UBC Reports

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President hosts top students

Nearly 50 of UBC's top first-year students were the guests of President David Strangway recently at a reception at Norman MacKenzie House.

Twenty of the students were winners of $2,500 Chancellor's Entrance Scholarships, awarded on the basis of scholarly achievements in high school. Holders who maintain a first-class average or stand in the top 10 per cent of their UBC class will be eligible to have the award renewed for a further three years of study.

Also at the reception were 23 students who were awarded President's Entrance Scholarships, each worth $2,000. Holders who maintain a first-class average or stand in the top 10 per cent of their class will be assured of a minimum of $1,200 in scholarship support for a further three years of study.

Other reception guests were the 1986-87 winners of the Mount Pleasant Branch 177 Royal Canadian Legion Scholarship, worth up to $5,000, and the $4,500 Bert Henry Memorial Scholarship. Both awards are renewable for three years if the winners maintain a first-class average or stand in the top 10 per cent of their class.

Library school celebrates

UBC's School of Library, Archival and Information Studies will celebrate its 25th anniversary on Nov.1 by honoring the first director of the school, Prof Sam Rothstein, who retires at the end of this year after a 50-year association with UBC as a student, teacher, researcher and administrator.

The Samuel Rothstein Distinguished Lectureship series will be inaugurated by the dean emeritus of library science at the University of North Carolina, Prof. Edward G. Holley.

His 5 p.m. lecture on Nov. 1, entitled "Scholarship, Leadership and the Technological Society," at the Ramada Renaissance Hotel will precede a 7 p.m. banquet that will conclude with reminiscences and entertainment by Prof. Rothstein and special guests Neal Harlow, former UBC librarian, and Basil Stuart-Stubbs, the current director of the school, which opened its doors in 1961.

Tours delight tourists

Campus walking tours were so popular this summer they brought people back for more. One woman enjoyed herself so much, she returned twice with different groups of friends each time.

UBC Community Relations tour guide Yusuf Nurani gave over 170 tours, showing off the campus site and buildings to more than 1,200 visitors. That's more than twice as many tours as last year and double the participants. Aside from the more visible attractions such as the Rose Garden and TRIUMF, one stop for out-of-town tourists was the board room at the Vancouver School of Theology which offers a spectacular panorama of the ocean.

Nurani said flexibility was the key in choosing the tour route. Secondary school groups wanted to get a feel of the university they might attend in the fall, convention delegates often wanted to find out about outdoor concerts and sports facilities. For senior citizens or handicapped people the walking distance was considerably shortened.

This year's campus explorers ranged in age from 4 to 89 years and came from all over North America and overseas. They included Expo visitors, elementary school students, people in language immersion programs, and even a touring school choir.

New library patent service

UBC will establish a new service to search out patent information with a $500,000 grant awarded under a federal-provincial agreement on science and technology development.

Joining the staff of the UBC Library on Nov. 1 to initiate the service will be Ronald Simmer, a librarian with patent searching experience. It's expected the service will be in operation by the end of November.

UBC's assistant librarian for public services, Bill Watson, said the patent-information service will be the first and most extensive to be located at a Canadian university. The service is expected to stimulate practical research in science and lead to more patentable discoveries, he added.

Mr. Watson said the service would provide "information" searches with the primary objective of improving access to patent literature. He emphasized that the service would not provide a "legal" search such as would be carried out by a patent attorney, who would determine whether or not an invention or process is patentable.

Some of the grant will be used to subsidize searches made on behalf of faculty, research staff and students at B.C.'s three public universities.

A primary source of patent information are data bases that provide basic information on the more than four million patents issued by the U.S. Patent Office and more than a million issued by the Canadian Patent Office.

The $500,000 allotted to the UBC project until March, 1990, will be administered through the provincial ministry of international trade, science and investment.

Researchers find treatment for Hodgkins disease

UBC cancer researchers are convinced they have a better treatment for advanced Hodgkin's disease.

The National Cancer Institute of Canada is in the midst of a five-year, nationwide trial to test its effectiveness.

"We are confident that our treatment will have the same cure rate or better than the drug treatment now used, while exposing patients to less toxicity for a shorter period of time," said Dr. Joseph Connors.

Dr. Connors is the major co-worker of Dr. Paul Klimo, creator of the new treatment. Both are members of UBC's Faculty of Medicine and the Cancer Control Agency of B.C.

Advanced Hodgkin's disease is a form of cancer thought to arise from the lymphocytes, a type of white blood cell that fights the spread of infection and is responsible for immunity. In Hodgkin's disease, these cells grow rapidly in a variety of abnormal forms and the body has fewer normal lymphocytes to fight infection.

"All cases of advanced Hodgkin's disease are treated with chemotherapy, using anti-cancer drugs to kill the cancer cells," said Dr. Connors.

"The standard chemotherapy treatment of Hodgkin's disease was developed in the U.S. in the 1970s. It's referred to as MOPP and cures about half of all patients.

"About 10 different drugs can be used against the disease but they can't be used all at once because of toxic side-effects. MOPP uses four drugs.

"An improvement was developed called ABVD which added four more drugs. In this regimen, patients receive the four MOPP drugs for one month, then the four ABVD drugs for a second month, then the MOPP cycle is repeated.

"Our regimen, called the hybrid chemotherapy program, uses seven drugs all at once. We've discarded the drug with the worse toxic side-effects, allowing us to increase the amount of one of the remaining drugs, and we administer the seven drugs in every cycle of treatment."

The hybrid regimen takes eight months to complete compared with 12 months for the MOPP and ABVD alternation.

Dr. Connors said the alternating MOPP-ABVD program cures slightly more than 75 per cent of advanced Hodgkin's disease patients.

The nationwide trial compares the MOPP-ABVD and the Vancouver hybrid regimens. Dr. Connors said the trial will continue for another two to four years.

Pat Buchannon, Assistant Director of Student Housing records the names as Dr. Cyril Finnegan pulls out another winner in the United Way early bird draw.

United Way draws winners

Over 400 donors to the United Way campaign had a chance to win one of 30 prizes in an early bird draw last Wednesday. In a short ceremony, Dr. Cyril Finnegan, chairman of the UBC United Way committee, drew the lucky pledge cards from a box placed at the Cairn. Prizes included green fees for two at the University Golf Club and vouchers for the Christmas Bake Shop. UBC President David Strangway took a walk across campus to present four of the prizes personally.

All donations received before the campaign closing date, October 31, will be eligible for the Final Draw on November 5, 12:30 at the cairn. And the prize--Dr. Strangway will be taking those four winners out for lunch.

The UBC United Way committee wants to increase campus participation this year to 15 percent. Last year 11 percent, just over 600 people, donated $94,000. The Canadian Union of Public Employees (CUPE) has already pledged $500 and plans to match each contribution from a union member up to $5.

IF YOU ASK ME....

An interview with Les Reed

Les Reed, one of Canada's leading forestry figures, joined UBC in 1984 after a successful career in government and the forest industry with organizations such as Weyerhaeuser Canada Ltd., the Council of Forest Industries, the B.C. Ministry of Forests, the Prices and Incomes Commission in Ottawa and the U.S. Forest Service. He served as Assistant Deputy Minister in charge of the Canadian Forest Service from 1980 to 1983, and has consulted on forestry problems in more than 30 countries world-wide. In this interview he discusses the need to produce more, and better, foresters in Canada.

UBCR: After five years with the government and 26 years in the forest industry and international consulting, why did you become an academic?

Reed: I think there should come a time when you look at the years you have left in your career and ask where you can make the most impact. I hope to make a lasting impression on forestry, and this can't be done by spending all my time with industry people downtown.

A good place to generate change in the industry is with the graduating classes in forestry. If I can infect young foresters with enthusiasm and a sense of resonsibility to their profession, my impact on forestry in the 1990s will be far greater than any impression I might make on officials in government and industry.

UBCR: A few years ago jobs were scarce for forestry graduates. Is this still the case?

Reed: No. B.C. is facing a substantial shortage of foresters in the next few years for several reasons.

To begin with, a large group of foresters who entered the profession right after the war -- people now holding key positions in the industry -- are retiring. The forest profession is like an unmanaged forest stand -- we have an abundance of old trees and a shortage of younger trees and seedlings. We have to train foresters to fill that gap.

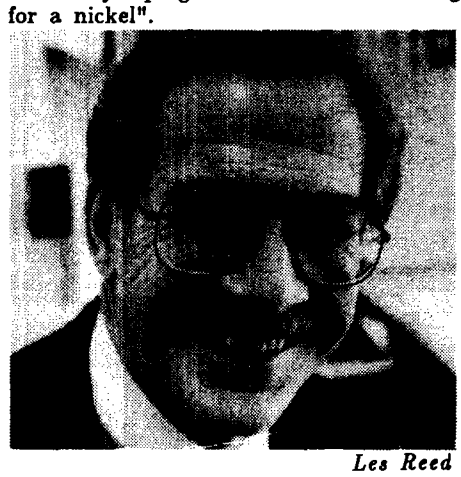
Secondly, we need more foresters because forest technology is advancing so rapidly. Forestry isn't as simple as it was 20 or 30 years ago -- we're not simply training loggers anymore, we're training silviculturalists and scientists. Canada's going to need its brightest young people out there in forestry science if we're going to catch up with competing countries like Sweden, Finland and the United States.

Finally, enrolment in Forestry is down right across the country. We at UBC have only one large class left, and they're due to graduate in 1987. After that, the number of graduates will be only half that of previous years. This reduction in graduates makes job opportunities good for the students, but will not meet the demand for foresters if opportunities continue to improve as they have in the last year.

We'd make better use of our forestry budget in this province if we hired two or three times as many field foresters as we have now. You don't save money by cutting off professional opportunity for skilled young people. The only way the industry is going to advance is by getting graduates with the latest knowledge and technology into the research laboratory and out into the field.

UBCR: Is hiring more foresters economical?

Reed: Of course it is. Take the area of reforestation for example. The province spends millions of dollars on reforestation programs each year. Foresters here at UBC and in the industry are working on new technology to increase the survival rate of seedlings. If we can improve seedling survival by just 10 per cent, it would save B.C. $20 million a year. That kind of investment in people and ideas pays off. The opposite course is what I call "jumping over a dollar looking for a nickel".



Les Reed

UBCR: What do you see as the forest industry's biggest problem right now?

Reed: My biggest concern for foresters today is their inability to communicate with the lay public. Foresters have to be able to go out into the community and articulate what forestry is about. There are a lot of misconceptions and concerns about forest renewal out there because foresters are ineffective in expressing their views.

UBCR: Why it this?

Reed: First of all it has to do with the type of person who is drawn to the forestry profession. A person attracted to this field generally shrinks away from the rough and tumble of debate. Most foresters are reflective, introverted types who prefer the solitude of nature to mixing with other people.

UBCR: How does this inability to communicate harm the industry?

Reed: I'll give you a specific example. Foresters are losing the use of chemical herbicides because of public pressure. Environmentalists have put the rush on foresters, and foresters have failed miserably in explaining the urgent need to use chemical herbicides and why they have been registered as safe to use. The result is that we may have to be satisfied with crops that are half or three-quarters their potential size. An alternative is to treat brushy sites manually, which often costs several times as much as using chemical herbicides. Either way the province loses out because foresters back down when they should be out in the community stating their position and clearing up misconceptions.

UBCR: How would you change this situation?

Reed: I think the university has a major role to play in making foresters effective communicators as well as competent silviculturalists and scientists. I recently took an informal survey of the elective courses my fourth year students had taken, and I was distressed at narrowness of their educational base. You can't hold people's attention and share your vision of forestry simply by talking science and statistics. You've got to be able to capture the imagination of the non-forester with images from poetry, art, philosophy, history and anthropology. UBC should be making sure that foresters leave this campus with a sense of history and some solid exposure to the arts, in addition to their training in science and technology. How to accomplish this in four years is admittedly a real challenge which is not made easier by the demands of the profession for technical competence.

But, if we don't do this, we're doing a real disservice to them and to all those people whose lives are profoundly affected by forestry.

CELEBRATE THE TEAM

Eliminate stress with REST

Over the years, few research teams at UBC can claim as many successes as those led by Prof. Peter Suedfeld, who has pioneered the use of stimulus reduction to help people stop smoking, lose weight, eliminate tension headaches and lower their blood pressure.

The success rates attained by the UBC teams using REST -- an acronym for Reduced Environment Stimulation Technique -- are very impressive.

Up to 55 per cent of some groups kicked the cigarette habit, some overweight people lost up to 25 kilograms, and subjects reported a substantial reduction in tension headaches after REST treatment.

Prof. Suedfeld says REST has also proved to be very promising in reducing high blood pressure. Currently, the UBC team is using the technique to help chronic insomniacs.

People chosen for REST projects enter one of two chambers -- a soundproof, unlit room or a flotation tank filled with an Epsom-salt solution.

In some studies, subjects receive messages over an intercom system from time to time. A recent innovation is the use of telemetering equipment which allows the research team to monitor the physiological condition of subjects constantly.

"REST," Prof. Suedfeld points out, "is a last resort for most of our subjects. They want to modify their behaviour but find that other methods don't work. We've found that the technique doesn't work for people who don't want to change."

While Dr. Suedfeld agrees that there is no one good theory to explain how REST works, the technique enables subjects to become much more attuned to internal processes and feelings they seldom pay attention to because of environmental distractions.

If the behaviour-management package is combined with treatment in one of the REST chambers, the research group has found that the data show an effectiveness rate equal to the sum of the two techniques used separately.

Prof. Suedfeld says he has only one disappointment after 25 years of using REST. Despite its demonstrated success, it's not available for patient treatment and is confined to a few research units in Canada.

"Canadians," Prof. Suedfeld points out, "pioneered research in this technique and successive teams have shown that it works in the treatment of a variety of conditions.

"Both professionals and lay people, however, continue to associate it with torture and brainwashing. It probably won't be widely used in Canada until the generation of university-trained psychologists and physicians which has grown up with the technique set up their own practices."

REST can be used to supplement behavioural self-management techniques that have a proven record of effectiveness. "For example, overweight people are taught to eat always in the same place, not to do anything while eating that distracts them from the amount they're consuming, wait before having more food because of the delay in the signals that say they're full, use a smaller plate so the portion looks bigger, that sort of thing."

The self-management techniques are taught to subjects during REST or just before they enter the REST situation, Prof. Suedfeld says, because there is evidence that people forget less if they enter the chambers immediately after learning something. In studies dealing with stress management, relaxation training may be given.

UBC's REST team, left to right, technician Lyle Hamer; psychology professor Dr. Peter Suedfeld, Ph.D. candidate Elizabeth Ballard, currently working with insomniacs; REST research coordinator Susan Bluck; and Ph.D. student Jane Mocellin, who works on the psychology of isolation.

LETTERS

Letters to the Editor are welcome.
Write to: The Editor
UBC Reports
Let us know what's on your mind.

UBC plans giant fundraiser

For the past year, campus and community leaders have been hammering out plans and policies for what will become the most extensive campus-wide fundraising campaign in the history of the university. It's due to begin in 1988/89. One of the plans slated for next spring is a market survey. UBC Chancellor Robert Wyman, chairman of Pemberton, Houston, Willoughby, will oversee the survey which will establish the "internal and external climate" necessary to run a major fundraising campaign.

As head of the study group, Wyman will be a high profile volunteer representing UBC in the community. "Everywhere I've travelled in Canada, I've been deeply impressed by the great concern and support that people have expressed for UBC." Wyman said. "I'm convinced there exists a tremendous groundswell of support for this university."

The behind-the-scenes organization for the campaign will be handled by the University Development Office under Chief Development Officer and Executive Director of the Alumni Association, Dan Spinner. The office also serves as a resource centre for faculty and others who want more information on managing a specific fundraising campaign. There are currently 28 such special interest campaigns on campus.

"One of the primary purposes of the Development Office is to encourage such enthusiasm and initiative, while at the same time helping to strengthen these campaigns." Spinner said. There is a real need to establish a co-ordinated approach to major donors, he added.

FUND RAISING A PRIORITY

University development is a top priority for UBC president, David Strangway who initiated a President's Advisory Committee on Development Policy last fall. This group is made up of university and community members, with faculty and student representatives soon to be announced. Strangway has emphasized that "while private dollars, even at optimal levels, will never replace adequate government support, these funds can make the difference in providing UBC with a margin of excellence that will be critical for our success over the next few years."

One of the Advisory Committee's first tasks was to take a hard-nosed look at where UBC stood in terms of current fundraising and determine whether it was ready to launch a major campaign. The Committee brought in experts from the University of California, at Berkeley, to assess the situation.

Their report said UBC was not ready. The report did indicate that "there exists a strong but latent goodwill in the community". But it warned that fundraising is the final step in a long program of donor involvement and cultivation, One of the report's recommendations was to fully involve faculty and administration in planning and setting goals for fundraising. Another was to have good community relations in place before before initiating a campaign.

CAMPUS SUPPORT VITAL

The so called Berkeley Report was widely distributed on campus as a first step in gaining university input. It led to the market survey. "There are three reasons for a market survey," said Dan Spinner. "To let people know you're coming, to test priorities, and to test potential giving levels or goal setting. People want to donate to a cause that is important and has potential for success. We must be well organized and know that our expectations are realistic when we go to the public and ask for contributions."

Spinner said special interest campaigns are a good way to prepare and test the market for a major campaign. The Germanic Studies department, for example, recently started a drive to raise funds for a $120,000 graduate fellowship. The drive began with a donation from the Eppich family of $50,000, and faculty demonstrated their support by adding $1,600. Spinner maintains that campus support from faculty and students goes a long way towards ensuring a campaign will be successful in the community.

Two of the key people in the major fundraising campaign are Academic Vice President Dan Birch (left) and Chancellor Bob Wyman.

WHERE THE MONEY GOES

After the market survey, the next step is to establish priorities for a major fundraising campaign. Academic Vice-President, Dr. Dan Birch, will be asking students, staff and faculty for their suggestions and ideas in the next few weeks, using an approach similar to the one used last year for selecting UBC's area of excellence. The general categories are: scientific research, expansion and maintenance of libraries, faculty renewal, student aid, and capital expenses.

Preliminary results are expected by February next year. From this list the Advisory Committee will draw up possible priorities and test them in the market survey. Not until then can a project list be drawn up for the major fundraising campaign. This "case statement" of projects will be the one that best serves the university's aims and objectives and builds on its strengths.

In addition to gathering a priorities list, the Development Office plans to hold a series of workshops with deans, department heads, faculty and administrators to familiarize them with fundraising issues as well as keep them up to date on the progress.

The university approach to planning a fundraising campaign must be "clear, comprehensive and participatory", recommends the Berkeley Report. This encourages the campus core to lend the kind of genuine support necessary to make a major campaign successful.

There are an enormous number of pre-campaign activities necessary in planning a major gifts campaign for a university as large as UBC, said one of the Berkeley fundraising experts, Kent Dove. "After the momentum is created, it is then a matter of running the race to the finish, a complex, exciting adventure that will serve the university well, both as it is done and after it is completed." Dove said.

New vaccine kills bacteria

A bacteria that kills thousands of people each year may have met its match in a new UBC vaccine.

The vaccine successfully immunizes mice against the bacteria. Drug companies are interested in the research and want to conduct clinical trials to see if the vaccine works in humans.

"Our progress so far give us every hope that we will succeed," said Dr. Elizabeth Worobec, a member of the UBC research team.

The bacteria is Pseudomonas Aeruginosa. It is an "opportunistic" bacteria present everywhere that causes secondary infections in people who are already ill. It usually attacks the lungs and is often the cause of death in patients with such diseases as cancer and cystic fibrosis.

The bacteria is highly resistant to most commonly used antibiotics.

Dr. Worobec of UBC's Microbiology Department said 17 strains of the bacteria have been discovered.

"We have identified six molecular structures called antigens on the cell surface of every strain of the bacteria," she said. "We developed the vaccine based on one of the antigens. Mice injected with the vaccine develop antibodies against the antigen which attack and kill any future invasion by any strain of the bacteria."

Principal investigator is Dr. Robert Hancock in UBC's Microbiology Department. The research is financed by the Medical Research Council, Natural Sciences and Engineering Research Council and drug companies.

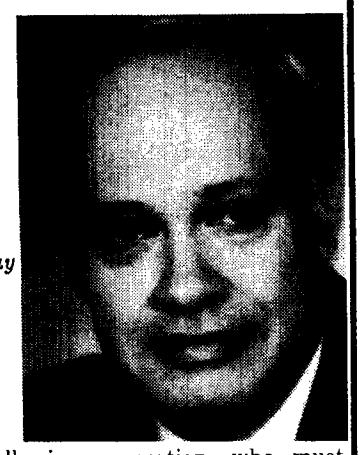
President reinforces teaching commitment

"Each year you worry as you go off to meet your first class. Is my material really as good a I think it is? Maybe I should have read that new book or attended that conference to be sure I know exactly what is happening in the subject? Will I be able to convey my excitement of the subject to yet another class? Will they all drop the course before the deadline date? Did I really choose the right textbook? Will they get the word and understand?"

These are some anxieties that run through the minds of faculty at the beginning of a school year, said UBC president Dr. David Strangway as he reinforced his commitment to teaching in an address he gave to the West Vancouver Rotary Club last month. Teaching is a big part of the scholarship and research of a faculty position, Strangway said, and the part that most directly serves people.

Strangway explained that on a campus the size of UBC, which has 36,000 students and 2,000 faculty members, it's easy to get lost in the numbers. "This simple recital of facts and figures about UBC paints a picture of a giant and uncaring institution. Have students simply become numbers or units to be processed? We at the university worry constantly about this issue as do all large, urban universities." Strangway said.

He reinforced the point that one of the university's most critical roles is the transfer of knowledge from faculty to students. Experienced university members pass on career and life skills



Dr. Strangway

to the following generation, who must learn to deal with an increasingly complex world. In this task the university takes it place alongside other community institutions.

"It seems clear to me that the support structures of advice and counselling, the assistance provided by peers, the help of families and the values of the churches are as important as ever." Strangway said.

"I have just participated in my first graduation ceremony at UBC." Strangway continued. "It was one of the most rewarding experiences of my life...The ceremonies focused on the human side of the university and on the joy of fulfilled ambition...After months of struggling with budgets and appointments, and funding and formulae, I was reminded and reassured that even a large university has a human scale and dimension."

Executives return

Businessmen are returning to the classroom, not to learn but to teach.

This year, three well-known B.C. business leaders are executives-in-residence in UBC's Faculty of Commerce and Business Administration this year. They bring years of experience in the real world of business to students preparing to launch their own careers.

The highly successful program has been in effect for years.

The dean of the Faculty says the insights of the executives in residence are invaluable.

"Our business school is committed to giving students a sound theoretical background in business and management," Dr. Peter Lusztig said.

"The executives have a wealth of experience in the practical world of business. They provide a balance between theory and practice and their contributions enrich our teaching program."

* Mr. David Devine, former chairman and chief executive officer of McGavin Foods and former chairman of the B.C. Business Council, is teaching a seminar on small business and entrepre-neurship.

He is also chairman of the Faculty's advisory council whose members are top executives in Canadian business, government and labor.

* Mr. Ian Gray, former chairman of CP Air, is teaching a seminar on business policy and serves as a consultant to students and faculty on business policy.

* Mr. Arne Olsen, chairman of Imperial Parking, is organizing a lecture series on small business and will also participate in seminars on small business and entrepreneurship.

SPECIAL REPORT

Forestry at UBC: managing

Forestry. Each year it contributes an estimated $20 billion to our national economy -- more than metals, food, agriculture, fisheries and automotive industries combined.

At UBC, researchers are developing new ideas and technologies in many specialities, including forest genetics, robotics and remote sensing, giving Canadian forestors a competitive edge in world markets.

"Forest technology is changing rapidly." says UBC Forestry Dean Robert Kennedy. "Canadian foresters used to be most concerned about harvesting forests. Now the focus is on reforestation as researchers race to produce the best quality trees in the shortest length of time."

Dr. Denis Lavender's team are increasing the survival of tree seedlings, helping to grow bigger and better trees for world markets. Lavender, head of the Forest Science Department, develops plant growth regulators that induce dormancy in seedlings, similar to hibernation in animals. The seedlings become more resistant to stress during transportation and replanting, a time when seedlings often die.

Others are developing new technology for the forest industry through interdisciplinary collaboration between researchers in forestry, engineering and science.

For example, Dr. Moss Kharadly of Electrical Engineering and Dr. David Barrett, head of Forest Harvesting and Wood Science, have developed a technique to grade lumber using microwave beams. The beams scan each piece of lumber, automatically "reading" the wood grain to assess its quality.

Remote images sensing are also valuable tools for the forest industry, providing information on tree ages and species, and showing damage caused by insects, acid rain, pollution and disease. "Remote sensing will revolutionize forest management," predicts forest researcher Dr. Peter Murtha. "Instead of using archival data up to ten years old, forest managers will be making decisions based on accurate, up-to-date information."

Research forest

Rarely does a forester from outside British Columbia visit the province without a trip to UBC's Research Forest in Maple Ridge.

The Research Forest, established in 1949 as an outdoor laboratory for research in forest resources, has an international reputation that draws more than 10,000 visitors to the site each year.

"The forest serves as a research, education and demonstration area," says Research Forest director Dr. Don Munro. "Although we only have seven permanent staff members, there's usually between 50 and 75 individuals doing research here on any given day. The number and range of projects under way in the forest make it an important resource for the forest industry in Canada."

More than 450 projects have been carried out in the 5,157-hectare Research Forest since 1949. About 100 studies are currently under way, on topics ranging from lake and stream ecology, fish and deer biology, forest productivity, climatology, stream water chemistry and forest genetics.

"We have researchers from several UBC faculties, SFU, the University of Victoria, BCIT, government agencies and various research organizations doing studies in the forest," says Munro. "And between them they publish their results in a wide range of publications. Our reputation spreads because of the quality of research being carried out here."

One of the most scenic spots in the Research Forest is Loon Lake, where UBC staff have built a lodge and camp facility that accommodates 110 visitors. The facility is presently being leased out, but Munro hopes the Research Forest will be able to use the lodge again soon for field schools, seminars and continuing education programs.

Munro has been busy recently with the development of another research forest in B.C. He has been named director of the 8,900-hectare UBC-Alex Fraser Research Forest near Williams Lake, which was announced in August by the provincial government. He will oversee the administration of the forest from Vancouver through a resident forest manager in Williams Lake.

"We're really excited about this development," says Munro. "It opens up all sorts of possibilities for research on problems unique to Interior forests."

If the UBC experience is any indication, the new Interior forest will be more than just a research facility for the residents of Williams Lake. Many people visit the UBC forest just to enjoy the sheer beauty of its trails and lake areas.

The UBC Research Forest is just 60 minutes from Vancouver. If anyone is interested in going for a visit, call 463-8148.

Waste makes money

UBC forestry professor Dr. Laszlo Paszner has made a discovery that could be worth billions of dollars to Canadians.

Paszner, a professor of forest harvesting and wood sciences, has perfected a technique that breaks forest waste products down to their elemental chemical compounds, glucose sugar and lignin. These compounds can then be converted into valuable liquid fuel products. The export market for the fuels is estimated at up to $50 billion a year.

Paszner's one-step technique breaks down wood products using an organic solvent with acid and water. At high temperatures the process takes only 30 seconds.

"We have about 200 million tons of waste materials available in Canada from the forest and agricultural industries," says Paszner. "If we convert these materials into liquid fuels, Canada could become a leading exporter of fuel additives such as ethanol."

Ethanol is blended with gasoline to act as an octane enhancer. The market for ethanol and other liquid fuels has increased dramatically as the result of a U.S. ban on lead as an octane booster. Canada plans to reduce the amount of lead in gasoline products by two-thirds by the end of 1987.

"The market for liquid fuels in the U.S. alone is enormous," says Paszner. "The American gasohol blending program calls for a fuel blend of 90 per cent gasoline, ten per cent alcohol. The U.S. consumes 180 million tons of gasoline each year, so Americans will have to rely heavily on imported liquid fuels to satisfy the requirements of the program." Paszner predicts Canada could supply half of the projected U.S. need if wood conversion was carried out on a commercial scale throughout the country. He adds that development of the industry would create thousands of new jobs for Canadians.

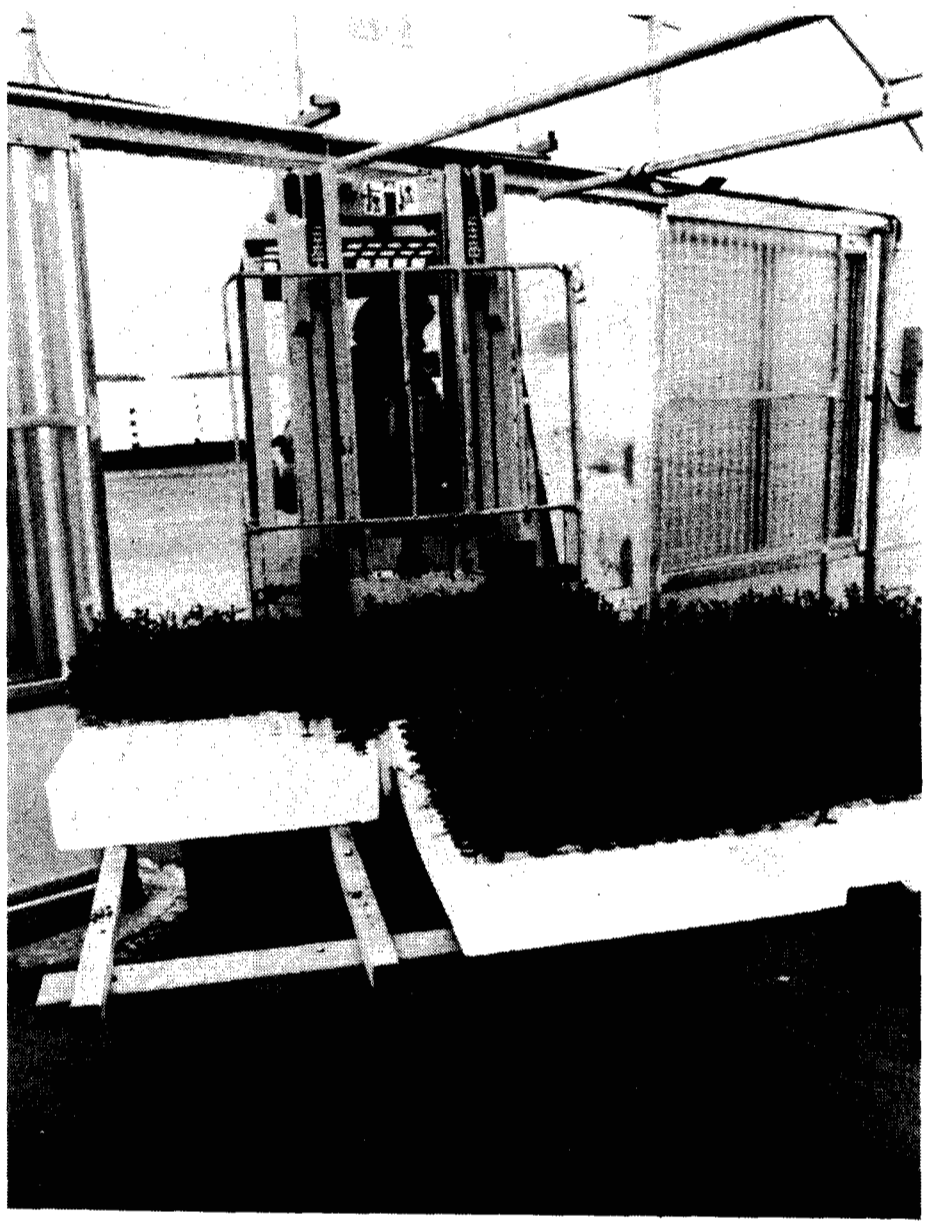
A recent report by the House of Commons Standing Committee on Energy recommended that Canada accelerate research in this field.

"Oil prices are fairly low right now, but they could climb again anytime," says Paszner. "With the vast amount of forest waste material available in Canada, we have the potential to extend our oil supplies dramatically and to create a new industry within the forest sector."

Paszner believes the real gold mine will come from products derived from the lignin compound. "We're still experimenting with different products we can get from lignin, but the results so far are very exciting. It appears lignin can be converted to high quality fuels that are presently only available in petrochemicals."

He adds that the percentage of fuel additives being used will probably increase in upcoming years. "A car can run on a 20 per cent alcohol blend without any modifications to the engine. With some alternations 100 per cent alcohol can be used."

Paszner's process is being used in a pilot plant in Brazil, where 80 per cent of the country's cars run on alcohol blend or straight alcohol fuel.



Clean home for fish

Cutthroat trout are already moving back into a rehabilitated creek in UBC's Research Forest as the result of a habitat improvement project carried out by UBC forester Cheryl Power.

Power is studying ways to improve fish habitats in areas that have been harmed by activities such as mining, highway construction, forestry and human settlement. Her goal is to increase fish populations to meet the growing demand for commercial and sport fishing stocks.

Intensive forestry operations near the Research Forest creek had resulted in a dramatic decline in the population of the trout. "The habitat was very poor because of chemical imbalances in the water, excessive amounts of silt, erosion, and high water temperatures," says Power. "We knew that the creek could support a much larger population if the habitat was improved."

Power and her colleagues built baffles in the creek to stop erosion and trap water into small pools. "These pools are critical because they offer protected areas where fish can rest and feed. The pools also trap organic material from the surrounding trees and vegetation, providing food for the fish."

The group chose organic materials to build their creek structures, using logs, root masses, rocks and other 'waste' materials from the nearby forest site. They also selected carefully the vegetation they put along the creek bed. "We chose plants that would be most useful in the food chain of this particular ecosystem," says Power. "It's critical to analyse the environment of any creek before you set out to change it."

Power, who joined the Research Forest after graduating from UBC's Faculty of Forestry in 1983, says the techniques used to improve creek environments affected by forestry operations can also be applied to creeks which have naturally poor fish habitats.

"This is a relatively new area of research in Canada, but one that is attracting an increasing amount of attention," says Power. "Maintaining and even increasing our fish populations is economically and environmentally important to B.C."

our number one resource
B.C. missing tree–mendous opportunity

British Columbians are losing money because they can't see the forest for the trees.

"B.C. isn't capitalizing on one of its greatest assets –– its spectacular scenery," says Dr. Peter Dooling, a professor in the Forest Resources Management Department and a leading Canadian expert on park and forest conservation and recreation. "Too many British Columbians tend to view forests solely as a source of timber and wood products. They overlook the economic benefits that recreation and tourism industries could bring to towns in B.C. The development of forest recreation and tourism activities is an excellent opportunity to create new jobs in forest–dependent areas in all parts of the province."

He points to the agressive marketing and promotion strategy that drew millions of visitors to B.C. for Expo 86. "We've got to keep this momentum going, building and promoting recreational and tourism industries."

Dooling says B.C. must keep developing forest management policies that promote a multi–purpose use of forests. "For example, a forest that will be ready for harvesting 30 or 40 years down the line could be used as a recreational area until that time. Beyond the concern for the preservation of natural areas, there's no reason an area has to be designated solely for industrial or recreational use."

He says outdoor activities are growing in popularity in North America.

In the past year Dooling has received distinguished centennial service awards from both the federal government and Parks Canada.

Dooling has led numerous studies on the use of forests for the provincial and federal governments, and has served on provincial, national and international committees.

He was the author of a major report for the provincial government on the scenic and recreational value of a 1,700–mile corridor in northern British Columbia known as the "Golden Circle." The reports included an extensive inventory of the natural and human history of the area, scenic features, existing and potential land uses, points of historical interest and potential park areas. "We provided a framework and extensive data base on how the north was presently being used for recreation and tourism and how it could be developed," says Dooling.

Most recently he played a key role in the organization of Heritage for Tomorrow, the Canadian Assembly on National Parks and Protected Areas held in Banff last year to celebrate the National Parks' centennial.

"Surveys show that more and more people are getting involved in recreational activities such as hiking, mountain climbing, water and winter sports. B.C.'s tremendous mountain, coastal and freshwater resources, good accessibility and climate make it ideally suited to become a major recreational centre on the continent. Development of this industry could provide a real boost to the economy."

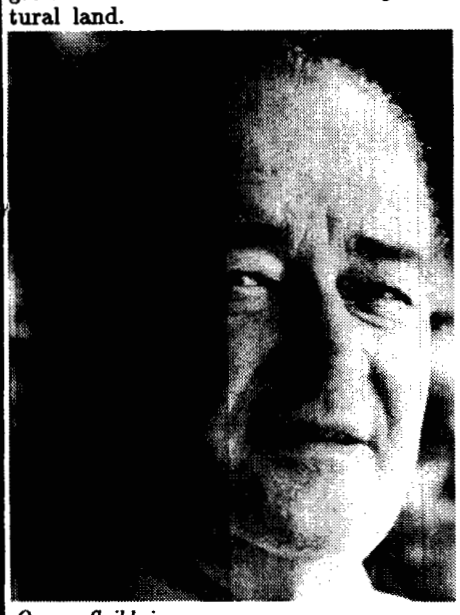
Dooling has played a major role in training Canadian foresters in the areas of park and forest conservation, recreation management and tourism–related forest uses. In 1968 he established Canada's first teaching and research program in park and recreational resources at UBC, a program that has continued to be a leader in its field.

Graduates of the program are serving in key positions in park, forest, and tourism agencies throughout Canada. They are also employed as far afield as Australia, Switzerland, Peru, Kenya, the United Kingdom and New Zealand.

Expert aids China

It was a catch–22 situation for Chinese foresters. As China's population increased, the demand for timber, pulp and paper, fuel and other wood products also increased. But, because of the growing population, the country was running out of land that could be used for reforestation. Faced with depleting native forests and a critical shortfall of wood products, China turned to foreign experts for help, among them UBC forestry professor Oscar Sziklai.

Sziklai, who comes from a family with five generations of foresters, has earned an international reputation for his work in the field of forest genetics and tree improvement. Since 1978 he has made nine trips to China, lecturing and advising Chinese foresters on methods to regenerate their forests, most specifically on how to improve the growth of Paulownia trees on agricultural land.



Oscar Sziklai

"The nine species of Paulownia are fast–growing shade trees native to China," says Sziklai. "Chinese foresters are worried because Paulownia trees are becoming scarce as land is cleared for farmland and urban development."

Sziklai is providing expertise on how China can select and breed the best of the Paulownia trees. "In forest genetics we select trees with the most desireable characteristics –– trees that grow quickly, are strong and have high quality wood –– and genetically breed seedlings with these characteristics. The value of the timber and wood products increases dramatically when you can consistently grow high quality trees."

Sziklai's work in China earned him an honor never before given to a non–Chinese forester ––last year he was named an honorary member of the 70,000–member Chinese Society of Forestry.

Phase I of the program, which began in 1983 and ended this spring, has been extremely successful. Sziklai will continue to work with China on the second phase of the project.

The Chinese have a fascinating approach to land use, says Sziklai. "With such a huge population, food production is always their first concern," he says. "Their 'straw hat plot' rule states that any piece of land as large as a Chinese straw hat must be used for food production."

Agro–forestry –– planting trees among agricultural crops –– is carried out extensively in China. "Agro–forestry is economical because every available plot of land has a double purpose. With the proper tree species and spacing, the crop yield increases," says Sziklai.

In the Paulownia project, seedlings were distributed to farmers who received a premium for each tree grown. "A bonus system for farmers encouraged them to water and fertilize the trees and they did with their crops," says Sziklai. "For instance, the farmer who grew the tallest tree might get a bicycle or a television set. The incentive program was very successful."

Sziklai has recently become involved in a second tree breeding program in northeastern China at the request of the Chinese government.

Keeping watch on the environment

Dr. Michael Feller of UBC's Forest Sciences Department is working to help forest companies make decisions that will benefit B.C.'s economy without sacrificing its natural resources.

He's conducting a wide range of studies that measure how various forestry practices, such as slash burning and clear cutting, affect the natural environment. Feller's goal is to provide forest companies with information on how logging and other forestry activities can be carried out with the least amount of harm to surrounding ecosystems.

"Forestry activities result in very specific changes within an ecosystem that can sometimes be harmful to plants, animals and humans in the area," says Feller. "In most cases a slight alteration in a forest practice, based on a scientific understanding of the environment, can reduce or eliminate any harmful effects. Our goal is to help foresters makes decisions that are both economically and ecologically sound."

He offers some examples. "There was some concern in the United States recently because drinking water from a particular stream was found to contain unsafe levels of nitrate, a substance which can be toxic to humans," says Feller. "This had resulted from the clearing of a surrounding forest area and the application of herbicides. When an area is cleared, it creates the perfect environment for certain organisms to convert nitrogen compounds in the soil and air into nitrate. The nitrate is then washed into the stream. A situation like this can be avoided if foresters are aware of the conditions that trigger these natural chemical reactions."

He says some alterations to forest practise are very simple. "For example, if trees growing beside a stream are cleared, the amount of sunlight hitting the stream water may increase. The resulting rise in water temperature can be extremely harmful to fish populations. This can easily be avoided by leaving a strip of trees beside the stream when the area is cleared."

Feller's research includes studies on the effects of forestry practices on streams, the impact of different kinds of slash burning on the environment and a long–term study on how acid rain affects forests.

"The aim of our research is two–fold," he says. "We're trying to identify chemical and physical reactions in the ecosystem that may be negatively affected by forest practices, but our long–term goal is to provide alternatives for forest managers based on what we know about different types of ecosystems."

Feller's research on stream water chemistry, based at UBC's Research Forest in Maple Ridge, is one of the largest and most significant projects of its kind in Canada. Also of national interest are measurements on rain chemistry collected by Feller in the UBC Research Forest since 1970. "We have the longest continuous record of the levels of chemicals contained in rain water in Western Canada. This is of particular interest to groups concerned about acid rain levels," says Feller. "We're collecting data and also studying how the acid is absorbed by forests. It appears that the acid is neutralized by chemical reactions in the soil before it can enter streams, but we're concerned that the soil will eventually lose this neutralizing ability."

In another research project, Feller is studying the effects of controlled fires on forest environments to find the most effective type of slash burning for particular ecosystems. He and his graduate students are currently carrying out this research at the UBC Research Forest and at sites near Smithers and the Kootenays.

Press goes for winners

When an exiled prince falls in love with his married cousin, their illicit affair is doomed from the start. An illegitimate child is born and the two lovers strive to keep their relationship a secret amidst the politics and power play of the eighteenth century French court. This may sound a bit like a cover of a historical romance novel. In fact, it is a historical biography and there is a romance--but it's no novel.

The Love of a Prince is a book by Laurence Bongie, head of the UBC French department, about the life and times of one of the legendary heroes in English history, Bonnie Prince Charlie. It's the result of almost ten years of research in public and private archives which turned up a series of love letters written by Louise, Princesse de Rohan to Prince Charles.

Marie Stephens, marketing manager, for the UBC Press is particularly excited about The Love of a Prince which was published by the Press in June. "It has garnered interest from publishers in the United Kingdom and the United States," she said. That means a potential for international recognition for Dr. Bongie and the university. It also represents a move in the right direction for the Press. "One of our goals is to really penetrate the U.S. market, it's very important to us," Stephens said. Currently, only about one-third of book sales go to U.S. and foreign markets, the other two-thirds are marketed in Canada.

Bongie's book is also significant because it's a trade journal and, in the publishing business, that means it can be marketed through any bookstore instead of being targeted at a strictly academic audience.

When the layman picks up The Love of a Prince at the bookstore in his local mall, he'll notice the book was written by a professor at his local university. "It's one way the public can see what their tax dollars are paying for," Stephens said.

The UBC Press has had a steady number of successes since its inception in 1971. It began by publishing four books a year and now produces over twenty-five a year, with annual sales of half a million dollars.

The first publications were limited to the disciplines of Canadian history, Canadian literature, and Asian and Pacific studies. When Jim Anderson joined the Press in 1982 as Executive Director, the Press began to broaden its field of publication. It now publishes books on a number of subjects from Botany to History, Angling to Theatre and wants to expand even more.

"We're interested in developing philosophy and economics," Jim Anderson said. "And we have no established base in sciences; that's an area we want to build up." He notes that a reputation for publishing in a certain field brings in authors with their manuscripts.

However, reputation is just one of the ways to attract marketable material. "We do get a number of proposals through the mail," said Brian Scrivener, acquisitions editor for the Press, who evaluates manuscripts that appear to have potential. The Press acquisitions editors travel across Canada and occasionally to the United States to establish contacts in academic communities and actively encourage people to think about preparing a manuscript for publication by the Press.

Marie Stephens and Jim Anderson with some of the UBC Press publications.

Many of the larger universities in Canada have a university press, most of them concentrated in the eastern part of the country. Scrivener adds that the personal touch is important. "We're easily overlooked unless we actively approach people. Geographically, we are out on the periphery and we need to establish contacts and sales on an ongoing basis."

The majority of publications from the Press fall into the category of scholarly or academic works which are marketed to libraries and universities. University and college course books, though fewer in number, generate the most revenue. And general trade books like Love of A Prince can be marketed to a wider readership.

Jim Anderson would like to see Canadian bookstores put more scholarly books on their shelves. For the bookstore owner, however, they are not as financially appealing as other genres. From a publisher's point of view, the largest English speaking academic book market is in the United States, one reason why the Press is anxious to become more well known over the border.

Through international publishing agreements, books put out by the Press are made available in other countries. To this end, the Press has agents representing its interests in the United Kingdom and Europe, as well as the Pacific Rim. And, in addition to selling on the international market, the Press also looks for authors in the United States and overseas. "The UBC Press can really extend the image of the university all over the world by publishing good books of interest to people in many countries,' Anderson said.

The working relationship between the Press and a potential author, from manuscript copy to actual publication, can cover several years. A book on Canadian artist, Jack Shadbolt, which was published to coincide with an exhibition of his work at the Museum of Anthropology this summer, was two years in the making. "They proposed a book to accompany the show," Scrivener said. "We sat down to discuss prospects and practical problems, and work out a schedule and division of labour."

The manuscript was written by museum curator and associate professor of Anthropology, Marjorie Halpin, and the museum provided all of the illustrations and design. The Press took on all of the editorial responsbilities, revising copy, both work in progress and final copy. They were also responsible for the physical production. The result was Jack Shadbolt and the Coastal Indian Image, a hard-cover book on the artist and his work, illustrated with colour and black-and-white photographs.

The Press printed five thousand copies of the book on the first run. "This was based on prospects as well as past sales of similar books," Scrivener said. One similar book, Totem Poles: An Illustrated Guide, also by Marjorie Halpin, was printed in 1981 and sold over 20 thousand copies. Some copies of the Jack Shadbolt book will be sold in the museum gift shops, the rest will be marketed by the Press.

Academic manuscripts are evaluated and critiqued by experts in the field to find out if they have publishing potential. A standing press committee of the university looks at all manuscript proposals and votes on whether they should go ahead or not. "This is to protect the standards and reputation of the university," Anderson said.

Book sales are certainly not limited by the number printed on the first run. If a book sells well it can be reprinted again and again. One such book is The Emergence of Social Security in Canada by UBC Social Work professor, Dennis Guest, which has been picked up by several universities in Canada as a core text.

Sales were so good it was reprinted four times before being revised and reprinted again in August. "I foresee it will be reprinted on an annual basis and revised and updated in another five years," Scrivener said. "The Press encourages authors to update and revise their work if they think a text will continue to be popular. "It's a good way to ensure continued sales," he added.

Continued sales is what Jim Anderson would like to see in the future. "We can only accomplish our goals by increased sales revenue," Anderson said. One of those goals is to reach more readers who will pick up a book and read, on the inside cover, "published by the UBC Press".

UBC grows Royal plants

UBC's Botanical Garden has cultivated a royal treat for England's Prince Charles and Princess Diana. Vancouver Jade, a new plant species introduced to the B.C. public this year through UBC's unique Plant Introduction Scheme, will be part of a collection of native B.C. plants presented to the royal couple by the provincial government to commemorate their visit to B.C. earlier this year. Pictured above with Vancouver Jade plants is the Botanical Garden's curator of collections, Dr. Gerald Straley.

PEOPLE

New dentistry appointments

A re-organization of the Faculty of Dentistry consolidates five clinical departments into two departments effective Oct. 1.

"The new structure will provide a better opportunity for the advancement of knowledge in the clinical disciplines as well as develop a more integrated clinical undergraduate program," said Dr. George Beagrie, dean of the Faculty.

The Oral Biology Department, the Faculty's basic science unit, has beer slightly expanded.

Said Dr. Beagrie: "We expect the Oral Biology Department will act as a catalyst to provide basic scientific knowledge to the two clinical departments.

"The Faculty will achieve a more appropriate place within the scientific community through an expanded graduate program and particularly our new Ph.D program in oral biology."

Dr. Marcia Ann Boyd is assistant dean of the Faculty effective Oct. 1. Dr. Boyd is the president of the Association of Canadian Faculties of Dentistry and is the first women appointed to the dean's office of any school of dentistry in Canada.

Dr. John G. Silver, head of the former Oral Medicine Department, is the head of the new Clinical Dental Sciences Department.

Dr. David Donaldson is head of the new Oral Medicine and Surgical Sciences Department. He was acting head of the old Oral and Maxillofacial Surgery Department.

New head of the Oral Biology Department is Dr. Donald M. Brunette. He succeeds Dr. Barry McBride who is the new head of the Microbiology Department in the Faculty of Science.

* * *

The University Singers, led by **Prof. James Fankhauser** of the School of Music, has won first prize in the 1986 National Radio Competition for Amateur Choirs, adult mixed choir division.

Finalists were selected from 60 regional entrants. The award, announced on Sept. 28 on the CBC stereo program "Choral Concert," carries with it a cash prize of $1,500.

In the same competition, **Prof. Cortland Hultberg**, conducted an 18-voice group called Phoenix, which won first prize in the chamber choir division and second prize in the contemporary division.

CBC listeners will be able to hear winners on Nov. 21 when "Mostly Music" rebroadcasts highlights at 10:30 p.m. on AM radio and at 11:30 p.m. on FM stereo.

Professor Lois M. Bewley from the School of Library, Archival and Information Studies will be the key-note speaker at the Symposium on Aging in Toronto. Bewley and colleague Sylvia Crooks wrote Urban Public Library Service for the Aging in Canada, a study published by Dalhousie in 1984. The Ontario Ministry of Citizenship and Culture is sponsoring the November 5th symposium.

* * *

Karen Firus, a student last year in UBC's film and television studies program, was the winner of the 1986 Norman McClaren Award, awarded annually to the maker of the best student film in Canada. The award, which includes a prize of $1,000, was awarded to "Fashion 99," a futuristic thriller.

At the 1986 B.C. Film Festival, "Bundle Deck," by UBC students Kevin Hall and Nancy Forstrom won first prize and Ross Weber's "Lack of Funding" won second prize. "Cheek to Cheek," by Michelle Bjornson and Ray Hartley captured second prize in the experimental division and honorable mention went to "A Faceful of Ugly," by Rovin Basi.

* * *

University **Professor Michael Shaw** of plant science and botany joined a select group of Canadian scientists recently when he was elected a fellow of the Canadian Phytopathological Society. He is widely known for his work on host-parasite relationships, particularly rust diseases on grain.

At the same meeting at the University of Saskatchewan, **Prof. Clayton Person** of the botany department was elected an honorary member of the society.

* * *

Funeral services were held Oct. 12 for **Ben Chud**, a UBC graduate and 26-year member of the faculty, who died suddenly on Oct. 9. He was 64.

Mr. Chud was awarded the degrees of Bachelor and Master of Social Work by UBC in 1957 and 1959, respectively. He taught initially in the UBC School of Nursing and was appointed to the staff of the School of Social Work in 1961.

Mr. Chud, in addition to his UBC duties, was active in a number of community organizations, including the Canadian Mental Health Association, the Western Institute for the Deaf and professional organizations.

He is survived by his mother, his wife, two daughters and two brothers.

Dr. Michael Duke, who teaches Chinese in the Department of Asian Studies, is at Peking University in China as resident director of a special language program designed to teach Chinese to foreigners. The China Co-operative Language and Study Program, which Dr. Duke says is probably the best program in China for learning Chinese, is run by the Council on International Educational Exchange.

Prof. Patricia Marchak of the Department of Anthropology and Sociology is the 1986 recipient of the John Porter Award of the Canadian Sociology and Anthropology Association for her book *Green Gold: The Forest Industry in British Columbia*, published by the UBC Press. Prof. Marchak has been invited to give the John Porter Lecture at the association's 1987 meeting in Hamilton, Ont.

Blood antibodies prevent disease

The familiar adage "an apple a day keeps the doctor away" could take on new meaning as a result of research being carried out by Prof. Shuryo Nakai of UBC's Food Science Department.

Prof. Nakai and his colleagues in the Faculty of Agricultural Sciences are using a technique called Immobilized Metal Affinity Chromatography (IMAC) to recover antibodies from eggs, milk and from the blood of packing house animals. The isolated antibodies can then be put into a wide range of food products for humans and animals to help built up resistance to specific diseases.

"We already know that the plasma in animal blood is a high-quality source of protein for both animals and humans," says Prof. Nakai. "But we believe that the immunoglobin found in the plasma can also be used in animal feed and food products for humans to prevent the onset of a variety of diseases."

The technique being used by Prof. Nakai and his colleagues to isolate the antibodies is simple and inexpensive. After collecting the blood, sodium citrate is added to prevent clotting when the red blood cells are removed. Prof. Nakai then separates the plasma into edible protein, which is used in processed foods, and serum. It is the serum that contains the immunoglobin, or antibodies.

"The immunoglobin is chemically separated from the rest of the serum protein by passing it through an IMAC column," says Prof. Nakai. "During this process the purity level of the immunoglobin is raised to 90-95 per cent, the level required for medical use."

Several companies in Japan and the United States have expressed an interest in importing the isolated immunoglobin. "There are a number of potential uses for the antibodies," says Prof. Nakai. "Our particular interest is in developing ways in which the immunoglobin can be added to food products."

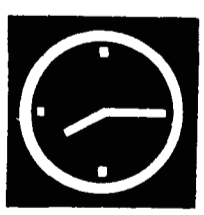
In previous studies, the addition of antibodies to food has had a dramatic effect on resistance to disease in both humans and animals. A study carried out by Prof. Bruce Owen of UBC's Animal Science Department showed that adding immunoglobin to feed for young piglets who were separated from their mother at birth increased survival rate from less than one per cent to more than 80 per cent. In a Swiss study, the milk from cows who had been injected with the E. Coli strain was given to human infants and dramatically reduced their incidence of diarrhea.

"I believe this area of research could lead to a whole new dimension in preventive medicine," says Prof. Nakai. He is currently developing a technique to identify specific antibodies present in blood samples.

Collaborating with Prof. Nakai are Profs. David Kitt and R.C. Fitzsimmons of UBC's Animal Science Department and Prof. Brent Skura of the Food Science Department.

UBC Calendar

THE VANCOUVER INSTITUTE



Saturday, Oct. 25
Lasers and Man. Prof. Arthur Schawlow, Physics, Stanford University.

Saturday Nov. 1
Toxic Rain and Toxic Oceans. Dr. J. Christopher Bernabo, President, Science and Policy Associates, Inc. Washington, D.C.

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

SUNDAY, OCT. 26
Band Festival Concert.
Grade 11 - 12 Honour Band. Johannes Somary and Martin Berinbaum, directors. Old Auditorium. 1:30 p.m.

MONDAY, OCT. 27
Medical Oncology Lecture.
The Role of Neoadjuvant (Preoperative) Chemotherapy in the Management of Cancer. Dr. J. Ragaz, Medical Oncology, Cancer Control Agency of B.C. Lecture Theatre, B.C. Cancer Research Centre, 601 West 10th Avenue. 12 noon.

Pacific Coast Lectureship.
Recent Advances in Free Radical Cyclisation. Prof. A. J. Beckwith, Chemistry, Australian National University, Canberra. Room 150, Chemistry Building. 12:30 p.m.

Mechanical Engineering Seminar.
Determination of Atmospheric Turbidity. Prof. M. Iqbal, Mechanical Engineering, UBC. Room 1215, Civil and Mechanical Engineering Building. 3:30 p.m.

Biomembranes Discussion Group.
Cell Biology of Insulin Action. Dr. Sam Cushman, National Institute of Health. IRC 4. 3:45 p.m.

Astronomy Seminar.
Blue Stragglers. Dr. James Nemec, Geophysics and Astronomy, UBC. Room 260, Geophysics and Astronomy Reading Room. 4 p.m.

UBC Chaplains Symposium.
Dimensions of Poverty. First in a series on Religion and Economics. Dr. Majid Rahnema, United Nations Regents Professor, University of California, Berkeley. For further information call, 224-1614. Room A203, Buchanan Building. 7:30 p.m.

UBC Chaplains Symposium.
Models for Development. Second in a series on Religion and Economics. Dr. Majid Rahnema, United Nations Regents Professor, University of California, Berkeley. Room A205, Buchanan Building. 12:30 p.m.

TUESDAY, OCT. 28
Chemistry Seminar.
The Dynamics of Macromolecules. Prof. Martin Karplus, Chemistry, Harvard University. Room 250, Chemistry Building. 1 p.m.

UBC Chaplains Symposium.
Making the Economy Work Better. Olaf Klasen, Director, Finn-Est Institute. Room B327, Buchanan Building. 2:30 p.m.

Distinguished Lecturer Series.
Circulating Fluidized Bed Research at UBC. Prof. J. R. Grace, Chemical Engineering, UBC. Room 317, Frank Forward Building. 3:30 p.m.

Statistics Seminar.
The Minimax Betting Strategy. Dr. Tomek Brus, Statistics, UBC. Room 102, Ponderosa Annex C. 3:30 p.m.

Comparative Literature Colloquium.
Framed Voices: The Polyphonic Elegies of Kogawa's Obasan and Hebert's Les Fous de Bassan. Buchanan Penthouse. 3:30 p.m.

Oceanography Seminar.
Neopolitan Ice Cream, Copper and Manganese in Sediments Near the Mexican Margin: Diagenetic Contrasts. Dr. T. F. Pedersen, Oceanography, UBC. Room 1465, Biological Sciences Building. 3:30 p.m.

UBC Chaplains Symposium.
Models of Cooperation. Third in a series on Religion and Economics. Ms. Delores Huerta, United Farmworkers of America. Room A203, Buchanan Building. 7:30 p.m.

WEDNESDAY, OCT. 29
Adult Education Seminar.
Women and Development. Afsaneh Eghbal, Iranian anthropologist and novelist (author of 'The Wandering Species') and authority on Third World women. Enquiries: 228-5822. Adult Education Research Centre, 5760 Toronto Road. 10 a.m.

Forestry Seminar.
Vision of Success - Short Rotation Intensive Culture of Cottonwood. Prof. Donald T. Lester, Forestry, UBC. Room 166, MacMillan Building. 12:30 p.m.

UBC Chaplains Symposium.
Models of Cooperation. Fourth in a series on Religion and Economics. Ms. Delores Huerta, United Farmworkers of America. Room A205, Buchanan Building. 12:30 p.m.

Poetry Reading.
Reading sponsored by the English Department. Andrew Parkin and Warren Stevenson, English, UBC. Buchanan Penthouse. 12:30 p.m.

Noon-Hour Recital.
Wes Foster, clarinet and Linda Lee Thomas, piano. Recital Hall, Music Building. 12:30 p.m.

UBC Calendar

Adult Education Seminar.
Rethinking Development – Considering Extent to Which Development Efforts Perpetuate Colonization. Majid Rahnema, former Minister of Higher Education in Iran and co-author of the Faure Report. ("Learning to Be"). Enquiries: 228-5822. Adult Education Research Centre, 5760 Toronto Road. 1:30 p.m.

UBC Chaplains Symposium.
Making the Economy Work Better. Olaf Klasen, Director, Finn-Est Institute. Buchanan Penthouse. 2:30 p.m. Continues at same time on Oct. 30.

UBC Chaplains Symposium.
A Time to Rise. Canadian Farmworkers Union. Room 208, Scarfe Building. 2:30 p.m.

Fine Arts Lecture.
John Massey, Toronto sculptor, will speak on his work. Room 107, Lasserre Building. 2:30 p.m.

Applied Mathematics Seminar.
Algorithms on Rings of Processors. Prof. Andrew Adler, Mathematics, UBC. Room 229, Mathematics Building. 3:45 p.m.

Animal Resource Ecology Seminar.
A Revolution is Underway in Data Analysis. Dr. Donald Ludwig, I.A.R.E. and Mathematics, UBC. Room 2449, Biological Sciences Building. 4:30 p.m.

UBC Chaplains Symposium.
Business vs. Social Services. Fifth in a series on Religion and Economics. Mr. Arnold Saltzman, Jewish Family Service, Los Angeles. Limited admission $8.00 (includes dinner). Hillel House. 5:30 p.m.

Cinema 16.
Mishima: A Life in Four Chapters. Film biography of the famous Japanese writer. $2.00 admission, plus $1.00 one time membership fee. SUB Auditorium. 7 and 9:30 p.m.

Classical Music Nights.
The Graduate Student Society sponsors jazz and classical music nights every Wednesday evening in the Graduate Student Centre Lounge. 8:30 – 11:30 p.m.

THURSDAY, OCT.30
Chamber Ensemble.
UBC Student Chamber Ensembles of the string, wind and keyboard divisions. Recital Hall, Music Building. 12:30 p.m.

UBC Chaplains Symposium.
Business vs. Social Services. Last in a series on Religion and Economics. Mr. Arnold Saltzman, Jewish Family Service, Los Angeles. Room A205, Buchanan Building. 12:30 p.m.

Gerontology Lecture.
Geriatric Assessment in Canada. Dr. Richard Ham, Family Practice, UBC. IRC 3. 1 p.m.

Psychology Colloquium.
Perception and Attention in School-Aged Children. Dr. James Ennes, Psychology, Dalhousie University. Peter Suedfeld Lounge, Kenny Building. 4 p.m.

Theatresports.
The Graduate Student Society sponsors Theatresports featuring the Vancouver Theatresports League every Thursday evening. Graduate Student admission is $3. Regular admission is $4. Bar service available. Graduate Student Centre Ballroom. 8 p.m. – 10 p.m.

FRIDAY, OCT. 31
Faculty Recital.
Music for Flemish and Italian Harpsichords. Doreen Oke, harpsichord. Recital Hall, Music Building. 12:30 p.m.

Reading.
Reading by Josef Skvorecky, Czech Canadian novelist, author of The Engineer of Human Souls, 1984 Governor General's Award. Room B320, Buchanan Building. 12:30 p.m.

Medical Genetics Seminar.
Control of Eukaryotic tRNA Gene Expression. Dr. G. Spiegelman, Microbiology, UBC. Parentcraft Room, Grace Hospital, 4490 Oak Street. 1 p.m.

Finance Workshop.
The Medium of Exchange in Mergers Takeovers. Espen Eckbo, Ron Giammarino, Rob Heinkel, UBC. Penthouse, Henry Angus Building. 3:30 p.m.

Chamber Ensembles.
UBC Student Chamber Ensembles of the string, wind and keyboard divisions. Recital Hall, Music Building. 8 p.m.

SATURDAY, NOV. 1
Football.
UBC Thunderbirds vs. the University of Saskatchewan. Thunderbird Stadium. 7:30 p.m.

SUNDAY, NOV. 2
French Intensive Sunday.
All-day French conversational program. $60.00 includes lunch and dinner. For information, call Language Programs and Services, 222-5227. Room D339, Buchanan Building. 10 a.m. – 10 p.m.

MONDAY, NOV.3
B.C. Cancer Research Lecture.
Cyclic Tetramolecular Complexes of Monoclonal Antibodies: A New Type of Crosslinking Reagent. Dr. Peter Lansdorp, Terry Fox Laboratory. Lecture Theatre, B.C. Cancer Research Centre, 601 West 10th Avenue. 12 noon.

Religious Studies Symposium.
A Symposium on the Shamanistic Practices. Shamanistic Practices in Japan, Dr. Tokutaro Sakurai, President of Komazawa University. Shamanistic Practices in Korea, Dr. Yunshik Chang, Anthropology and Sociology, UBC. Everyone welcome. Room 604, Asian Centre. 1:30 p.m.

Mechanical Engineering Seminar.
On the Modelling of Peak Ground Acceleration Due to Seismic Events. Mr. Shahriar Shahriari, Graduate Student, Mechanical Engineering. Room 1215, Civil and Mechanical Engineering Building. 3:30 p.m.

Applied Mathematics Seminar.
Boundary Element Methods. Prof. Laurence Johnston, University of Toronto. Room 229, Mathematics Building. 3:45 p.m.

Preventive Medicine and Health Lecture.
Health Promotion for Seniors: The Process of the Program. Ann Robertson, Seniors' Wellness Coordinator, Main Health Unit. For further information call, 228-2258. Room 253, James Mather Building. 4 p.m. – 5:30 p.m.

Guitar Lecture/Recital.
Spanish Guitar Repertoire from 1535 to the 20th Century. Michael Strutt, Music, UBC. Conference Room, Carr Hall, Centre for Continuing Education. 8 p.m.

Archaeological Lecture.
UBC Excavations at Ancient Mytilene (Lesbos). Dr. H. Williams, Classics, UBC. Theatre Gallery, Museum of Anthropology. 8 p.m.

TUESDAY, NOV. 4
Computer Science Colloquium.
Use of the Viewpoint Consistency Constraint for 3D Object Recognition. Dr. David D. Lowe, Courant Institute of Mathematical Sciences, New York University. Room 301, Computer Science Building. 11:30 a.m.

John G. Moffatt Lecture.
Radical Cyclizations in Natural Product Synthesis. Prof. Gilbert Stork, Chemistry, Columbia University. Room 250, Chemistry Building. 1 p.m.

Metallurgical Engineering Seminar.
Measurement of Athermal Strain Rate in a-Brass. Prof. T. H. Alden, Metallurgical Engineering, UBC. Room 317, Frank Forward Building. 3:30 p.m.

Oceanography Seminar.
Slope Flow Driven by Convection. B. Van Hardenberg, Oceanography, UBC. Room 1465, Biological Sciences Building. 3:30 p.m.

Community Sports Services Seminar.
Coaching Effectiveness Training Seminar. (Youth Sports) Dr. F. L. Smoll, Sports Psychology, University of Washington. Advanced registration, $15.00. At the door, $18.00. Students, $10.00. For further information call, 228-3688. Elm Room, Richmond Inn, 7551 Westminster Highway, Richmond. 7:30 p.m. – 10:30 p.m.

Information Science Seminar.
Exotic Scripts in Desktop Publishing. Dr. Ken Bryant, Asian Studies, UBC. Conference Room, Sedgewick Library. 7:30 p.m.

WEDNESDAY, NOV. 5
Pharmacology and Therapeutics Seminar.
Regulation of Gastric Somatostatin Secretion. Dr. C. McIntosh, Physiology, UBC. Room 317, Basic Medical Sciences Building, Block C. 12 noon.

Forestry Seminar.
The State of the U.S. – Canadian Negotiations with Respect to the Timber Trade Issue. Mr. M. Apsey, President, Council of Forest Industries of B.C. Room 166, MacMillan Building. 12:30 p.m.

Noon-Hour Concert.
Presented in cooperation with CBC Radio. Alan Rinehart, guitar and Jane Martin, flute. Recital Hall, Music Building. 12:30 p.m.

Chemistry Seminar.
A New Approach to the Stereocontrolled Synthesis of Polypropionates. Prof. Gilbert Stork, Chemistry, Columbia University. Room 225, Chemistry Building. 2:30 p.m.

Fine Arts Lecture.
Ian Wallace, artist and instructor at Emily Carr College of Art and Design, speaking on his work. Room 107, Lasserre Building. 2:30 p.m.

Animal Resource Ecology Seminar.
Adaptive Significance of Vertebral Variation in Fishes: The Quick and the Dead. Mr. Douglas Swain, Animal Resource Ecology and Zoology, UBC. Room 2449, Biological Sciences Building. 4:30 p.m.

Cinema 16.
Marianne and Juliane. Directed by Margarethe Von Trotta. Admission $2.00 plus a one-time membership fee of $1.00. SUB Auditorium. 7:00 and 9:30 p.m.

Rehabilitation Medicine Information Evening.
Admission Procedures. Division heads, admission secretary and student panel. IRC 6. 7 p.m.

Adult Education Seminar.
Innovative Learning and the Club of Rome. James Botkin, author of No Limits to Learning, a report to the Club of Rome. Enquiries: 228-5822. Adult Education Research Centre, 5760 Toronto Road. 7:30 p.m.

THURSDAY, NOV. 6
Native Law Program.
Gitksan Wet'Suwet'en Land Claims. Louise Mandell and Stuart Rush. Room 101/102, Law Building. 12:30 p.m.

Noon-Hour Concert.
Student Composers Concert. Recital Hall, Music Building. 12:30 p.m.

Office For Women Students Workshop.
Career Decisions for an Uncertain Future. Guest experts will describe the preparation of a flexible career plan to meet technological and economic changes effecting women. Enquiries: 228-2415. Room 223, Brock Hall. 12:30 p.m.

Biomembranes Discussion Group.
Interactions Between Membrane Proteins: Equilibrium and Dynamic Consequences. Dr. Jack Owicki, Biophysics, University of California, Berkeley. IRC 3. 3:45 p.m.

Inside Tibet.
A talk and slide presentation by Prof. Michael Futrell, Slavonic Studies, UBC, recently returned from Tibet. Admission: $5.00, students $2.50. Vancouver Planetarium, 1100 Chestnut Street. 7:30 p.m.

Chamber Singers.
UBC Chamber Singers. Cortland Hultberg, director. Recital Hall, Music Building. 8 p.m.

FRIDAY, NOV. 7
Chamber Singers.
UBC Chamber Singers. Cortland Hultberg, director. Recital Hall, Music Building. 12:30 p.m.

Medical Genetics Seminar.
Report on American Society of Human Genetics Meeting. Faculty. Parentcraft Room, Grace Hospital, 4490 Oak Street. 1 p.m.

Commerce Finance Workshop.
Rights versus Underwritten Offerings. Espen Eckbo, Commerce, UBC. Penthouse, Henry Angus Building. 3:30 p.m.

Kuhlau Bicentennial Concert.
Paul Douglas, flute; Robert Rogers, piano; John Loban, violin; Eric Wilson, cello; Hans-Karl Piltz, viola. Recital Hall, Music Building. 8 p.m.

SATURDAY, NOV. 8
Music of India Series.
Final concert in a series by distinguished artists of India. Rina Singha-Kathak gives a recital of Kathak dance. Enquiries: 228-4688. Auditorium, Asian Centre. 8 p.m.

NOTICES
Pipers and Drummers.
Any pipers and drummers among faculty, students and staff interested in practicing and playing on campus are asked to contact Dr. Edward Mornin, Germanic Studies, 228-5140.

Faculty Staff Exercise Class.
Monday, Tuesday and Thursday 12:30 – 1:05 p.m. Robert Osborne Gymnasium B East. For further information call 228-3996.

Volleyball.
Faculty and staff volleyball group meets from 12:30 – 1:30 p.m. every Monday (Gymnasium A) and Wednesday (Gymnasium B) in the Robert Osborne Centre. New or experienced players are welcome to participate in recreational games at anytime. For further information, call Ken Coutts, 228-3838.

Fine Arts Gallery.
Life Jackets. Recent paintings by Judith Lodge at the Fine Arts Gallery until Nov. 8. Tuesday to Friday, 10 a.m. – 5 p.m. Saturday, 12 noon – 5 p.m. For further information, call 228-4381.

Co-operative Education Programs.
An information meeting for Engineering students (1st year all branches/2nd year electrical only) will be held on Thursday, Nov. 6 in Room 200, Computer Science Building. 12:30 p.m. For further information contact the Co-op Office, Room 213, Brock Hall, 228-3022.

Dorothy Somerset Studio.
Vancouver actor Bill Murdoch gives a solo performance of Mr. Poe, a Halloween theatrical presentation, at 8 p.m. Oct. 31. On Nov. 1, a seminar entitled The Making of Mr. Poe features playwright Douglas Bankson, director Kiko Gonzales-Rizzo and composer Chantal Morin, from 10 a.m. to 4 p.m. Theatrical performance $8; seminar $35, includes performance. Information: Centre for Continuing Education, 222-5261. Both events in the Dorothy Somerset Studio.

Fitness Appraisal.
The School of Physical Education and Recreation, through the new John M. Buchanan Fitness and Research Centre, is administering a comprehensive physical fitness assessment program available to students, faculty, staff and the general public. A complete assessment takes approximately one hour and encompasses the various fitness tests, an interpretation of the results, detailed counselling and an exercise prescription. A fee of $20 for students and $25 for all others is charged. For additional information please call 228-3996 or inquire at recreation UBC, War Memorial Gym, Room 203.

America's Cup Symposium.
What's in the America's Cup?: A weekend symposium for both sailors and the shorebound presented by award-winning B.C. sailors, naval architects and others. 7:45 p.m.to 10:30 p.m. Friday, Nov. 7; 9:15 a.m. to 4:30 p.m. Saturday, Nov. 8, Law Building. Both sessions, $38; Friday only, $8; Saturday only, $32. Special rate for under 18. For further information call, Centre for Continuing Education, 222-5252.

Language Programs.
Non-credit daytime, evening and weekend conversational programs in French begin the week of Nov. 3. A Saturday morning class in Language Teaching Techniques is also available. For more information call, Language Programs and Services, Centre for Continuing Education, 222-5227.

Faculty Women's Club.
The Faculty Women's Club of UBC is celebrating its 70th year. All women faculty members and wives of faculty members are cordially invited. For further information, call Peggy MacGregor, 222-1134.

Calendar Deadlines.
For events in the period Oct. 26 to Nov. 8, notices must be submitted on proper Calendar forms no later than 4 p.m. on Thursday, Oct. 16 to the Community Relations Office, 6328 Memorial Road, Room 207, Old Administration Building. For more information, call 228-3131.

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