Air Pollution Linked to Premature Death

The California Air Resources Board released three studies in December 2011 revealing that exposure to airborne fine-particulate matter significantly elevates the risk for premature deaths from heart disease and strokes, particularly among older adults.

Particulate matter is a complex blend of substances that vary in shape, size and chemical composition. Particles can contain metals, soot, nitrates, sulfates and very fine dust. One source of “fine particulate matter” or PM2.5 – particles smaller than 2.5 microns in diameter – is exhaust from vehicles, especially from diesel engines.

Vet Med Platelet Research

A common cause of heart attacks and strokes is the development of clots in the blood stream. One suggested explanation is that PM2.5 exposure activates platelets, the key cells involved in blood clotting, so that they form clots and then trigger heart attacks and strokes. In one of the three studies, Fern Tablin, Department of Anatomy, Physiology and Cell Biology, and Dennis Wilson, Department of Pathology, Microbiology and Immunology, discovered that mice exposed to PM2.5 from the San Joaquin Valley and very fine dust. One source of “fine particulate matter” or PM2.5 – particles smaller than 2.5 microns in diameter – is exhaust from vehicles, especially from diesel engines.

New Program Focuses on the Health and Welfare of Companion Parrots

Parrots are very popular companion animals. Because of their highly social and intelligent nature, they form close and affectionate bonds with people. Recognizing the devotion of their owners and the specialized care needs of parrots, the school has established the Parrot Wellness and Welfare Program.

Providing Exceptional Care for Parrots

This innovative program takes a comprehensive approach to provide exceptional care for parrot companions. Services encompass the areas of preventive health, pain prevention and management, pediatric and geriatric care, nutrition, behavior and environmental enrichment.

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Drs. Dennis Wilson and Fern Tablin have enjoyed several fruitful collaborations related to hearts and minds.

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Translating from Discovery to Treatment

What if laboratory discoveries could be applied, or translated, more efficiently to clinical treatments? As one of his first initiatives as dean, Michael Lairmore, and a team of faculty members, are developing a national center for veterinary clinical trials to achieve that goal in animals and people.

The Veterinary Center for Coordinated Clinical Trials will enhance the school's high-quality translational science through expanded clinical trials in client-owned animals from throughout the nation.

Lairmore states, “Our new clinical trials organization will provide an excellent basis for faculty members to partner with corporate veterinary networks, private practitioners and other university hospitals to engage in important large-scale clinical research and, ultimately, improve the health of animals and people.”

Specialized guidelines, procedures and dedicated staffing will ensure well-organized clinical trials at the William R. Pritchard Veterinary Medical Teaching Hospital while maintaining the highest standards of patient care and biomedical science.

Faculty veterinarians in the Wildlife Health Center work with state and federal agencies on dozens of species and issues of interest to regulators, conservation groups, lawmakers and members of the public.

An article on the Island Scrub-jay, authored by 20 scientists from 16 agencies and institutions, including Walter Boyce and Winston Vickers from the Wildlife Health Center, discusses emerging threats to Island Scrub-jay population viability and calls for an analysis regarding what to do to reduce extinction risk. The paper was featured on the cover of the December 2011 issue of Bioscience.

The Island Scrub-jay, one of the rarest bird species in the United States, is restricted to Santa Cruz Island off the coast of Southern California. Its population appears stable and not at imminent risk of extinction. However, it faces a number of threats that are likely to be exacerbated by climate change, such as catastrophic disease (e.g., West Nile virus) and wildfire.

The authors discuss management actions that could reduce extinction risk, including vaccination, captive propagation, biosecurity measures, and establishing a second free-living population on neighboring Santa Rosa Island. A second population on that island may also help accelerate the restoration and enhance the resilience of that island’s highly degraded ecosystem.

Biodiversity conservation in an era of global change and scarce funding benefits from approaches that simultaneously solve multiple problems, the authors write. The new framework illustrates an integrated solution for species protection, ecosystem restoration, adaptation to climate change and mitigation of such change.
**Symposium Surprise**

Ariela, a teaching llama, poses with senior students Lauren Riley (left) and Lori Campbell (right); and Julie Dechant, faculty member (center), as they show their awards from the Llama Association of North America. The unexpected recognition for their role in treating 33 llamas rescued from an abandoned Montana animal sanctuary in 2011 was announced at the 2012 UC Davis Camelid Symposium in January. Nearly 200 llama owners, alpaca owners and veterinarians from across the United States learned about camelid health issues such as dermatology, genetics, reproduction, gastrointestinal parasites, corrective dentistry, emergency care, medical conditions and herd health. The symposium, hosted by the UC Davis Camelid Medicine Club and Calpaca, is also generously supported by Cal-ILA, LANA, Llamas of the Wine Country, Abaxis, Bar-Ale, several owners and ranches.

**Parrots** Continued from page 1

“At the Parrot Wellness and Welfare Program, we are advancing the healthcare and well-being of companion parrots. Maintaining the school’s level of excellence, our program will serve as a leading resource for parrot health, welfare, education, and community outreach,” say Dr. Michelle Hawkins and Dr. Joanne Paul-Murphy, co-directors of the program.

**Educating Veterinarians**

The school incorporates teaching on the health and welfare of parrots in both the DVM curriculum and the residency program. Throughout their education, veterinary students have opportunities to learn about the unique anatomy, health needs and welfare issues of parrots. Residents who complete training can become board-certified specialists in zoological medicine.

**Improving Health and Wellness**

The parrot population will benefit from research conducted at the program. Researchers work as part of a team with faculty in avian sciences, avian nutrition and zoological companion animal medicine. Projects link post-graduate students in master’s degree programs with research studies designed to improve psittacine health and wellness.

**Serving the Community**

Through their research, the faculty optimize care and protect the health and well-being of parrots kept by private owners, aviculturists and zoological collections. Upcoming wellness classes will provide information about best care practices for parrots. The program’s mobile service offers on-site consultation to owners of large parrot collections. For an appointment with the Parrot Wellness and Welfare Program, call (530) 752-1393.

The Parrot Wellness and Welfare Program was launched thanks to a generous philanthropic gift from Scott Schubot, whose father Richard M. Schubot was a pioneer in avian breeding and research. In making this gift, Scott said, “it is a fitting tribute to my father, who loved parrots and was truly devoted to their wellness and welfare. The School of Veterinary Medicine, one of the premier institutions of its kind in the world, offers an exceptional program to advance care for our parrot companions.” Each dollar donated will be matched dollar for dollar, up to $800,000.

Gifts will support parrots, students and community outreach – all the necessary ingredients to make the Parrot Wellness and Welfare Program the leading model to help parrots and the people who care for them. For more information on supporting the program, please contact the Development Office at (530) 752-7024.
School Earns Full Accreditation

The American Veterinary Medical Association Council on Education has granted the School of Veterinary Medicine Full Accreditation for the maximum period of seven years.

In an email announcement March 5, Lairmore wrote, “Thank you to our accreditation team led by Drs. John Pascoe and Jan Ilkiw and many thanks to all of the faculty, staff and students who contributed to the self-study document; worked so hard to prepare facilities, schedules, tours or demonstrations; and participated in the site visits in Davis and Tulare.”

The comprehensive review included a 6-day site visit and the preparation of a 100-page self-study document containing detailed information on each of 11 accreditation standards – Organization, Finances, Facilities, Clinical Resources, Library and Information Resources, Students, Admissions, Faculty, Curriculum, Research, and Outcomes Assessment.

The site team pointed out particular strengths in facilities, the school’s ability to protect the financial support of the educational program in the face of declining funding, services for students, and extensive opportunities for students to be exposed to research.

The council also noted “substantial compliance” related to the clinical competency assessment requirement included in Standard #11, Outcomes Assessment. The school is required to satisfactorily address this issue within two years. The clinical competency assessment is being developed and tested in the Old Curriculum with final implementation as part of the New Curriculum.

Accreditation through this peer-review process represents the highest standard of quality and achievement for veterinary medical education in the United States. Graduation from an accredited veterinary school is a prerequisite for licensure or certification for professional practice in most states.

UC Davis School of Veterinary Medicine is the only public institution in California authorized to confer the Doctor of Veterinary Medicine degree.

Teachable Moment

Eric Eisenman, class of 2014, examines a dog and gives pet healthcare tips to children in Jiquilillo, Nicaragua in December 2011. Ten UC Davis volunteers, including DVM students, a technician and veterinarian-mentor Eric Davis, traveled to aid animals and local communities. The 5-day project addressed canine overpopulation, animal welfare and the lack of veterinary care services in the nation. The group saw 162 dogs, 6 cats, a pig, a horse and a cow. Their next step is to develop an international veterinary outreach organization so that veterinary students can continue such humanitarian visits abroad into the future.
Amber Roegner examines cell cultures in the lab of Birgit Puschner.

Amber Roegner is in many ways a “typical” UC Davis graduate student. She entered the Veterinary Scientist Training Program in 2006 with the goal of earning dual DVM/PhD degrees and expects to complete both degrees by 2014. VSTP students work toward veterinary careers in academia, government or public practice.

Dual-degree candidates, however, are anything but typical in veterinary medicine. VSTP students are interested in animal health and a scientific discipline, adding years to their studies. Roegner’s early interests in environmental water quality and public health, along with the support of the Pharmacology and Toxicology graduate group, have kept her motivation high.

Fellowships and Support
Graduate student funding comes from grants and fellowships. With the aid of mentors Birgit Puschner, Alan Buckpitt and Jerold Last, Roegner successfully applied for several fellowships and projects of some distinction. The recipient of a Fulbright Graduate Research Award and three years of funding from the U.S. Environmental Protection Agency “Star” fellowship, Roegner has conducted research in Davis, Boston, Guatemala and Uruguay. The school’s own STAR program supported Roegner for two summer sessions.

Algae, Animals and People
“My work in Uruguay focused on improving detection of a class of freshwater cyanotoxins called microcystins in harmful algae blooms,” Roegner says. “The EPA-funded award focuses on improving both detection and understanding of microcystins. These impact both wild and domestic animals in addition to human populations dependent upon surface waters.” Roegner’s work also emphasized reducing testing costs in poorer countries.

Strategic Plan Guides School’s Progress
To further foster the creativity and dedication of faculty, staff and students for the advancement of the profession, the faculty and school leaders have developed a schoolwide strategic plan.

With the help of AMC Strategies, specialists in strategic and business planning for academic medical centers, the school launched a strategic planning process designed to focus school efforts and resources for maximum impact and future achievement. The strategic plan will guide program endeavors and allocations of faculty, facilities and financial resources to support those initiatives.

In the first phase, completed in June 2011, the school completed an environmental assessment and surveys to identify strengths, weaknesses, challenges, opportunities and strategic issues related to teaching, research and service. The environmental assessment included key trends for research, financial resources, educational programs, and clinical services, including caseload information.

With this framework in place, the steering committee worked on strategic directions: mission and vision statements, measurable goals, strategies and tactics of the plan. The draft plan then received broad review and refinement by faculty, staff and students.

Over the summer, the steering committee will develop implementation plans, including target dates and strategy champions with responsibilities for the accomplishment of each strategy and tactic. The implementation efforts will include techniques and oversight mechanisms for tracking, as well as progress reports to help the school reevaluate priorities as conditions change during the next three to five years.

Incorporating the school’s mission to advance the health of animals, people and the environment, the final strategic plan will provide guidance for the school’s vision to lead veterinary medicine and find solutions to societal needs.

The final plan will be announced and posted at www.vetmed.ucdavis.edu/strategic_planning/index.cfm.
Father and Daughter Share in their Dedication

The bond that a father and daughter share is a very special one. Also special is the dedication that veterinarians embrace in their profession. As father and daughter and alumni of the school, Dr. Michael Ina and Dr. Jamie Ina share both distinctions.

Michael graduated in 1974 and began working at the Arguello Pet Hospital in San Francisco. In 1982, he purchased the hospital, a small practice consisting of three people. Over the years, he dedicated himself to providing quality, compassionate veterinary care to his patients and excellent client service to their owners.

Inspired by her wonderful mentor, Jamie pursued her dream. In 2008, she earned her DVM degree and then returned to join her father’s practice.

“The School of Veterinary Medicine provided me with an outstanding education, a wide range of great clinical cases and the building blocks to fulfill my childhood dream. I am very proud to tell clients, family and friends that I graduated from the School of Veterinary Medicine,” says Jamie.

Grateful to the school, Michael is a firm believer in giving back. He has served on the Admissions Committee and is a loyal and generous supporter. “I feel very fortunate for the education and training I received at the school. I have had the privilege and joy to work as a veterinarian every day for the last thirty-eight years,” adds Michael. “I donate as a way to say ‘thank you’ for the opportunity my daughter and I were given.”

“I donate as a way to say ‘thank you’ for the opportunity my daughter and I were given.”

– Michael Ina

“My education at the School of Veterinary Medicine provided me the foundation to become a confident and skilled veterinarian,” says Michael. “Becoming a veterinarian was my childhood dream. I credit my education at UC Davis for giving me the tools to become the best veterinarian possible.”

Because of Michael’s dedication, the hospital has grown considerably. There are now six veterinarians and a staff of over twenty employees. While he values each member of his team, there is one veterinarian who he is particularly proud of – his daughter, Jamie.

Jamie has always loved animals and knew that she wanted to become a veterinarian since her childhood. While growing up, she would often visit the hospital and observe her father in his role as a veterinarian.

Air Pollution  Continued from page 1

Air Basin showed platelet activation in both winter and summer, which could promote clotting and lead to strokes and heart attacks.

Population Studies

Two related population studies were co-sponsored by the South Coast Air Quality Management District. UC Berkeley’s Michael Jerrett found that exposure of Californians to fine particulate matter significantly elevated the risks for premature death from heart disease. A California Department of Public Health team led by Michael Lipsett came to the same conclusion. In addition, Lipsett reported an increased risk of stroke among women who had never had one before, particularly post-menopausal individuals.

Heart disease is the number one killer in California and is responsible for approximately 35% of annual deaths.

An abstract of Tablin and Wilson’s study is available online at www.arb.ca.gov/research/single-project.php?row_id=64824.
Thank you Notes

DEAN’S CLUB HONOR ROLL

The Dean’s Club honors alumni who have given generous gifts to support the school’s mission – providing the best veterinary education and advancing animal, human and environmental health. The following alumni contributed to the Dean’s Club from July 1, 2010 through December 31, 2011.

Dean’s Club

Executive Circle
Gifts of $5,000 or more
Kent Humber, ’82
Michael Ina, ’74
Morton La Pittus, ’61
Michael O’Brien, ’76

Dean’s Club
Gifts of $1,000 or more
Steven Aboulafia, ’91
Norman Baker, ’52
Robert Baker (in memoriam) *
Thomas Banks, ’59
Edmond Bayer, ’53
Barak Benaryeh, ’97
Carlo Besio, ’58
James Bittle, ’53
Gaylord Brown, ’78
Leslie Bullock, ’63
Robert Bushnell, ’56
Valerie Cardeiro, ’80
Homer Caston, ’55
James Clark, ’88
Charles Clulkenbeard, ’54
James Coldingon, ’80
Denny Constantine, ’55
Ian Coster, ’58
Wylend Cripe, ’52
Jack Darling, ’55
Gary Dillon, ’74
Harry Dingwall, ’57
Arthur Eisenhower, ’53
Kenneth Erwin, ’53
David Feldman, ’90
Michael Floyd, ’61
Lloyd Freitas, ’39
William Frizell, ’79
Patricia Gilbert, ’84
Patrick Goodwin, ’59
John Gus, ’80
Richard Hack, ’69
Donald Hambley, ’63
Larry Herbert, ’62
Harold Hill, ’56
Harry Hill, ’52 *
Donald Hu, ’37
Donald Hudson, ’52
Ronald Humason, ’57
Linda Ivburg, ’87
Rodney Ingraham, ’52
Charles Jenner, ’59
Arthur Jennison, ’76
Jock Jocoy, ’54
Jerry Kaneko, ’56
Richard Keagy, ’59
H. Jay Kerr, ’77
William Kidd, ’75
Larry Kidwell, ’58
William Kortum, ’53
Keith Lansing, ’56
James Larkin, ’58
Gabriele Levine, ’59
Kenneth Levine, ’59
Carl Lind, ’65
Louis Locke, ’56
Douglas Mader, ’86
William Manclark, ’56
Richard McCapes, ’58
Charles Nelson, ’55 *
Arthur Neves, ’65
Harvey Olander, ’58
Robert Olsen, ’53
Lloyd Pilch, ’75
Mark Pio, ’85
Herbert Piper, ’52
Philip Plocher, ’54
Holly Reed, ’86
Judy Reens, ’85
Ronald Ringen, ’66
Christopher Rodi, ’93
Samuel Rogers, ’58
Pamela Rohrich, ’83
Janet Sanford, ’57
Thomas Schauwecker, ’57 *
Arthur Selby, ’57 *
Hani Shatila, ’73
Mervyn Shenson, ’55
Maremaro Shibuya, ’59
Don Shields, ’87
John Shirley, ’52

Rose Circle – alumni who have celebrated their 50th anniversary (indicated in bold).
* Heritage Society for Animals – members have made planned gifts.

Dean’s Club
Gifts of $1,000 or more
Steven Aboulafia, ’91
Norman Baker, ’52
Robert Baker (in memoriam) *
Thomas Banks, ’59
Edmond Bayer, ’53
Barak Benaryeh, ’97
Carlo Besio, ’58
James Bittle, ’53
Gaylord Brown, ’78
Leslie Bullock, ’63
Robert Bushnell, ’56
Valerie Cardeiro, ’80
Homer Caston, ’55
James Clark, ’88
Charles Clulkenbeard, ’54
James Coldingon, ’80
Denny Constantine, ’55
Ian Coster, ’58
Wylend Cripe, ’52
Jack Darling, ’55
Gary Dillon, ’74
Harry Dingwall, ’57
Arthur Eisenhower, ’53
Kenneth Erwin, ’53
David Feldman, ’90
Michael Floyd, ’61
Lloyd Freitas, ’39
William Frizell, ’79
Patricia Gilbert, ’84
Patrick Goodwin, ’59
John Gus, ’80
Richard Hack, ’69
Donald Hambley, ’63
Larry Herbert, ’62
Harold Hill, ’56
Harry Hill, ’52 *
Donald Hu, ’37
Donald Hudson, ’52
Ronald Humason, ’57
Linda Ivburg, ’87
Rodney Ingraham, ’52
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Arthur Jennison, ’76
Jock Jocoy, ’54
Jerry Kaneko, ’56
Richard Keagy, ’59
H. Jay Kerr, ’77
William Kidd, ’75
Larry Kidwell, ’58
William Kortum, ’53
Keith Lansing, ’56
James Larkin, ’58
Gabriele Levine, ’59
Kenneth Levine, ’59
Carl Lind, ’65
Louis Locke, ’56
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Holly Reed, ’86
Judy Reens, ’85
Ronald Ringen, ’66
Christopher Rodi, ’93
Samuel Rogers, ’58
Pamela Rohrich, ’83
Janet Sanford, ’57
Thomas Schauwecker, ’57 *
Arthur Selby, ’57 *
Hani Shatila, ’73
Mervyn Shenson, ’55
Maremaro Shibuya, ’59
Don Shields, ’87
John Shirley, ’52

Director of Development Named

The school welcomes Robert N. (Bob) Ware as the new director of development. His primary responsibilities will support the ongoing efforts and strategic vision of the school through his work with major fundraising programs, including the alumni reunion programs, and with individual donors.

Before joining the development team, Ware served as the senior manager of Gift and Data Services in Advancement Services at UC Davis. Prior to that he worked for 25 years in the financial services industry in a variety of roles, most recently as a senior vice president and process design executive with the Bank of America, N.A.

Ware holds a Bachelor of Business Administration degree in finance from Georgia Southern University and is certified in Six Sigma, CPI and Lean Process design. He has two French Bulldogs, Winston and Jordy, and brings a passion for building relationships, problem solving, and a love of animals.

Robert N. Ware
New Knowledge Now from Tomorrow’s Specialists

Some 50 residents representing 28 veterinary specialties presented the results of research projects at the annual House Officer Seminar Day March 23. The veterinarians investigated orthopedics and equine herpesvirus-1 myeloencephalopathy in horses; orthopedic and cardiological issues in dogs; dental problems in rabbits; diagnostics and genetics of cats; reproduction and herd health of livestock; botulism and milk testing for food safety; laboratory animal veterinary care; and many other topics. All residents carry out independent research studies as part of the largest veterinary residency program in the nation. The projects may be case reviews, epidemiological studies, drug experiments, diagnostic testing evaluations or treatment assessments. Residents generate new knowledge, increase their appreciation of the value of research in veterinary practice, and may ultimately publish results in peer-reviewed journals. One such study already published concerns the effectiveness and safety of a new method to deliver stem cells to injured horses. The William R. Pritchard Veterinary Medical Teaching Hospital, with partial support from Merial, Ltd. and Pfizer, Inc., concluded with awards for presentations of special scientific merit.