under construction to meet the demands of returning students. Publishers have been able to resupply the bookstore and about 90 percent of required textbooks were available to students at the start of the fall semester.

At the College of Veterinary Medicine and Biomedical Sciences, the Microbiology Building sustained slight damage from flooding in the lower level. For the rest of the College's facilities, it was, fortunately, business as usual as buildings remained dry through the monsoon-like storms. However, over 425,000 volumes, including much of the col-

lection important to veterinary students, were damaged in the Morgan Library. At least ten percent will be unsalvageable and the remainder cleaned using a freeze-drying process that can take as long as two years.

While the cost of most of the physical damage at the University will be taken care of through insurance and related disaster relief sources, many instructors lost personal and professional possessions of a lifetime that will not be covered. Literary collections, photographs and artifacts, masters' and doctoral theses, individual publications, and manuscripts have been lost.

At press time, the student center and the library, as well as the South College Gym, the Music Building, Gibbons Hall, Student Health, and Occupational Therapy remain closed. The recovery effort is proceeding well and students will have a minimum of disruption when they begin classes. Ongoing repair efforts include all affected campus buildings, a general cleanup of the campus grounds, and repair to sidewalks and roads.

To date, numerous businesses, alumni, and friends of the University have come forward to offer assistance. The most immediate need is to purchase subscriptions and books to rebuild the veterinary medicine collection. We need your help now to provide the necessary reference materials for presently enrolled P.V.M. students. If you are interested in contributing to this effort, please send your check, payable to the Colorado State University Foundation, to Paul Maffey, Director of Development for the College, Office of the Dean, Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, CO 80523.

Check Us Out on NBC News

If you're a regular NBC News watcher, you may have already caught the new veterinary medicine and pet health segments produced at Colorado State University for NBC News. If not, keep an eye out for us twice a month and see what's happening in the world of veterinary medicine.

The news segments, featuring Dr. Susan LaRue of the Veterinary Teaching Hospital, are distributed by the network to its affiliate television stations across the country for use in local news programming. Segments already aired include cancer treatments in dogs, knee

surgery in horses, and basic health care for pets. The segments, produced by Colorado State's Public Relations Department, began airing in early June.

"We're thrilled to have this type of national exposure for our veterinary medical program," said Dr. James Voss, dean of the College. "We think this is a unique opportunity for the College to enhance its reputation nationwide, and to bring to millions of people the kind of health care information about their animals that can make a real difference in the quality of their pets' lives."

It's a tale of two cities. Some parts of campus are unscathed, others were under 8-12 feet of water and are now showing heavy losses.

Scholarships Create Yount Family Legacy

About 19 miles southwest of Wray, a small rock house sits inconspicuously amongst the wildflowers. The house is simple in design, yet holds within its walls the story of a family who homesteaded in Colorado six generations ago. The little house, a family museum recognized by the State Historical Society, is filled with historical paraphernalia that tell the tale of the Yount family, their long journey from Switzerland to Colorado, and what their life was like in the 1800s.

The little house is one of several lasting tributes to Dr. Virgil and Mitzy H. Yount. Another is the memorial scholarship established in their name at Colorado State Univer-



Virgil Yount (right) with Dorvin Schepler.

sity. While the memorials are different in their structure, both have a similar intent: to celebrate those things that the Younts held in high esteem – family, education, and service to community.

Dr. Yount graduated from the Colorado State College of Agricultural and Mechanical Arts (now Colorado State University) with a degree in veterinary medicine in 1936. He immediately entered a Bang's disease testing program in Oklahoma where he and his wife lived until he entered the U.S. Army. Dr. Yount retired from military service as a major and moved to California for a time before returning to Colorado and the piece of land his family homesteaded in 1888.

The Younts raised wheat and cattle on their Colorado ranch, farming until their retirement in 1984. They were very involved in their community and Dr. Yount always helped out neighbors in need with his veterinary skills. At the time of their retirement, Joyce Schepler, the Yount's niece, and her family purchased

the farm and continue to run it today. Schepler's son maintains the family tradition and is the sixth generation to work the homestead.

"Community was very important to Virgil and Mitzy," said Schepler. "While they were alive, they did all they could to help those less fortunate than themselves, to lend a hand to friends in need, and to be involved citizens. This desire to be of service also is apparent in the way they wished to leave their estate. They left money to the Wray and Yuma County schools, money to local churches, and established the postgraduate veterinary scholarship at Colorado State University. These acts are simply a reflection of the type of people they were – caring, concerned, and generous."

The Dr. Virgil and Mitzy H. Yount Postgraduate Veterinary Medicine Awards are given annually to five individuals with D.V.M. degrees who are engaged in postgraduate training. The awards help students pay for tuition, fees, books, living expenses, and other costs that often can make postgraduate work a financial challenge. With awards such as the Younts, more students are able to complete their graduate work and embark on careers that benefit not only themselves, but society as well.

As far as the little rock house, Dr. Yount never saw the tribute to his family, and Mitzy



Mitzy Hart Yount (left) with a family friend.

Yount never saw it completed. The house, built in 1890, has been a huge project for Schepler. She has worked diligently to document the family history and create a museum that reflects life as it was for the Yount family when they homesteaded in Colorado. "They came here with very little, but we've managed to capture what they had and show some of how people lived in the 1800s," Schepler said. "The house has simple furniture, clothes, diaries of Civil War days, bibles from the 1840s, feather beds, quilts, and other memorabilia."

The Dr. Virgil and Mitzy H. Yount Postgraduate Veterinary Medicine Awards are given annually to five individuals with D.V.M. degrees who are engaged in postgraduate training.

Schepler welcomes visitors to the house, among them schoolchildren who come to tour the house and learn more about Colorado history. They leave with an appreciation of running water, modern heating systems, and a

greater understanding of the importance of families. It's a legacy befitting a couple who lived their lives doing for others, caring about their communities, and keeping watch over the family's homestead.

Yount Postgraduate Award Helps Kyra Royals Stay on Career Path

The things many people take for granted, Kyra Royals and her family do without. Their health insurance is basically "cross your fingers and hope no one gets sick". Savings, for retirement or emergencies, are nonexistent. The day-to-day stress of dealing with bills, schedules, expenses, and life's unexpected surprises is sometimes overwhelming. Kyra, a recipient of a Dr. Virgil and Mitzy H. Yount Postgraduate Veterinary Medicine Award, is especially appreciative of the scholarships that can help her make ends meet.

A graduate of the Professional Veterinary Medical program, Kyra is currently involved in postgraduate training in clinical pathology, as well as in a residency in pathology at the Veterinary Teaching Hospital. She hopes to finish her course of studies by the year 2000, and pursue a career in private industry or academia. In school for 13 years, borrowing from the government for 12 of those 13, it's been a long road for Kyra, but one she knows will be worth the drive.

"I enjoy what I am doing so much," Kyra said. "Of course, from a financial standpoint, it's been hard. But eventually, all this should pay off with a stable and rewarding career, and a more certain future for my children. Another benefit is that my children really understand the value of education, and the importance it has in our lives. It's easier to motivate them to achieve in school when I'm right there in the same boat."

Kyra, who graduated from the P.V.M. program in 1995, works in the laboratory of her mentor Dr. Mary Anna Thrall. She is

involved with the cat colony and research work into Neiman Pik Disease Type C (NPC), a genetic disease that is characterized by the inability of victims to process cholesterol properly. The disease, though rare, is lethal in affected children. Kyra is involved in characterizing the defective gene that causes NPC. The feline model for this disease is providing researchers the opportunity to better understand the gene so appropriate therapies can be developed.

"The long-term goal is to help people," Kyra said. "If we can understand and characterize the gene that causes the disease, perhaps we will have a better shot at developing treatments like gene therapy to help affected children. If I can help to make that happen, it will be an incredible experience."

For Kyra, the availability of scholarships like the Younts' means possibilities become realities. Without such support, many students like Kyra find financial obstacles too difficult to overcome and are unable to complete their educational programs. If you are interested in supporting the College's scholarship program, contact Paul Maffey, Director of Development for the CVMBBS, at (970) 491-0663.



Kyra Royals

For Kyra, the availability of scholarships like the Younts' means possibilities become realities.

Soccer Club Scores Big in Winning Season

The CVMBBS Soccer Club continued to dominate in Northern Colorado, winning all three divisions of the Fort Collins Adult Soccer Leagues. The "A" team consolidated its #2 state ranking, losing narrowly to the Denver Kickers in the fourth round of the U.S. National Amateur championships in March. P.V.M. senior Jeff Goldy had a stand-out season for the team.

The women won their division with a 6-0-2 record, with the Colorado State University NCAA Club tournament champions team finishing in third place. Coach Ian Orme, a professor in microbiology at CSU, faces a rebuilding season this fall as the core of the team – Julie Martin, Alison Patricelli, Susan Spidle, and Julie Buchanan – all graduated from the P.V.M. program this spring.

“Remembering how the scholarships he earned had helped him through school, Tim wanted to do the same for somebody else. He endowed a veterinary scholarship at Colorado State to be awarded each year to an outstanding junior veterinary student in financial need.”

Colorado State Alum Lives on Through Scholarship

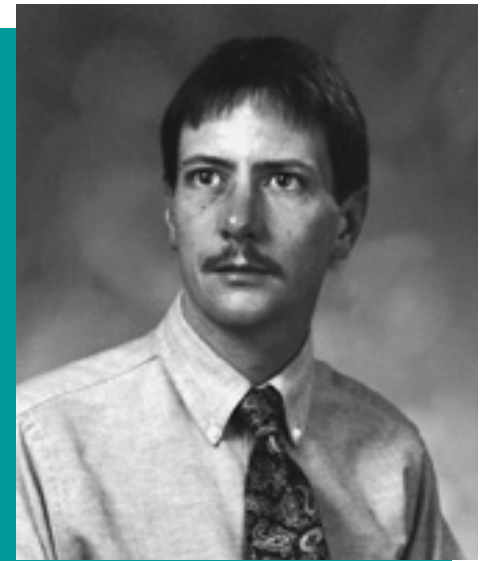
For Dr. Tim Muhr, life was about taking chances. Not small chances, like playing the lottery or venturing out without an umbrella on an overcast day. It was about big chances, like chasing a dream against all odds. Tim’s dream was to become a veterinarian, a lofty goal for an unemployed computer operator. Nonetheless, it was a dream he was able to realize before his death in 1996 at the age of 37.

Tim lived with the belief that when one looked back on their life, they would regret the things they didn’t do more than the ones they did. This was the motivator that pushed Tim to pursue his dreams. “Tim never really expected to go to veterinary school,” said his close friend, Michael Vos, an attorney in Denver. “I don’t think he believed it would happen for him until it actually did.”

Tim grew up outside Scottsbluff, Nebraska, in an area his great-grandparents had homesteaded more than a century ago. After high school, Tim attended the University of Nebraska in Lincoln for two years before moving to Denver. In Denver, he worked as a computer operator and became involved with the local rodeo association. In 1986, with the energy industry in recession, Tim was laid off. His ensuing job search netted a position with a company in South America, but Tim was apprehensive. Vos, who had only recently met Tim, suggested this might be a good time for Tim to bow out of the working world and return to school to finish his bachelor’s degree.

“Tim decided to stay in Colorado,” Vos remembers. “He found a night job, transferred his credits from Nebraska, and enrolled at the University of Colorado in Denver. Tim’s grades were excellent and he was beginning to get excited about the possibility of really going to veterinary school. He cleaned dog kennels, took night computer jobs, finished up his pre-veterinary requirements, and was accepted to the Professional Veterinary Medical program at Colorado State University.”

The living was lean for Tim in veterinary school. His stepfather loaned him an old 30-foot travel trailer, badly in need of refurbishment. This was his home while at school. Tim, with help from Vos, did the renovation work necessary and turned the trailer into a respectable home. Tim’s grandparents had to buy him a water heater for the trailer, and help him with his pickup truck once. He handled most everything else on his own. He also benefitted from several scholarships that assisted him with expenses. Despite the financial difficulties, Tim thrived on his veterinary studies. His



Tim Muhr

grades were topflight and Tim graduated with honors in 1993. He had achieved his dream, and was now a practicing veterinary doctor.

In 1995, only two years after his graduation, Tim became ill and retired from practice. He put his remaining energies into volunteer work for the Colorado AIDS Project and PAWS, an organization that provides low-income veterinary assistance. He also reached out to students in veterinary medicine who were facing financial hardships.

“Remembering how the scholarships he earned had helped him through school, Tim wanted to do the same for somebody else,” Vos said. “He endowed a veterinary scholarship at Colorado State to be awarded each year to an outstanding junior veterinary student in financial need.”

Tim died at his home in Denver on June 1, 1996. On April 24, 1997, Michael Vos presented the first Dr. Timothy Dwayne Muhr Memorial Scholarship at the College’s annual Scholarship and Awards Night. Vos hopes that, in memory of Tim, the scholarship will continue to grow, a fitting legacy to a man who lived his life with an awareness of the need to take chances in order to make your dreams come true.

If you are interested in making a contribution to the Dr. Timothy Dwayne Muhr Memorial Scholarship, please contact Paul Maffey, Director of Development for the College, at (970) 491-0663.

VTH Open House Attracts Many Visitors

It was a dog's heart in a jar – a heart laden with worms – that brought most of the kindergartners to a complete halt. “Oooh, gross,” commented one child, a sure attention-getting statement. As all the students crowded around the jar, a veterinary student explained to a captivated audience what heartworms are, how dogs get them, and how pet owners can prevent them. It was all part of the show at the annual Veterinary Teaching Hospital's Open House held April 4, 5, and 6.

The open house attracted more than 4,500 visitors, including tour groups from local schools, nursing homes, service clubs, and child care programs. The open house is an opportunity for the community to tour the Veterinary Teaching Hospital, learn more about the hospital's teaching and clinical programs, and develop a better understanding of important research underway to enhance animal health.

Highlights of this year's open house included a petting zoo and educational display about farm animals; a mock surgery exhibit; a series of seminars on many issues regarding pet health, veterinary education, and research; and a chance to visit with animals from the Humane Society of Larimer County as well as canine companions for individuals with disabilities.

Special thanks goes to all the volunteers who made this event such a success, and to all the veterinary students who worked so hard.



An Open House visitor checks out “patients.”

Continuing Veterinary Medical Education

Please call the Department of Clinical Sciences at Colorado State University at 1-800-457-9715 for further information on all course offerings. Courses are sponsored by the Department of Clinical Sciences and the Colorado Veterinary Medical Association.

September, 1997

Diagnosis and Treatment of Lameness in the Horse - September 24-26, 1997

The course is designed to cover the various causes of lameness in the horse. Instructors are Dr. Ted Stashak, Dr. Wayne McIlwraith, Dr. Gayle Trotter, Dr. Richard Park, Dr. Gary Baxter, and Dr. Dean Hendrickson. Fee: \$500/\$450 CVMA Member

October, 1997

Equine Dentistry - October 1-3, 1997

This program will consist of lecture and slide demonstration on anatomy and physiology of the mouth, including examination of the mastication process, procedures for floating teeth, removing wolf teeth, etc. Instructors are Dr. D. G. Bennett, Dr. Patrick McCue, Dr. Leon Scrutchfield, and Dr. Jack Easley. Fee: Lecture Only: \$300/\$270 CVMA Member; Lecture & Lab: \$400/\$360 CVMA Member

Current Topics in Feline Medicine - October 8-10, 1997

This course will provide discussion in selected areas currently relevant to feline medicine. Instructors are Dr. Dave Twedt, Dr. Dennis Macy, Dr. Ellen Miller, Dr. Steve Roberts, Dr. Deborah Greco, Dr. Greg Grauer, Dr. Greg Ogilvie, Dr. Rod Rosychuk, Dr. Mary Smith, and Dr. Mike Lappin. Fee: \$425/\$382.50 CVMA Member

The Wobbling Horse: EPM, “Wobbler Syndrome” and Other Common Spinal Problems in the Horse - October 24, 1997

The purpose of this course is to review the clinical signs of spinal cord disease in the horse, to discuss differential diagnosis and definitive diagnosis techniques, and to present the various treatment modalities available. Instructors are Dr. Mary Smith, Dr. Paul Cuddon, Dr. Robert Wrigley, Dr. Ted Stashak, and Dr. Pat McCue. Fee: \$300/\$270 CVMA Member

Newer Drugs for Small Animals - October 29, 1997

This course will focus on new drug development and products that have recently or will soon be on the market. Instructors are Dr. Deborah Greco, Dr. Autumn Davidson, Dr. James Gaynor, Dr. Dennis Macy, Dr. Ellen Miller, Dr. Rod Rosychuk, Dr. Paul Cuddon, Dr. Mary Smith, Dr. Greg Grauer, Dr. Michael Lappin, and Rick Allen. Fee: \$200/\$180 CVMA Member

(continued on back cover)

Continuing Veterinary Medical Education (continued from page 15)

A Problem Based Approach to Practical Fracture Fixation Selection and Application - October 30-31, 1997

Using examples of problematic and failed fracture cases, we will present realistic techniques for managing fractures commonly seen in the practice setting. Instructors are Dr. Erick Egger, Dr. Peter Schwarz, and Dr. Dianne Dunning. Fee: \$500/\$450 CVMA Member

November, 1997

Current Techniques for Managing Corneal Ulcers, Corneal Lacerations, Pigmentary Keratitis and Glaucoma - November 5-6, 1997

Background lecture material will be presented describing the medical and surgical aspects of ulcerative and pigmentary keratitis. Instructors are Dr. Steve Roberts and Dr. Cynthia Powell. Fee: \$375/\$337.50 CVMA Member

Cardiopulmonary/Cerebral Resuscitation and Advanced Emergency Techniques for the Practitioner - November 7, 1997

The purpose of this course is to review common emergency procedures including cardiopulmonary resuscitation, thoracocentesis and tube thoracostomy, emergency tracheostomy, and wound management. Instructors are Dr. Tim Hackett and Dr. James Gaynor. Fee: \$375/\$337.50 CVMA Member

Basic Equine Endoscopy and Laparoscopy - November 13-14, 1997

This course is designed to cover the basic uses of both flexible and rigid endoscopes in their uses for upper respiratory, lower respiratory, gastric, and urinary diseases, as well as abdominal and thoracic abnormalities. Instructors are Dr. Dean Hendrickson, Dr. Kate Savage, and Dr. Josie Traub-Dargatz. Fee: \$500/\$450 CVMA Member

December, 1997

Management of the Acute Abdomen in the Horse - December 3-5, 1997

The clinical evaluation of the acute abdominal patient leading to a decision whether medical treatment or surgical intervention is required will be reviewed. Instructors are Dr. Ted Stashak, Dr. Gayle Trotter, Dr. Josie Traub-Dargatz, Dr. Kate Savage, Dr. Gary Baxter, Dr. Dean Hendrickson, and Dr. Ann Wagner. Fee: \$600/\$540 CVMA Member

For Equine Sciences Continuing Education Schedule, contact the Equine Sciences Program, Colorado State University, Fort Collins, CO 80523; (970) 491-8373.

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