SPECIAL COLLECTIONS

UBC reports

Volume 24, Number 18. Dec. 6, 1978. Published by Information Services, University of B.C., 2075 Wesbrook Mall, Vancouver, B.C. V6T 1W5, 228-3131. Jim Banham and Judith Walker, editors. ISSN 0497-2929.

Catherine Milsum

Rhodes Scholar named

Catherine Milsum, 21, an honors student in UBC's Department of English, has been named the winner of the 1979 Rhodes Scholarship for B.C.

She is the first B.C. woman to win the award since the competition was thrown open to both sexes three years ago. She is also the 74th B.C. winner of the prestigious award, which provides for a minimum of two years of study at Oxford University in England.

Rhodes Scholarships are awarded to students who combine high academic standing with athletic ability and service to the university they attend.

Ms. Milsum said she applied for the Rhodes Scholarship because "I have always wanted to live in England and study at Oxford. This way," she adds with a grin, "I get paid to go and study."

She hasn't yet decided which Oxford College she'll enter to pursue her studies in English. And she says there's a possibility that she might elect to study law while she's a student there.

Born in Ottawa and educated in Montreal, Ms. Milsum came to Vancouver in 1972 when her father, Prof. John Milsum, was appointed to the Department of Health Care and Epidemiology in the UBC Faculty of Medicine. Her mother, the former Eileen Moyls, is a UBC graduate (B.A. '50) and a part-time UBC student and her uncle, Prof. Ben Moyls, is head of the UBC mathematics department and director of ceremonies.

Ms. Milsum completed her secondary education at University Hill school in the University Endowment Lands and entered UBC in 1975. She will graduate in the spring of 1979.

She has been associated for a number of years with Speakeasy, the student-operated information and crisis centre in the Student Union Building. This year she served as Speakeasy's training co-ordinator and arranged for an indoctrination program to train the more than 60 students who man the centre.

Last summer she taught in a summer tutorial program operated by the English department and funded by the provincial government. In 1976 she was a hostess during the United Nations Conference on Human Settlements, popularly known as Habitat.

Ms. Milsum is currently one of five Faculty of Arts representatives on the Student Representative Assembly and a member of the AMS women's committee. She was a founding member of the Association of English Students.

Ms. Milsum says she's "really not into competitive athletics at UBC," preferring to ski, skate, run and swim with friends for recreation and relaxation.

'79 Open House dates set

"It works for you!"

That's the theme of UBC's triennial Open House, March 1 to 3 next year.

Members of the University community are beginning to plan for a successful event, said Open House chairman Geoff Smith, a third-year Agricultural Sciences student.

"Executive and steering committees have been established, we have a budget, and letters have gone out to deans and directors of faculties and schools.

"Although Open House has traditionally been a student enterprise, its success is impossible without the co-operation and enthusiasm of faculty and staff."

Mr. Smith said the theme of Open House should not be interpreted narrowly.

"'It works for you' applies to the entire University, and isn't limited to the applied sciences or the more obviously practical campus activities.

"Pure research and the teaching of classical languages are activities that work for the general public, as much though not in the same way as more utilitarian areas such as instruction in timber harvesting," Mr. Smith said, "or the work of the faculty I'm in, which is concerned with providing food.

"The public benefits from the work of the philosopher as well as the hydraulic engineer at UBC."

Mr. Smith said Open House is a unique opportunity for the University to demonstrate to tens of thousands of people the work that is accomplished at UBC.

Sixty thousand persons are expected to visit the campus, he said.

Mr. Smith said Open House representatives will be identified in faculties and schools. Each representative will be sent a package of information on finances and assistance available through Physical Plant, Food Services, Information Services and other service departments on campus.

Nomination flurry expected Dec. 20

There hasn't been much interest so far in upcoming student elections for two members of UBC's Board of Governors and 17 members of Senate.

But officials in the Registrar's Office, which handles arrangements for the annual elections, aren't worried. They say that in past years a flurry of nominations has usually arrived at the last minute.

The "last minute" in 1978 is 4 p.m. on Dec. 20, when nominations for the positions close. Forms giving full details of nomination requirements are available in the Registrar's Office in the General Services Administration Building, in Room 266 in the Student Union Building, and in the offices of student undergraduate societies and the Graduate Students' Association.

Election of Board and Senate members will take place on Jan. 16. An advance poll will be held on Jan. 15 from 5 to 7 p.m.

Winners of UBC's three leading scholarships for combination of academic achievement and service are, left to right: Anne A. Gardner, Science 3, awarded the $2,500 Sherwood Lett Memorial Scholarship; Gary Walters, also Science 3, winner of the $1,500 Amy Sauder Scholarship; and Deirdre R. Dawson, Rehabilitation Medicine 4, who has won the $1,000 Harry Logan Memorial Scholarship. Details below.

Award winners combine achievement and service

Students from the Faculty of Science and the School of Rehabilitation Medicine have been named the winners of three scholarships awarded for a combination of academic achievement and participation in UBC and community activities.

The winner of the $2,500 Sherwood Lett Memorial Scholarship is Anne A. Gardner, president of the Science Undergraduate Society and an honors student in chemistry and mathematics.

The $1,000 Harry Logan Memorial Scholarship has been awarded to Deirdre Dawson, who will graduate in the spring of 1979 from the School of Rehabilitation Medicine.

The winner of the $1,500 Amy Sauder Scholarship is Gary Waters, a science student specializing in biochemistry and chairman of the Student Administrative Commission.

Anne Gardner, winner of the Sherwood Lett award, which is named for a former UBC chancellor, is a native of Prince George who was educated at Centennial secondary school in Coquitlam.

She was one of 30 western Canadian students chosen in 1976 to attend an annual, month-long conference in Calgary sponsored by the National Youth Science Foundation. She is also an accomplished pianist and played the bassoon in her high school orchestra and the New Westminster Symphony Orchestra.

At UBC she has worked as a marker for the mathematics department and was employed in Computer Science last summer under the provincially funded Youth Employment Program. She has served on the Student Representative Assembly and as a student representative to the Faculty of Science.

Deirdre Dawson, winner of the Harry Logan Memorial Scholarship, is a native of Ottawa, where she attended Carleton University before enrolling at UBC in 1975. She holds a piano-teaching degree from the Western Ontario Conservatory of Music and has passed advanced examinations of the Royal Lifesaving Society.

Ms. Dawson has been active in the affairs of the School of Rehabilitation Medicine as an organizer of the annual fund-raising drive known as the Wheelathon, as a member of the rehab students' council and as the school's representative to the Faculty of Medicine. She also functions as the liaison between the rehab medicine graduating class and the faculty of the school. She is a member of the UBC branch of Amnesty International and the CUSO club.

The Logan Scholarship is named for the late Harry T. Logan, former head of UBC's Department of Classics and one of the original members of the UBC faculty when the University opened its doors in 1915.

Gary Waters, winner of the Amy Sauder Scholarship, is a graduate of University Hill secondary school where he was active in sports as a hockey player and swimmer. At UBC he has served as a Faculty of Science representative on the Student Representative Assembly and as an SRA delegate to the B.C. Students' Federation. He has also served as a student representative on the Faculty of Science. He hopes to enter the Faculty of Medicine after completing the Bachelor of Science program.

UBC scientists get grants for problem-area research

Eighteen UBC faculty members have received a total of $526,800 from a new Canadian granting agency for research in the fields of energy, environmental toxicology and oceanography.

The grants from the new Natural Sciences and Engineering Research Council, which has taken over the research-granting function formerly held by the National Research Council, are for the support of projects in "national problem areas."

The largest single grant has been made to Prof. Neil Towers of the Department of Botany, who has received $70,000 to study toxic substances found in certain common garden plants.

The research is an outgrowth of a discovery made in Dr. Tower's laboratory recently that certain naturally occurring compounds found in plants are lethal in the presence of sunlight to some types of bacteria and fungi, nematodes and mosquito and black fly larvae.

Prof. Towers believes the compounds, called polyacetylenes, are potentially useful in medicine for treating certain skin diseases and in agriculture for control of insect larvae.

The largest single grant for energy research has been made to Dr. Robert Parsons of the physics department, who will use a $41,700 allocation for work that has potential application in the solar energy field.

Dr. Parsons will use a complex machine known as a planar magnetron to deposit thin optical films over large areas, including heat-absorbing glass panels, solar energy condensers, metal electrodes and solar cells.

The largest single grant for oceanographic research — $63,000 — goes to Dr. Raymond Andersen of the Department of Chemistry and Institute of Oceanography, who will study marine microorganisms that produce substances (metabolites) used for the explanation of chemical structure and for ecological evaluation.

A complete list of grants follows in each of the areas under which the awards were made.

ENERGY (six grants totalling $183,700)

Dr. Peter Nemetz, Commerce and Business Administration — $25,000 for a study of the possibilities and cost of replacement of specific fuels in their current uses by alternative fuels and to measure the effectiveness of substitution in reducing dislocations in the supply of some forms of energy.

Dr. Jochen Meyer, Physics — $30,000 to initiate a program in laser fusion research. Associated with this program will be Prof. A.J. Barnard of the same department, who has received $22,000 for a computational study of energy transfer in laser fusion plasmas.

Dr. David Dolphin, Chemistry — $30,000 for studies aimed at developing a new class of catalyst to convert petroleum and coal into petrochemicals and to develop an inexpensive oxygen electrode for fuel cells, which convert chemical into electrical energy.

Prof. R.R. Haering, Physics — $35,000 for research in support of development of a new type of rechargeable, high-energy high-density battery system.

Dr. Robert Parsons, Physics — $41,700 for experiments on the deposition of thin optical films over large areas on materials for utilizing solar energy in homes and industry.

Pictures by Jim Banham

The three UBC scientists pictured above are among 18 faculty members who have received grants totalling $526,800 for research in national problem areas. Shown in their plasma physics lab at left above are Dr. Jochen Meyer, left, and Prof. A.J. Barnard, who will co-operate on a laser fusion research project. They've received a total of $52,000. Grant of $20,000 will be used by Dr. A.J.F. Griffiths, shown in his botany lab at right above, to investigate the role of a wide range of environmental chemicals, including such things as herbicides and pesticides, in the incidence of ill-health through changes in chromosome numbers.

ENVIRONMENTAL TOXICOLOGY (Four grants totalling $160,000)

Dr. A.J.F. Griffiths, Botany — $20,000 for investigation of the role of environmental agents, including herbicides, pesticides, drugs and industrial chemicals, in the incidence of ill-health through changes in chromosome numbers, using a screening system based on fungal organisms.

Prof. James Kutney, Chemistry — $20,000 for studies of the improvement of water quality in B.C. rivers through the detoxification of kraft pulp mill effluents.

Prof. Hans Stich, Zoology — $50,000 for experiments on the use of human blood cells as a short-term test for agents that cause malformations and cancer in humans.

Prof. Neil Towers, Zoology — $70,000 for experiments on the mechanism of action of toxic substances found in certain common garden plants.

OCEANOGRAPHY (Eight grants totalling $183,000)

Prof. Liam Finn, Civil Engineering — $24,000 for development of a method for predicting the behavior of pollutants in the ocean, development and evaluation of contaminant dilution models, and improved interpretation of water-quality data.

Dr. Paul Harrison, Botany and Oceanography — $9,100 for studies on how light and nutrients may be manipulated to encourage growth of food sources for fish and shellfish and the effect on aquatic food organisms of reduced light caused by turbidity resulting from discharge of pulp mill effluent or mine tailings.

Dr. Raymond Andersen, Chemistry and Oceanography — $63,000 for a study of marine microorganisms that produce substances used for the explanation of chemical structure and ecological evaluation.

Dr. Ronald Clowes, Geophysics and Oceanography — $13,500 for seismic studies in the deep ocean basin and on the continental shelf and slope off the west coast of Vancouver Island.

Dr. E.V. Grill, Oceanography — $17,100 for the purchase of a polarographic analyser to study interactions between trace metals and plankton in seawater.

Dr. T.R. Osborn, Oceanography — $13,700 for a study of the dynamics of salt- and fresh-water mixing in the Lower Fraser River.

Prof. R.W. Burling, Oceanography — $22,700 for a study of turbidity currents resulting from the discharge of mine tailings in Rupert Inlet on northern Vancouver Island.

Prof. Peter Hochachka, Zoology — $20,000 for an in-depth study of the biochemistry and physiology of certain marine animals, including squid, which are an important link in the food web of the north Pacific Ocean.

For the record...

In the Nov. 22 edition of *UBC Reports* we stated that the new Coal Research Centre to be constructed adjacent to the Frank A. Forward Building for metallurgy would be a building of 150,000 square feet. The correct figure is 15,000 square feet.

Top students in UBC's Faculty of Applied Science who have received awards from the Canadian Mineral Industry Education Foundation are, left to right, Mark Freberg, Mineral Engineering 4; Mark Benz, Metallurgy 2; and Dennis Bergen, Mineral Engineering 4. Freberg and Benz each got $1,500, while Bergen was awarded the $2,000 Futterer Memorial Scholarship.

Institute director appointed

Prof. Stephen E. Calvert, a British expert on the geology of the sea, has been appointed director of UBC's Institute of Oceanography.

Prof. Calvert, who will be 44 on Dec. 30, will hold a joint appointment as professor of geological sciences when he takes up his new post at UBC on July 1, 1979.

Currently senior principal scientific officer at England's Institute of Oceanographic Studies in Godalming, Prof. Calvert was educated at Reading University near London, where he received a Bachelor of Science degree with first-class honors, and the University of California, where he was awarded the degree of Doctor of Philosophy after six years of study at the Scripps Institute of Oceanography.

He taught at the University of California at Los Angeles from 1964 to 1966, when he returned to the United Kingdom to take up a post as lecturer in geology at the University of Edinburgh.

He joined the British Institute of Oceanographic Studies in 1972 and was named senior principal scientific officer in 1977. In 1975 he was invited to the University of Washington in Seattle as a distinguished visiting professor.

Prof. Calvert is widely known for his research on ocean-floor sediments and mineral deposits. He has done extensive work on the geology of sediments in north Atlantic waters off Scotland and Norway and in the south Atlantic off Namibia on the west coast of Africa.

Prof. Calvert will succeed Prof. George Pickard, who will retire as director of UBC's Institute of Oceanography on June 30 next year.

Grant will subsidize travel

"Have talk, will travel" could be a new motto for the UBC Speakers Bureau.

The bureau, a program service of the UBC Alumni Association, now has funds provided by a grant from the Leon and Thea Koerner Foundation to help subsidize travel expenses for UBC speakers to address non-profit organizations outside the Greater Vancouver Regional District.

It is intended that the Koerner Foundation travel grant be used to assist those organizations which would otherwise be unable to arrange a visit by a UBC speaker. (The speakers are all volunteer members of the University faculty and staff.) The host group is responsible for making travel arrangements and providing accommodation and meals as necessary. Assistance of up to $150 will be available towards the cost of transportation expenses and is restricted to one request annually from any individual group.

The UBC Speakers Bureau, now in its fourth year of operation, has recently reprinted its 1978-79 catalogue listing over 1,000 topics. Copies of the brochure and terms of reference for the travel grant may be had by contacting the UBC Speakers Bureau Office, UBC Alumni Association, 6251 Cecil Green Park Road, Vancouver, B.C. V6T 1X8 (228-3313).

Coping with the knowledge explosion

We've all heard about the so-called "information explosion," which is a shorthand way of describing the incredible acceleration in the rate at which knowledge is being generated in today's world.

It's estimated that the world's knowledge in all fields is now doubling every 8 to 12 years. In some areas, the rate of increase is even faster.

This has raised some head-scratching problems for libraries and librarians, whose mission is to make the world's knowledge available to everyone – the general public as well as teachers, researchers and students.

Traditionally, the way in which a reader finds something in a library is to consult its card catalogue, which lists in a variety of ways the complete holdings of that collection.

In a library system as big as UBC's, which contains (among other things) more than 1.8 million books, half a million documents and more than 110,000 maps, the result has been a union catalogue of 6.2 million cards occupying a generous part of one floor of the Main Library as well as scores of catalogues located in branch libraries and reading rooms scattered across the campus.

And since there's no sign of a slowdown in the knowledge trade, the prospect is that the card catalogue will become so vast and unwieldy that it will obstruct rather than help people in their quest for knowledge. Not to mention the problems that confront the library in simply cataloguing material and filing it in the card system.

But hand-in-hand with the knowledge explosion has come a parallel development in technology. The computer and the development of microfiche hold out the hope of solving some of the problems that confront librarian and information-seeker.

What the B.C. library user of the future will have access to is a computer-based union catalogue designed to make the total resources of all the libraries of the province available to everyone.

The most obvious advantage is that if the library you're in doesn't have what you want, the union catalogue will tell you where the item is located, thus eliminating what could be a lengthy delay while a search is conducted.

The first steps in the development of a computer-based union catalogue are already underway at UBC and other post-secondary educational institutions in the province. Recently, UBC received $454,090 from the provincial ministry of education as a start on computerizing all its holdings.

When the project at UBC is completed in an estimated five years, the 6.2 million cards in the UBC catalogue will have been reduced to approximately 1,500 microfiche measuring 4 inches by 6 inches. Stacked one on top of the other, the pile will measure 15 inches in height.

The UBC holdings will make up about one half of the total holdings of all the libraries in the province, including the public libraries. Which means the entire system will be on 3,000 microfiche that will make a column 30 inches high.

The microfiche catalogue will work on the same principle as the existing card catalogue; books and other materials are indexed alphabetically by title, author and subject. The only difference is that a microfiche, each of which can hold up to 6,000 entries, is machine readable. Insert it into a viewer and the entries are magnified and read on a screen.

A major decision concerning conversion from cards to microfiche was made in the UBC library in the summer of 1978. It was decided that all acquisitions published in 1978 would be catalogued on microfiche only and no cards would be prepared for the library's card catalogue.

All material published in 1977 and earlier is still being card catalogued, says Ann Turner, who heads the cataloguing division of the UBC library system. But the division is planning to stop making cards for most acquisitions by the end of this year, she adds.

Part of the task of converting from cards to microfiche is made easier because UBC has, since January, been tied into the University of Toronto Library Automated Systems computer, which is usually referred to by the acronym UTLAS.

The UTLAS computer is already programmed with cataloguing information for many of the books and other material printed during the past decade. As a result, the UBC cataloguers can simply ask the UTLAS computer for information on any specific piece of material.

"Our 'hit rate,' or the number of times the UTLAS system has cataloguing data on something in our possession, is about 70 per cent," says Ms. Turner, who heads a staff of 56 people whose main task is cataloguing material for UBC library users.

If the UTLAS computer hasn't got an entry for something acquired or possessed by UBC, the item is turned over to professional cataloguers who prepare cataloguing data for the UTLAS system, which also results in a catalogue entry for UBC. And because the entry is now in the UTLAS computer, other institutions using the UTLAS system will have access to it.

The biggest task for the cataloguing staff will be preparing for the computer materials published before 1978. This so-called "retrospective conversion project" is so vast and complex that a new catalogue librarian, Lynn Rosen, was hired recently to oversee it.

Ms. Turner points out that as the computer-based union catalogue system is developed, the problem of bringing library collections in public libraries into the system will be reduced. "Some of the regional colleges," she says, "are experiencing hit rates of more than 80 per cent in searching the UTLAS system. By the time the libraries at post-secondary institutions are catalogued it's expected that there will be few entries which are not already in the system."

One of the key figures in the plan to develop the union catalogue of all B.C. library resources is UBC's chief librarian, Basil Stuart-Stubbs. "The proliferation of information is a global phenomenon," he says, "and libraries everywhere are struggling with the resulting problems.

"If we continue to expand card catalogues we simply won't be able to keep up with published material. We run the risk of having the entire system come crashing down around us."

He said the computer-based union catalogue would be particularly useful to people in smaller communities located far from university and college centres. An interlibrary telex or computer link will mean that the remote user will be able to order books and other material and receive them within a few days.

"The object is to make the total resources of all libraries in the province available to everyone living in B.C.," he said. "It will equalize opportunity of access to information regardless of where a person lives."

Developing a computer-based union catalogue of UBC's library system are Ann Turner, standing, and librarian Lynn Rosen.

UBCalendar

UBC CALENDAR DEADLINES

Events in the week of

Dec. 17-30	Deadline is 5 p.m. Dec. 7
Dec. 31-Jan. 6	Deadline is 5 p.m. Dec. 14
Jan. 7-13	Deadline is 5 p.m. Dec. 28

Send notices to Information Services, Main Mall North Administration Building, Campus. Further information is available at 228-3131.

SUNDAY, DEC. 10

3:00 p.m. MUSEUM OF ANTHROPOLOGY. The Mexican Society of Vancouver presents **A Mexican Posada.** 6393 Northwest Marine Dr.

MONDAY, DEC. 11

3:45 p.m. MECHANICAL ENGINEERING SEMINAR. K. Lips, UBC mechanical engineering graduate student, on **Transient Dynamics of Satellites With Flexible Appendages.** Room 1215, Civil and Mechanical Engineering Building.

4:00 p.m. DIAGNOSTIC RADIOLOGY Visiting Professor. Dr. Jack Edeiken, professor and chairman, Department of Radiology, Thomas Jefferson University Hospital, Philadelphia, Penn., lectures on **Ankle Trauma.** Lecture Hall B, Vancouver General Hospital.

8:00 p.m. FLUTE RECITAL with Barbara Kallaur. Recital Hall, Music Building.

TUESDAY, DEC. 12

12 noon ACADEMIC WOMEN'S ASSOCIATION Christmas Lunch. Salons A, B and C, Faculty Club. Cash bar at 12 noon and lunch at 12:30 p.m. $5 payable at the door. Everybody welcome, but please confirm by calling 228-2561 on or before Monday, Dec. 11.

3:30 p.m. OCEANOGRAPHY SEMINAR. D. Turbin, Oceanography and Botany, UBC, on **Limiting Nutrient Patchiness as a Factor Affecting Phytoplankton Growth and Succession.** Room 1465, Biological Sciences Building.

4:00 p.m. DIAGNOSTIC RADIOLOGY Visiting Professor. Dr. Jack Edeiken lectures on **Approach to Bone Lesions.** Lecture Hall B, Vancouver General Hospital.

4:30 p.m. BIOINORGANIC AND CHEMISTRY SEMINAR. Prof. R.H. Holm, Chemistry, Stanford University, on **Identification of Prosthetic Groups in Iron-Sulfur Proteins By Core Extrusion Reactions.** Room 250, Chemistry Building.

8:00 p.m. BIOMEDICAL ENGINEERING. Dr. Don Studney, Health Systems, UBC, speaks to the Canadian Medical and Biological Engineering Society, Vancouver Chapter, on **Computers in Medicine — The Automated Patient Record.** Salons B and C, Faculty Club.

WEDNESDAY, DEC. 13

12 noon PHARMACOLOGY SEMINAR. Dr. G. O'Connor, Anesthesiology, UBC, on **Primitive Man — Primitive Medicine.** Room 114, Block C, Medical Sciences Building.

1:00 p.m. DEVELOPMENTAL MEDICINE SEMINAR. Dr. W. Tze, Department of Pediatrics, Children's Hospital, on **Islet Cell Transplantation.** Centre for Developmental Medicine, 811 W. 10th Ave.

4:00 p.m. PHARMACEUTICAL SCIENCES and **BIOMEMBRANE GROUP SEMINAR.** Dr. Casey van Breeman, Department of Pharmacology, University of Miami, on **Na-Ca Interactions in Smooth Muscle.** Lecture Hall 3, Woodward Instructional Resources Centre.

5:00 p.m. DIAGNOSTIC RADIOLOGY Visiting Professor. Dr. Jack Edeiken lectures on **Approach to Arthritis.** Lecture Hall B, Vancouver General Hospital.

7:00 p.m. DUPLICATE BRIDGE. Informal game at the Faculty Club. Faculty, staff and graduate students are invited to participate. $1.75 per person includes refreshments. For further information, call Steve Rettig at 228-4865.

8:00 p.m. SENATE MEETING. Tickets for the visitors' gallery can be reserved by calling Frances Medley, clerk to Senate, 228-2951. Board and Senate Room, Old Administration Building.

THURSDAY, DEC. 14

10:30 a.m. MARKETING SEMINAR. Prof. John U. Farley, Columbia University, on **Discriminating Among Decision Rules in Family Food Distribution Decisions.** Penthouse, Angus Building.

12:30 p.m. PHARMACOLOGY AND TOXICOLOGY SEMINAR. Dr. Vladimir Palaty, professor of anatomy, UBC, on **Studies on Calcium Transport in Muscle.** Room 237, Wesbrook Building.

4:00 p.m. DIAGNOSTIC RADIOLOGY Visiting Professor. Dr. Jack Edeiken lectures on **Osteomyelitis.** Film Library, Heather Pavilion, Vancouver General Hospital.

FRIDAY, DEC. 15

1:00 p.m. MEDICAL GENETICS SEMINAR. Dr. L. Wei and Dr. M. Rosin on **The Possible Role of Trapping Agents in Cancer Prevention.** B.C. Cancer Research Centre, 601 W. 10th Ave., Vancouver.

Jim Banham photo

Display of classical antiquities excavated at sites in southern Italy are on display in UBC's Museum of Anthropology until Feb. 11. Museum exhibit designer Herb Watson holds a wine-mixing bowl found in a mid-fourth-century B.C. grave. The large, reconstructed mixing bowl or stamnos at left dates from 650-700 B.C.

EXHIBITIONS

A selection of 20 intaglio and relief etchings by **Lionel Thomas,** of the Department of Fine Arts, will be on display on the lower floor of the Faculty Club from Dec. 1 to 29. The works, which emphasize the pre-sessional zodiacal constellations, are from Mr. Thomas' three travelling exhibitions currently being shown in U.S. cities. The works are to be included in a book entitled *Firmaments — The Story of the Constellations,* by Mr. Thomas and **Prof. Michael Ovenden,** of the Department of Geophysics and Astronomy, both of whom will be at the Faculty Club exhibit from 1:00 to 1:45 p.m. on Dec. 7 to discuss the display and the forthcoming book.

A showing of work by students in the Bachelor of Fine Arts program is in the AMS Art Gallery at the Student Union Building until Friday, Dec. 8. The gallery is open from 10:30 a.m. to 3:30 p.m.

An exhibition of **classical antiquities** excavated in Southern Italy will be on display at the Museum of Anthropology on Northwest Marine Drive until February 11.

Also on display at the Museum of Anthropology as one of the Museum's temporary exhibitions is **Yuquot...4,000 years: Continuity and Change in a West Coast Village.**

CHRISTMAS LIBRARY HOURS

Normal hours will be maintained in the Main Library until Tuesday, Dec. 19. Main Library will be open from 8 a.m. to 5 p.m. on Wednesday, Dec. 20; from 9 a.m. to 5 p.m. on Thursday and Friday, Dec. 21 and 22. However, from Saturday, Dec. 23 to Tuesday, Dec. 26, the Main Library will be closed. Main will also be closed from Saturday, Dec. 30 to Monday, Jan. 1. Normal hours will resume on Wednesday, Jan. 3. Hours for the Law Library, Sedgewick and Woodward libraries are the same as for the Main Library.

Check with other branches and divisions for particular Christmas library hours.

CHRISTMAS TREE SALE

Christmas trees of true fir will be on sale again on the south campus Forestry Research Area (between B.C. Research and TRIUMF), on Saturday, Dec. 9 and Saturday, Dec. 16, from 10 a.m. to 2 p.m. The price of the trees is $2/ft. and the proceeds will be going to assist in forestry student projects. Come with your family and bring your own saw or shovel to cut or lift out your selected Christmas tree.

CHRISTMAS BAKESHOP

The University Food Services is offering to take the hassle of making mince tarts and Christmas cake off your hands. You can order traditional Christmas baking by phoning 228-3649, and orders can be picked up at the central kitchen, SUB, until Dec. 20. The catering department will also help with Christmas entertaining. Call 228-3951.

EATERS TAKE NOTE

CHRISTMAS CLOSING DATES — CAMPUS FOOD SERVICES UNITS

Dec. 7 – Jan. 2 inclusive

War Memorial Gym Snack Bar
Ponderosa Snack Bar
International House Snack Bar

Dec. 9 – Jan. 2 inclusive

Auditorium Snack Bar

Dec. 20 – Jan. 2 inclusive

Bus Stop Coffee Shop

Dec. 21 - Jan. 2 inclusive

Barn Coffee Shop
IRC Snack Bar

SUB Snack Bar — Closed on statutory holidays and on Dec. 23, 24, 30 and 31.

FINAL ORAL EXAMINATIONS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Listed below are scheduled final oral examinations for the degree of Doctor of Philosophy at the University. Unless otherwise noted, all examinations are held in the Faculty of Graduate Studies Examination Room on the second floor of the General Services Administration Building. Members of the University community are encouraged to attend the examinations, provided they do not arrive after the examination has commenced.

Thursday, Dec. 7, 11:00 a.m.: JOSEPH BIFAKI DDUNGU KATONGOLE, Poultry Science; **Fat Utilization by Chickens of Different Genetic Backgrounds.**

Friday, Dec. 8, 10:00 a.m.: LEE CASE PIGAGE, Geological Sciences; **Metamorphism and Deformation on the Northeast Margin of the Shuswap Metamorphic Complex, Azure Lake, British Columbia.**

Friday, Dec. 8, 10:30 a.m., in Room 348, Macmillan Building: PETER ROBERT HICKLENTON, Plant Science; **Some Effects of Supplemental Carbon Dioxide on the Physiology of Plant Growth and Development.**

Friday, Dec. 8, 2:30 p.m.: SHARON DIANE EATON, English; **The Rhetoric of the New** *Arcadia.*

Thursday, Dec. 14, 10:00 a.m.: HERMAN F. SCHWIND, Commerce and Business Administration; **Development of an Index of Questions for the Planning of Management Programs.**