UBC REPORTS

Volume 32 Number 2

January 23, 1986

Members appointed to UBC Athletic Council

The Board of Governors has approved the appointment of seven members of UBC's new Athletic Council. The council, which will be chaired by Dr. Neil Risebrough, associate vice-president, student services, will hold its first meeting after seven members appointed by the Alma Mater Society are announced.

Sitting on the council as University representatives will be Dr. Charles E. Slonecker, Anatomy; Dr. Thelma Cook, Education; Dr. C.V. Finnegan, Zoology; Mrs. May Brown, Alderman, City of Vancouver; and Dr. Robert Morford, Physical Education and Recreation. Board-appointed alumni representatives are Mrs. Diana Lam, BA'56 and Mr. Richard P. Gibbons, LLB'67. Dr. Robert Hindmarch, director of Athletics and Sports Services, will be an ex-officio, non-voting member of council. The Alma Mater Society will appoint five students and two alumni to complete the 15-member council.

The Athletic Council was established to integrate the operation of all University athletic programs. In addition to drawing up an annual athletics budget for Board approval, the council will administer the budget and make recommendations for the use and development of present and future athletics facilities. UBC's athletics budget for 1985-86 totals almost $2.5 million.

The recommendation for the establishment of the council, which went before the Board in October, 1985, proposed that the Department of Athletics and Sports Services be operated as an ancillary service with a subsidy of $525,000 from University operating funds in the current fiscal year.

Fee proposal goes to February Board

UBC's Board of Governors will consider a proposal to increase undergraduate tuition fees by an average of 4 per cent when it next meets on Feb. 6.

The fee increase proposal was introduced at the Board's December meeting. If approved, the new tuition-fee schedule would be effective on April 1, when UBC's 1986-87 fiscal year begins.

The present per-unit tuition fee of $85 would increase to $88 per unit and apply to most programs in Arts, Commerce, Education and Science.

This would result in normal-load fees (15 units) of $1,320 in Arts, first-year Commerce, Education and Science. Normal-load fee for students in the upper years of Commerce would be $1,584 and students registered for degree programs in the School of Physical Education and Recreation would pay $1,452.

UBC's highest undergraduate fees in 1986-87 would be the $2,288 paid by students enrolled in programs in Dentistry and Medicine.

Here are some other proposed fees for undergraduate degree programs (current year fees in brackets): Agricultural Sciences—first year $1,602 ($1,540), other years $1,716 ($1,650); Engineering—$1,716 ($1,650); Music—$1,773 ($1,705); Pharmacy—$1,773 ($1,705).

International students (i.e. those enrolled on student visas) who are registered in undergraduate programs will pay 2.5 times the corresponding fee for Canadian citizens and permanent residents.

Fees for programs in the Faculty of Graduate Studies are under review and it's expected that a recommendation will go forward to the Board at its February meeting.

Honorary degree recipients named

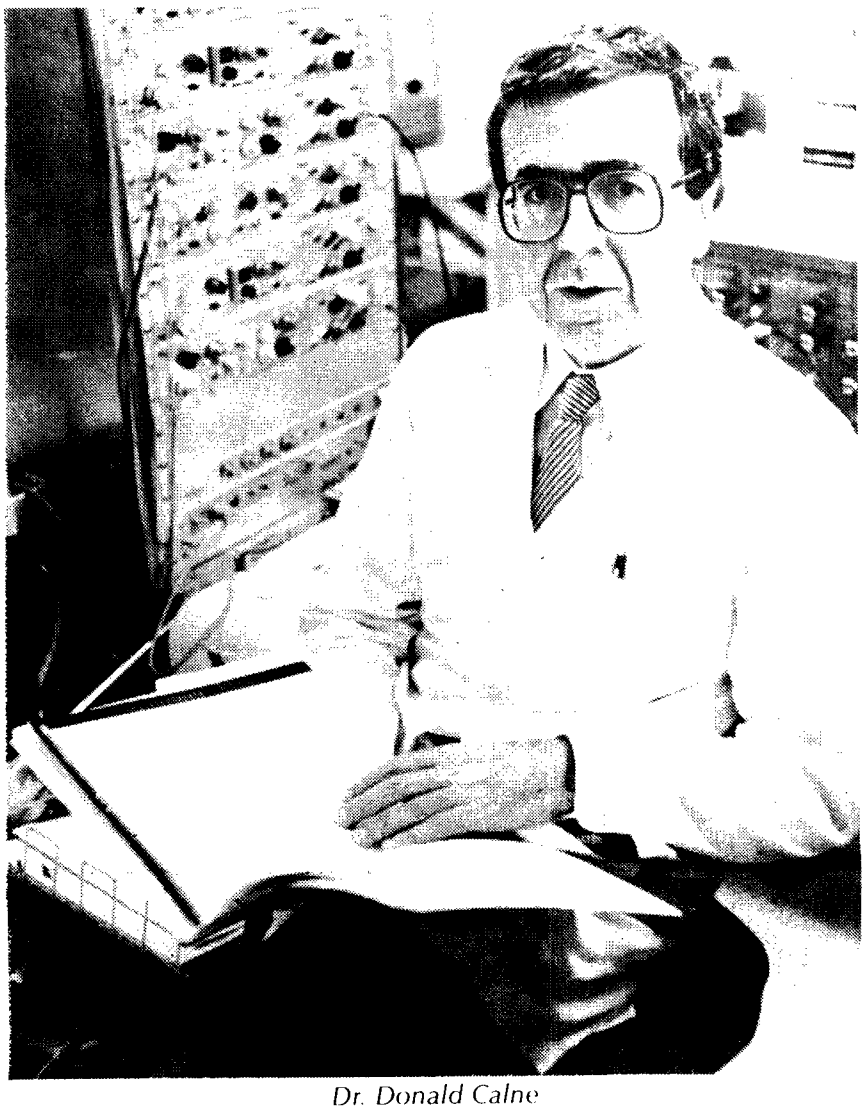
UBC will award six honorary degrees this year at its graduation ceremonies on May 28,29 and 30.

Receiving honorary degrees will be Maestro Kazuyoshi Akiyama, former music director and resident conductor of the Vancouver Symphony Orchestra; Joseph H. Cohen, a Vancouver businessman and philanthropist; the Hon. R.G. Brian Dickson, Chief Justice of Canada; Jack Halpern, a former UBC faculty member who has gained international recognition for his work in the field of chemistry; Audrey Hawthorn, one of Canada's leading anthropologists, who played an instrumental role in the development of UBC's Museum of Anthropology; and the Bishop of Prince George, J. Fergus O'Grady, who is being honored for his service to citizens of B.C.'s Interior and northern communities.

Tentative C.U.P.E. settlement reached

A tentative settlement between the University and C.U.P.E. Local 116 was reached on Dec. 23, 1985. The ratification process is under way and is expected to conclude in early February.

Highlights of the settlement are a two-year contract from April 1, 1984 to March 31, 1986; a $200 signing bonus for full-time active employees as of the date of settlement; a general wage increase of 1 per cent as of Jan. 1, 1986; a change in shift premium for all new employees after Jan. 1, 1986, from per cent of wages to cents-per-hour (50 and 70 cents respectively for evening and night shifts); and a revision in the manner in which hours of work are posted.



Dr. Donald Calne

Parkinson's disease explored

Drs. Donald Calne and Wayne Martin of UBC's Division of Neurology were recently awarded a $150,000 grant from the Medical Research Council of Canada to study parkinsonism in MPTP patients.

MPTP, a toxic agent that is being sold on the streets as a "new" heroin, produces severe parkinsonism in individuals who have injected themselves with the drug. Parkinsonism is a group of symptoms comprising tremor, stiffness and profound slowing of movement. In the most common situation, parkinsonism occurs spontaneously without any identifiable cause and then is called Parkinson's disease.

A recent investigation of MPTP subjects led by Drs. Calne, Martin and William Langston of the Institute for Medical Research in San Jose has attracted widespread interest. It has been discussed in *Newsweek, Nova, Science 85, Nature and Equinox.*

Using a Positron Emission Tomograph (PET) scanner, the researchers probed the brains of four people at risk for Parkinson's disease. The subjects, aged 26 to 48, had injected the "new" heroin contaminated by MPTP. The PET scanner showed damage to the same cells that are destroyed in Parkinson's victims. Their research suggests that the tool may detect the disease before it appears.

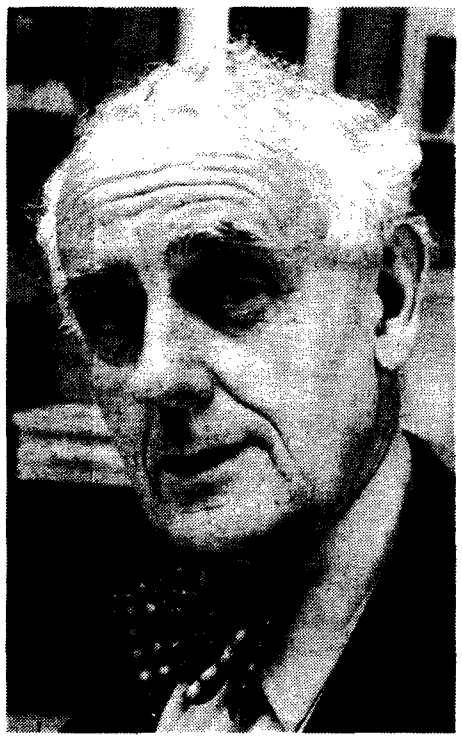
"The scans indicated that the cause of Parkinson's may precede the onset of symptoms for many years," said Dr. Calne.

Dr. Calne will also use the MRC grant to examine three more at-risk groups for parkinsonism—boxers, Guamians (parkinsonism is common on this North Pacific island), and manganese miners. "I am now looking for research funds to transport these special at-risk subjects to Vancouver," said the neurologist.

Previous research studies by Dr. Calne and other researchers have shown through a study of Parkinson's disease in twins that the major contribution to the cause of Parkinson's is non-genetic. Therefore the cause must be an environmental factor, possibly toxic. This factor could produce unnatural damage—similar to that found in MPTP subjects—and over the natural course of aging, the slow, sustained neuronal loss could lead to the ultimate appearance of symptoms.

In addition to the MRC grant, the Movement Disorder Study group directed by Drs. Calne and Martin is approaching the end of their fifth year of a $1 million grant from the Dystonia Medical Research Foundation and they will be reapplying for the grant. Dystonia is a crippling disease that often starts in childhood and affects the same area of the brain as Parkinson's disease. The group led by Drs. Calne and Martin is one of only two in the world to receive the DMRF grant.

CAMPUS PEOPLE



Prof. Cyril Finnegan, former dean of the Faculty of Science, has re-entered the administrative life of UBC. He is currently serving as acting associate vice-president academic while Prof. R.D. "Don" Russell is on leave of absence in Australia.

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Four UBC students who have combined high academic standing with qualities of leadership and service have been named the winners of annual awards with an total value of $11,000.

The winners of UBC's top scholarship awards for 1985-86 are:

Alison Hoens, now in her final year of undergraduate studies in Rehabilitation Medicine, winner of the $4,500 Sherwood Lett Memorial Scholarship;

Gregory S. Yen, a student in the Faculty of Commerce, where he plans to specialize in accounting, winner of the $3,000 Amy E. Sauder Scholarship;

Jane Little, now in her final year of undergraduate studies in the School of Family and Nutritional Sciences, winner of the $2,000 Harry Logan Memorial Scholarship; and

Don Holubitsky, currently a student in Law and one of two students who serve on UBC's Board of Governors, winner of the $1,500 Jean Craig Smith Scholarship.

Alison Hoens, a graduate of McGee secondary school in Vancouver, has combined an outstanding academic record with a wide range of activities as a photographer and as a participant in athletics on and off the campus.

She is a former head photographer for The Ubyssey and was publications photographer for the UBC Athletic Department. As an athlete, she competed for nine years in the B.C. Women's Soccer Association and is currently a member of UBC's Varsity Women's Field Hockey Team.

Gregory Yen is a graduate of St. George's School in Vancouver, where he led his class four years in a row. He is an accomplished pianist who narrowly missed obtaining the highest mark in Canada the year he wrote the ARTC piano exam. He also plays the clarinet and alto and baritone saxophones and is a member of a Vancouver singing group called the Norman Madrigal Singers.

He has been active in student activities in the Faculty of Commerce and has served on the executive of the Commerce Undergraduate Society. Last summer, in addition to operating a painting business under the Student Venture Loan program, he was a member of a group of students who carried out a calendar project entitled "The Guys of UBC," which featured male students in various campus settings.

Jane Little, a graduate of Crofton House School in Vancouver, began her student career at UBC in the Faculty of Science, but switched her degree program to the School of Family and Nutritional Sciences in the Faculty of Arts in 1983.

At UBC, she has been the recipient of a number of scholarship awards, including a Natural Sciences and Engineering Research Council undergraduate summer research award in 1985. She is an active member of a number of student and off-campus clubs and service organizations, is currently training with UBC's women's diving team and continues a long-standing interest in music as a flute and piccolo player.

Don Holubitsky, a graduate of Carson Graham secondary school in North Vancouver, is currently enrolled in Law after having obtained his Bachelor of Science degree with combined honors in biology and chemistry, his Master of Science degree in anatomy and the degree of Doctor of Medicine. He has only to write a thesis to complete the requirements for the Ph.D.

He has been actively involved in student affairs over the years as an executive member of the Graduate Student Association, the Students Council and a large number of other campus organizations associated with student government. As a member of UBC's Board of Governors he participated in the work of the advisory committee to the Board which recommended the appointment of Dr. David Strangway as UBC's tenth president.

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Donald Mosedale, director of the English Language Institute in UBC's Centre for Continuing Education, has been named to a B.C. Government Trade Mission to Japan and Korea from Jan. 25 to Feb. 8.

Mr. Mosedale has been named to the mission as the representative of B.C.'s three public universities. The purpose of the mission is to facilitate B.C. post-secondary institutions obtaining English-language training agreements with their counterparts in Japan and Korea and to promote the sale of B.C.-developed courseware in English-language training.

Also participating in the mission will be the principals of five B.C. community colleges and a representative of the B.C. Open Learning Institute.

The institute Mr. Mosedale directs provides year-round English-language instruction for students from more than a dozen countries and also stages a number of special programs for English teachers.

The institute is also headquarters for the Pacific Region Orientation Centre, one of five centres funded by the federal Canadian International Development Agency (CIDA) to provide English-language and orientation programs for individuals coming to Canada to work or study on CIDA-sponsored projects.

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Dr. Keith Dobson of the Department of Psychology has been elected president of the B.C. Psychological Association for 1986. In this capacity, Dr. Dobson will also serve as provincial representative to the Council of Provincial Associations of Psychology.

Dr. David Hulchanski of UBC's School of Community and Regional Planning has been awarded a fellowship by the Japan Society for the Promotion of Science, a semi-governmental organization that invites a small number of foreign scholars to Japan annually as a means of promoting international cooperation in research.

He will be based at Kyoto University this summer to study Japanese housing policy and programs and brief Japanese researchers and officials on Canadian community planning and housing policies.

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Several graduates of UBC's Department of Creative Writing have recently been honored with literary prizes and awards. **Dennis Foon,** artistic director of Vancouver's Green Thumb Theatre, has won a British Theatre Association Award as best playwright for young people's theatre. Graduates **Robert Brinkhurst** and **Andrew Wreggit** won CBC literary prizes for their poetry submissions, and two novels by **Louise Lemieux** were among seven honorable mentions for the Norma Epstein Award, the University of Toronto's top creative writing award. **Ann Ireland** was the winner of the prestigious Seal First Novel Award.

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A UBC graduate student in Education and faculty members in Commerce and Business Administration and Physical Education and Recreation are all scheduled to speak at the World Congress on Education and Technology scheduled for May 22 to 25 in Vancouver.

More than 260 of the world's innovators in the field of educational technology are scheduled to address the congress, which will draw an estimated 10,000 educators, researchers, manufacturers and government representatives from around the world.

The congress is being organized by the B.C. School Trustees Association. The two sites of the congress are the UBC campus and B.C. Place Stadium.

UBC speakers and their topics are: Education graduate student **Colin J. Laine** on "Education Assessment and Career Planning Using Guildford's Structure of Intellect Model"; **Dr. Albert Dexter,** Commerce, on "Acquiring Skills to Manage Technology"; **Dr. Robert Goldstein,** Commerce, on "Using Database Technology Effectively"; and **Dr. Ian Franks,** Physical Education, on "A Systematic Analytical Model of Sport Analysis."

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UBC's Library received a Certificate of Recognition in the "Models for Excellence" program held in conjunction with the annual conference of the Pacific Northwest Library Association in Eugene, Oregon.

UBC's entry, prepared by Librarians **Isabel Pitfield** and **Margaret Friesen,** was *The B.C. Post-Secondary Interlibrary Network Manual*. The loan network is a resource-sharing system for 24 publicly funded post-secondary libraries in B.C. The manual can be used as a model for any interlibrary loan network.

Scientists clone enzymes

A team of 15 UBC molecular geneticists have solved a major scientific problem that will allow conversion of renewable wastes into high value products.

Their starting material is cellulose, a principle component of wood slash, sawdust and straw—waste products of the forest and grain industries.

The end result would be such products as liquid fuels, fertilizers, plastics and synthetic rubber.

Their five years of work was the subject of a paper in the Nov. 22, 1985 issue of *Science*, the official publication of the American Association for the Advancement of Science and one of the most prestigious science publications in the world.

The team, led by Professors Tony Warren, Doug Kilburn and Bob Miller, worked in collaboration with Allexlix Inc. of Toronto. They were supported by research grants from the National Research Council and the Natural Sciences and Engineering Research Council of Canada.

Dr. Warren is a bacterial physiologist in UBC's microbiology department. Dr. Kilburn, acting head of the department, is an expert in fermentation engineering. Dr. Miller is dean of the Faculty of Science.

The team has created a new strain of yeast using cloning and other techniques of molecular genetics.

There are many enzymes in nature that convert cellulose to glucose, a sugar. But they work too slowly to be commercially usable. The scientific significance of the team's work is that they successfully selected the right gene out of thousands possible and fused the gene with yeast genes.

The new yeast strain carries out a two-step conversion. It not only transforms the cellulose to glucose, but also can ferment the glucose into alcohol. What was previously two distinct reactions is now accomplished by a single, new strain of yeast.

Alcohol can be blended with gasoline at a rate of one part alcohol to nine parts gasoline for use in conventional cars. Environment Canada estimates that Canada could consume about 1,400 million gallons of alcohol for automobile fuel alone. Canada produces enough renewable waste products to manufacture 10 billion gallons of fuel a year.

Other fermentation products from cellulose can easily be used in plastics. Once again, ever-decreasing petroleum reserves are the current source of plastics.

The team has a achieved a goal sought by biotechnologists for some time. They cloned their first enzyme four years ago, in competition with at least three other laboratories in North America. Major competitors in France and England are close behind the UBC team in the effort to develop a commercially-viable industry using the enzymes.

Grant for SSHRC history awarded

A member of UBC's Faculty of Education has been awarded a two-year, $50,000 grant to write a history of the Canadian Social Science Research Council during the period 1940-1965.

Dr. Donald Fisher of the education faculty's Department of Social and Educational Studies will sift through documents in the Public Archives of Canada and the files of organizations such as the Canada Council, the National Research Council and a host of social science organizations in order to compile material for the history.

He also plans to use the papers of UBC's former president, Dr. Norman MacKenzie, in writing the history because of Dr. MacKenzie's key role in the development of the social sciences in Canada during that period.

Dr. Fisher says he feels many long-time members of the UBC faculty might be able to provide valuable leads or information about the early days of social science research in Canada. If you think you can help, call 228-5295.

Poison Control Centre offers vital service

Parents enter the kitchen to find their young child on the floor in a semi-consciousness state. The sink cupboard door is open and a few bottles of household cleansers lie overturned on the floor. The child has accidentally swallowed one or more of them—immediate care is critical.

Distrought and sometimes panicky parents can receive instant advice by dialing 682-5050, the Poison Control Centre number listed on the inside cover of the Vancouver telephone directory.

The service is available 24 hours a day, seven days a week. At the moment, the service is extended to all health professionals in the province and to the general public in the Lower Mainland.

The B.C. Drug and Poison Control Centre, sponsored jointly by UBC's Faculty of Pharmaceutical Sciences and the B.C. Ministry of Health, has just celebrated its tenth anniversary. It is the first centre of its kind in Canada and has become a national resource servicing some of the specialized needs of hospitals in most of the other provinces.

Dr. John. N. Hlynka, a UBC pharmacy professor and director of the centre, said a series of recommendations is presently being studied by the B.C. Ministry of Health to expand services offered by the centre. "Cost effectiveness and better service are primary considerations for many of our expansion plans," he said. "We expect to introduce most of the extended services on a trial basis over the next two years. Those that pass the cost-benefit test will become a permanent feature of the centre's services."

One of the recommendations of the centre is to eventually expand their poison information service to the general public throughout the province.

"British Columbians outside of the Lower Mainland who need immediate advice on poisons now contact their local hospital emergency departments," said Dr. Hlynka. "Emergency departments are extremely busy and sometimes, depending on the staffing at the time the call is received, they may not have the expertise to deal with the situation.

"It makes sense to have a toll-free poison information line available to everyone in the province."

As part of the series of recommendations for development of the centre between now and 1988, a province-wide toll-free line will first be offered to health professionals wanting poison information.

"At present health professionals in the province must pick up the long distances charges for calls to the centre," Dr. Hlynka said. "This is probably an inhibition to greater use of our service. Some B.C. hospitals may have regulations preventing long distance calls, for example.

"We want to allow toll-free access to poison information to B.C. health professionals first and see what happens before deciding to extend the same service to the general public in the province."

The toll-free line would be to St. Paul's Hospital where the centre has been located since it opened in 1975.

B. C. POISON CONTROL CENTRE

It is staffed by experts from UBC's Faculty of Pharmaceutical Sciences who have been specifically trained in the analysis and dissemination of drug and poison information. Supporting the centre are staff members of the hospital's emergency, pharmacy and medicine departments.

Drug information is available to health professionals throughout B.C. Monday to Friday from 9 a.m. to 5 p.m.

"When you consider that more than 100,000 information articles on drugs and poisons are published each year, it's obvious that health professionals just can't keep up with the literature," said Dr. Hlynka.

"Our drug information line is designed to meet their needs.

"In our first year of operation, we received about 100 drug and poison information requests a month. We're now handling more than 1,500 a month. Requests have doubled in the past three years."

The centre also publishes drug and poison reference and management manuals that are computerized and up-dated. They provide information on the side-effects of Canadian drugs, guidelines for drug administration and patient counselling and recommended treatment for toxic exposure to poisons.

The centre's Poison Management Manual, distributed by the Canadian Pharmaceutical Association, is not only in use in all B.C. hospitals but has become the primary reference used in poison control centres across Canada.

The centre itself has become a model for similar operations in other provinces where centralized facilities don't exist.

Another area of the centre's activities is education. Undergraduate pharmacy students as well as hospital and community pharmacy residents who have already completed their undergraduate training are taught at the centre.

"We would like to hold an annual provincial continuing education conference at UBC on the principles of poison management," said Dr. Hlynka. "We also recommend that education programs be offered to emergency department staff in different regions of the province each year as part of an out-reach program.

"Another element of continuing education recommended is a speakers' bureau that would be the vehicle for a comprehensive provincial poison prevention program. The experts would be community pharmacists and public health nurses who would speak to groups throughout B.C."

Forum on Arts careers planned

After the B.A. ..., a three-part forum exploring career options for students enrolled in the Faculty of Arts, is being offered on Jan. 30, Feb. 6 and Feb. 13.

The series, sponsored by the Faculty of Arts, the Alumni Association and the Arts Undergraduate Society, will give Arts students an opportunity to meet with graduates of humanities and social sciences programs who have achieved success in various careers.

Panelists for the Jan. 30 program are Mr. Donald Hudson, president of the Vancouver Stock Exchange; Ms. Diana Millen of the management consulting firm D.Millen and Associates; Mr. Murray Budd, vice-president of Merrill Lynch Canada Inc.; and Mr. Ray Williston, chairman and president, B.C. Cellulose. Keynote speaker for the evening is UBC President David Strangway.

Panelists for Feb. 6 are the Hon. Nathan T. Nemetz, Chief Justice of the Province of British Columbia; Mr. Michael Horsey, B.C. Deputy Minister of Tourism; the Hon. J.V. Clyne, former chairman of MacMillan Bloedel, Supreme Court judge for 20 years and former UBC chancellor; and Ms. Gayle Stewart-Gray, manager of public affairs for First City Financial Corp. Ltd.

On Feb. 13, the keynote speaker will be the Hon. J.V. Clyne, with panelists Ms. Nicole Parton, Vancouver *Sun* columnist; Ms. Valerie Casselton, reporter for the Vancouver *Sun*; Mr. Andy Soles, Deputy Minister of Universities, Science and Communications; and Mr. Dennis Foon, artistic director of Green Thumb Theatre.

Programs will be held at Cecil Green Park from 5:30 to 7 p.m., with a no-host bar at 5 p.m. To register, call the Alumni Association at 228-3313 or drop by Room C154 of the Buchanan Building.

Man-in-Motion

Update: Jan. 23, 1986: Rick Hansen has travelled 11,785 miles on his round-the-world wheelchair tour to raise funds for spinal cord research and rehabilitation, and is currently in Adelaide, Australia. Contributions in Canada so far total $616,275. If you'd like to make a donation, please call 687-5200.

UBC psychologist begins study on shyness

Dr. Lynn Alden of UBC's Department of Psychology has begun a search for 100 people whose lives have been impaired by overpowering shyness.

Each member of the shyness-impaired group will be assigned to one of three counselling and therapy programs aimed at helping them to remove the psychological blocks that prevent them from relating to other people.

The research project, which is being funded by Health and Welfare Canada, is aimed at finding out why some people avoid social interaction and helping them to modify their behavior.

The three therapy programs to be used in the study have each been effective in past experiments, Dr. Alden said. "The question we're interested in is which type of treatment works best."

It's possible that a new treatment program could emerge from the UBC experiments, combining elements from each of the three programs to be tested, Dr. Alden added. "Or we may discover a basic gap that needs to be filled in one of the experimental programs. We're hoping for honest feedback from participants on whether or not the therapy programs helped."

Individuals chosen for the program will be asked to commit ten weeks to it. Each of the therapy groups will meet once a week for two hours of intensive discussion aimed at equipping participants with strategies for making friends.

People whose lives have been impaired by shyness are typically in their late 20s or early 30s and are under-utilized in their work situation because they are seen by their superiors as timid people who wouldn't be able to handle increased responsibility, Dr. Alden said.

"We have just completed a related study which seems to indicate that shy people are divided into two fairly clear cut groups, those who are born timid and those who develop shyness as the result of negative social experiences," Dr. Alden said.

Recent research suggests that timidity may be, in part, constitutional. Some people are born timid enough to cause problems in later life.

The other cause seems to be environmental and may be the result of physical or emotional abuse. This group may require therapy in addition to what they will get in the shyness program.

Lynn Alden

"For those who have been abused, some basic issues of trust will be involved. Shy people who have been brutalized may be constantly asking the question 'Can I trust anyone in a friendship situation?' "

One of the thrusts of the project will be to determine if those shy from birth and those who acquired shyness at some point in their lives will require different kinds of therapy to help them.

Dr. Alden cautions against expectations that participants will be "cured" when the therapy sessions end. "The therapists will aim at equipping people to do something between sessions and after the program ends that will enable them to relate better to other people."

"Those who are chosen for the program will be individuals who have suffered from overpowering shyness for up to 30 years. It would be quite unrealistic to think that a problem of that duration can be overcome in ten weeks. Those who complete the program will be in a position to make a start on changing their lives over a period of two or three years."

In the final analysis, Dr. Alden said, the project aims at helping people take part in what she thinks is a deeply felt human need.

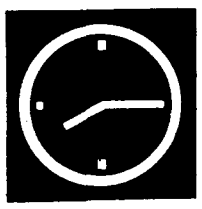
"Modern attitudes not withstanding," she said, "having a mate, someone with whom you're intimate, is one of the most important human needs. In my view, that's the way human beings are made."

UBC CALENDAR

Calendar Deadlines

Events for the period Feb. 9 to 22 should be submitted on proper Calendar forms no later than 4 p.m. on Jan. 30 to the Community Relations Office, Room 207, Old Administration Building, 6328 Memorial Road. For more information, call 228-3131.

The Vancouver Institute.



Saturday, Jan. 25
The News from Halley's Comet. Prof. John Caldwell, Earth and Space Science Institute, SUNY, Stony Brook, N.Y.

Saturday, Feb. 1
Orangutans: People of the Forest. Dr. Birute M.F. Galdikas, Archeology, Simon Fraser University.

Lecture Hall 2, Woodward Instructional Resources Centre. 8:15 p.m. Free admission.

MONDAY, JAN. 27

Cancer Research Seminar.
Human Papillomavirus and Ano-Genital Cancer. Dr. Janet Daling, Epidemiology, University of Washington and Fred Hutchinson Cancer Research Centre. Lecture Theatre, B.C. Cancer Research Centre, 601 W. 10th Ave. 12 noon.

Botany Seminar.
The California Vegetable Industry: A Dimension of Economic Botany & Contemporary Trends in Research. Donald Nevins, Vegetable Crops, University of California, Davis. Room 3219, Biological Science Building. 12:30 p.m.

Remote Sensing Seminar.
The FLI Imaging Spectrometer, A Future Space Sensor. Dr. G. Borstad and Dr. J. Gower, Institute of Ocean Sciences, Pat Bay. Room 266, MacMillan Building. 12:30 p.m.

Applied Mathematics & Management Science Seminar.
Some Graph-Factorisations. Prof. Brian Alspach, Mathematics, Simon Fraser University. Room 421, Henry Angus Building. 3:30 p.m.

Biomembranes Discussion Group.
Active Calcium Transport Across the Red Blood Cell Membrane: Regulatory Calmodulin. Basil Roufogalis, Pharmaceutical Sciences, UBC. IRC 4. 4 p.m.

Zoology Physiology Group Seminar.
Developmental Changes in the Electrical Properties of Oocytes and Early Embryos. Dr. W. Moody, Zoology, University of Washington. Room 2449, Biological Sciences Building. 4:30 p.m.

TUESDAY, JAN. 28

Botany Seminar.
Cell Wall Polysaccharides: Dynamics Associated with Cell Wall Elongation. Donald Nevins, Vegetable Crops, University of California, Davis. Room 3219, Biological Science Building. 12:30 p.m.

Oceanography Seminar.
The Homing Migration of Sockeye Salmon to the Fraser River. Dr. Cornelius Groot, Pacific Biological Station, Nanaimo, B.C. Room 1465, West Wing Biological Sciences Building. 3:30 p.m.

CUSO Development Education Series.
Primary Health Care—Case Studies From the Third World. A weekly series exploring international development issues and possibilities for personal involvement. Free admission. International House, UBC. 7:30—9:30 p.m.

WEDNESDAY, JAN. 29

Pharmacology and Therapeutics Seminar.
Diabetes-Induced Cardiac Changes in the Rat. Dr.J.H. McNeill, Dean, Faculty of Pharmaceutical Sciences, UBC. Room 317, Basic Medical Science Building, Block C. 12 noon.

Wednesday Noon-Hour Concert.
Music of Stojowski and Jacob. Gordon Cherry, trombone and Joyce Cherry, piano. Recital Hall, Music Building. 12:30 p.m.

Geography Colloquium.
The Hydrology and Sedimentology of an Ice-Dammed, Self-Dumping Lake. Joseph Desloges, Geography, UBC Room 201, Geography Building. 3.30 p.m.

THURSDAY, JAN. 30

Medical Grand Rounds.
Synovial Pathology. Dr. H. Ralph Shumacher, Director, Immunology Centre, University of Pennsylvania. Lecture Theatre Room G279, Acute Care Unit, HSCH. 12 noon

Faculty Recital.
Music of Villa-Lobos. Metroscope Cello Project. Eric Wilson, director. Recital Hall, Music Building. 12:30 p.m.

Environmetrics Seminar.
Regression Analysis Under Misspecification of the Link Function. Dr. Naihua Duan, Rand Corporation, Santa Monica, California. Room 225, Math Building. 3:30 p.m.

Musical Theatre.
MUSSOC, UBC's musical theatre society presents Fiddler on the Roof Jan. 30 to Feb. 8 (except Sunday). Tickets are $7.50, $5 for students and seniors. For ticket information and reservations, call 228-5656. Old Auditorium. 8 p.m.

After the B.A. ...
A forum to explore career options for students in the Faculty of Arts. Tonight's speakers are Dr. David Strangway (keynote speaker); Donald Hudson, president, Vancouver Stock Exchange; Diana Millen, D. Millen and Associates; Murray Budd, vice-president, Merrill Lynch Canada Inc.; and Ray Williston, chairman and president, B.C. Cellulose. To register, call 228-3313 or drop by Room C154, Buchanan Building. 5:30—7 p.m.

FRIDAY, JAN. 31

Pharmaceutical Sciences Seminar.
How Inward Current K+ and Ischemia-Induced Arrythmias. Dr. Micheal Walker, Pharmacology, UBC. IRC 3. 12:30 p.m.

Medical Genetics Seminar.
Lidgap Mice—Update of a Genetic Model for the Causes and Prevention of Multifactorial Threshold Birth Defects. Dr. Diana Juriloff, Medical Genetics, UBC. Parentcraft Room, Main Floor, Grace Hospital. 1 p.m.

Geophysics and Astronomy Seminar.
Interpretation of Magnetic Anomalies of the Earth Derived from Satellite Data. Dr. Jafar Arkani-Hamed, Geology, University of Toronto. Room 260, Geophysics and Astronomy Building. 4 p.m.

MONDAY, FEB. 3

Botany Seminar.
Biogeography of Coastal Alpine Bryophytes. John Spence, Botany, UBC. Room 3219, Biological Science Building, 12:30 p.m.

Remote Sensing Seminar.
Integration of Computer-Assisted Mapping and Statistical Information for Resource Management Applications. F. Hegyi, B.C. Ministry of Forests. Room 166, MacMillan Building. 12:30 p.m.

Mechanical Engineering Seminar.
Stability of Small Boats in Following Beam Seas. A.Allievi and G.Rohling. Room 1202, CEME Building. 3:30 p.m.

Applied Mathematics Seminar.
An Algorithm for a Weighted Matching Problem in Graphs. Prof. Richard Anstee, Mathematics, UBC. Room 229, Mathematics Building. 3:45 p.m.

Biomembranes Discussion Group.
Thermodynamic and Kinetic Factors in Ion Transport Across Membranes. Charles Tanford, Physiology, Duke University. IRC 4. 4 p.m.

TUESDAY, FEB. 4

Botany Seminar.
Mycorrhizas. Caroline Bledsoe, College of Forest Resources, University of Washington. Room 3219, Biological Science Building. 12:30 p.m.

Cecil H. and Ida Green Lecture.
Intelligence in People and Computers. Prof. Herbert Simon, Computer Science & Psychology, Carnegie-Mellon University. Room 104, Angus Building. 12:30 p.m.

Oceanography Seminar.
A Mixed Upper Layer Ecosystem Simulation (MULES) Model for Assessing Plankton Abundance and Juvenile Fish Survival. Prof. T.R. Parsons, Oceanography, UBC. Room 1465, Biological Science Building. 3:30 p.m.

WEDNESDAY, FEB. 5

Pharmacology and Therapeutics Seminar.
Central and Peripheral Actions of Vasoactive Substances. Ms. Kathryn King, Pharmacology & Therapeutics, Faculty of Medicine, UBC. Room 317, Basic Medical Sciences Building, Block C. 12 noon.

Wednesday Noon-Hour Concert.
Roger Cole, oboe and Linda Lee Thomas, piano. Recital Hall, Music Building. 12:30 p.m.

Fine Arts Lecture.
Joanne Tod, an artist from Toronto who has had her work exhibited at the 49th Parallel Gallery in New York and who will be shown at the Art Gallery of Greater Victoria in February, will talk about her painting. Lecture is sponsored by the Canada Council, in conjunction with Simon Fraser University and the Emily Carr College of Art & Design. Room 104, Lasserre Building. 12:30 p.m.

Dentistry Seminar
Treatment of Periodontal Diseases by Local Drug Delivery. Dr. Max J. Goodson, MRC Visiting Professor, Forsyth Dental Center, Boston, MA. Room 388, J.B. Macdonald (Dentistry) Building. 12:30 p.m.

Geography Colloquium.
Expert Systems and Modelling in Cartography. Prof. T.K. Poiker, Geography, SFU. Room 201, Geography Building. 3:30 p.m.

Comparative Literature Colloquium.
Operatic Score as Text. Dr. Carolyn Finlay, English, UBC. Room A205, Buchanan Building. 3:30 p.m.

THURSDAY, FEB. 6

Medical Grand Rounds.
Adult Respiratory Distress Syndrome—Recent Developments in Pathophysiology and Management. Dr. James Russell, director, Intensive Care Unit, St. Paul's Hospital and Dr. James Hogg, director, UBC Pulmonary Research Laboratory, St. Paul's Hospital. Lecture Theatre Room G279, Acute Care Unit, HSCH. 12 noon.

UBC Wind Symphony.
Music of Bernstein, Grainger and Puccini. Martin Berinbaum, director. Recital Hall, Music Building. 12:30 p.m.

Cecil H. and Ida Green Lecture.
Expert Systems and the Social Implications of Artificial Intelligence. Prof. Herbert Simon, Computer Science & Psychology, Carnegie-Mellon University. Room 104, Angus Building. 12:30 p.m.

Environmetrics Seminar.
Standard Errors for Paleolimnologically Inferred Lake pH Histories. Dr. Gary Oehlert, Applied Statistics, University of Minnesota. Room 225, Math Building. 3:30 p.m.

After the B.A. ...
A forum to explore career options for students in the Faculty of Arts. Tonight's speakers are the Hon. Nathan T. Nemetz, Chief Justice of the Province of British Columbia; Michael Horsey, Deputy Minister of Tourism for B.C.; the Hon. J.V. Clyne, former chairman of MacMillan Bloedel, Supreme Court judge for 20 years and former UBC chancellor; and Gayle Stewart-Gray, manager of Public Affairs, First City Financial Corp. Ltd. To register, call 228-3313 or drop by Room C154, Buchanan Building. 5:30—7 p.m.

FRIDAY, FEB. 7

Dentistry Lecture.
New Concepts on Natural History of Periodontal Disease. Dr. Max J. Goodson, MRC Visiting Professor, Forsyth Dental Center, Boston, MA. IRC 4. 9:30-10:30 a.m.

UBC Contemporary Players.
Stephen Chatman and Eugene Wilson, directors. Recital Hall, Music Building. 12:30 p.m.

Pharmaceutical Sciences Seminar.
Studies with Monoclonal Antibodies to Somatostatin. Dr. John Brown, Physiology, UBC. IRC 3. 12:30 p.m.

Cecil H. and Ida Green Lecture.
Some Research Frontiers of Cognitive, Motivation, Emotion, Imagery. Prof. Herbert Simon, Computer Science & Psychology, Carnegie-Mellon University. Room 104, Angus Building. 12:30 p.m.

Regional Mass Spectometry Discussion Group.
ICP—Mass Spectometry. Dr. Dean Toye, ACME Analytical Laboratories. For information, phone 228-3235. ACME Analytical Laboratories, 825 E. Hastings St. 2 p.m.

UBC Wind Symphony.
Repeat of Thursday, Feb. 6 program. Recital Hall, Music Building. 8 p.m.

SATURDAY, FEB. 8

Retirement Recital.
Retirement Recital in honor of Dale Reubart with pianists Gaye Alcock, Patricia Hay, Nicholas Maloff and James Manson. Tickets are $8, $5 for students and seniors. Proceeds towards Department of Music Scholarship Fund. Recital Hall, Music Building. 8 p.m.

Notices . . .

Faculty Club Exhibition
Recent watercolor paintings by Victor Doray, Jan. 27 to Feb. 22.

Badminton Club
Faculty and Staff Badminton Club meets Tuesdays 8:30—10:30 p.m. and Fridays 6:30 - 9:30 p.m. (except Jan. 24 and Feb. 7) in Gym B of the Robert Osborne Sports Centre. New members welcome. Fees $10 per term. For more information, call 228-4025.

Issues in Iconicity
An interdisciplinary conference entitled Issues in Iconicity will be held Feb. 28 to March 1. Sponsored by the Vancouver Semiotic Circle and UBC's program in Comparative Literature. For details, call Lorraine Weir at 228-2365 or Shelagh Lindsey at 228-4492.

Faculty/Staff Exercise Class
Faculty and staff exercise classes will be offered on Mondays, Tuesdays and Wednesdays from 12:30 to 1:05 p.m. from Jan. 6 to April 4 in Gym E of the Osborne Centre. Instructor is Stanley Brown of the School of Physical Education and Recreation. For more information, call 228-3996.

Computer Science Courses
The winter/spring program of Computer Science courses begins the week of Jan. 27 with topics ranging from beginners to advanced. Register now for Programming in BASIC: Level 1; Computers Introduced; Assembly Language: The INTEL 8088; and Implementing Word Processing to Improve Productivity. Contact Vicki Ayerbe, Computer Science Programs, Centre for Continuing Education at 222-5276.

Language Programs
Non-credit conversational programs in French, Spanish, Japanese and chinese begin the week of Jan. 27. A Saturday morning class in Teaching Languages to Adults is also available. For more information, contact Language Programs and Services, Centre for Continuing Education, at 222-5227

Reading, Writing and Study Skills Centre
Non-credit courses to improve your reading speed and comprehension, essay writing, report writing, writing business letters and memos, writing research papers, vocabulary, spelling, speaking, and study skills begin the week of Jan. 27. For registration information, call The Centre for Continuing Education at 222-5245.

FIRST CLASS MAIL

UBC Reports is published every second Wednesday by Community Relations, UBC, 6328 Memorial Road, Vancouver, B.C., V6T 1W5
Telephone 228-3131. Lorie Chortyk, editor, Jim Banham, contributing editor.