



# THE CREST

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The Ontario Veterinary College reporting on its people, events & programs.

## Horses - A woman's best friend?

### Getting back in the saddle may be a potent tool for trauma recovery

The bond between female horseback riders and their animals may be strong enough to help the women recover from extreme fear and anxiety, say OVC researchers.

Prof. Cindy Adams, department of Population Medicine, is working with graduate student Janet Yorke to examine the "therapeutic alliance" of the human-equine bond. They think this attachment may help alleviate the suffering of women who have been through traumatic physiological or psychological stress.

"We know that fear and anxiety can be transferred to other aspects of a person's life, such as riding," says Yorke. "I think people could really be reached through the use of horses in therapy."

The researchers decided to focus on women, after a recent finding by the Canadian Equestrian Federation showed that women comprise the largest growing segment of the companion horse owner population. In fact, 75 per cent of new horse owners are women, most of them baby boomers, says Yorke. Adams and Yorke are interviewing 50 female riders who say horseback riding influenced their recovery from traumatic situations such as car accidents, illness, or physical or sexual-abuse. They will look at what experiences interviewees identify



Janet Yorke and Cindy Adams are studying the "therapeutic alliance" of the human-equine bond in female horseback riders.

Photo by Martin Schwalbe

as traumatic and how their relationship with a horse helped or didn't help them cope.

They hope to find out if "getting back in the saddle" affects the emotional and psychological recovery of riders experiencing post-traumatic stress.

Questions for the survey will be developed in collaboration with a multidisciplinary team of professionals from sociology, psychology, veterinary and epidemiology backgrounds. The researchers will identify themes and patterns through standardized data analysis which they hope will lead to more

quantitative investigation such as video-taping riders through their recovery period and researching the demographics of respondents.

Yorke says the research will measure the effects of the therapeutic alliance according to the amount of time a rider spends with a horse and the nature of their riding.

"The intensity and proximity of the relationship before and after a traumatic situation are very important factors," says Yorke.

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## Virtual learning commons awarded additional funding

Canada's veterinary colleges have been awarded an additional \$150,000 from CANARIE Inc. to support the development of a Virtual Veterinary Medicine Learning Commons.

The Learning Commons will act as a portal that will give students and faculty from all four of Canada's schools access to video-rich learning content and the opportunity to share resources.

"Students will gain access to a wider range of online learning experiences and resources," says project manager Gary Smith. "And faculty will have more collaborative opportunities to exchange educational programs, learning material and expertise."

The project is funded by CANARIE, a private, not-for-profit organization supported by Industry Canada to encourage collaborative projects that use advanced Internet technologies to address structural barriers. In 1999, CANARIE committed \$1 million towards the Learning Commons, which was spearheaded by OVC. Only 10 projects received funding from CANARIE's Learning Program and the Veterinary Learning Commons is the only project to receive additional funding this year. The total cost of the veterinary project is about \$2.4 million and will be met with matching funds from the universities and industry partners.

The original CANARIE funding was set up to allow OVC, the Atlantic Veterinary College (AVC) at the University of P.E.I, the Faculté de Médecine Vétérinaire (FMV) at the Université de Montréal and corporate partner Lifelearn Inc. to establish a database-driven portal. Lifelearn, a spin-off of OVC's continuing education program, produces multimedia reference materials. The new funds mean all four of Canada's schools, including the Western College of Veterinary Medicine (WCVM) at the University of Saskatchewan, will now be part of the

project.

"I believe we received the additional funding because of the significant progress we have made in meeting the project goals," says Smith. "And by including the WCVM, it becomes a truly national project." The project could not have gone ahead without the help of



CANARIE, he says.

A portion of the new funds will be spent on videoconferencing equipment for WCVM. The college will be developing a graduate course in molecular biology to share with OVC and AVC. The funds will also support the portal and the purchase of a CISCO broadcast server for FMV. The server will allow FMV to exchange broadcast quality videos of veterinary procedures over the Internet with OVC.

Now that WCVM is involved in the project it is also assessing the feasibility of an interactive graduate course in general pathology, a co-operative graduate program in wildlife health and collaborative undergraduate teaching in poultry medicine. WCVM will use CANARIE technology to facilitate the exchange of information related to wildlife health problems across Canada.

In the past, the ability of Canada's veterinary colleges to share resources has been limited by technology and the physical distance between the schools. The Learning Commons will be designed to overcome these barriers. It will use CANARIE's national optical R&D Internet. The broadband technology is the only medium capable of allowing high-quality exchange of veterinary material.

A meeting between college and Lifelearn representatives to discuss the Learning Commons was held at the OVC Lifetime Learning Centre in June and marked the halfway point of the project.

Thus far, the project has resulted in the development of the following:

- a graduate course in epidemiology jointly taught between OVC and AVC using videoconferencing technology
- a database of radiological images created with a diagnostic quality scanner purchased with CANARIE funds. The database will be easily

accessible for teaching and continuing education. It will allow for collaborative teaching of radiology.

- an interactive module to teach students how to handle large animals. The module, developed by OVC large animal medicine professor Dr. Danny Butler, was used by first year students in 2001. It allows for more self-directed learning and emphasizes student safety, says Butler.

- A digital anatomy module that will eventually be incorporated into the first-year anatomy course.

Dr. Alan Meek, Dean of OVC, stressed the uniqueness of the Learning Commons project. No other country or profession has developed a portal of this kind, he said.

"We are pioneers and I do believe we will continue to lead the way," said Meek.

The framework developed by the project will provide other professional schools with a model to help them develop their own virtual learning environments.

The colleges plan to continue their work on the Learning Commons after the completion of the CANARIE project, but additional funding will be required.

The two-year CANARIE-funded project is to be completed on March 31, 2002.

- *Natasha Marko*

## Nobel prize winning veterinarian receives honorary degree



Dr. Peter Doherty, the first veterinarian to win a Nobel Prize, received an honorary degree from Guelph during convocation in June.

Doherty was

awarded an honorary doctorate of science June 7 during a ceremony for OVC and the College of Physical and Engineering Science. He received a Nobel Prize in 1996 when he and colleague Rolf Zinkernagel were recognized for their research investigating how the immune system recognizes virus-infected cells. His work has influenced current thinking in

the area of immunology, especially with respect to approaches to vaccination. Doherty is a scientist in the Department of Immunology at St. Jude Children's Research Hospital in Memphis, Tenn.

### *Entire class of 2001 wearing Veterinary rings thanks to OVMA*

Every member of the Class of 2001 is wearing a veterinary ring thanks to support from the OVMA and the resourcefulness of a few graduating students.

The rings, which were a Student Canadian Veterinary Medical Association initiative, were first available to graduates in 2000 and many members of OVC '00 purchased the rings. In 2001, graduating students Dr. Karyn Jones and Dr. Beverley Bateman felt it was important that their entire class receive a ring at no cost.

Jones and Bateman enlisted the help of classmates Dr. Michelle Lem and Dr. Devon Boyd and communicated with Université de Montréal students to coordinate the purchase of the rings. They also approached the OVMA for support.

"The OVMA has always been very supportive of student initiatives at OVC," says Jones.

The association agreed to support the project by matching funds raised by the OVC '01 class council.

The rings are engraved with "DVM" on the outside and the graduate's name, school and graduating year.

"The ring symbolizes our inclusion and dedication to the veterinary profession in Canada," says Jones. "It was a very special component of our graduation ceremony and the saying of the Veterinarian's Oath. We are grateful to the OVMA for their support of the Class of 2001."

### Functional foods focus of 2001 Chappel Memorial Lecture

Functional foods can improve the quality of our lives, according to a leading food scientist from Japan.

Lekh R. Juneja, Managing Director of the Nutritional Foods Division of Taiyo Kagaku Co. Ltd, delivered this message to more than 100 members of the University community at the Chappel Memorial Lecture on June 19, 2001 at the OVC Lifetime Learning Centre.

The annual lecture was established by OVC '50 graduate Dr. Clifford Chappel in memory of his father, Herbert, to give students and faculty an opportunity to meet internationally known scientists. The College of Biological Sciences (CBS) hosted this year's lecture, which rotates among OVC, the Office of Research, Graduate Studies and CBS.

"The future for functional foods is for healthy living," said Juneja in his lecture titled "The future role of functional foods/nutraceuticals as adjunctive treatments/preventative agents for human diseases."

Functional foods are foods that have a positive impact on health beyond basic nutrition. Buzz words used to describe these foods include "nutraceuticals" and "designer foods".

"We don't know anymore what the demarcation is," said Juneja, who uses the term "functional food" to describe any



**Lekh R. Juneja spoke about functional foods at the 2001 Chappel Memorial Lecture.**

Photo by Tim Sullivan

beneficial food or food component.

Juneja most recently developed the "Nutritional Delivery System," a method of fortifying foods with minerals, vitamins or polyunsaturated fatty acids.

"We have created a revolution in the fortification of food with this system," said Juneja, who called Guelph an excellent place for functional food research.

He has also developed applications for other functional foods, including green tea and eggs.

Juneja said that although functional foods may not necessarily be able to cure disease, they show promise for slowing the aging process and "dying healthy".

Worldwide trends, such as an increased burden on healthcare systems, make it a good time for the food industry to play a role in improving health, he said. The use of functional foods will also increase with the application of knowledge about the human genome. Mapping of the genome will allow for the optimization of certain nutrient gene interactions, where specific foods will be deemed beneficial to people with particular genetic makeups, he said.

*-Natasha Marko*

# Students visit Ottawa as part of Leadership Program

Students participating in the 2001 Summer Leadership Program got a chance to learn about a variety of veterinary career options during a recent trip to Ottawa.

Twenty-six students participated in the trip that included a visit to the Animal Care Facilities at the University of Ottawa's Faculty of Medicine and the Canadian Food Inspection Agency's (CFIA) Animal Disease Research Institute (ADRI).

The program, which is in its second year, is designed to give students exposure to research and to promote awareness of career opportunities outside of traditional veterinary practice. Students spend the summer working on projects under the direction of OVC faculty members. They also attend seminars and field trips focusing on career and research topics.

"There are many interesting career options for recent veterinary graduates," said Dr. Wayne McDonell, assistant dean of research and graduate affairs at OVC. McDonell is in charge of the program and accompanied the students to Ottawa. He said upcoming retirements will provide many opportunities, particularly in the expanding areas of food safety and laboratory animal medicine.

The students were exposed to the field of laboratory animal medicine during their visit to the animal care facility at the University of Ottawa. The visit was host-



The 2001 Leadership Program students dined in the town of Wakefield, Quebec in the Gatineau Hills on the Friday night of their trip to Ottawa.

Photo by Natasha Marko

ed by facility director Dr. Marilyn Keaney. Keaney, an OVC '81 graduate with a Ph.D. and a law degree, has extensive experience in laboratory animal medicine.

In addition to ensuring welfare guidelines are met, she helps researchers make decisions about experimental design. She said her work is challenging because of the need to balance competing interests.

"It requires mental flexibility," she said. "This has been a rewarding area of practice, but it has also been most challenging."

Dr. James Hutchinson, a researcher at the Children's Hospital of Eastern Ontario, spoke about the importance of veterinary medicine to his work on brain injury and congenital heart surgery in children. His research requires the use of animals and he often consults Keaney for direction.

On the second day of the trip, students learned about other veterinary careers in public service while visiting the ADRI, a branch of the CFIA. The ADRI has spe-

cialized centres for avian diseases, biologics evaluation, brucellosis, germplasm, mycobacteriology and rabies.

Institute staff presented seminars on a variety of issues, including rabies, spongiform encephalopathies, tuberculosis and foot and mouth disease. They also discussed career opportunities at the ADRI.

"The idea is to entice bright young minds to be researchers and workers at the CFIA, particularly the ADRI," said Dr. Dan Stevenson, an OVC '68 graduate who is employed by the U of G's Laboratory Services, but has been assigned to a scrapie project at the ADRI.

President Ron Doering said the CFIA will be in serious hiring mode over the next few years. The agency is Canada's largest employer of veterinarians, but the median age of its employees is 50 years and a large number will be retiring in the near future.

The CFIA employs over 5000 people, including 519 veterinarians. The staff is growing by about 50 people each month. Last year 46 new veterinarians were hired.

The leadership students also travelled to London, Ontario this summer for visits to a division of the National Research Council, The Robarts Institute and the Lawson Institute.

- *Natasha Marko*



## Day at the Races

As part of their new agreement, OVC and the **Equine Research Centre** are coordinating fundraising activities. All funds raised by these efforts will go towards the common goal of improving the health and well-being of horses. The main fall fundraiser is the "**Day at the Races.**" The 11th annual event will be held **October 28th, 2001** at **Woodbine Racetrack**. Bring your friends and enjoy a day of fine dining and action-packed thoroughbred racing. This fundraiser provides important support for OVC and the ERC. The "Night at the Races" at Flamboro in the spring raised \$80,000 for equine research.

For more information contact:  
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**Race Sponsorship Packages Available**  
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Table of Eight \$1500

## *Environmentally friendly selection methods boost immune systems of farm animals*

# Healthy animals, healthier food chain

A livestock breeding technique developed at OVC enhances the general health of farm animals and could mean producers need to use fewer antibiotics.

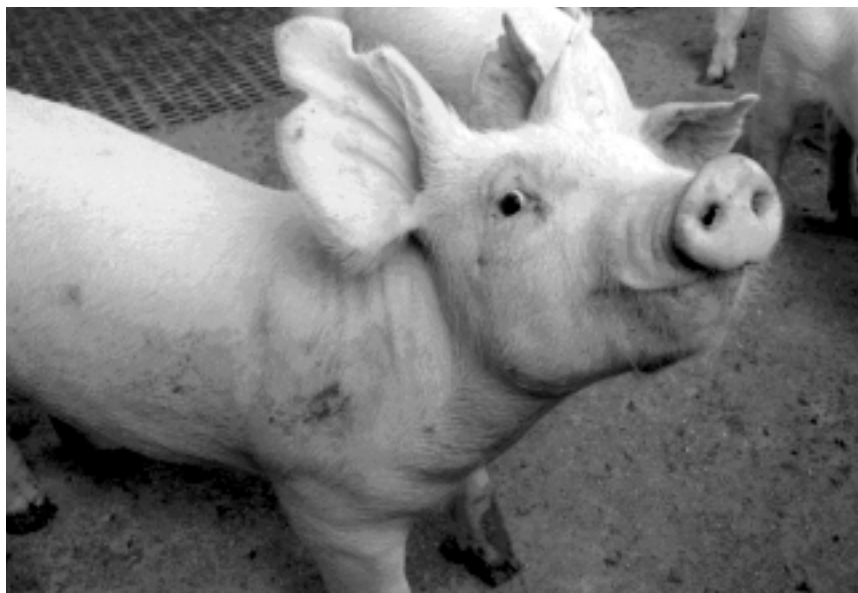
Profs. Bonnie Mallard and Bruce Wilkie, both of the department of Pathobiology, have developed an alternative breeding method that boosts the immune systems of pigs and cattle, with the goal of increasing their general resistance to most infectious diseases. By increasing overall resistance instead of developing absolute immunity to one particular disease, animals are generally healthier.

Unlike traditionally bred livestock, animals bred with high immune response to disease should require little or no antibiotic or chemical treatment. And lower levels of chemical use mean less harm done to the environment.

These breeding methods also improve food safety. Because naturally disease-resistant livestock need minimal antibiotics, there is less chance for organisms that are pathogenic for humans to develop resistance to antibiotics, and less chance of an accidental contamination of food with trace antibiotic levels.

"There's a lot of public concern that human antibiotic resistance could be generated, at least in part, from livestock at some level," says Mallard. "But this approach to breeding for enhanced immune responses can help alleviate those fears."

Often genetic approaches to combat-



An alternative breeding method that boosts the immune systems of pigs and cattle has been developed by Bonnie Mallard and Bruce Wilkie, both of the department of Pathobiology.

Photo by Martin Schwalbe

ing infectious diseases involve the selection and breeding of animals that show heightened or enhanced resistance to one disease of interest. But this approach can be counter-productive, as breeding for resistance to one disease can make the animals more susceptible to other diseases.

Disease-specific breeding may also decrease the genetic diversity within an animal population. This means genetic variation that isn't relevant now - but may be of use later - could be permanently bred out of a population of livestock permanently. As well, the pathogens targeted in the selective breeding of livestock are constantly changing, which often renders traditional breeding practices ineffective. However, the immune system normally has the adaptive ability to respond to these changing organisms. Using breeding strategies that capitalize on this fact should result in increased disease resistance to a variety of pathogens.

For these reasons, Mallard and Wilkie

bred pigs with the intent of strengthening their immune systems. They hoped this would produce a population of offspring whose immune systems made them generally -- but not absolutely -- resistant to a wide range of diseases commonly found in pigs.

"If the immune system is optimized, there should be some general improvement in resistance to a broad range of pathogens," says Mallard. "This may not generate absolute resistance to any one

disease but raises levels of resistance across the board."

Results of this research show that the population of pigs did possess enhanced immune responses and demonstrated other qualities such as higher immune response to vaccination, heightened fertility levels and improved growth.

Mallard and Wilkie are now extending their swine research and applying the same innovative breeding technique to dairy cattle.

This research is sponsored by the Ontario Ministry of Agriculture, Food and Rural Affairs, Natural Sciences and Engineering Research Council, the Dairy Farmers of Ontario and GUARD, a technology management company that specializes in realizing the commercial value of university research.

- Mark Kennedy, SPARK

## *A Woman's Best Friend*

*From page 1*

"There's a difference between endurance riders and those who ride more casually for pleasure."

Yorke has more than 30 years of social work experience and has volunteered for a therapeutic riding program for children with physical disabilities. She observed physiological and emotional benefits such as improved fine and gross motor skills and reduced tension in the program's participants.

"I hope that people will begin to realize the value of therapeutic riding programs for those who have been through trauma," she says.

- *Katie Meyer, SPARK*

### **OVC initiatives featured in Research magazine**

From high-immune animals to cleaner veterinary facilities, the latest edition of U of G's *Research* magazine — focusing on public health and the environment — will highlight an array of OVC research.

With strong ties between food supply, public health and the environment, much of the research reported in the magazine relates to OVC initiatives. Environmental health in the wake of genetic modifications and recent West Nile outbreaks are just two of the OVC-related issues covered in the 80-page magazine — *Research's* largest issue yet.

In addition to the printed version of the magazine, interested readers can check [www.uoguelph.ca/research/](http://www.uoguelph.ca/research/) for updated information on stories as news of advancements becomes available.

The magazine is produced primarily by U of G's SPARK program — (*Students Promoting Awareness of Research Knowledge*), of which OVC is a sponsor. The program gives students of all disciplines the opportunity to acquire important journalistic and communication skills, and to develop hands-on experience vital to career development in the field of research communications. Natasha Marko, OVC's new communications officer, is a former SPARK participant.

- *Lisa Caines*

## **Distribution of VTEC infection in Ontario identified**

Verocytotoxigenic *Escherichia coli* (VTEC) threatens farm families more than their urban counterparts, according to findings from OVC researchers.

A research team led by Prof. Jeff Wilson of Population Medicine, says that in rural residents, VTEC — a potentially deadly bacterium found naturally in cattle — results from direct contact with cattle and the consumption of contaminated well water or locally produced foods.

"The results reversed the conventional thinking at the time that VTEC infection comes mainly from hamburger," says Wilson. "In the past we believed that urban centres were at a higher risk of infection, but now we realize the great risk that exists among rural people."

The team used provincial information that identified human victims of VTEC-related illnesses based on their location of residence. Comparisons were made with cattle densities using a geographical information system (GIS) and a relationship was established using spatial regression analysis, a statistical tool used to study potential relationships between two events based on their locations.

Nine counties in Ontario — all with predominantly mixed agriculture — showed high levels of VTEC infection. The counties are in three major regions of Ontario: the western and central part of the western region (including the Walkerton area), the north-west section of the central region, and the far western part of the eastern region.

Officials have always believed a link existed between water quality and gastrointestinal illness in farm residents. Landowners with contaminated wells — totaling about 30 per cent of all farm wells, according to the 1991-1992 Ontario Farm Groundwater Quality Survey — were urged to stop using the water. In a later study carried out by researchers at the University of Guelph, McMaster University, and Health

Canada, the relationship between illness and rural water quality was established.

"The results of the earlier study show that individuals living on farms with contaminated wells are twice as likely to experience this illness than individuals without the bacteria," says Wilson.

He says many of the rural people exposed to VTEC develop a stronger immunity, compared to urban dwellers. But he warns farm families not to feel complacent — there is an increased risk to rural people, especially young children, the elderly, and people with suppressed immune systems. Visitors are also a high-risk group.

Seasonal factors are likewise relevant, says Wilson. The peak of infection occurs in the summer. It most likely comes to a head because bacterial populations naturally increase in the cattle environment, while higher temperatures promote greater bacterial loads in food products, and because food preparation methods change in the summer, he says.

"We need to let people in rural areas know about the risks and how they can prevent this illness," says Wilson. "Local health officials also need to understand the risk factors."

Wilson and his team are now developing a method to assess the risk of infection based on population characteristics, watershed factors and water quality.

Other researchers involved in this project included Dr. Pascal Michel; Profs. Wayne Martin and Scott McEwen of Population Medicine; Prof. Carlton Gyles of Pathobiology; and Dr. Bob Clarke, formerly of Health Canada.

This research, supported by the Ontario Ministry of Health and the University of Guelph, was sponsored by Health Canada and Agriculture and Agri-Food Canada.

- *Andrew Bearinger & Barb Keith, SPARK*



## Radiation therapy unit gets equipment upgrade

The Veterinary Teaching Hospital at OVC can now take on more complicated oncology cases thanks to recent equipment upgrades in the radiation therapy unit.

The new equipment in the Frank and Martha Thompson Radiation Therapy Unit was purchased from Princess Margaret Hospital in Toronto in April. Built in 1987, it is far more modern than the unit's original equipment, which dated back to the 1950's. The unit is now fully operational after being temporarily closed between November 2000 and April 2001. The new equipment cost about \$110,000, \$90,000 of which was raised by Pet Trust.

"The greatest improvement with the new equipment is in accuracy," says radiation therapist Kim Stewart, who performs most of the radiation treatments on VTH patients.

In addition to allowing the treatment of more difficult cases, the new equipment will also cut back on side effects related to therapy.

"The more accurate you are with radiation therapy the fewer side effects you get," says Dr. Isabelle Aubert, an internal medicine expert with an interest in oncology. Aubert is in charge of most of the oncology cases at the VTH. To ensure accuracy, all patients are treated under general anesthetic, she says.

The oncology team has also grown since the unit originally reopened in 1999. Dr. Karen Bateman, a radiologist, and Stewart have been joined by Aubert and oncology technicians Vicki Heinbecker and Melanie Brooks.

In August 2001, the unit also gained a computerized treatment-planning program, donated by the London Regional Cancer Centre.

"It enables us to do more complicated treatments," says Stewart, who has over 15 years of experience as a human radiation therapist.

For example, when a patient has a nasal or brain tumour, the planner helps the cli-

nician test different scenarios and determine how to hit the tumour with maximum intensity, while sparing other tissues.

The radiation therapy unit can now easily treat five patients a day, depending on the type and complexity of the cases. Most VTH radiation patients are dogs, but cats are also treated for various cancers.

The most common cancers treated include lymphomas, sarcomas, carcinomas, and mast cell tumours. Treatments



**VTH patient Olin is suffering from cutaneous lymphoma. Half-body radiation was used to control the disease when the cutaneous lesions progressed despite chemotherapy.**

are administered on a variety of areas, including body extremities and nasal or oral cavities. Patients with carcinomas and sarcomas typically receive one fraction each day for 20 to 25 days. Multicentric lymphoma is treated with two "half-body" radiation treatments. Half-body radiation doesn't destroy all of a patient's bone marrow in one session and therefore avoids the side effects that come with bone marrow suppression. Seventy percent of the radiation caseload last year consisted of lymphomas treated with half-body radiation, a therapy which was initiated at OVC by Dr. Tony Abrams-Ogg.

Although lymphomas make up a large proportion of the caseload, the types of oncology cases the unit is able to treat depends mostly on referrals and the wishes of pet owners.

"We are always up for trying new stuff," says Aubert, who completed her residency in internal medicine at OVC.

Recently, Toby, an eight-year-old Pomeranian suffering from hind limb paralysis due to an immune-mediated granulomatous disease of the spinal cord refractory to conventional medical treatment was treated with 10 fractions of radiation therapy. He walked out of the OVC on August 22 and his owners were very, very happy, says Aubert.

Aubert stresses that treatment is generally palliative. However, radiation therapy may be able to cure melanomas, very localized lymphomas and sarcomas in some cases.

A VTH success story is BJ the cat who was treated with radiation for a nasal lymphoma. It has been two years since his cancer went into remission and he is still doing very well.

Radiation therapy can also be used for pain management, particularly for dogs with osteosarcoma. If an owner decides not to amputate and instead to treat osteosarcoma with radiation therapy, there is a 70% chance that a dog will feel well for 2 to 4 months following treatment. Radiation delays the growth of the tumour and decreases the risk of fractures.

There are many people involved in the care of VTH oncology patients, including staff veterinarians, anesthetists, residents, technicians and students. Since most patients are older animals, they often end up visiting other specialists, such as neurologists and ophthalmologists, says Aubert.

"They become very well-known to the staff," she says. "You get to know them so well that it is very rewarding."

The extent to which staff know each individual animal can be comforting for clients who cannot join their companions in Guelph. Since the VTH is the only place in Canada currently offering radiation therapy, patients often come from outside the Guelph area. Animals that are not regular VTH patients must be referred by their veterinarian.

*Continued on page 8*

## Scintigraphy useful diagnostic tool

A variety of cases have benefited from the Veterinary Teaching Hospital's new nuclear medicine diagnostic unit since it opened in March.

Nuclear medicine, or scintigraphy, is a tool that provides information about the size, location and functioning of an organ or tissue, according to diagnostic imaging specialist Dr. Howard Dobson, department of Clinical Studies.

Scintigraphy involves the use of radioisotopes to evaluate tissue function. Virtually all VTH diagnostics use technetium99, a radioisotope with a convenient 6-hour half-life. Technetium is very reactive and can bind to a wide variety of carrier molecules allowing for the evaluation of a broad range of tissues. When the radioisotopes reach the target tissue they undergo gamma radioactive decay which is recorded by the unit's gamma camera.

The most common procedures performed in the unit include bone scans and the investigation of portosystemic shunts. The equipment has also been used to determine thyroid function and gastric emptying, to screen for pulmonary embolism and to identify metastatic disease. Nuclear medicine is also the only means of determining the function of each of the two kidneys separately.

To date the majority of cases seen in the unit have been large animals, particularly horses in training. However, the number of small animal cases is increasing, as clinicians become familiar with the capabilities of the

facility. The equipment can accommodate virtually any patient, the most unusual so far being a lame camel. The camera is very mobile and can take images from a variety of angles, with patients either standing or lying on an examining table.

Several research studies that were previously not possible at OVC have been conducted with the new equipment, says technician Joanne Kell-Glerum. Two large projects were completed over the summer. One project involved evaluating the influence of non-steroidal anti-inflammatory drugs on renal function in dogs. The other was part of an investigation of the distribution of antibiotics following intra-osseous injection in horses.

Scintigraphy does not have the side effects of more invasive procedures. No general anesthetic is required and even compromised animals can undergo diagnostics without concern about side effects. However, many animals do require sedation to ensure that they remain still during imaging.

The unit includes a holding room where patients remain for 24 hours until the radioisotopes have decreased to safe levels. Provisions have been made in case a patient requires intensive care during that period.

The unit is the third facility upgrade at OVC that has been supported by Pet Trust. Earlier projects included the VTH radiation therapy unit and the intensive care unit. Pet Trust's next major capital project is a magnetic resonance imaging facility.

### **New interns welcomed**

#### **Large Animal Interns:**

- Dr. Bree Howard, Murdoch University in Perth, Australia (1999)
- Dr. Thomas Koch, Royal Danish University in Denmark (2000)
- Dr. Karen Schaedel, University of Minnesota (2001)
- Dr. Adrian Solano, Universidad Nacional in Costa Rica (1989)

#### **Small Animal Interns:**

- Dr. Christina Barnett, Texas A&M University (2001)
- Dr. Lynette D'Urso, Virginia-Maryland Regional College of Veterinary Medicine (2001)
- Dr. Thomas Gibson, OVC (1995)
- Dr. Kimberly Murphy, OVC (1998)
- Dr. Duane Robinson, OVC (2000)
- Dr. Dianna Saam, Western College of Veterinary Medicine (2001)
- Dr. Becky Valentine, Western College of Veterinary Medicine (2001)
- Dr. Jinelle Webb, OVC(2001)

#### **Avian/Exotic Animal Interns:**

- Dr. James Wellehan, University of Minnesota (2001)

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## Equipment upgrade means better care for oncology patients

### *From page 7*

When possible, many owners from outside the area elect to accompany their animals to Guelph for longer treatments.

"Patients that can spend time with their owners, or that get to go home to sleep and eat, generally tolerate the treatments better," says Aubert.

There are several other factors owners should consider before electing for radiation therapy, including cost and potential side effects. Treatment can run anywhere from \$800 to \$1000 for three fractions to \$3000 to \$5000 for 25 fractions. The worst side effects from radiation therapy are dermatitis and mucositis. "They (side effects) can be pretty ugly," says Aubert, adding that

care is taken to minimize pain and itchiness related to the therapy. Both dermatitis and mucositis are usually self-limiting.

Despite the drawbacks, most clients are very happy with the results and the extra time they get to spend with their companions.

Aubert says that many owners call the VTH a year or more after their pet's treatment has ended and often after their pet has died, to thank the staff for their care. Although it can be difficult to hear of a pet's death, it is rewarding to know that the human and animal had an extra year of life together, she says.

- *Natasha Marko*



## Symposium honours retired professor and amateur historian

The OVC community recently celebrated the contributions made by one of its own to the preservation of veterinary history.

The C.A.V. Barker Symposium on Canadian Veterinary History was held June 15, 2001, as part of Alumni Weekend, to honour Dr. Cliff Barker, an OVC graduate and university professor emeritus. Barker established the C.A.V. Barker Museum of Canadian Veterinary History at OVC and has published research papers and books about the history of the veterinary profession.

Dr. Alan Meek, dean of OVC, said Barker has led the way in ensuring veterinary history is preserved for generations to come.

"He has worked tirelessly to collect and display this history for us," said Meek.

The symposium, which was organized and hosted by Dr. Brian Derbyshire, professor emeritus of Pathobiology, began with an appreciation of Barker.

"We congratulate you on your work, we thank you for your work and we wish you continued success in this field," Derbyshire told Barker in front of the nearly 100 faculty, alumni, family and friends who attended the symposium.

Barker said he was grateful for the honour and for everything that has been done to support the museum.

"I appreciate this more than you can comprehend," he said.

Although the symposium was held to honour Barker's contributions to the preservation of Canadian veterinary history, Derbyshire pointed out that Barker himself is an important figure in that history.

"He has been a very important member of the veterinary profession and veterinary history in Canada," said Derbyshire.

Barker was born and raised in Ingersoll, Ontario and earned his DVM in 1941 and his D.V.Sc. in 1948. He later became a board certified theriogenologist.



Dr. Cliff Barker (centre) stands with presenters (from left to right) Dr. Ole Nielsen, son Dr. Ian Barker, Philip Teigen and Dr. Thomas Dukes. Dr. Don Barnum (not pictured) also presented.

Photo by Trina Koster

He was a faculty member at OVC from 1945 to 1984.

As a prominent theriogenologist, Barker completed some of the earliest work on artificial insemination in swine. He also developed the first artificial breeding course and frozen semen lab in Canada, and has authored over 70 scientific publications. For his work in the field, Barker became a member of the Order of Canada in 1986.

Barker's other honours include the Royal Society of Canada's Jason A. Hannah Medal for his book "Century One: A History of the Ontario Veterinary Association, 1874-1974," which he co-wrote with professor Margaret Evans of the University of Guelph's history department. He has also served as both OVA and CVMA president.

His historical research focuses on two major themes: biographies of Canadian veterinarians; and the early history of OVC, particularly the "Temperance Street Era" in Toronto.

Barker first became interested in early veterinary history when he befriended Arthur Brown, a graduate of the class of 1888. Brown gave Barker several veterinary artifacts in the 1950s. There are currently 10,000 to 11,000 artifacts in the museum.

In addition to an appreciation of C.A.V. Barker, the symposium featured lectures given by other veterinary historians, both professional and amateur.

Historian Philip Teigen, the deputy librarian of the National Library of Medicine in Bethesda, Maryland, delivered a lecture titled "Inventing veterinary education in the U.S. and Canada, 1866-1930." Teigen also commended Barker for his historical research and called his output "amazing" for any amateur or professional historian.

*Continued on page 10*

## Dr. Cliff Barker honoured

*Continued from page 9*

“His productivity, his keen eye for fruitful and interesting topics, and his aptitude and thoroughness can serve as a model for anyone interested in historical writing,” he said.

Dr. Thomas Dukes, an OVC '65 graduate spoke about Queens University's foray into veterinary medicine in the 1890s, and Dr. Ole Nielsen, an OVC '56 graduate and the college's former dean, spoke about the history of veterinary medicine and the environment. He called managing the biosphere the single biggest challenge facing society today and said the veterinary profession is well-equipped to handle this challenge. Dr. Donald Barnum, OVC '41, professor emeritus of Pathobiology and one of Barker's former classmates, discussed the history of bacteriology.

Barker's son Dr. Ian Barker delivered the final lecture of the day titled “The evolution and demise of the Canadian Army Veterinary Corps.” He recently co-edited “A history of the Canadian Army Veterinary Corps in the Great World War, 1914-1919,” with his father and also helps maintain the museum.

The Barkers hope to make the museum self-sustaining in the future and would like the collection to be available for educational programs and scholarly research. The OVC Alumni Association helps to support the museum.

- *Natasha Marko*

## CVO Registrar now with College of Dental Surgeons of B.C.



Dr. John Henry has retired as the registrar of the College of Veterinarians of Ontario and is now registrar for the College of Dental Surgeons of British Columbia (CDSBC). He and

his wife, Sandra will now be closer to their daughter Andrea, who lives in B.C.

Henry, OVC '61, assumed his new duties in August 2001. He is the first person outside the dental profession to become registrar of the CDSBC. He brings years of experience in governance, alternate dispute resolution and staff culture issues to his new position.

As registrar since 1990, Henry is credited for bringing a newer, more open face to the CVO.

He had planned to officially retire in the spring of 2002 before deciding to take the position in B.C.

Prior to becoming registrar of the CVO, Henry had a varied career both within and outside of veterinary medicine. After graduation, he practiced in Brampton for three years and then spent 21 years in a mixed practice in Kemptonville, Ontario, where he was also a municipal councilor and the director of the Rideau-Carlton Raceway. In 1985, Henry joined the Ontario Ministry of Agriculture and Food as a regional veterinarian for Eastern Ontario. He became the Director of the Livestock Inspection Branch in 1988 and also served as the Livestock Commissioner. He also served several years as an elected council representative at the CVO and was president in 1987/88.

Dr. Barbara Leslie, former Deputy Registrar of the CVO, became Acting Registrar in July.

## **Job search support for students and graduates now online!**

Students, recent graduates and alumni can now search for jobs on OVC's Web site. As part of its commitment to developing career opportunities for graduates, OVC has made vital contacts with clinics, companies and agencies across Canada to create lists of job opportunities that are available on the Internet. If students or graduates wish to view job postings at midnight from home, they are now free to do so. Summer positions are also available online.

In addition, starting this September, all fourth year students will have the opportunity to post their profiles on the Web site. Students will be listed by area of interest in order to help employers find a match to suit their needs. They will also be encouraged to highlight key points about themselves and their professional future and to create a CV that will be accessible online. This particular initiative is a first among the four veterinary colleges in Canada and is supported by OVC's Recruitment and Career Opportunities Officer, Angi Gallupe. Both initiatives provide students, graduates and employers with the freedom to look for a job or an employee on their own time, when it is convenient for them.

For more information about these initiatives, please contact Angi Gallupe at (519) 824-4120 ext. 4085. Please visit <http://www.ovc.uoguelph.ca/UnderGrads/index.html> to view this Web site.



Ontario Veterinary College  
**ALUMNI ASSOCIATION**

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I wish to extend greetings to all OVC alumni members and faculty and the incoming Class of 2005. I would like to take this opportunity to update you on the activities of the OVC Alumni Association. Graduates from the Class of '41 to the Class of '01 volunteer their time on the OVC AA Board that meets regularly between September and June. Over the past year, we have welcomed the assistance of Andrea Pavia in her role as Manager, Alumni Programs for OVC.

**The OVC Alumni Association is involved in the following activities:**

- OVC student orientation package and participation in orientation week
- The Buddy-Mentor Pizza Lunch
- Support for College Royal
- Support for the Probe Lectures
- Sponsorship of The Crest
- Sponsorship of the C.A.V. Barker Museum of Canadian Veterinary History
- In conjunction with the OVC's Dean's office, providing complimentary first year OVC AA membership to new graduates
- Establishment of the OVC Alumni Trust
- Student scholarships and awards
- The new OVC Alumni Merchandise Collection
- An evolving OVC Alumni Association Web-Page with a link to the Ontario Veterinary College Web-Page

**OVC Alumni members are encouraged to renew friendships and contacts during events throughout the year. Reunion receptions for the OVC/University of Guelph graduates for the coming year include:**

- North American Veterinary Conference, January 12-16, 2002, Orlando, Florida - reception on the 13th at the Caribe Royale Resort
- Ontario Veterinary Medical Association Conference, January 24-26, 2002, Westin Harbour Castle, Toronto, Ontario
- Western Veterinary Conference, February 11-14, 2002, Las Vegas - reception on the 12th at the MGM Grand Resort
- University of Guelph Florida Reunion, March 6, 2002, Port Charlotte, Florida - Maple Leaf Estates
- Alumni Weekend at the University of Guelph, June 21-23, 2002. OVC Alumni Association Annual General Meeting will be held at OVC on June 22, 2002.

The Association receives nominations each year for the OVC Distinguished Alumnus Award that is presented at the President's Lunch during Alumni Weekend. We congratulate Dr. James Archibald, DVM 1949 as recipient of the OVC Distinguished Alumnus 2001.

In order to continue sponsoring our activities, the Association needs your support. By purchasing a Life Membership in the OVC Alumni Association, you will help ensure that these and future activities are possible. A one-time life membership costs only \$150 (\$100 if received within 20 months of graduation – take note Class of 2001). Alternatively, you can enroll for five annual payments of \$35 each. Please contact Andrea Pavia at (519) 824-4120 x 4430 or at [apavia@ovc.uoguelph.ca](mailto:apavia@ovc.uoguelph.ca) for more information.

**The current Executive of the OVC Alumni Association is:**

Dr. Robin Rabideau, '00	President	Dr. Grant Scherer, '92	Treasurer
Dr. Clayton McKay, '70	Vice President	Dr. Susan Sabatini, '92	Past President
Dr. Lynn Bruce Helwig, '54	Secretary		

In closing, I congratulate the OVC Class of 2001 on your achievement and welcome your involvement in the OVC Alumni Association. By maintaining a lifelong relationship with OVC you will ensure your College's continued excellence.

**Robin Rabideau**

Contact e-mail: [robin\\_rabideau@hotmail.com](mailto:robin_rabideau@hotmail.com)

## Coming Events

University of Guelph  
Homecoming Weekend,  
September 28-29, 2001

•  
Schofield Lecture, October 18, 2001  
Lifetime Learning Centre, OVC

•  
Lifelearn Seminar/Wet-Lab  
“Companion Animal Laser Surgery”,  
October 19-20, 2001 (Introductory)  
December 7-8, 2001 (Intermediate),  
Lifetime Learning Centre, OVC

•  
Day at the Races, October 28, 2001  
Woodbine Racetrack

•  
2nd Annual Guelph Conference on  
Equine Nutrition, October 20, 2001,  
Lifetime Learning Centre, OVC

•  
OVC Alumni Hockey Tournament,  
U of G Twin Pads Arena,  
April 5-6, 2002

*The Crest* is published for the interest of OVC alumni, friends and members of the veterinary profession generally. Articles do not necessarily reflect the views of the editorial board.

**We welcome your news and views and encourage you to contact us with your coming events, photos or story ideas. Anyone wishing to excerpt *The Crest* should contact:**

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## In Our Memory

**Dr. Trafford Carvelle, OVC '50**, of Cornwall, Ontario died June 10, 2001. He is survived by his wife, Greta.

**Dr. Wilmer Cooper, OVC '50**, of Forest, Ontario died July 21, 2001.

**Dr. Eugene Epperson, OVC '33**, of Galion, Ohio died August 20, 2001. He is survived by his wife, Harriet.

**Dr. John C. Hulet, OVC '52**, of Woodstock, Ontario died June 8, 2001. He is survived by his sister, Helen Yule.

**Dr. Fred(erick) Judiesch, OVC '50**, of Swift Current, Saskatchewan died April 24, 2001. He is survived by his wife, Virginia.

**Dr. Winston Moffatt, OVC '73**, of Ithaca, New York, husband of Mary Lou, died January 21, 2001.

**Dr. Gerry Mullen, OVC '39**, of Walkerton, Ontario died June 3, 2001. He is survived by his wife, Dora, his sons Roy and Daniel and his granddaughter, Jill Nichols.

**Dr. Willard Persson, OVC '40**, of Vancouver, B.C. died April 10, 2001. He is survived by his wife, Lorna.

**Dr. Peter Poruks, OVC '52**, of Edmonton, Alberta died December 31, 2001. He is survived by his wife, Mirdza.

**Dr. Graham Steele, OVC '57**, of Flint, Michigan died July 8, 2001 after a four-year battle with cancer. He is survived by his wife, Barbara.

**Dr. John Thompson, OVC '49**, of New Liskeard, Ontario died in July 25, 2001. He is survived by his wife, Gwen and his daughter, Jennifer Adams.

**Dr. Alfred Vanags, OVC '59**, of South Pickering, Ontario died in January 2001. He is survived by his wife, Iraida.

**Dr. Donald Willitts, OVC '54**, of Mount Albert, Ontario. He is survived by his wife, Jean and his sons, Douglas and Thomas.

## OVC Alumni Trust

The OVC Alumni Trust was established to assist OVC students, based on their ability and financial needs and will support projects fundamental to the College's mission and goals. The fund currently stands at: **\$23,012.**

To contribute, please contact Laura Manning, Sr. Manager, Development at (519) 824-4120, ext. 4796 or [lmanning@ovc.uoguelph.ca](mailto:lmanning@ovc.uoguelph.ca).

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*Please Forward*

