

The Atlantic Veterinary College: where technology meets the sea

Andrew M. Silverstone

In 1971, Agriculture Canada proposed the establishment of a 4th Canadian veterinary college (1). The Canadian Federal Government, Maritime Provincial Government, and the veterinary profession went on to debate this issue for more than 10 years. In May 1984, the Governments agreed upon funding for the school, and on June 4, 1984, ground was broken at the University of Prince Edward Island for the construction of the Atlantic Veterinary College (AVC). Dr. Reginald Thompson, who had spent 3 years working for the establishment of the AVC, was appointed dean. It would take Dean Thompson another 3 years to carefully recruit the young, energetic, and dedicated staff and faculty with whom he would design the veterinary school, literally page by page and brick by brick. The year 1999 was one for reaching several milestones at the AVC; in May, the school graduated its 10th class of veterinarians and its 1st PhD student (2), and in July, its 3rd dean was appointed.

Hard-hats and microscopes

When the AVC opened its doors in September 1986, the new students were issued hard-hats on their 1st day of school. Many parts of the building were still under construction and, for safety reasons, off-limits to the students.

For students admitted to the inaugural class at the AVC, there was a palpable rush and excitement to their unique experience. When classes began, only one lecture hall was completed.

The histology laboratory was finished, but the anatomy laboratory was still under construction, so dissections were done in the stalls that would later become the large animal clinic. Several faculty and graduate student positions still needed to be filled, so many students were able to use the empty office spaces as carrels for study. The university's library was still trying to acquire veterinary-related books and journals, so many of the necessary resources were shared by the students (McBurney SR, personal communication).

Guinea pig stew: The students' experiences

The demographics of the initial class were also unique. The age range of the class was higher than the normal,

Class of 2000, Atlantic Veterinary College, University of Prince Edward Island, 550 University Avenue, Charlottetown, Prince Edward Island C1A 4P3.

Correspondence and reprint requests to the author at P.O. Box 589, Dover, Ohio 44622-0589 USA.

as many students already held postgraduate degrees or were involved in other careers, and had anxiously awaited the school's opening. This dynamic gave the members of the class some nontraditional ideas on how they would eventually practise. The inaugural class even made light of its role, by publishing a cookbook titled "Guinea Pig Stew," (McBurney SR, personal communication).

The opening of the Veterinary Teaching Hospital in January 1988 was exciting for the now 2nd-year students. The new hospital worked hard to build a solid case load and a client-base for the students' clinical rotations, which would begin 18 months later. A tremendous comradery grew between the interns and the sophomore students during this time. The selection of rotations for the eventual 4th-year students included 10 core rotations, which were divided over the course of their senior year. In the autumn of 1989, the testing of a fully operational school commenced, as there was a full complement of students for the first time. All of the early hard work paid off, as the school received full accreditation by the American and Canadian Veterinary Medical Associations and the Royal College of Veterinary Surgeons upon their respective initial reviews (Ogilvie TH, personal communication). It remains the only school in the world that is fully accredited by these 3 organizations. Today, the AVC offers a choice of more than 40 different rotations and permits external clinical experiences in such areas such as zoo and laboratory animal medicine, and oncology. A rotation in ecosystem health, funded by the Max Bell Foundation, is also a part of the curriculum. Senior students from all 4 Canadian colleges of veterinary medicine participate in the course. The program rotates annually amongst the schools. By emphasizing applied problem-solving skills, the rotation allows the participants to delve deeper into areas involving agriculture and the environment, avian epidemiology, and wildlife pathology.

From used autoclaves to million dollar facilities: The faculty experience

For some of the new faculty, this appointment was their 1st full-time teaching experience, with slides and handouts often being developed as the school year progressed. There were times when the development of the curriculum seemed to stay only one step ahead of program needs. Fortunately, this was balanced by the faculty's vested interest in the students' progress. Many

unsung heroes existed among the faculty members who made teaching their primary interest and decreased their research activities to promote the school's functional capacity. The graduating students attributed the caring of the faculty to fine performances on the National Board Examinations (McBurney SR, personal communication).

The initial staff of 24 people began with their offices in the basement of the campus physical plant, while the administrators shared a trailer with the construction engineers. In these buildings, the school was developed literally from the ground up, from the cutting of sections for the first histology slides and the embalming of cadavers, to the development of the curriculum and case study files. All of the teaching resources had to be generated by the new faculty, as there were no old materials to rely on or revise. Funding was very short during the start-up years, and much of the equipment used for research was acquired at an auction of used supplies by a local human hospital (Bellamy JEC, personal communication).

The design for the College was based on those of the North America's veterinary schools, all of which were visited by Dean Thompson, architects, and engineers. An efficient and functional building was their primary objective in creating the school. The radiology department and pharmacy were designed to be centrally located within the hospital, so that each would be readily accessed by the large and small animal clinics. Laboratories for pathology and anatomy were arranged to share functional areas, economizing on the use of coolers and floor space. The Fish Health Unit had such precise parameters for ambient light, water temperature, and salinity, that the administrators and architects needed to lock themselves in a hotel room for 2 days to create an operational and financially achievable design. The structure that houses the AVC includes skylights in the underground laboratories, stairwells built to look like the exteriors of barn silos, and banisters made of cattle-grade tubular steel. Four departments comprise the college: Anatomy and Physiology, Pathology and Microbiology, Companion Animals, and Health Management (Bellamy JEC, personal communication).

The AVC today and tomorrow

The College places emphasis on the improvement of production efficiency, disease prevention programs, aquaculture, and continuing education for the region's veterinary and agricultural communities (3). Historically, there were few published reports regarding investigation of animal and zoonotic diseases in Maritime Canada (2). As a result, research into their prevention and control became a focus of the AVC. The Animal Productivity Health and Information Network (APHIN) is a computerized database of information that examines swine, dairy, and beef cattle productivity in the provinces. The 3 components of the program, herd health, productivity, and data collection, are compiled in a central database. The analyzed information is disseminated to the farming community and other regions of Canada for improving individual productivity and for making com-

parisons with the national averages. The information collected by APHIN will soon be accessible on the World Wide Web (1). The Fish Health Centre is unique to the college and is structured to assess the disease status of deep sea, coastal, and inland fisheries. The AVC is the only North American veterinary college with its own aquaculture facilities on site.

Currently, the AVC has 230 students enrolled in the DVM program, and 50 graduate students in affiliated programs. The student body comprises Canadian and international students from more than 11 countries. The hospital also trains interns and offers 3- to 5-year residency programs. The faculty consists of 65 tenure track professors, and the teaching staff has grown in number from 5 in 1986 to more than 120 today. A large percentage of the founding staff remain at the AVC today. Dean Thompson served his position at the AVC until 1990. Dr. Brian Hill served as interim dean for 2 years, and Dr. Lawrence Heider served as the dean of the AVC from 1991-1998. After serving as interim dean for one year, Dr. Tim Ogilvie, a founding faculty member of the AVC, was selected as the new dean for the college in July 1999. Today, the Veterinary Teaching Hospital boasts a caseload of more than 5000 appointments and 3000 farm service calls a year. The College's Animal Welfare Unit is currently funding projects in humane education for the Island's grade-school students, the medical care and castration of humane society dogs and cats, the prevention of racehorse lameness, funding for retired equine athletes, and a database accessible by the World Wide Web to promote the reduction of canine inherited disorders (2).

As the school continues to grow, it is currently expanding its research in the areas of drug safety and pharmacogenetics, shellfish reproduction and health issues, estrogen's protective effects against heart disease, ultrasonic probes to measure meat yields in lobsters, and the impact of sea lice on fin fish. Recent additions to the AVC's off-site teaching facilities include the Cardigan Fish Hatchery and a 1000-head feeder pig unit to investigate swine health and nutrition (2).

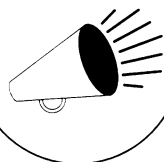
A mere 13 years have passed since the AVC opened its doors to students, and it continues to impart a unique collection of experiences and opportunities for each doctor whom it trains. The North American Mobility in Higher Education Program funds a 3-way exchange between veterinary students in Canada, the United States, and Mexico. Students frequently necropsy moose, bears, seals, and dolphins, and perform on-site postmortem examinations of beached whales. The faculty and students are involved in responding to whale and dolphin strandings at the local beaches. Each winter, stranded seals are nursed back to health in the Large Animal Hospital, before being tagged and released. The identification tags are used to track the seals' progress and survival. Rare yellow and blue lobsters grow in the tanks of the Fish Health Unit, where instruction is given on maintaining home aquariums and anesthetizing farmed fish. Clinical rotations in acupuncture, aquatic species diagnostics, and fish farm services are filled each year by 4th-year students from the AVC, other Canadian veterinary schools, and abroad.

Whether an AVC student's interests include the effect of sea lice on Atlantic salmon, small animal medicine, or equine surgery, the College's unique facilities, dedicated faculty, and Island location enable every student to pursue a broad range of veterinary-related experiences. Each graduate of the AVC enlightens the profession by sharing what she or he learned where *technology meets the sea*.


References

1. Howell DG. Report of a Study of the Establishment of a School of Veterinary Medicine in the Atlantic Region. Maritime Provinces Higher Education Commission. Guelph, Ontario. 1975.
2. Ostridge SL, ed. Atlantic Veterinary College 1997/8 Annual Report, University of Prince Edward Island. Charlottetown, PE. 1999.
3. Thomson RG. A Discussion Paper on the Proposed Atlantic Regional Veterinary College, An Animal and Marine Health Centre. Charlottetown, PE. 1979.

COMING EVENTS



ÉVÉNEMENTS À VENIR


**CVMA Conventions/
Congrès de l'ACMV**

2000
 Saint John, New Brunswick
 July/juillet 5-8

2001
 Vancouver, British Columbia
 August/août 4-11

APRIL/AVRIL 2000

American Animal Hospital Association — Veterinary Management Development School — Level 1. April 1-4, 2000 in Toronto, Ontario. Contact: AAHA Member Service Center, tel.: (800) 883-6301 or (303) 986-2800.

American Animal Hospital Association — 67th Annual Meeting. April 1-5, 2000 in Toronto, Ontario. Contact: AAHA Member Service Center, tel.: (800) 883-6301 or (303) 986-2800.

American Institute of Ultrasound in Medicine — 44th Annual Convention. April 2-5, 2000 at the Moscone Center in San Francisco, California, USA. Contact: AIUM Professional Development Department, 14750 Sweitzer Lane, Suite 100, Laurel, Maryland 20707-5906 USA; tel.: (301) 498-4100 or 1 (800) 638-5353; fax: (301) 498-4450; e-mail: conv_edu@aium.org, Web site: www.aium.org.

Lifelearn Inc. Residential Courses — Module 3: Rigid and Avian/Exotic Endoscopy. April 7-8, 2000 at the Lifetime Learning Centre, Ontario Veterinary College in Guelph, Ontario. Contact: Anne Behnan, Lifelearn Inc., tel.: (800) 375-7994; fax: (519) 767-1101; e-mail: abehnan@lifelearn.com.

Mare/Stallion Reproduction Ultrasound Short Course. April 14-15, 2000 at the New Bolton Center, University of Pennsylvania, Pennsylvania, USA. Contact: Universal Seminars, Inc., 299 Adams Street, Bedford Hills, New York 10507 USA, tel.: (800) 842-0607.

Académie de médecine vétérinaire du Québec — 11th Annual Meeting. April 14-16, 2000 at the Sheraton Laval

Hotel in Montréal, Québec. Speakers include: Drs. Jonathan Abbott, Juliette Besso, Kathy Quesenberry, Karol Mathews, Manon Paradis, Caroline de Jaham, Manon Lécuyer, Michèle Doucet, Isabelle Ducharme, Diane Frank, Jérôme Planté, and Marilyn Dunn, etc. Contact: Lucie Lamarche, Académie de médecine vétérinaire du Québec, 3625 Dagenais Boulevard West, Suite 100, Fabreville, Laval, Québec H7P 5C9; tel.: (450) 963-1812 or (877) 963-1812; fax: (450) 963-1952; e-mail: secretariat@amvq.qu.ca.

Ottawa Academy of Veterinary Medicine — Endocrinology. April 27, 2000 at the Embassy West Hotel in Ottawa, Ontario. Contact: Dr. Susan Kilborn, Ottawa Academy of Veterinary Medicine, 125 Owl Drive, Ottawa, Ontario K1V 9J5; tel.: (613) 736-7673; fax: (613) 736-9502.

Small Animal Diagnostic Ultrasound Workshop. April 29-30, 2000 in Bedford Hills, New York, USA. Contact: Universal Seminars, Inc., 299 Adams Street, Bedford Hills, New York 10507 USA, tel.: (800) 842-0607.

MAY/MAI 2000

American Animal Hospital Association — Implementing Behavioral Wellness Services Workshop. May 12-13, 2000 in Lakewood, Colorado, USA. Contact: AAHA Member Service Center, tel.: (800) 883-6301 or (303) 986-2800.

Saskatchewan Association of Veterinary Technologists — Mini-Conference and Annual General Meeting. May 13, 2000 in Regina, Saskatchewan. Contact: Leanne Malec, SAVT, tel.: (306) 665-6787; fax: (306) 665-6786.

Veterinary Homeopathy Course. May 18-21, 2000 in Tiberon, California, USA. Case-taking, repertory and materia medica, remedy selection, evaluating responses, managing acute and chronic cases, practical use of homeopathy in a clinical setting. Contact: Dr. David Evans, Natural Care Clinic for Pets, RR#3 Chester Basin, Nova Scotia B0J 1K0, tel.: (902) 275-3553, fax: (902) 275-2435.

American Animal Hospital Association — Veterinary Management Development School — Human

Resource Intensive. May 19-20, 2000 in Boston, Massachusetts, USA. Contact: AAHA Member Service Center, tel.: (800) 883-6301 or (303) 986-2800.

Canadian Parrot Symposium (West) Professional Program. May 19-20, 2000 at the Dunsmuir Lodge, University of Victoria, Victoria, British Columbia. Features Drs. Ken Welle and Louise Bauck. Lectures on avian behavior, dermatology, neonatology, nutrition, pathology, and interactive cases. Contact: Chris Collis, Glenview Animal Hospital, #103-3145 Jacklin Road, Victoria, British Columbia V9B 3Y7; tel.: (250) 478-4075; fax: (250) 478-4092; e-mail: glenview@islandnet.com; Web site: www.islandnet.com/~2parrot.

American Animal Hospital Association — AAHA Technician Academy. May 19-21, 2000 in Boston, Massachusetts, USA. Contact: AAHA Member Service Center, tel.: (800) 883-6301 or (303) 986-2800.

Small Animal Diagnostic Ultrasound Workshop. May 20-21, 2000 in Bedford Hills, New York, USA. Contact: Universal Seminars, Inc., 299 Adams Street, Bedford Hills, New York 10507 USA, tel.: (800) 842-0607.

American College of Veterinary Internal Medicine — 18th Annual Veterinary Medical Forum. May 25-28, 2000 in Seattle, Washington, USA. Contact: ACVIM, tel.: (800) 245-9081 (USA or Canada); fax: (303) 231-9933; e-mail: acvim@acvim.org.

CanWest Travel Company — Imagine Africa: The Ultimate Veterinary Safari. May 27-June 15, 2000 in Kenya, Africa and June 16-July 1, 2000 in Tanzania, Africa. An interactive, hands-on experience with African animal life, including local husbandry and wildlife management techniques. Qualifies for 22 AVMA CE hours. For Kenya only: \$5500; includes: air from Canada, accom. in Kenya, meals, park and programme fees, transportation in Kenya, insurance, and taxes Add \$2000 to add Tanzania trip. Contact: Mr. Richard Roth, CanWest Travel Company, 5229-49th Avenue, Red Deer, Alberta T4N 6G5; tel.: (800) 565-8598; fax: (403) 309-3499; e-mail: canwest.travel@home.com.