



Med school cuts not answer, says dean

By **CONNIE FILLETTI**

A plan by provincial health ministers to cut medical school enrolments will do nothing in the short term to lower spiralling health care costs or reduce the physician-population ratio in Canada, says UBC's dean of Medicine.

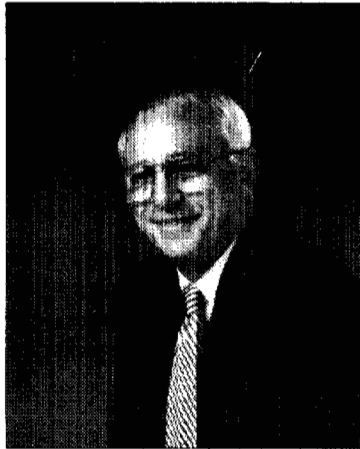
The ministers agreed to a cut of 10 per cent in medical school admissions, to be applied differentially, across the country as part of a nationally coordinated strategy for physician resource management.

But Dr. Martin Hollenberg says training fewer doctors isn't the answer to achieving cost savings quickly.

"It takes many years between admission into medical school and introduction into medical practice," Hollenberg said. "Although, the physician-population ratio has risen dramatically and we have to correct that situation.

"A better and more immediate approach to keeping costs down is to increase health care evaluation and outcome analysis so that we can see what's effective and eliminate what's not. We can see what can be done just as well with less cost," he added.

Hollenberg also suggested that doctors be trained in smaller communities to create a more equitable distribution of



Hollenberg

physicians throughout the province.

He said the ministers' strategy cannot stop Canadians from training as doctors outside the country and returning to Canada to practice.

Hollenberg did, however, hail the new strategy to restructure Canada's medical profession and lower health care costs as a turning point.

"The fact that we now have a policy document is a first," Hollenberg said. "What needs to follow now, and quickly, is broad discussion with the stakeholders on the frontline who are delivering health care in this country."

The ministers' strategy was announced

Jan. 28 after a meeting in Banff, Alta.

Key recommendations emerging from the conference concerned the training, supply, distribution and payment of doctors within Canada's health care system.

In a joint statement following the meeting, the ministers said the intent of the strategy was to meet Canadians' health needs efficiently, subject to the resources available.

Their recommendations were based

on a 1991 study co-authored by Morris Barer, director of UBC's Centre for Health Services and Policy Research.

"The objectives of the report were to identify key problems in the sector that were common to all provinces and territories," Barer explained.

"We also tried to determine the potential for a national physician resource policy strategy to address those problems, and to make specific recommendations consist-

ent with that strategy."

He said that although there was no technical method of determining if there were too many doctors, there was no compelling rationale for growth in the number of physicians to continue to outpace population growth.

"The ministers' strategy represents a set of initiatives that will maintain the quality of care while reducing the number of physicians it takes to do it," Barer said.



Photo by Media Services

Perry tours NCE

In his first official visit to the UBC campus as Minister of Advanced Education, Training and Technology, former alumnus and faculty member, Dr. Tom Perry, (left) tours the university's new Networks of Centres of Excellence (NCE) facilities with Dr. Michael Hayden, director of the Canadian Genetic Diseases Network. The government of British Columbia has committed \$20 million over four years to provide infrastructure support to the NCEs based in the province. UBC is the national leader in three of the centres. The NCE program is a federal project, initiated to promote Canadian fundamental and long-term applied research.

UBC closes book on English 100

By **CHARLES KER**

English 100, taken by all UBC undergraduates since 1915, was officially retired by the Board of Governors last month.

In September, the full-year, six-credit course will be replaced by five, one-term courses. Students will have to complete any two of these new courses to meet the English requirements of the faculties of Arts and Science.

"English 100 was excellent for the initial audience it served, but UBC has undergone many demographic changes since then," said Herbert

Rosengarten, head of the Department of English. "While it is in some ways sad to see it go, it would also be a mistake to hang onto a course that has outlived its usefulness."

In addition, the compulsory, mid-term English Comprehension Test (ECT) will be shelved in September in favor of a screening examination administered to all students before they are admitted into first-year English. Those who graduate from Grade 12 English with a final mark of A are exempt from writing the exam.

The new exam, called a Language Proficiency Index (LPI), will test sentence structure, English usage, reading comprehension and composition. Students who do not achieve a certain level on the composition portion of the exam will be required to take a one-term, non-credit writing course at a new University Writing Centre administered by the Centre for Continuing Education.

In addition to completing the course, students will have to obtain a satisfactory mark on the LPI exam in order to become eligible for first-year English credit courses.

Rosengarten said the new format will help identify problem writers early and get them the remedial help they need. He added that the several hundred students expected to enrol in the writing course won't be restricted to those whose first language is not English.

See **NEW** on Page 2

Astronaut worms help assess effects of radiation on humans

By **CONNIE FILLETTI**

Astronaut Roberta Bondar wasn't the only one born and bred in Canada to fly in space recently.

Genetically altered roundworms cultured by UBC researcher Ann Rose were also aboard the space shuttle Discovery as part of an experiment developed by NASA's Jet Propulsion Laboratory in Pasadena, Calif.

Hundreds of the mutant worms have been produced for a genetic tool kit, which may help scientists in their quest to conquer certain cancers and hereditary diseases, since Rose began her project a decade ago.

"By mutant I mean that worms are being produced with genes that have an absence of function," Rose explained. "We can then deduce from the mutant what the gene was supposed to do."

The worms each carry different

genetic information and are being shipped to the international scientific community for use in experiments that are out of this world — literally.

The worms aboard the Discovery were exposed to cosmic ray particles and will be examined for mutations and other genetic damage caused by the quantity and type of radiation.

"Astronauts are subjected to cosmic rays each time they are aboard a space flight," Rose said. "We'll know how much radiation the Discovery's crew received when the worms that went with them into space are examined."

She explained that the DNA of the roundworm is exactly the same as human DNA. A single alteration in the genetic material can cause death to either.

"The target for damage is the same in both," Rose said. "It's vital for us to study the cumulative effect of radiation in the astronauts to provide some



Rose

guidelines for how often they can participate in space flights."

Many of Rose's worms have died after being genetically rearranged, either through radiation or chemical damage.

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Inside

SING OUT: Soprano Lauren Wagner finds her star rising as she joins the School of Music. Profile, page 3

MONKEY BUSINESS: A biology student discovers chimpanzees may be medicating themselves with the leaves of a plant. Page 10

SOFT TOUCH: A new generation of wood preservatives uses compounds found in shampoo and household cleaners. Page 12

Province's highest court holds hearing on campus

By CHARLES KER

A handwritten note on the door read "court in session."

But wait. These were not students seated on the bench in the Faculty of Law's moot courtroom. No, the three presiding judges looked suspiciously authentic.

In fact, they couldn't have been more so.

B.C.'s Court of Appeal convened on campus last month marking the first time the province's highest court conducted a hearing in Vancouver outside its regular downtown chambers.

"I'm surprised the lawyers agreed to the change of venue," said third-year student Mark McLean, one of about 60 curious onlookers who sat in for part of the day-long session.

However, the proceedings went smoothly enough for Chief Justice Allan McEachern to hint at a return visit.

"I am sure most of the judges will enjoy an occasional return to the law

school where they learned so much as students—most importantly, that there is always much more to be learned," he said.

"It is more convenient for us to send three judges to UBC than it is for a larger number of students to come to the law courts."

The chief justice added that he got the idea to move the court to UBC after hearing about similar judicial visits in U.S. schools.

"He approached us with the possibility and of course we jumped at the chance," said Dean Lynn Smith. "The exercise is primarily for the benefit of students who can watch a real case, with experienced counsel presenting to the highest court in the province."

For McLean, the opportunity was too good to miss.

"We read judgements day in and day out, but we just see the end result," he said. "We are concealed from the process and miss the drama of the presentation."

Third-year student Kathy Paljus watched the sitting for an hour and agreed it was a worthwhile exercise.

"It gives us a glimpse of the practical aspects of the profession which isn't covered in our courses," said Paljus. "The more exposure we get, the better."

Held in the Curtis Building, the hearing involved an action by emergency room doctors who wanted to bill for full medical examinations administered to patients in the emergency ward. The Medical Services Commission refused to pay these claims and was taken to court.

The action was dismissed by the B.C. Supreme Court in 1990. The appeal was also dismissed.

The Court of Appeal, which has a total of 22 judges, sits daily in the Smithe Street courthouse in Vancouver and makes trips to courthouses in Victoria 10 times a year, in the Interior twice annually, and once each year in the Yukon.



Clinic deal signed

Photo by Leza Macdonald

UBC President David Strangway (left) and Gerald Merrithew, Minister of Veterans Affairs Canada, sign an agreement which will provide \$650,000 in federal funds for a new geriatric dental clinic to be established at UBC. The facility will serve veterans and senior citizens of B.C. and is expected to open in January, 1993.

New program for first-year English will be more varied, flexible

Continued from Page 1

"There is a great variety of students who need extensive help with their writing skills," he said.

With faculty positions declining (from 90 in the early 1970s to 72 today) and enrolments increasing, Rosengarten said instructors shouldn't be expected to teach basic writing skills to small number of students on top of their other responsibilities.

Currently, there are about 3,500 students enrolled in 107 classes of English 100. Forty of these classes have 50 students taught by an instructor with the help of a teaching assistant. The remaining classes are half the size with one instructor.

Rosengarten said the introduction of five new English courses will give both students and faculty greater flexibility in terms of

scheduling, while allowing them to focus more on particular areas of interest.

The new courses include: English 110, an introduction to the genres of fiction, poetry and drama; English 112, a writing course focusing on the principles of exposition and persuasion; English 111, a course in non-fiction prose with an emphasis on writing of the 20th century; and English 120 and 121, enriched courses in literature and criticism intended for those with a strong interest in literature and the humanities.

The effectiveness of the curriculum changes, which came about after three years of inter-departmental negotiations, will be closely monitored and reviewed by Senate in two years.

Genetic link found for MS

By CONNIE FILLETTI

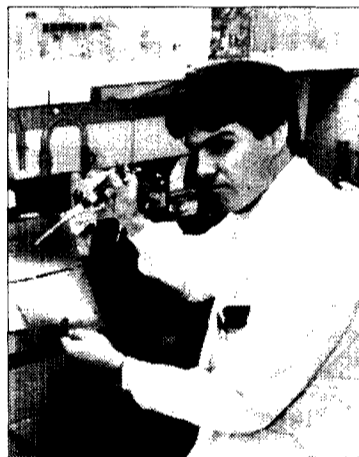
Multiple sclerosis may be linked to the inheritance of certain genes, a UBC researcher has found.

A recent study by Dr. Steven Beall, an assistant professor of Medical Genetics in UBC's Faculty of Medicine, revealed an abnormality in genes responsible for controlling the production of certain proteins which cover the surface of white blood cells, called T-cells, and which were common in MS patients.

MS, a chronic, slowly progressive disease of the central nervous system, has no known cure.

An aberration of these genes may have affected the production of the proteins and impaired the immune system's ability to detect the presence of an infectious agent, such as a bacteria or virus, which scientists argue trigger the illness, Beall said.

The virus may be indigenous to a northern climate, he said, or to people of a particular genetic background common in the province — some of



Beall

the reasons which brought him to UBC to continue his research.

Beall believes that, although the inherited genes do not cause MS, carriers of the genetic variation may be more susceptible to attack by the virus suspected of inducing it.

Conversely, the aberrant genes may lead to autoimmune destruction of the

white matter of the brain, he added.

Beall began his study of MS patients at the National Institutes of Health and the California Institute of Technology before joining the university last August.

In addition to the 83 people who had the disease, Beall studied 197 people who do not have the illness. He found the aberrant genes rare in this group.

"If there is a genetic cause for multiple sclerosis it should be delineated in Canada," Beall said. "There is a high proportion of people afflicted with the illness in this country, and excellent data is available through the Canadian network of multiple sclerosis clinics."

He has recently started testing his hypothesis on a new set of MS patients drawn from the only population-based genetic database for multiple sclerosis in existence, amassed by UBC assistant professor of Medical Genetics, Dr. Dessa Sadovnick.

Worms used as on-going research tools

Continued from Page 1

"We've learned that those genes were essential for the organism to live," Rose said. "It also indicates that most functions are required at early stages of development."

The roundworm was chosen as a test model for the project because the genetic material of the roundworm and the functions it performs are similar to that of humans.

They are also easy to culture in the laboratory, inexpensive to do research with and reproduce in a short period of time, usually in about three days, she said.

"Another benefit is that the worms can be frozen and revived in liquid nitrogen, which means that the body of work we do now won't be lost,"

Rose added. "It can be kept for future generations. This is a simple, cheap way to measure how much damage humans are being exposed to."

Another strain of worms are currently being used in Japanese experiments to calculate the level of mutagens humans are exposed to in the water supply.

Rose said that researchers working with the mutants have detected the same damage present in the parents in their offspring, including thousands of generations later. On rare occasions, some reversions were also noticed where one defective gene will interact with another defective gene to correct the defect.

"A second mutation corrects the first mutation. This tells us how two gene products are interacting. Essen-

tially, two wrongs will make a right," Rose explained.

This is the type of genetic information Rose compiles and sends to scientists worldwide, along with the worms they require for their experiments.

"Some of this information is transferable to humans, the tool kit will provide researchers with a greater understanding of normal human development and genetic disease."

She plans to develop a genetic tool kit for the entire genome. Rose estimates that it will take another five years to design the hundreds of genetic rearrangements required to complete the kit. The project is being carried out in collaboration with Simon Fraser University and the University of Missouri.

Correction

In the story, New Academic Chairs Created, which appeared in the Jan. 23 issue of UBC Reports, a typographical error resulted in the misspelling of the Mary Pack/Arthritis Society Chair in Rheumatology.

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Program boosts confidence of disabled teens

By CHARLES KER

Staying motivated is a problem for most teenagers. For those who are disabled, the challenge is compounded.

To help boost the confidence and self-esteem of students with disabilities, UBC's Disability Resource Centre (DRC) has designed a program for a local high school.

This month, the DRC will set up a five-month pilot project at Frank Hurt Secondary School in Surrey. The goal is to foster greater understanding and interaction between disabled and non-disabled students.

In five, two-hour sessions, 16 disabled teenagers in Grades 8 to 12 will discuss issues such as public perceptions of the disabled, assertiveness, career education, interpersonal relationships, goal planning and decision making.

The project will use audio-visual presentations, topical worksheets, and guest lectures. It will also establish a buddy system between disabled students and their peers.

Bruce Gilmour, the DRC's education co-ordinator, said the first step is

to get disabled students thinking about their own interpersonal relationships, and later, about career options and how they might fit into the workforce.

"There are those with disabilities that find their condition to be their predominant characteristic and a social barrier," he said. "We want to turn that attitude around so ability, not disability, is the focus."

Gilmour said a great number of disabled students take special buses to and from school, are taught in segregated classes and return home to parents who often don't know how to deal with their children.

"If students aren't getting mentoring or information on how to motivate themselves to a fuller potential within their limitations, then where are they going?" Gilmour said.

He added that career counsellors and resource teachers will review the state of awareness regarding disability in B.C. and Canada during the 1980s, the United Nations Decade of the Disabled.

Students will also examine issues to be discussed during the Independ-



Photo by Leza Macdonald

Interpreter Debbie Miyashita signs between CNIB's Stefan Koval, left, and Bradford Bentley, DRC employment co-ordinator, at the centre's recent open house.

ence '92 International Congress and Exposition on Disability to be held in Vancouver in April.

The pilot program will be reviewed and considered for testing in other schools in the Lower Mainland in the

next school year.

For more information about the DRC call 822-5844.

Vancouver centre for expertise on pulp mill pollution: Hall

By GAVIN WILSON

Pulp mill pollution is a volatile issue in this province, as Eric Hall found out only days after taking a new posting at UBC.

The B.C. government's announcement on Jan. 16 that pulp mills may be required to completely eliminate chlorinated organics in 10 years took the forest industry, and Hall, who is one of Canada's foremost experts in forest products industry pollution control, by surprise.

One of Hall's prime tasks as the newly appointed chair of Forest Products Waste Management had been to lead research into the treatment of chlorinated organic compounds.

"The proposed regulations will drastically change the problems we'll be looking at," Hall said.

But, he quickly added, there are many other areas of pollution control and treatment that require research. As well, the scope of his team's efforts will reach far beyond B.C.'s borders.

"We see ourselves as a national centre of expertise," he said. "There's no shortage of research work."

Hall's chair and related research activities will receive funding of \$2.7 million over five years, with major backing provided by the Natural Sciences and Engineering Research Council, the Council of Forest Industries and the provincial Ministry of Environment, Lands and Parks.

Associated with the senior chair are two junior faculty positions, research associates, technicians, graduate students, support staff and new equipment.

Hall's position will be based in the environmental engineering group within the Dept. of Civil Engineering. The group has become one of the largest and most complete research programs in waste management in Canada since its founding, 23 years ago.

Hall sees the new appointment as an opportunity to continue the type of research he carried out at the Wastewater Technology Centre, an Environment Canada research centre in Burlington, Ont. He spent 12 years there working on problems related to the treatment of pulp and paper mill effluent.

"U B C's offer was too ideal to turn down," he said. "It was an opportunity to join a well-established and successful environmental engineering group. And the chair has a pulp and paper emphasis, so I'll fit right in."

Hall is pleased with the expertise and facilities already in place at UBC. Other pluses are the proximity of the Pulp and Paper Centre, the Pulp and Paper Research Institute of Canada (PAPRICAN), and pulp mills where field work can be conducted.

"It's really an ideal setting," he said. "The number of people working on environmental problems here is unparalleled in Canada. I'm convinced that in pulp and paper and forest products waste management, Vancouver is becoming the centre of expertise in Canada. It's exciting to be part of that."

External funding for the chair is provided by NSERC, COFI, the provincial Ministry of Environment, Lands and Parks and the Science Council of B.C. The university will fund renovations to lab facilities. Other cooperating agencies are the Wastewater Technology Centre, Environment Canada and the Pulp and Paper Research Institute of Canada (PAPRICAN).



Hall



Profile

Soprano embraces world stage

By CHARLES KER

It was about one year ago that Lauren Wagner applied for an opening as voice instructor at UBC's School of Music.

After a decade of studying, performing and coaching opera and recitals, the soprano wanted a change of pace.

But the pace of Wagner's musical career has since shifted into overdrive.

Last year, the Michigan native entered and won three prestigious international singing competitions, placed third in another and performed her recital debut in New York City.

During the next two months, the acclaimed vocalist will record a solo CD in Amsterdam, sing at a nationally broadcast concert in Georgia and give another solo recital debut performance at the Opera Comique in Paris.

For the moment, however, Wagner is at home in Vancouver helping her five-year-old daughter recover from the flu.

"It's a juggling act," said Wagner, who joined the school's faculty as an assistant professor in September. "I'll never have another year like it, but I'll also never enter another competition either."

Her winning 1991 performances in New York at the Concert Artists Guild, Joy in Singing and Pro Musicis Foundation competitions, combined with a previous first-place showing at the Metropolitan Opera National Auditions, means she probably won't have to compete again.

Now in her mid-30s, Wagner's efforts are firmly focused on teaching and performing.

Before her appointment, Wagner was based in her home town of Ann Arbor, Mich. singing, coaching and preparing recitals. While UBC is her first academic teaching job, Wagner said she looks forward to challenging students and helping tap their potential.

"They have to recognize that success is built on tiny steps, not leaps," she said. "You don't open your mouth one day and sing at the Met the next. Careers are built on hard work and stamina."

In terms of her own career, Wagner views the move to UBC as a natural progression. After all, the great musicians Isaac Stern, Benita Valenti, Jan Degaetani and Leonard Bernstein were all affiliated with schools. The key is to have a flexible schedule.

Robert Silverman, the school's director, said Wagner "brings to her teaching not just training in voice, but that special element of interpretive inspiration — someone at the ascendancy of a career on the world stage, yet with a commitment towards education."

Practising for two hours at home



Lauren Wagner will perform at UBC's Recital Hall Sept. 24.

cently, appeared as Rosalinda in Die Fledermaus with the June Opera Festival in Princeton, New Jersey. Other parts have included Donna Elvira in Don Giovanni (her favorite),

Fiordiligi in *Così fan tutte* and Europa in *Die Liebe der Danae*.

She speaks fluent Italian, some German and, as a born mimic, can make any language sound like her native tongue with some practice.

A self-described "late bloomer" on the opera scene, Wagner said the young, ingenue roles were never quite right for her. Instead, she prefers to play the great Strauss and Mozart women or characters from the Elisabeth Schwarzkopf repertoire.

While her competition days may be over, Wagner's recital calendar for the coming year is filling up fast. Agents in Toronto and New York have so far booked their client for appearances in Montreal, Berlin, Munich, Rome and Warsaw. She is also recording a second solo CD (under the Sony Classics label) and can be heard locally in the Vancouver Chamber Music Series in July.

Last November, a month-long bout with bronchitis forced Wagner to cancel a date in UBC's Recital Hall. The campus debut, which promises plenty of Wolf and Strauss, has been tentatively rescheduled for September 24.

"You don't open your mouth one day, and sing at the Met the next"

each morning, Wagner spends afternoons on campus teaching 17 students five days a week, sometimes six. She is one of three, full-time voice professors in the school.

A graduate of the University of Michigan and the Manhattan School of Music, Wagner was actually trained as an instrumentalist and grew up playing the clarinet and piano. History, theatre and languages were her favorite subjects in high school and she harbored no dreams of becoming a singer.

When singing for fun at home or in choirs, she felt nothing special, "just that I was louder than everybody else without even trying."

As it turned out, opera proved the perfect tonic blending all Wagner's interests into one.

She has played leading roles with the Santa Fe, Seattle, Fort Worth and San Bernadino operas and, most re-

Calendar

February 9 – February 22

MONDAY, FEB. 10

Law Public Lecture

Law, Language And Native Culture. Emma LaRocque, Native Studies Programme, U. of Manitoba. Curtis 101/102 from 12:30-1:30pm. Call 822-6506

Mechanical Engineering Seminars

Forces On The Coupling Between A Tug And Barge with David Mumford, MASC student. Wing Tip Vortex Modification with Shizhong Duan, PhD student. Both seminars, Civil/Mechanical Engineering 1202 from 3:30-4:30pm. Refreshments provided. Call 822-6200/4350.

Astronomy Seminar



Star Formation Rates In Irregular Galaxies. Dr. P. Hodge, U. of Washington. Geophysics/Astronomy 260 at 4pm. Coffee at 3:45pm. Call 822-6706.

TUESDAY, FEB. 11

Financial Planning Seminar Series

The Current State Of The Faculty Pension Plan And Changes Occuring As A Result Of Member Requests And Government Legislation. Marcelle Sprecher, manager, Compensation/Benefits. Sponsors: Faculty Association and Centre for Continuing Education. Angus 104 from 12:30-1:20pm. Call 222-5270.

Botany Seminar

Chimeric Evolution Of The 2um Genome Of Yeast. Dr. Gerry Rank, Biology, U. of Saskatchewan. BioSciences 2000 from 12:30-1:30pm. Call 822-2133.

Asian Research Seminar



Planning For Hong Kong's Future: The Role Of The Port And Airport Development In This Strategy. Edward G. Pryor, Principal Government Town Planner, Hong Kong Government; Dip. T.P. (NZ); PhD, Geography. Asian Centre 604 from 12:30-2pm. Call Kate Elliot at 822-4688.

Lectures In Modern Chemistry

Oxidation/Reduction Chemistry Of Nickel (II) In A Nitrogen/Sulfur Donor Environment: Implications For Ni-Containing Enzymes. Dr. Marcetta Darensbourg, Chemistry, Texas A&M, College Station, TX. Chemistry 250, South Wing at 1pm. Call 822-3266.

UBC Reports is the faculty and staff newspaper of the University of British Columbia. It is published every second Thursday by the UBC Community Relations Office, 6328 Memorial Rd., Vancouver, B.C., V6T 1Z2. Telephone 822-3131. Advertising inquiries: 822-6163. Managing Editor: Steve Crombie. Ass't Editor: Paula Martin. Contributors: Ron Burke, Connie Filletti, Abe Hefter, Charles Ker, and Gavin Wilson.



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CALENDAR DEADLINES

For events in the period February 23 to March 7, notices must be submitted by UBC faculty or staff on proper Calendar forms no later than noon on Tuesday, February 11, to the Community Relations Office, Room 207, 6328 Memorial Rd., Old Administration Building. For more information call 822-3131. The next edition of UBC Reports will be published February 20. Notices exceeding 35 words may be edited. The number of items for each faculty or department will be limited to four per issue.

Oceanography Seminar

Recent Developments In The Study Of Hydrothermal Vents. Gary Klinkhammer, Oregon State U. BioSciences 1465 at 3:30pm. Call 822-2828.

Museum Of Anthropology Tuesday Evening



Panel Discussion: Teaching With Stories Learning From Stories: A Cross Cultural View Of Oral Traditions. Moderator: Curator of Education, Louise Jackson. Admission free. MOA Theatre Gallery from 7-9pm. Call 822-5087.

WEDNESDAY, FEB. 12

Orthopaedic Grand Rounds

Reflex Sympathetic Dystrophy. Dr. Peter J. O'Brien. Eye Care Centre Auditorium at 7:30am. Call 875-4646

Wednesday Noon Hour Concert Series



Jane Coop, piano. Music Recital Hall at 12:30pm. Admission \$2. Call 822-5574.

International Relations Students Association

Guest lecture. China, Tianamen And Human Rights: What Happened And What Will Happen? Earl Drake, former Canadian ambassador to China. Buchanan A-202 from 12:30-1:30pm. Call 222-2387.

Forestry Seminar

Recovery Of The Migratory Whooping Crane, Grus Americana. Dean Clark S. Binkley, Forestry. MacMillan 166 from 12:30-1:30pm. Call 822-3553.

Microbiology Seminar Series

Computer Aided Techniques In The Study On Structure - Function Relationships Of Proteins. Dr. Sharyo Nakai, Food Science. Wesbrook 201 from 12:30-1:30pm. Call 822-3308.

Geography Colloquium

Subglacial Landforms And Catastrophic Floods. John Shaw, Geography. U. of Alberta. Geography 201 at 3:30pm. Refreshments at 3:25pm. Call 822-2985/2663.

Applied Mathematics Colloquium



Beyond Regularization Methods In Early Vision. Dr. Robert J. Woodham, Computer Science. Mathematics 104 at 3:45pm. Call 822-4584.

THURSDAY, FEB. 13

Pharmacology Seminar

Travels With Antiarrhythmics. Dr. Michael J. A. Walker, Pharmacology/Therapeutics, Medicine. IRC #5 from 11:30am-12:30pm. Call 822-2575.

Geological Sciences Seminar Series

Groundwater And Wetland Contributions To Stream Acidification - An Isotopic Analysis. Christoph Wels. GeoSciences 330A at 12:30pm. Refreshments follow in the Grad Lounge (308). Call 822-2449

Microbiology Seminar

The Degradation Of Chlorinated Organic Compounds By Aquatic Bacteria: Are These Genes More Important Than The Whole Organism? Dr. Roberta Fulthorpe, Chemical Engineering/Applied Chemistry, U. of Toronto. Wesbrook 201 from 12:30-1:30pm. Call 822-6648.

Graduate Student Seminar Series

Sponsored by both the society and the Faculty. Preparing A Thesis. Grad Centre Garden Room from 12:30-2pm. Call 822-3203

CICSR Distinguished Lecture Series

Realistic Image Synthesis: Progress And Problems. Prof. Donald P. Greenberg, director, Computer Graphics Program, Cornell U. Scarfe 100 from 1-2:30pm. Refreshments at 12:30pm. Call 822-6894.

Policy Centre Seminar

Knowledge/Technology Transfer - Strengthening The Service Function Of The University. Dr. Ernest Lynton, U. of Massachusetts, Boston; Dr. James Murray, director, Industrial Liaison; Dr. Hans Schutze, CPSE/AAHE (Education). Ponderosa Annex H-123 from 2:30-4:30pm. Call 822-2593/5295.

Psychology Colloquium

Masochism And Suicide: On Escaping The Self. Dr. R. Banmeister, Case Western Reserve. Kenny 2510 at 4pm. Social hour follows. Call 822-3005.

Physics Colloquium

Structural Archaeology: Solving The Mysteries Of The Master Builders. Robert Mark, Princeton U. Hennings 201 at 4pm. Call 822-3853.

Distinguished Artist Series

Soni Ventorum, wind quintet. Lecture at 7:15pm, concert at 8pm. Music Recital Hall. Adults \$13, Students/Seniors \$7. Call 822-5574.

Obstetrics/Gynaecology Grand Rounds

Neonatal Allo-Immune Thrombocytopenia. Local Experience. Dr. I. Kornfeld, Dr. Penny Ballem. University Hospital, Shaughnessy Site, Theatre D308 at 8am. Call 875-3108.

Paediatrics Resident Case Management



Clinicopathology Presentation. David Haughton, Senior Paediatric Resident. G.F. Strong Rehab. Centre Auditorium at 9am. Call Dr. A.C. Ferguson at 875-2118.

Chemical Engineering Seminar

Reactions Of Oil Shale Particles. Antonio C.L. Lisboa, graduate student, Chemical Engineering. ChemEngineering 206 at 3:30pm. Call 822-3238.

WEDNESDAY, FEB. 12

Vancouver Institute Evening Lecture



Readings And Commentary. Prof. George Bowering, English, SFU. Woodward IRC #2 at 8:15pm. Call 822-3131.

Museum Of Anthropology Family Story Hour

Song, Drums, Stories. Mary Uslick, a Coqualeetza elder, spiritual healer/community worker. MOA Rotunda from 11:30am-12:30pm. Free with Museum admission. Call 822-5087.

MONDAY, FEB. 17

Biochemistry/Molecular Biology Discussion Group



Molecular Biology Of Tumorigenic Pox Viruses. Dr. Grant McFadden, U. of Alberta. IRC #1 at 3:30pm. Call Dr. Ivan Sadowski at 822-4524.

Mechanical Engineering Seminars

On The Dynamics Of Tethered Satellite Systems with S. Pradham, PhD student; Bubble Condensation At Low Pressure And Flow Rates with Davood Farajisair, MASC student. Civil/Mechanical Engineering 1202 from 3:30-4:30pm. Refreshments provided. Call 822-6200/4350.

Applied Mathematics Colloquium

Consistent Approximations For Optimal Control Problems. Dr. Elijah Polak, Electrical Engineering/Computer Science, U. of California, Berkeley. Mathematics 104 at 3:45pm. Call 822-4584.

Astronomy Seminar



BL Lac Host Galaxies. Dr. R. Abraham, Dominion Astrophysical Observatory. Geophysics/Astronomy 260 at 4pm. Coffee at 3:45pm. Call 822-6706.

TUESDAY, FEB. 18

Financial Planning Noon Hour Series

Registered Retirement Savings Plans: '91 Contribution Roles, Maturity Options, Tax Planning, Income Splitting Options. John Gives, Solguard Financial Limited. Sponsors: Faculty Association/Centre for Continuing Education. Angus 104 from 12:30-1:20pm. Call 222-5270.

Botany Seminar

Plants And The Planet: Plant Physiology Applied To Global Processes. Dr. Joseph Berry, Carnegie Institute of Washington/Stanford U., California. BioSciences 2000 from 12:30-1:30pm. Call 822-2133.

Asian Research Seminar

The Development Of The Narmada Valley: Politics, Environment And Human Rights. Prof. John R. Wood, Political Science. Asian Centre seminar room 604 from 12:30-2pm. Call 822-4688.

Statistics Seminar

Identification Of ARIMA And SAR Models. Prof. S. Koreisha, U. of Oregon. Angus 325 at 1pm. Call 822-4997/2234.

Lectures In Modern Chemistry



Chemical Methods Of Solar Energy Conservation: Mechanisms Of Charge Separation At Semiconductor/Liquid Interfaces. Dr. Nathan Lewis, Chemistry/Chemical Engineering, California Institute of Technology, Pasadena, CA. Chemistry 250, South Wing at 1pm. Call 822-3266.

Oceanography Seminar

Low Black Sea Sedimentation Rates Inferred From 210Pb: Implications For Organic Carbon Accumulation And Paleoclimatology. John Crusius, Oceanography. BioSciences 1465 at 3:30pm. Call 822-2828.

Statistics Seminar

Curvature Diagnostics Of Maximum Likelihood And Posterior Non-normality. Prof. R. Kass, Carnegie Mellon U. Angus 223 at 4pm. Call 822-4997/2234.

Anthropology/Sociology Lecture

European Revolutions: 1492-1992. Prof. Charles Tilly. Anthropology/Sociology 207-209 from 4-5:30pm. Call 822-2878.

Museum Of Anthropology Tuesday Evening



Panel Discussion: Teaching With Stories Learning From Stories: Themes In Storytelling Traditions. Moderator: Curator of Ethnology, Julie Cruikshank. Admission free. MOA Theatre Gallery from 7-9pm. Call 822-5087.

WEDNESDAY, FEB. 19

Orthopaedics Grand Rounds

Cancelled. Call 875-4646.



PARKING AND SECURITY SERVICES PRESENTATION: JANUARY 1992

CAMPUS CENTRALIZATION, UBC COMMUTERS, AND PARKING

It's hard to avoid being affected by the recent shrinkage in parking space. Construction is taking place on many former parking lots and construction workers, sub-contractors, and consultants with vehicles are adding to the pressures on the remaining parking lots. Reduction of parking space will continue until we can build new parkades to replace it.

Currently, parkades hold about 3,000 spaces. About 10,000 are on surface lots. Most surface lots will be consumed by new construction over the next few years. Student lots will be the hardest hit. Now, faculty and staff parkers are given priority in the parkades. Soon, as students lose their parking spaces, they'll be sold space in the parkades.

In UBC's past, parking has been plentiful and cheap. We have not worried much about it. These days, many pressures are testing our parking system. To quote a faculty correspondent who wrote of her concerns, "On the grand scale of things, parking may seem a trivial matter." It is not!

Few realize the role played by campus parking these days. New buildings are being planned on existing parking lots. Environmentalists beg us to close all parking lots and forbid cars on campus. BC Transit says they already provide their best service for campus commuters. New construction brings more vehicles onto campus. UBC's desire to increase student "quality" will mean a more committed student spending more time on campus, using parking space for longer periods of time. New residents will occupy spaces nearly 24 hours a day. Parking is at the centre of many issues.

While it will not ease the parking "squeeze" for you, it may help you to know something of what is happening with campus parking. We are seeing some of the less pleasant side effects of an exciting period of campus growth coupled with some difficult but positive changes in attitudes regarding the use of cars. These two pressures of growth and changing attitudes affect us through parking.

Following a successful World of Opportunity Campaign, a conscientious building plan aimed at concentrating activity within a tightly defined central campus has designated much construction to take place on existing parking lots. We've had to scramble to find alternatives to surface parking lots for commuters. Because of parking space turnover, each space lost affects from two to three parkers.

We need to analyse the long-term financial consequences of our existing systems and project the financial impact of considered alternatives. Underlying both the strategic and financial planning should be a set of realistic and thoughtful parking and transportation policies.

Although cheap and plentiful parking is no longer possible, we CAN achieve reasonable and convenient alternatives to plentiful parking at reasonable prices. Parking problems are complex, but not insoluble. Please join me in considering the solutions. At the upcoming meeting, I'll present our latest campus parking plans and ask for your input.

I thank you in advance for your participation.

John Smithman, Director
Parking and Security Services

INTRODUCTION

Good parking is one of those things we have come to expect at UBC. However, many campus changes are having significant impacts on our parking. The need to build more parkades seems inevitable.

The 1992 Campus Plan, on page 68, states, "As sites fill up within the Main Campus, each site will require replacement of lost surface parking by new structures whether under buildings or under playing fields and other open space. And as the parking solution moves up the inevitable progression from surface lots, to parkades, to structures under buildings, to structures under buildings, costs will increase by a significant factor at each step."

Without considering the cost of land: in 1989, our North Parkade cost \$6600 per space; in 1991, the West Parkade was \$8700 per space. Because we had to borrow all construction money for the West Parkade, we assumed an annual debt of \$1,000 per space. Building costs are rising steeply as new building codes require parkades to be earthquake proof. In 1997, it may cost over \$20,000 per space to build a parkade.

In 1980, we doubled faculty and staff parking fees to save for a new parkade. After ten years, only \$2 million was saved toward a \$7 million parkade. Nothing as dramatic as a sudden doubling of fees will happen now, but rates will rise significantly to pay the cost of new parkades.

Two conditions combine to force price increases: our parking lots are being consumed by new buildings; and, we have a huge number

of commuters who travel by car. It seems impossible to alter the first condition — parking lots are logical locations for new buildings — but we might alter the second — the number of cars arriving each day.

Last November, BC Transit planners and we decided to study UBC commuter habits before discussing solutions. We did independent traffic surveys in November where we counted cars and car occupants and measured bus ridership. About 31,000 cars arrive on campus each weekday; 18,000 between 7 and 11 in the morning. We have about 13,000 parking spaces for them. By 1993, we expect to lose about 4,000 spaces for new buildings. If we could cut the number of commuter cars by a third, we wouldn't need another parkade!

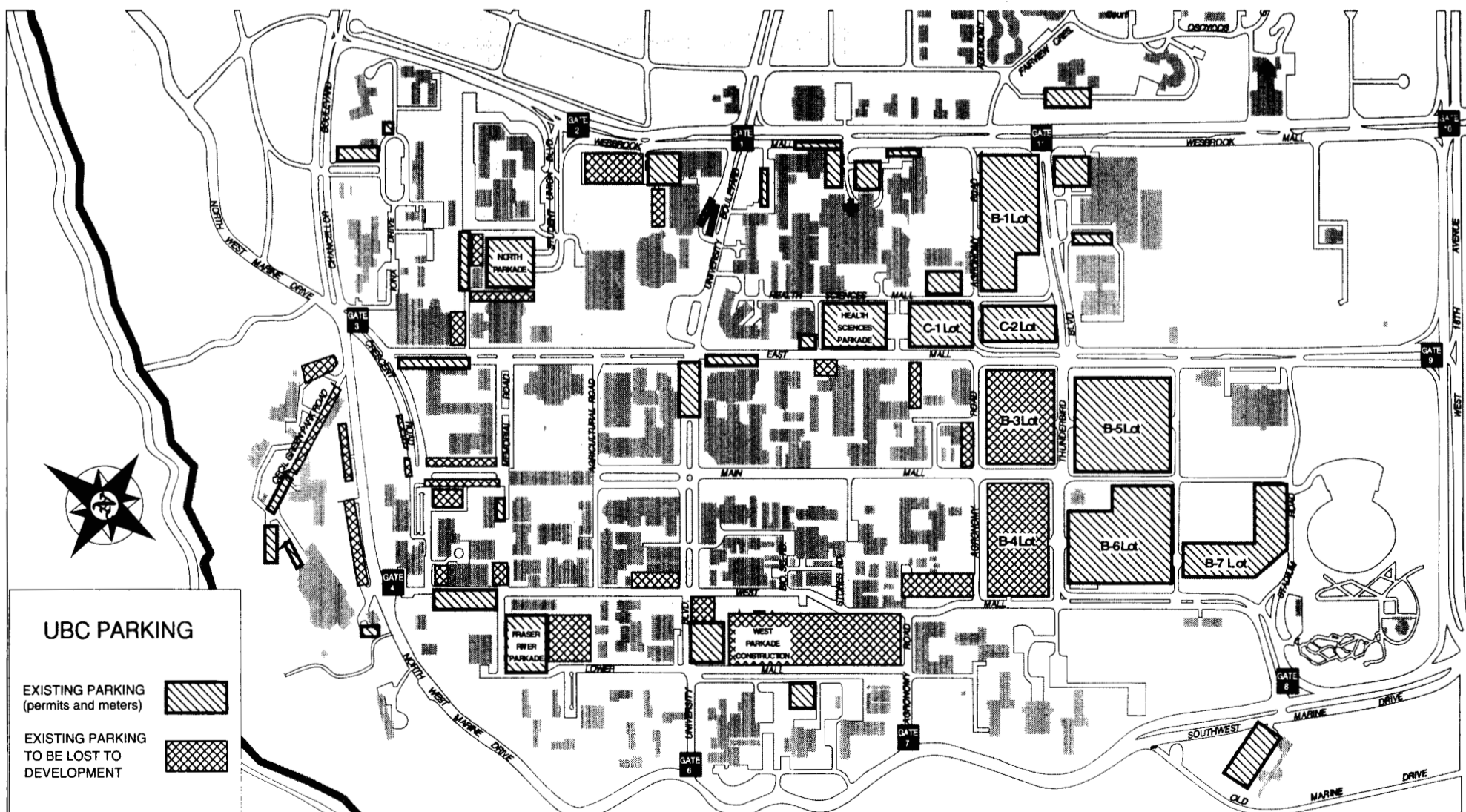
BC Transit, UBC Planners, Others Help Reduce Campus Parking Needs.

BC Transit wants to improve their UBC service, but their biggest challenge is to cover travel peaks which occur at UBC and downtown simultaneously. If our peak times were different, they could cover our needs better. Incidentally, they have really improved UBC services during the last ten years and are planning to improve services next year on 16th and 41st Avenues.

UBC planners are considering bicycle storage facilities along with changing rooms and showers while planning new campus buildings. They have also studied ways to plan for alternative transportation.

Plant Operations are considering a Van Pool program for their employees.

The AMS have worked hard to change student attitudes and en-



UNIVERSITY OF BRITISH COLUMBIA

PARKING AND SECURITY PRESENTATION: JANUARY 1992



courage them to bus or carpool.

Others can also help reduce parking needs. How can we avoid morning lineups on all inbound routes, heavy air pollution, and heavily packed buses? If morning classes or office hours were staggered to reduce or alter peak travel times, BC Transit could better manage the loads. If the school day or week was lengthened, fewer parking spaces would still meet our needs.

Travel sharing seems to be a good solution. Commuters are beginning to travel together. Travelling with a friend who lives near you is a very good idea.

Last Fall, we started two formal car pool programs for drivers only; both are fully subscribed. We think this reduced cars on our roads by 300. We also introduced a portable permit. The PASScard allows drivers to share parking costs and easily alternate cars. Informal car pools have begun. Our November survey showed that 1 in 5 cars has more than one occupant! If this continues, we won't have to build all of the four new parkades proposed by our planners.

Car pools don't have to be inconvenient or difficult. A friend said, "I don't want to have people go out of their way to pick me up. Before I'd want to car pool, I'd take the bus!" But sharing car and parking costs with a co-worker makes a lot of sense. And two-car

pools reduce campus parking needs by 50%. BC Transit is encouraging car poolers to use their Park N Ride lots, and ICBC is offering lower insurance rates to car poolers.

Now, let's talk about parking fees.

Compared to prices on other campuses and at other parking lots in our area, our prices are quite cheap. Many say, "Too cheap!" People ask us to raise rates to a level which would not only pay for expensive parkade construction, but also pay for environmental programs. But, we won't raise rates arbitrarily! Rates must cover parking expenses, and we'll have to raise them substantially for that purpose alone. However, we do hope to avoid the expense of more parkades.

SUMMARY

Reducing the need for campus parking will keep our parking rates low. But some travellers live too far away to use buses or bicycles to come to campus. For them, car and van pools are very good alternatives.

The University will provide leadership to the community by minimizing commuter car use here. Our new PASScard provides the means for card holders to share their travel costs with co-workers.

Proposed parking fee increases are based on current trends and on the need to

build expensive parkades to replace lost surface parking. To meet expenses, we plan to increase monthly faculty and staff parking rates by \$6 each year until 1997. However, we will monitor the results of car pool programs and efforts by others to reduce the need for campus parking space. As needs decrease, we will lower future increases.

THE PARKADE PLAN

UBC lost about 900 parking spaces in 1991. Another 2,000 spaces will be lost in 1992, and at least 700 in 1993. The 1,200-car West Parkade will be completed by the end of 1992. The 1992 Campus Plan suggests adding several parkades: underground at the north end of campus, under the proposed greenhouses west of McMillan Building, under McInnes Field, and south of the University Hospital on Agronomy Road.

The attached parking projections include the costs of the proposed parkades in their construction year and the revenues from the added spaces in the following year. Each parkade takes about a year to build.

New parkades are projected for 1992 (West Parkade 1200 spaces); for 1994 (North of Marine Drive 800 spaces); for 1995 (McInnes Field 1200 spaces); and for 1997

(near the University Hospital 2000 spaces). A parkade under McInnes Field is expected to relieve pressure on the North Parkade to allow it to serve the Arts Complex visitor needs.

OTHER PLANS

Parking revenues will continue to support parking staff in the B lots, the parkades, and the traffic office. Financial support will continue for the Patrol's parking enforcement activities and the security bus. This will be the fourth year of the 10-year plan to commit \$100,000 each year from parking fine revenues toward a \$1 million student bursary fund to support students needing help with their academic fees. So far, \$300,000 has been donated to the student fund.

All opportunities to create small parking lots here and there will be maximized. Such lots will accommodate the mobility needs of UBC faculty and staff. The larger ones will provide opportunities for more car pool programs.

Negotiation for better bus services from BC Transit will continue. Incentives to alter the schedules of staff and students to smooth out commuter peaks will be strongly encouraged to evenly distribute the use of parking space.

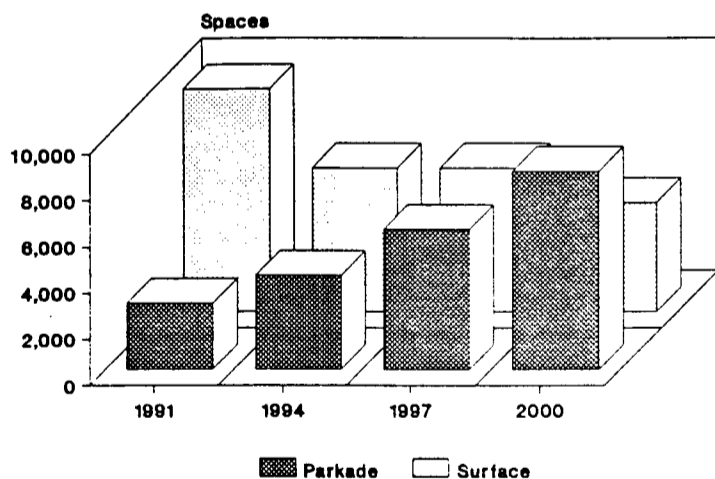
PROPOSED PARKING FEES
1992 - 1996

YEAR	"B" Lots HOURLY	Meters & Parkades HOURLY	Faculty Staff MONTHLY	Student Preferred ANNUALLY	BASIC Registrn ANNUALLY	Reserved Spaces ANNUALLY
1991-2 (now)	\$ 0.25	\$ 1.25	\$ 14	\$ 84	\$ 60	\$ 420
1992-3	\$ 0.25	\$ 1.40	\$ 20	\$ 120	72	\$ 600
1993-4	\$ 0.25	\$ 1.50	\$ 26	\$ 156	84	\$ 780
1994-5	\$ 0.30	\$ 1.60	\$ 32	\$ 192	96	\$ 960
1995-6	\$ 0.30	\$ 1.70	\$ 38	\$ 228	108	\$1,140
1996-7	\$ 0.30	\$ 1.75	\$ 44	\$ 264	120	\$1,320

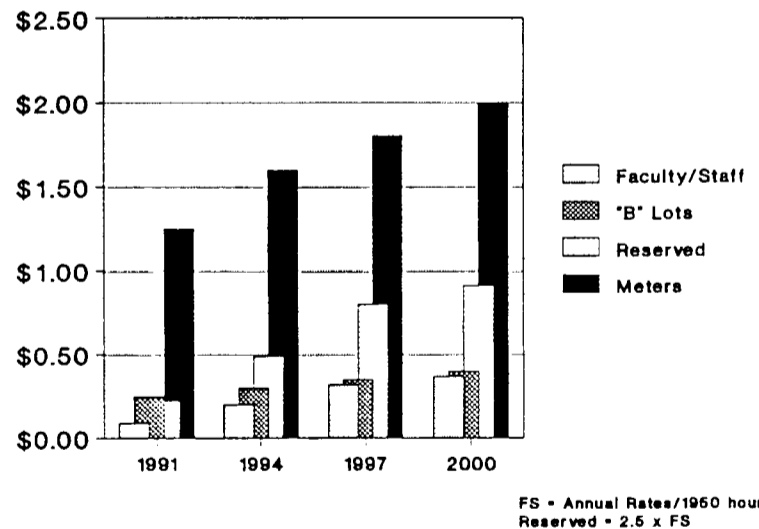
FINANCIAL PROJECTIONS
1992 - 1996
(Millions)

YEAR	OPERATING COSTS	DEBT SERVICE	REVENUES
1991-2	\$ 1.7	\$ 2.2	\$ 4.3
1992-3	2.2	2.2	5.2
1993-4	2.4	4.2	6.2
1994-5	2.7	5.7	7.8
1995-6	3.4	5.7	10.1
1996-7	3.7	8.8	11.4

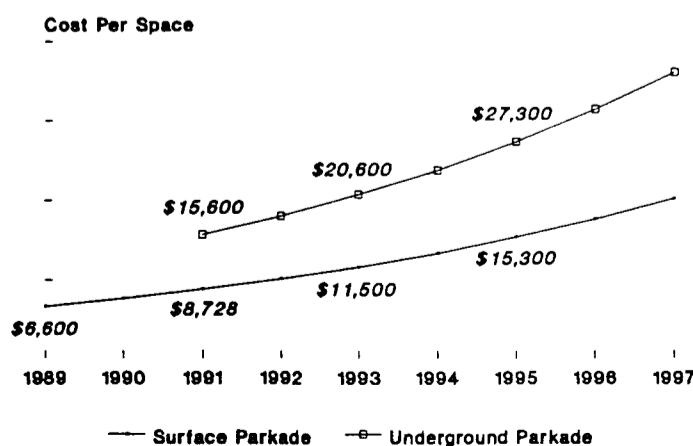
UBC Parking 1991-2000



UBC Parking Rates Per Hour

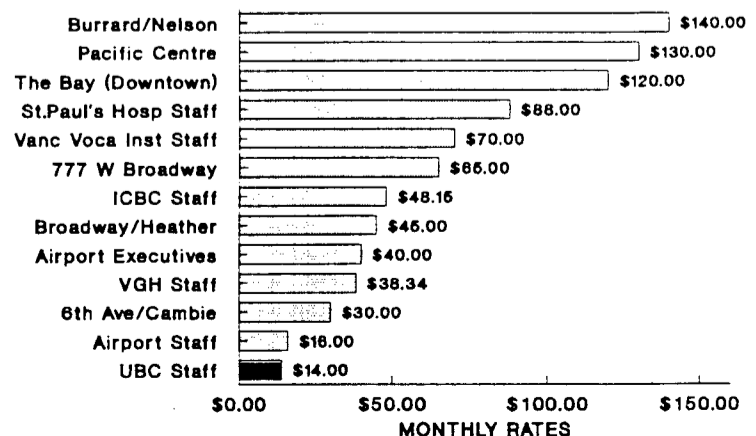


Parkade Construction Costs



1989 and 1991 prices are actual. Prices after 1991 are based on expected inflation rates.

Vancouver Parking 1992 Monthly Rates

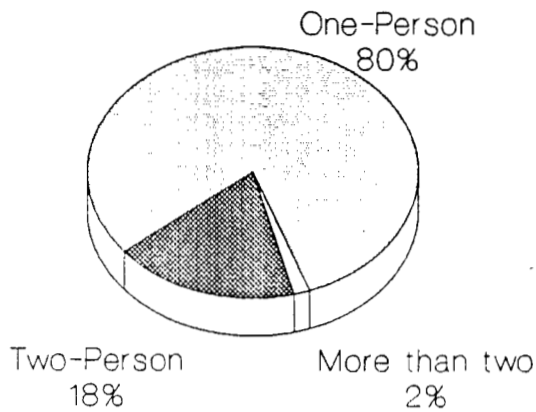


Survey: January 1992

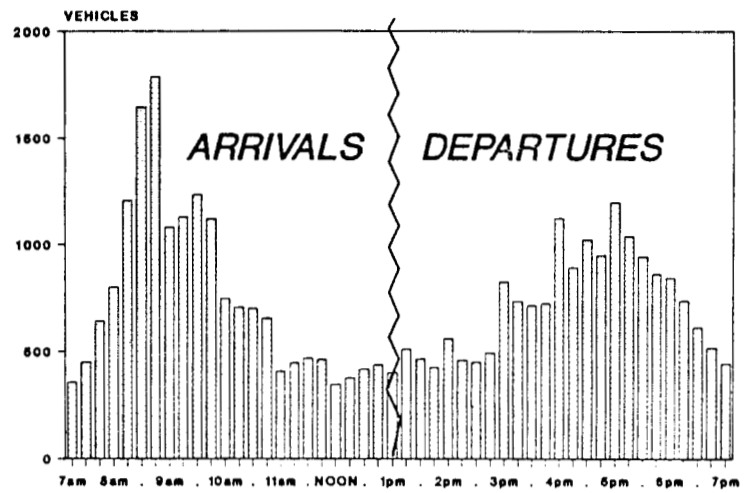


UBC Traffic Survey - November 1991

VEHICLE OCCUPANCY

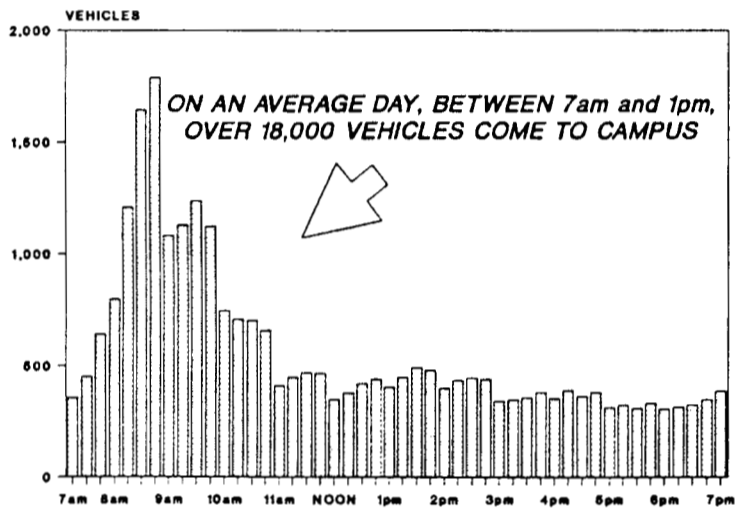


COMMUTER TRAFFIC PEAKS

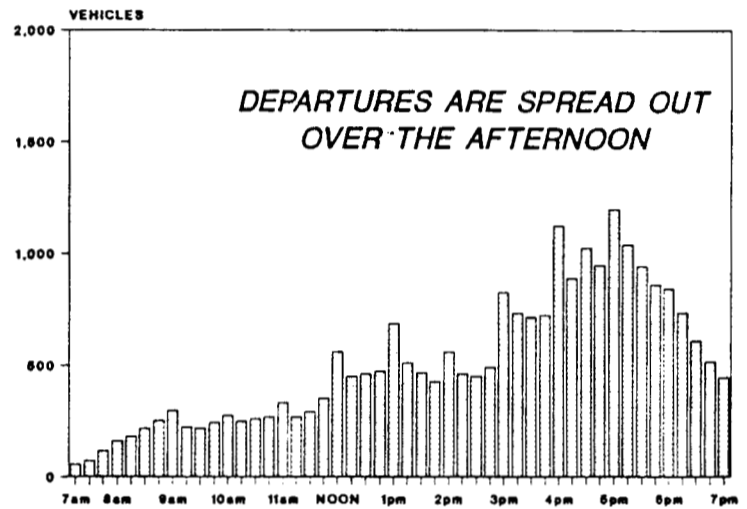


November 18-22, 1991
Weather & Campus Activity Normal

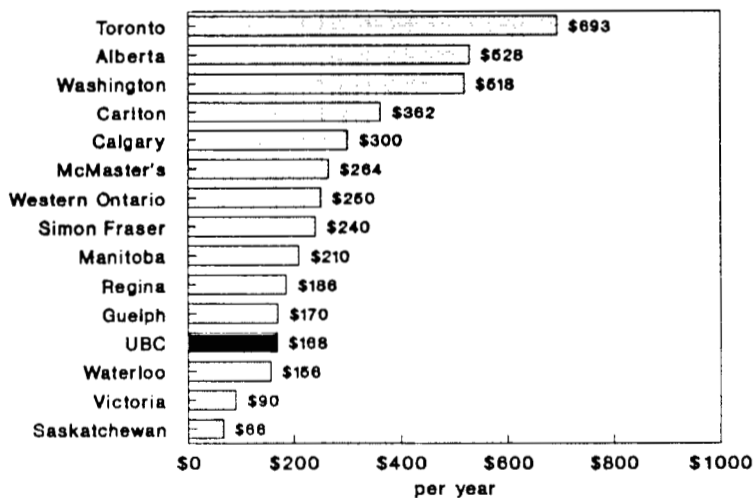
INBOUND VEHICLES



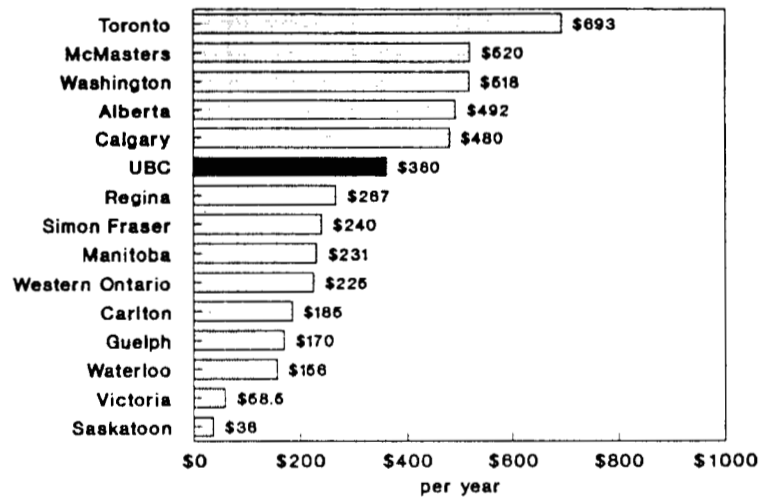
OUTBOUND VEHICLES



Faculty/Staff Parking 1991

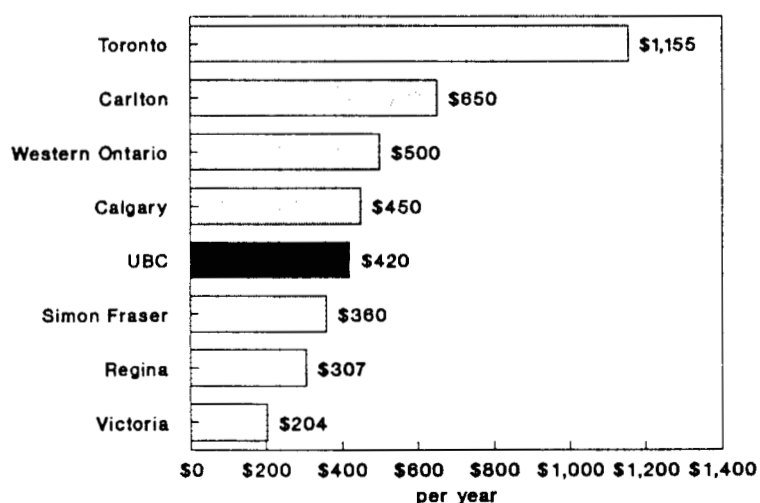


Student Parking Rates 1991

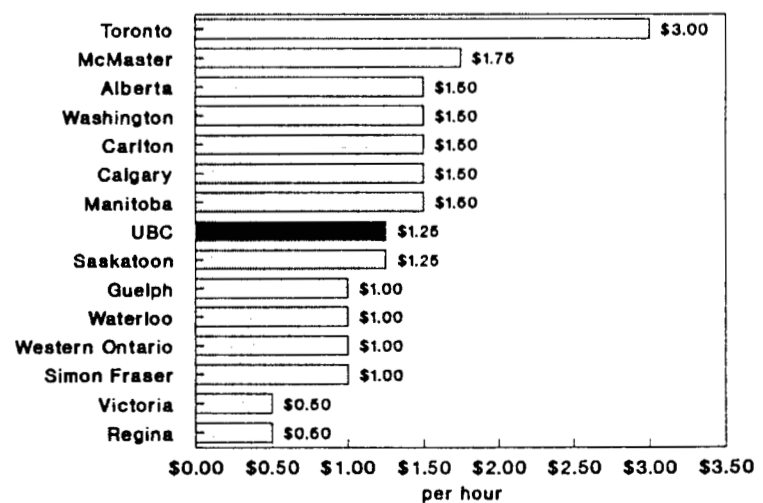


UNIVERSITY SURVEY (October 1991)

Reserved Parking Rates 1991



Visitor Rates (Meters) 1991



Payroll changes improve service

By GAVIN WILSON

A new computer system that will streamline UBC's personnel record-keeping and payroll will go into effect in March.

The new system replaces a payroll system installed in the 1970s that has become increasingly unable to cope with today's demands.

The move is the first phase of IHRIS, the Integrated Human Resources Information System, a project designed to improve service to the university's 10,000 employees and staff.

Most employees will not even notice the changeover, said Harvey Burian, manager of the Human Resources Information Centre. The format and other details of paycheques will remain substantially the same, at least for now.

The exceptions are staff who are paid semi-monthly. Currently, they receive a mid-month advance with the balance paid, and deductions made, on the month-end cheque. They will now receive a full, detailed breakdown of payment and deductions on both paycheques.

At a later date, more employees will see changes to their paycheques, including different formats and additional information, said Angela MacDonald, manager of Payroll.

The adoption of the new computer system follows an extensive evaluation of the existing human resources and payroll systems and an assessment of the needs of the university community.

An advisory committee, chaired by Erik de Bruijn, assistant librarian, and consisting of 28 members representing faculties and administrative departments, has been pivotal in providing user input. The project was overseen by a steering committee chaired by Bruce Gellatly, vice-president, Administration and Finance.

A project team with members from Human Resources, Financial Services, Budget and Planning, Faculty Relations, and Information Systems Man-

agement was responsible for the day-to-day operation of the project.

The project team visited all faculties and administrative departments in January to give an overview of the new system and the new forms that will be in use.

The new system was purchased from California-based PeopleSoft Inc., which has recently provided human resources management systems for B.C. Hydro, Canadian Airlines, B.C. Gas and other major employers.

The PeopleSoft system was chosen, following a lengthy examination of competing systems, because it was felt to best fit UBC's requirements, said Burian and MacDonald.

The new system uses the latest technology which provides mainframe performance with personal computer flexibility. A PC is used to connect with the database stored on the mainframe.

Introduction of the new system will improve payroll processing, benefits administration, appointments and human resources information for all faculty, staff and students.

Once the system is in place, inquiry access to the campus community will be available through the UBC Network. Campus users will be able to take full advantage of all the PeopleSoft features when they have the necessary PCs and technical connections.

Later phases of IHRIS will include areas such as operating budgets, position management, applicant tracking and recruiting functions.

Despite the thorough testing the new system has received, Burian and MacDonald cautioned that there is always a "settling-down" period with any new system and some glitches are possible.

If employees do experience problems, they are asked to be patient and understanding, they said. A project group dedicated to resolving your difficulties can be reached on a "hotline." For Payroll questions call 822-3142 and for Human Resources call 822-9350.

Commerce Accounting shows editorial strength

By ABE HEFTER

The Faculty of Commerce and Business Administration's Accounting Division has been rated in the top 10 among North American universities in a study of editorial boards of academic accounting journals.

The study, conducted by University of Cincinnati Accounting Professor Linda Mittermaier, ranked accounting programs based upon editorial board representation.

"Since publication quality and quantity are highly valued, those who are in a position to evaluate potential publications are in an important and influential position," Mittermaier wrote.

"Presumably, journal editors and members of editorial boards are selected because they have a proven publication record of their own and are considered well-qualified to

evaluate current research."

Mittermaier's study, published in the fall 1991 edition of *Issues in Accounting Education*, examined the membership of the editorial boards of 13 academic accounting journals for the years 1979, 1983, 1987 and 1990. Schools were ranked according to the representation of both their faculty and doctoral graduates.

The study broke down the 13 journals into two groups. The first group included what are recognized as three of the leading accounting research publications in the world: *The Accounting Review*, *Journal of Accounting and Economics* and *Journal of Accounting Research*. UBC ranked seventh with 17 editorial board memberships.

No other Canadian university finished in the top 30.

The second group of journals included specialty publications. UBC

finished 23rd with eight editorial board memberships, a number which reflects upon the relatively small size of UBC's accounting division, according to Division Head Dan Simunic.

When the two groups of journals were combined, UBC finished 10th overall.

Simunic said the true indication of UBC's strengths in accounting research came when the study factored in the size of each university's accounting division to the overall results.

"UBC finished sixth in the adjusted rankings, a reflection of the strong research orientation within our division," said Simunic.

"We may not have a division that's large in number or heavily steeped in tradition, but the quality of our faculty members is clearly evident in these results."

New bio-degradable wood preservative has soft touch

By ABE HEFTER

The ammonia-based disinfectants found in shampoos and household cleaners could lead to the development of a new generation of biodegradable wood preservatives, according to Faculty of Forestry Professor John Ruddick.

They're called alkylammonium compounds — also known as quats. Ruddick says they could represent the next generation of more versatile wood preservatives.

"Quats represent the user-friendly approach to wood preservation," said Ruddick, who first started investigating their potential for preserving wood some 15 years ago.

"They are safe to the skin and meet the public's demand for a non-arsenic-based wood preservative."

To understand the potential of such a treatment, Ruddick compared quats to chromated copper arsenate (CCA), which is rapidly becoming industry's preferred treatment for preserving wood.

"CCA, the green preservative you

see on everything from do-it-yourself decking to fenceposts is currently used to treat 95 per cent of sawn wood in Canada," said Ruddick.

"Quats perform as well as CCA in laboratory tests. When combined with copper, they are proving to be almost as effective in field testing as well," he added.

At this point, Ruddick isn't certain what it is about the copper formulation that improves the outdoor performance of quats. But he, and two of his graduate students, Andrew Doyle and Ruiying Liu, intend to find out by studying the chemical reactions that occur when preservatives are placed in wood.

"This will enable us to learn a great deal about wood preservatives, how they work, and how they can be made more effective," he explained.

Ruddick said environmental guidelines are very strict for wood preservatives, much more so than when the last new preservative was introduced into Canada more than 30 years ago. His

research in wood preservation could set new standards for industry to follow.

The current evaluation protocol for a new or modified preservative — studying a piece of treated wood after it has been sitting outdoors for 10 years — is a crude one.

"We don't have 10 years to determine the effects of wood preservatives."

By understanding the chemical principles behind wood preservation, Ruddick believes the effectiveness and safety of these preservatives can be quickly determined. Chemical analysis can further ensure that the preservatives stay in the wood until both the preservative and the treated wood are safely recycled.

Quat-based preservatives could be on the market within two or three years. Ruddick said further research will lead to subsequent modifications and improvements, including combining preservatives with a fire retardant or rain repellent.

SPRING BREAK February 20 & 21, 1992 Hours of Operation Campus Food Service Units

THE BARN COFFEE SHOP 7:45 a.m. to 3:45 p.m.

I.R.C. SNACK BAR 8:00 a.m. to 3:45 p.m.

THE PONDEROSA 7:30 a.m. to 3:30 p.m.

SUBWAY CAFETERIA 7:30 a.m. to 3:30 p.m.
(Closed Sat. Feb. 22nd)

ALL OTHER CAMPUS UNITS WILL BE CLOSED
Totem Park and Place Vanier Dining Rooms are open on a cash basis

For information: Totem Park Dining Room 822-6828
Place Vanier Dining Room 822-2622
Food Service Office 822-2616

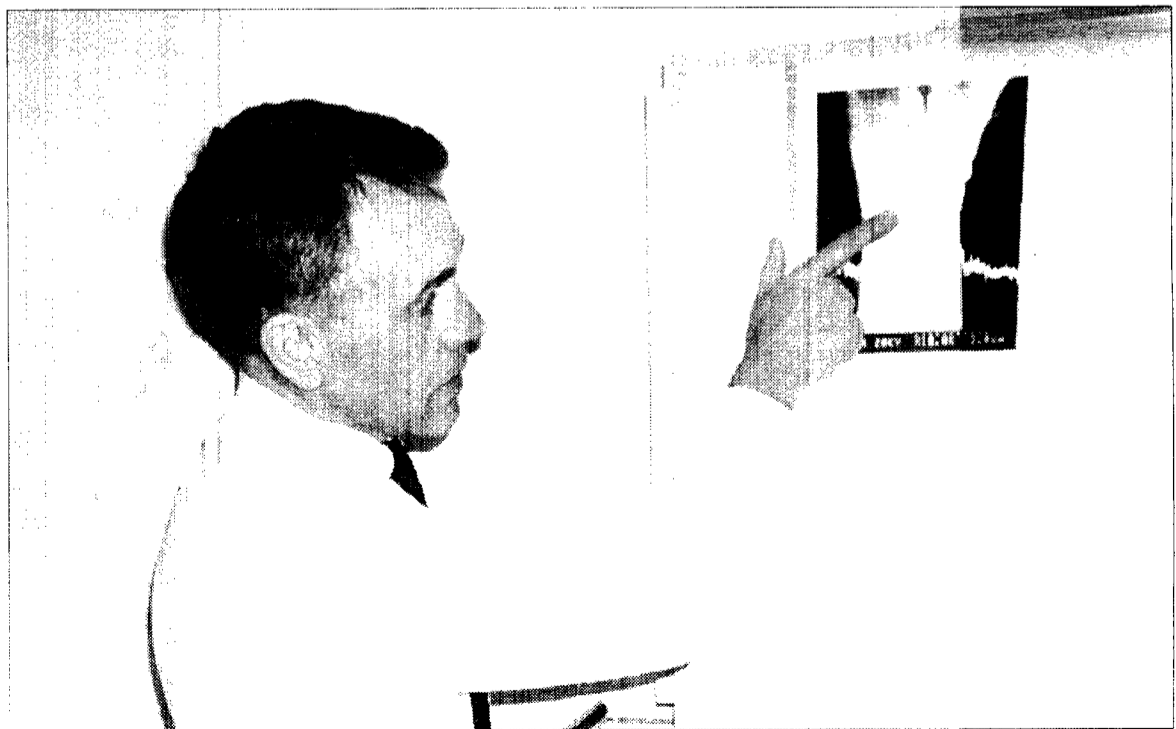


Photo by Abe Hefter
Professor John Ruddick points to peak quat concentration in wood cell wall as analyzed by scanning electron microscope.

CALENDAR

February 9 –
February 22

Wednesday Noon Hour Concert Series



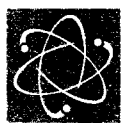
Festival Players Canada. Gene Ramsbottom, clarinet; Jesse Read, bassoon; Eva Kinderman, piano. Music Recital Hall at 12:30pm. Admission \$2.

Call 822-5574.

Forestry Seminar

Forest Management In Northern England/Scotland. Ken Day, resident manager; Alex Fraser, UBC Research Forest. MacMillan 166 from 12:30-1:30pm. Call 822-3553.

Microbiology Seminar



Treponema Denticola Tip-Oriented Adhesion To Matrix Proteins And Cytopathic Effects On Periodontal Cells. Dr. Richard Ellen, Dentistry, U. of Toronto. Wesbrook 201 from 12:30-1:30pm. Call 822-3308.

Anthropology/Sociology Lecture

States And Nationalism In Europe Since 1600. Prof. Charles Tilly. Anthropology/Sociology 207-209 from 12:30-1:20pm. Call 822-2878.

Asian Research Seminar

Grief, Grudge And Nostalgia: The Consciousness And Logic Of Japanese "Immigrants" To Manchuria. Shinzo Araragi, visiting scholar, Institute of Asian Research and associate professor, Sociology, Kumamoto U., Japan. Asian Centre 604 from 12:30-2pm. Call 822-4688.

THURSDAY, FEB 11

Pharmacology Seminar



Behavioral Factors In Drug Tolerance. Dr. John Pinel, Psychology. IRC #5 from 11:30am-12:30pm. Call 822-2575.

Microbiology Seminar

Canadian Bacterial Diseases Network. The Molecular Determinants Of Bacterial Pathogenesis. Dr. Richard Moxon, Paediatrics, U. of Oxford, England. Wesbrook 201 from 12:30-1:30pm. Call Dr. R.E.W. Hancock at 822-2682 or Dr. D. Speert at 875-2438.

Sustainable Development Research Institute Seminar

Doing Business With Business. Aldyen Donnelly, SPARK Environment Industries Committee. IRC #5 from 12:30-1:30pm. Informal discussion/refreshments follow from 1:40-2:30pm. No registration required. Call 822-8198.

Obstetrics/Gynaecology Research Seminar

Physiology Of The Oviduct. Dr. Peter McComb, associate professor, Obstetrics/Gynaecology. Grace Hospital 2N35 from 1-2:30pm. Call 875-2334.

Physics Colloquium



Problems In Non-Linear Dynamics. Albert Libchaber, Princeton U. Hennings 201 at 4pm. Call 822-3853.

Distinguished Artists Series

An Evening Of Chamber Music. Paul Rosenthal, violin; Gerald Stanick, viola; Eric Wilson, violoncello; Robert Silverman, piano. Music Recital Hall. Lecture at 7:15pm, concert at 8pm. Adults \$13, Students/Seniors \$7. Call 822-5574.

FRIDAY, FEB 12

Obstetrics/Gynaecology Grand Rounds

Management Of Pre-Eclampsia. Dr. Baha Sibai, U. of Tennessee. University Hospital, Shaughnessy Site Theatre D308 at 8am. Call 875-3108.

Paediatrics Grand Rounds

Cancelled. Call 875-2118.

SATURDAY, FEB 13

Vancouver Institute Evening Lecture

Why Have Zoos? Prof. Peter Crowcroft, Zoology, U. of Texas, Austin. Woodward IRC #2 at 8:15pm. Call 822-3131.

NOTICES

UBC Speakers Bureau

Would your group like to know more about topics ranging from Recreational Reading to Forest Regeneration? More than 300 topics to choose from. Call 822-6167 (24-hr. ans. machine).

Campus Tours For Prospective Students

School And College Liaison Office provide tours of the campus most Friday mornings for prospective students. Brock Hall 204D at 9:30am. Advance registration required. Call 822-4319.

Hort Club Orchid Sale

Cymbidiums, Dendrobiums, Miltonia And Coelogyne, \$5-\$15. Every Tues./Thurs. through Feb. or while quantities last. Greenhouse, West Mall at Stores Rd. from 9am-3pm. Call 822-3283.

Graduate Student Centre

Live entertainment every Friday in the Fireside Lounge from 8-11pm. Call 822-3203.

Graduate Student Society

Nominations For GSS Executive Positions deadline: Feb. 14. Includes positions for president, vp, executive secretary, house, programs, external affairs and finance directors. Graduate Student Centre Front Office. Call 822-3203.

Continuing Education Language Programs

Spanish Immersion Program in Cuernavaca, Mexico, Mar. 2-20. Call 222-5227.

Fine Arts Gallery



Open Tues.-Fri. from 10am-5pm. Saturdays 12pm-5pm on. Free admission. Main Library. Call 822-2759.

Museum Of Anthropology Exhibition

Eulachon: A Fish To Cure Humanity. MOA Gallery 5, until May 24 only. Call 822-5087.

Executive Programmes

Business seminars Feb. 12-13: Assertiveness for Managers, \$495; Feb. 13-14: The Management of Time, \$550. Call the Registrar at 822-8400.

Statistical Consulting/Research Laboratory



SCARL is operated by the Department of Statistics to provide statistical advice to faculty and graduate students working on research problems. Forms for appointments available in Ponderosa Annex C-210. Call 822-4037.

Dentistry Treatment Program

Participants with no natural teeth of their own are needed for a complete denture treatment. Patients accepted will be treated now through May. Call Mon-Fri, 10am-3pm, at 822-5668.

Weight Problems?

Women Students' Office is sponsoring a Support Group every Thursday, until Mar. 26 (exc. Feb. 20). Brock Hall 261 from 4-6pm. Call 822-2415.

High Blood Pressure Clinic



Volunteers (over 18 years) needed, treated or not, to participate in clinical drug trials. Call Dr. J. Wright or Mrs. Nancy Ruedy in Medicine at 822-7134.

Seniors Hypertension Study

Volunteers aged 60-80 years with mild to moderate hypertension, treated or not, needed to participate in a high blood pressure study. Call Dr. Wright or Nancy Ruedy in Medicine at 822-7134.

Drug Research Study

Volunteers required for Genital Herpes Treatment Study. Sponsoring physician: Dr. Stephen Sacks, Medicine/Infectious Diseases. Call 822-7565.

Heart/Lung Response Study

At rest and during exercise. Volunteers age 45-75 years, all fitness levels, required. No maximal testing. Scheduled at your convenience. Call Fiona Manning, School of Rehab. Medicine, 822-7708.

Lung Disease Study



Subjects with emphysema or fibrosis needed to investigate means of improving lung function without drugs. Call Fiona Manning, School of Rehab. Medicine, 822-7708.

Counselling Psychology Research Study

Clerical/secretarial staff needed to participate in a study which involves completion of one questionnaire a month for three months. Call Karen Flood at 822-9199.

Parent/Adolescent Career Development Study

Pairs of parents and teenagers needed for a study on conversations about career choices and life directions. Two interviews of up to 2 hours each. Honorarium of \$40/paid following completion of the second interview. Call Dr. Richard Young in Counselling Psychology at 822-6380.

Retirement Study

Women concerned about retirement planning needed for an 8-week Retirement Preparation seminar. Call Sara Comish in Counselling Psychology at 931-5052.

Personality Study

Volunteers aged 30 or more needed to complete a personality questionnaire. Required, 2 visits, about 3 hours total. Participants receive a free personality assessment and a \$20 stipend. Call Janice in Dr. Livesley's office, Psychiatry, Detwiller 2N2, 822-7895.

PMS Research Study

Volunteers needed for a study of an investigational medication to treat PMS. Call Doug Keller, Psychiatry, University Hospital, Shaughnessy Site at 822-7318.

Psychiatry Research Study



Volunteers needed as control group. Study involves one eye test at VGH and one interview at UBC—total time 1 1/2 hours. \$15 stipend offered. Call Ms. Arvinder Grewal at 822-7321.

Dermatology Acne Study

Volunteers between 14-35 years with moderate facial acne needed for 4 visits during a three month period. Honorarium paid. Call Sherry at 874-6181.

Sun-Damaged Skin Study

Participants needed between ages of 35-70 for 9 visits over 36 weeks. Have not used retinoids for the past year. Honorarium will be paid. Call Sherry in Dermatology at 874-6181.

Eczema Study



Volunteers 12 years of age or older needed for 4 visits over a three week period. Honorarium paid. Call Sherry in Dermatology at 874-6181.

Memory/Aging Study

Participants between the ages of 35-45 years or 65 and over needed for study examining qualitative changes in memory. Kenny 1220. Call Paul Schmidt in Psychology at 822-2140.

Stress/Blood Pressure Study

Learn how your body responds to stress. Call Dr. Wolfgang Linden in Psychology at 822-3800.

Surplus Equipment Recycling Facility (SERF)

Disposal of all surplus items. Every Wednesday, 12-3pm. Tent Rentals. Depts. save GST/PST. Task Force Bldg., 2352 Health Sciences Mall. Call 822-2813.

Student Volunteers

Find an interesting and challenging volunteer job with Volunteer Connections, UBC Placement Services, Brock 307. Call 822-9268.

Narcotics Anonymous Meetings

Every Tuesday (including holidays) from 12:30-2pm, University Hospital, UBC Site, Room M311 (through Lab Medicine from Main Entrance). Call 873-1018 (24-hour Help Line).

Fitness Appraisal

Administered by Physical Education and Recreation through the John M. Buchanan Fitness and Research Centre. Students \$25, others \$30. Call 822-4356.

Faculty/Staff Badminton Club

Fridays from 6:30-9:30pm in Gym A of the Robert Osborne Centre. Cost is \$15 plus library card. Call Bernard at 822-6809 or 731-9966.

Botanical Garden

Open from 10am-5pm daily. Free admission. Call 822-4208.

Nitobe Garden

Open Mon-Fri from 10am-3pm. Closed week-ends. Free admission. Call 822-6038.

NOTICE

CALENDAR POLICY

Due to the popularity of the Calendar, the number of submissions is constantly increasing. Because of space limitations, it is not always possible to include every item. In order to be as fair as possible, for future issues, the number of items for each faculty/dept. is limited to four per issue.

Ethicists take stock at UBC workshop

By ABE HEFTER

It's time to take stock of Canadian research in business and professional ethics, according to Philosophy Professor Michael McDonald, chair of UBC's Centre for Applied Ethics.

"The public, and leaders in business and the professions, are pushing the question of ethics to the forefront," said McDonald.

"A strategy must be developed to get the information across to students, professionals, business people and the general public."

McDonald said ethical questions regarding the environment, health care, business are practical questions that hit home.

"We must determine where we are today in terms of research and its dissemination through teaching and consulting," he added.

McDonald heads a team of UBC faculty members and academics from across the country that will gather at UBC Feb. 20-23 for the Area Research Institute for Business and Professional Ethics. The three-day workshop will bring together leading Canadian researchers from a wide range of disciplines.

"Canadian researchers in this area are scattered across a variety of disciplines and often don't even know each other," said McDonald. "We have a great deal to learn from each other."

Besides giving researchers an opportunity to meet face-to-face, the upcoming workshop will feature the launching of the computer-

based Canadian Business and Professional Ethics Network (CBPENET), which is supported by a research grant from the Social Sciences and Humanities Research Council.

The network, which will operate out of the Centre for Applied Ethics within the Faculty of Graduate Studies, will enable researchers to exchange information, test new ideas, seek assistance and engage in joint research projects. McDonald also hopes that the network will be a wellspring of new ideas for people in business and the professions.

"The network will allow a fast and effective means for communication and learning about the latest in business and professional ethics," said McDonald.

"Researchers will be able to do this in either English or French, without regard to geographical limits, or subject to high communication costs."

Networking will be one of four main topics for discussion at the workshop. Taking stock, assessing needs and developing an action plan are the others, said McDonald.

"Are we doing enough to prepare people for the ethical aspects of business and professionalism? Are we delivering the proper messages in addressing these value questions? There is a lot of cynicism out there and our work in applied ethics can go some distance to countering that cynicism," he said.

Student sheds light on chimpanzee behavior

By GAVIN WILSON

An honors thesis paper by a biology undergraduate student has taken him from the classrooms of UBC to the jungles of Tanzania and the podium of a prestigious scientific conference in Chicago.

Jon Page's research, which suggests wild chimpanzees eat certain plant leaves for medicinal purposes, has added to our knowledge of the great apes and could shed light on the origins of human medical practices.

"It is remarkable work for an undergraduate student," said Neil Towers, the Botany professor who supervised Page's research. "He has perhaps answered a question that has been puzzling some of the world's leading primatologists for some time."

Primatologists working in the field have known for several years that chimps display unusual behavior when eating leaves of species of the *Aspilia*, which is a member of the sunflower family.

Instead of stripping off the leaves by the handful and quickly chewing them, as they normally do when feeding, chimps will carefully choose individual *Aspilia* leaves, slowly suck on them and, with a grimace, swallow them whole.

Professor Richard Wrangham of Harvard and Professor Toshida Nishida of Kyoto University also observed that female chimps ate the leaves three times as often as male chimps and that the females ate the leaves in multi-day bouts.

A team of scientists, which included Towers, later found that the plant contained a compound called thiarubrine-A, which has potent antibiotic effects.

They theorized the chimps were medicating themselves, but had no clear evidence. They also noted that the local people of East Africa used the plant to treat a number of ailments.

Intrigued by the research, Page took up the challenge of discovering why the chimps ate the leaves and, with encouragement from Towers, went to Tanzania.

He spent six weeks there during May and June of 1991, mostly in

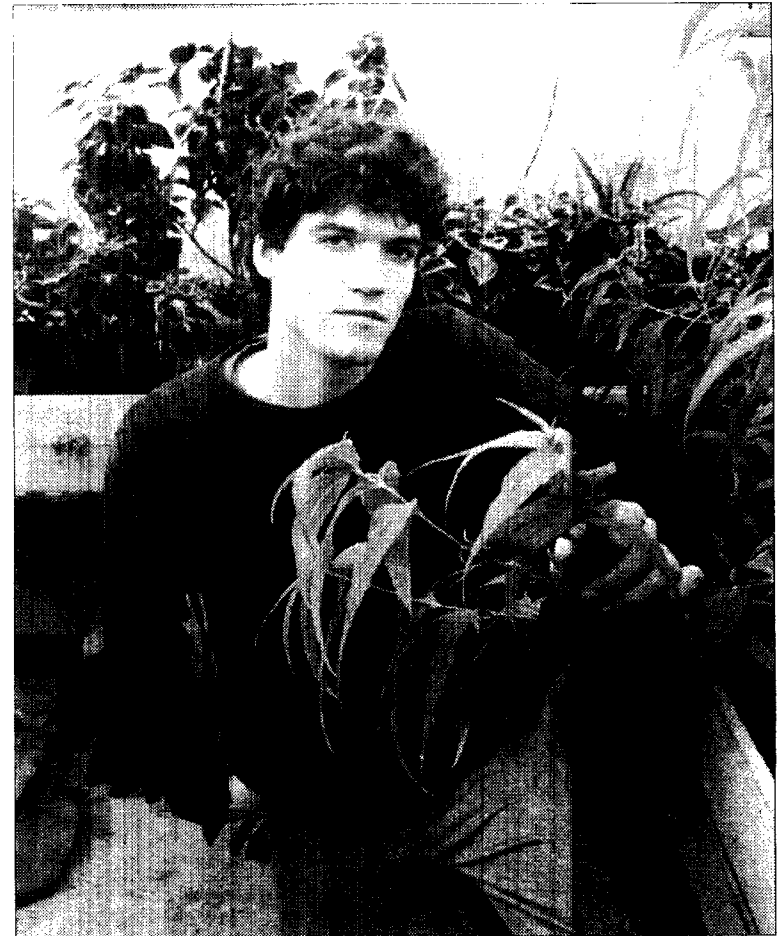


Photo by Gavin Wilson

Biology student Jon Page's study of the *Aspilia* plant, shown here in UBC greenhouse, has taken him to wild chimpanzee reserves in Tanzania.

Mahale Mountains National Park on the shores of Lake Tanganyika, home of one of two major field stations for the study of chimpanzees.

There Page had the opportunity to observe wild chimps in their natural habitat. It is an experience he won't soon forget.

"It was amazing how close we were able to get to large groups of them," he said, indicating a distance of about three metres. "They're so used to people, they look right through you as if you weren't there."

Page brought back samples of *Aspilia* which were then tested in the laboratories of the UBC departments of Botany and Pharmacology and Therapeutics. He was assisted in the chemical analysis

by Felipe Balza in Towers' lab.

Page discovered the leaves did not contain thiarubrine-A. That compound was only in the roots, which chimps do not eat. However, the leaves did contain two biologically active substances, kaurenolic acid and grandfloreonic acid.

Both compounds are potent stimulators of uterine contraction and are found in other plants of the sunflower family in Mexico, where they are used as folk medicine to hasten labor. Page said this suggests female chimps may eat *Aspilia* for its reproductive effects.

The findings are not only interesting from zoological and botanical points of view, but can also provide clues about the early development of the human race, he added.

"This type of research could provide clues to how early humans did things one-and-a-half million years ago," he said.

This approach was taken by famed anthropologist Louis Leakey. He believed there were limits to what could be learned from fossils about early human behavior, but much could be surmised from the study of our closest cousins, the great apes. He recruited three women who devoted their lives to this research — Jane Goodall, Dian Fossey and Canadian Birute Galdikas.

Meanwhile, Page was scheduled to present his findings at the American Association for the Advancement of Science annual meeting in Chicago Feb. 6-11.

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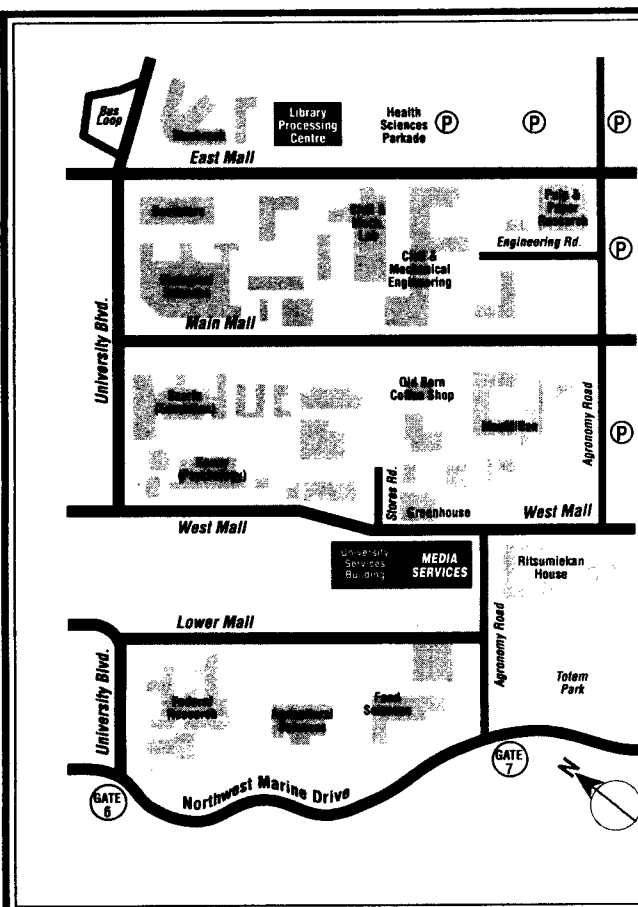
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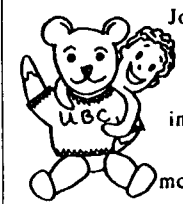
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Moth threat needs more research

By GAVIN WILSON

A UBC entomologist says more research is needed to determine whether the Asian gypsy moth is as great a threat to Vancouver as some federal officials believe.

Moth eggs were found on Russian ships arriving in Vancouver this summer and a number of mature moths were later trapped around the harbor.

To prevent the moth from spreading further, Agriculture Canada plans to spray large areas of Vancouver, North Vancouver and Burnaby with a bacterial control agent called *Bacillus thuringiensis* Kurstaki. The \$4-million spraying program will begin in April, with three aerial applications planned.

"There always seems to be money for spraying, but not for the research to see if this species could be established

here with the dire consequences predicted" said Judith Myers, who holds a joint appointment in Plant Science and Zoology.

Federal biologists say the moth poses a serious hazard to B.C.'s environment and could strip entire forests if left unchecked. But Myers wonders if the moth, which is native to Siberia, China and Japan, will adapt to Vancouver's climate and coniferous woodland.

The native habitat of the Asian gypsy moth has extremely cold winters and hot summers, a temperature pattern that determines the life cycle of the moth, including when its eggs hatch.

"It might be too mild for them here," Myers said, "and they normally feed in oak woodlands rather than

hemlock and cedar forests."

Myers also warned that the spray would kill other caterpillars feeding at the time of spraying, with potential effects on other aspects of the ecosystem.

She said past "eradication" attempts, including the 1978 European gypsy moth campaign in Kitsilano, and one against the Mediterranean fruit fly in California, are inconclusive — their apparent success perhaps due to natural population changes.

"We're weighing great unknowns which will continue unless we attempt to get answers to some basic questions," said Myers.

In addition to the spraying program, funding should be available to build a securely screened quarantine facility where observations could be

made on newly introduced insect species in a nearly natural environment, she said.

Evaluation of their potential threat in B.C. would indicate if further eradication programs were necessary, or if the insects were unlikely to flourish here and would not need to be sprayed.

"The Asian gypsy moth is not the only introduced insect that Vancouver is having to deal with," said Myers.

The Winter moth has spread from Europe to Victoria and will defoliate many deciduous trees in Vancouver this spring. The apple ermine moth, another European native, has recently been spotted in Vancouver because of its small silk tents found on apple trees in May and June. But both of these species are now declining in



Myers

the areas of initial population outbreaks, Myers said.

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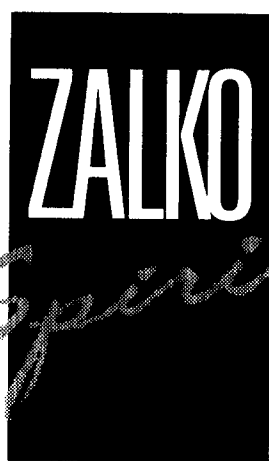
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Exercise improves health of ailing kids

By ABE HEFTER

Chronically ill children are being given a fighting chance at fitness through exercise programs prescribed by Dr. Don McKenzie of the UBC Sports Medicine Centre.

"The worst thing you can do is put chronically ill children into a mainstream physical education program and expect them to compete on equal footing," said McKenzie, who is also an associate professor in the School of Physical Education.

McKenzie and his research team have been testing children between the ages of eight and 18 who have had solid cancer tumors. After putting them through a fitness assessment, he discovered they had a low heart-lung function and very little endurance — but very capable muscle capacity.

"By prescribing a regular exercise regimen of walking, cycling or swimming, young cancer patients can improve their physical well-being," said McKenzie.

"An equally important result of that has been a healthier psychological outlook as well."

McKenzie, whose work with cancer patients has been in collaboration with Dr. Paul Rogers from B.C.'s Children's Hospital, is currently studying the fitness levels of 60 children with juvenile arthritis. Working with Dr. Peter Malleon of Children's Hospital, McKenzie is discovering that these kids appear to have similar shortcomings in their aerobic capacity, though not as severe.

"Their problems can be pinpointed to where the arthritis has struck. Fortunately, some of these children may 'outgrow' their arthritis, but others may remain chronically disabled through their adult life," he said.



Photo by Abe Hefter

Dr. Don McKenzie, centre, and assistant Pat Turner, right, monitor Craig Metcalf's results for maximum aerobic capacity.

McKenzie is still working on developing an exercise program for children with juvenile arthritis. But if the success he's had with world kayak champion Renn Crichlow is any indication, the prognosis for children with chronic disorders is encouraging, indeed.

"Renn is a young man with fairly severe asthma who comes to the Sports Medicine Centre for help in managing his disease," he said.

"Despite his handicap, he has emerged as a medal contender for Canada at the upcoming summer Olympics in Barcelona."

McKenzie said Crichlow is an example of what's possible with the right combination of treatment and motivation.

"Don't write off children with chronic diseases," he said. "With help, they have enormous capacity to participate in recreational and competitive sports."

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