



Kevin Barber introduces his group to the world of insects.

## Professor has unique role on task force

Psychology professor Norma Bowen may play a unique role in a task force named last week by Attorney-General Roy McMurtry to look into police hiring, training and promotion across Canada.



Prof. Bowen feels that because of her color and ethnic background (she came to Canada from Trinidad 23 years ago) and because she has been "absorbed into the Canadian culture," she is able to understand the "sensitivities on both sides of the ledger."

The task force was set up in the face of mounting tension in Metropolitan Toronto between the police and minority groups, exacerbated by the shootings of two black men by police officers. Nevertheless the scope of the inquiry and the recommendations made will cover the Province as a whole and not be limited just to the Toronto area, added the professor.

Prof. Bowen has worked before in an advisory capacity at several government levels, on the Ontario Council of University Affairs and on a subcommittee of the Status of Women for the Canadian Commission for UNESCO. She has also done research and written about the black child in the Canadian culture and so feels that to that extent she is "familiar with the minority groups' plight."

Other members of the task force are the chairman, Dr. Reva Gerstein, a psychologist with extensive experience working with the police in matters related to assessment of their responsibilities, and Gordon Torrance, chief of the Hamilton-Wentworth Regional Police Force, a policeman for 29 years and chairman of the crime prevention committee of the Ontario Association of Chiefs of Police. Dr. Gerstein received an honorary Doctor of Laws from Guelph in 1975. She and Prof. Bowen have also worked together previously on other projects.

## Praise for campus PD day

Professional Development Day has taken on a whole new dimension for 20 grades four to six youngsters from Brisbane Public School in Erin. Thanks to their parents, the University's tour co-ordinator, Elaine McCann, and the willingness of Professor M.K. Sears of the Department of Environmental Biology, a recent professional development day was turned from what could have been a ho-hum holiday into a mind-broadening, fun-filled experience.

One of the parents, Mrs. Bev McKay, who approached Ms. McCann several weeks ago, says the group of professional people whose children participated would like to see their children's basic education enriched by more extra-mural activities related to the school curriculum. Ms. McCann contacted Prof. Sears, and an hour and a half program was arranged at Graham Hall for Friday, November 16.

Prof. Sears, who is an entomologist, decided on three activities which he thought would be appropriate and interesting for the age group. First, he had the children look at, identify and put into a display box specimens representing all six major orders of insects. These included beetles, butterflies and moths, flies, bees, wasps and ants, true bugs, grasshoppers and crickets. Then he explained about the life cycle of these insects and let the

children visit three or four displays illustrating this. Finally, he had the children dissect a generalized insect, in this case a dead lubber grasshopper, to see and learn about its structure and parts. As they dissected the insects they pinned and labelled the parts on large sheets of paper which they later took home.

The hour and a half went by "like 10 minutes," according to Prof. Sears. The children were attentive and asked good questions. "Other than honey bees, are there any other insects that provide us with food?", one youngster wanted to know. Another asked how mosquitoes bite, and another was anxious to find out if bees sting if one leaves them alone.

But a major reason for the program's success, in the professor's opinion, was the work of five of his students majoring in entomology. Prof. Sears was lecturing until right before the youngsters' arrival, and the University students set up all the displays and readied the teaching materials. During the program itself, the children were divided up into groups of four with one University student assigned to each group. Prof. Sears and his students welcomed this occasion because, he said, "they enjoyed it and felt it was an excellent opportunity to practise teaching." They had studied entomology for years — two are doing Master's work and one is studying for his

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# SMMPs- Getting the most from dwindling dollars

Consumers can pay outrageous prices in the quest for long-wearing, durable and colorfast garments or carpets. Too often price is the least reliable indicator of quality. Performance characteristics, while available for any number of industrial products, are not usually available for consumer purchasing decisions. In the department store consumers have to resort to guesswork.

Consumer Studies professor Pat Cross is convinced there are ways to quantify performance characteristics of consumer products, particularly textiles such as rugs, carpets, upholstery, draperies and even clothing.

As a physicist, Prof. Cross is most concerned with the development of standardized tests for textiles that would measure such qualities as resistance to abrasion, color fastness to light and water, tearing and breaking strength and resistance to stains. Most consumers purchase rugs, upholstery, drapes and clothing on the basis of very subjective criteria: style, color and texture. Whether or not that rug will stand up to muddy footprints, spilled grape juice and years of shuffling feet is a matter of pure speculation.

Translating subjective characteristics such as looks and feel into definable, testable and reproducible data is a problem of enormous magnitude. "What is needed," says Prof. Cross, "are Standard Methods of Measuring Performance (SMMPs) for consumer goods." The International Standardization Organization (ISO) is in the process of drafting guidelines as a preliminary step to developing SMMPs for a range of consumer products.

Canada has taken a few tentative steps in performance rating. Many carpets, for instance, now carry a number indicating their rating and recommendations for use. This system, developed by carpet manufacturers with government backing, attempts to lump all important properties together for a single rating. A more comprehensive system would identify individual properties and rate them separately.

SMMPs are only one phase of an overall comprehensive system of labelling and consumer education. The important performance properties must be identified and rated in a manner clearly relevant to the consumer's use of the product. The ratings must be presented in an understandable form at the time of purchase and consumers must be made aware of the rating system and know how to use it.

"We, in Consumer Studies, are in a unique position," explains Prof. Cross, "because we have many different kinds of expertise 'on tap'. I am concerned about the laboratory testing phase, but I've found I have to be aware of the consumer/product interface. My colleagues are an excellent resource of information on consumer behavior." Likewise, the textiles area has been slow to develop techniques for sensory evaluation, but there are highly sophisticated techniques for

sensory evaluation of food. Other Consumer Studies faculty have helped Prof. Cross apply sensory evaluation techniques to the whole question of textiles.

Developing standardized tests will be a long, slow process involving manufacturers, scientists and consumer groups. The field is complex because consumer products are subjected to non-standard conditions of use and consumers themselves have an almost unbelievable range of expectations for the same product.

Engineers have developed performance tests for industrial products, from screws to fibreboard, but the consumer products area has been largely ignored. Prof. Cross feels this is because consumer purchases have been considered slightly frivolous. "When you think of the dollar volume of consumer purchases from floor coverings to furs, the performance data for these products is anything but frivolous. As dollars become tighter, consumers will seek more information before making purchases," notes Prof. Cross. Her work with SMMPs will help consumers get the most from their dwindling dollars. □

## Professor has unique role

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The three members of the task force, together with the Deputy Minister of the Attorney General's office and the task force secretary, Sheila Dunlop of Toronto, who holds a Master's degree in criminology, met informally in Toronto November 23 to work out appropriate terms of reference. They met again, this time formally, December 4, to decide on the framework of the inquiry. Their main areas of concern, Prof. Bowen said, will be recruitment, training, promotion and career development, the police forces' policies and practices in these areas and the implications for ethnic/racial relationships.

Because of the time element — the preliminary report is expected by March 1, 1980, and the final report by early June, 1980 — the task force will gather information not so much through open hearings as through responses they receive to questions sent out to appropriate individuals, Prof. Bowen explained. They will also consider inviting submissions on specific issues. Their inquiry will be assisted by a research back-up from the Attorney-General's office □

The *News Bulletin* will not be published December 20 and December 27. Copy for the January 3, 1980, issue must reach the editor not later than Wednesday, December 19.

## Praise for

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Ph.D. — but this was the first time they had had a chance to teach others about their chosen subject.

There was only one hitch during the entire proceedings. Prof. Sears had planned to have the children dissect cockroaches and accordingly had put a number of them in carbon dioxide earlier that morning. But, as Prof. Sears said, cockroaches have amazingly resilient systems and as the children were about to handle them they began to come back to life. "The kids didn't mind very much, but I could see that their parents did, so we dispensed with the cockroaches and used four-inch lubber grasshoppers instead," he said.

When the children returned to school the following Monday, they took a present with them; the specimen box containing almost 100 insects, which they had pinned and labelled during their visit to the University, will become a permanent part of Brisbane's teaching equipment. It reminded Prof. Sears of a similar occurrence a year ago. One of the students who worked with the Brisbane youngsters had been part of a Young Canada Works project with three high school students and supervised by another Environmental Biology professor. Over the summer they had collected a large number of insects, mounted and labelled them in 15 sets of six boxes each and presented them to the Wellington County Board of Education. This collection would be invaluable at all levels of teaching, Prof. Sears believes, as a visual teaching aid for young students and as a complementary part of text book learning for students in the upper grades.

Buoyed up by their first visit to the University of Guelph the students are now looking forward to returning. And that will be before too long. They will be back in February when naturalist Alan Watson will take them on a tour of the Arboretum.

In the meantime, decisions have been made by two of Guelph's visitors. One wants a microscope for Christmas and the other is going to be an entomologist when he grows

**LANDSCAPE AND DEVELOPMENT FOREMAN**

Landscape and Development Foreman, Grounds Department. Salary grade 010. Salary range: \$283.35-\$372.42.

Clerk, Faculty of Graduate Studies. Clerk I. Salary range: \$153.04-\$224.37.

Library Assistant I, (Stack Maintenance), Library. Salary range \$143.66-\$202.98.

Payroll Clerk, Payroll Department. Clerk Salary range \$220.07-\$313.82. (Open to on-campus employees only.)

Secretary (Maternity Leave), Office of the President. Executive Secretary I. Salary range: \$201.09-\$289.21.

Custodian I, Housekeeping. Job rate \$5.35. Probation rate \$.20 per hour lower than job rate. (On campus employees only.)

**Custodian 2**, Housekeeping. Job rate \$5.67. Probation rate \$.20 per hour lower than job rate. (Open to on-campus employees only.)

# VAX minicomputer arrives

A VAX minicomputer, the product of Digital Equipment Corporation, Maynard, Massachusetts, arrived on campus last Thursday and is being installed in Room 114 of the Institute of Computer Science building. Professor Kats Okashimo, Department of Computing and Information Science, who is in charge of the installation and the initial set-up, expects the machine to be operational by December 17.

CIS chairman, Professor Jim Linders, proposed the purchase of a stand-alone minicomputer for teaching computer language to CIS students last spring. The Computer Services Council agreed to the idea and the proposal was recommended to Vice-President, Academic, Professor Howard Clark. Members of both CIS and ICS travelled to Iowa State University, a user of the VAX system, and to DEC's head office to assess the minicomputer's abilities. Obviously pleased, Guelph signed the contract for the VAX in September.

Although the unit can support 64 terminals, only 30 will be connected during the initial period. These will form part of the first computer language lab to be established on campus. Complete with overhead projector and screen, and long tables for the terminals, professors and students will explore the powers of FORTRAN, Pascal, Basic and COBOL computer languages.

As the computer language lab is vital to the teaching efforts of CIS, the Department's needs will have first priority. However, such areas as the Department of Animal and Poultry Science and the Schools of Agricultural Economics and Extension Education and Engineering will be using the lab for undergraduate demonstrations and instruction in using this technology in their own disciplines.

The VAX minicomputer is regarded both as an easy-to-use system, which should make it more exciting to new students who are just entering the world of computing, and as a way to cut down the escalating costs inherent in the use of the larger computer, the Amdahl. The cost per student using the

minicomputer is expected to be 10 to 20 per cent below user costs on the larger machine.

The installation of the VAX minicomputer does not mean that students will be completely removed from the Amdahl system, adds Prof. Okashimo. APL (A Programming Language), JCL (Job Control Language) and CMS (Conversational Monitor System) will be taught on the Amdahl. It will also still be used for analyzing data through one of the packages available on the system and for teaching senior courses. □

## Bolshoi dancers given Guelph T-shirts

University of Guelph T-shirts should turn a few heads in the USSR when the Mini Bolshoi Ballet Dancers return home. Following a dazzling performance in War Memorial Hall, the company was feted at a reception where John Wilkes, associate director of the University Centre, presented the T-shirts to the dancers and a set of University of Guelph bookends to the company manager.

The performance in Guelph is part of a cross-Canada bus tour which includes stops in many small cities. Seeing the country and meeting Canadians are especially satisfying aspects of this tour, explained the company manager who had been to Canada many times as a dancer with the Bolshoi Ballet. One disadvantage of dancing in smaller cities is the inadequacy of facilities; because of the small stage in Guelph's War Memorial Hall, the dancers had to abbreviate some of their movements and ballet sequences.

This performance was the last in a four-program series sponsored by the University Centre. Announcements of the winter series will appear in January. □

Laurentian University has acquired a major collection of research materials on northern Canada. The Gardner Northern Collection, which contains all of the elements of the former Arctic and subarctic research services of the University of Quebec, Montreal, will be housed in Laurentian's science library.

## No damage to plants observed at Mississauga

The chemical spill resulting from the recent Mississauga train wreck left no damage to plants, according to an initial survey conducted by faculty members of the Department of Horticultural Science. Professor D.P. Ormrod says that the only damage observed was heat scorching suffered by trees and shrubs close to the derailment and resulting fire.

The study team covered the area carefully, examining plant material within a radius of approximately one mile from the crash site.

"It is fortunate that at this time of year all plant material, even the evergreens, is in a dormant condition," points out Prof. Ormrod. "Earlier in the season there would probably have been some leaf damage from the gases released."

The University team plans to revisit the area next spring to see if any effects can be observed after growth begins for a new season. □



**CHRISTMAS LUNCHEON** specials of ham and turkey will be served in the Whippetree restaurant on level 3 of the University Centre Monday, December 10 to Friday, December 21. A luncheon, including beverage and mincemeat pie, is \$5.50.

The Whippetree's Christmas dinner special of Ham Montmorency will be served from December 4 to December 15.

The holiday closing day for dinners is December 15; for luncheons, December 21.

**THE SECOND ANNUAL** University of Guelph Christmas party is Friday, December 14 in Peter Clark Hall of the University Centre. Cocktails will be served at 6:30 p.m. with feasting beginning at 7:30 p.m. Dancing begins at 9 p.m. to the Walter Ostanak Orchestra. Tickets, at \$7 per person, are available at the box office in the courtyard of the University Centre. For further information telephone Ext. 3902.

**WHEN** School of Part-Time Studies and Continuing Education professor Gary Hutchison was asked to give a lecture in New Liskeard he suggested an unusual approach that did not require his attendance.

A script on current farm income tax problems was prepared, taped in the campus studio and forwarded with overheads. This was followed by a 25-minute telephone hook-up to the amplification system in the auditorium for a question and answer session.

The evaluations completed by 84 people in attendance indicated the presentation was the second best of 11 given on subjects ranging from law to microwave ovens.

Prof. Hutchison feels we must become innovative in our attempts to conserve energy, let alone the time savings. He said he felt that he could give several hours of lectures for the time involved in travelling so far.

# N.I.H. research contract awarded

A contract for research from the US National Institutes of Health has been awarded to Family Studies professor E. Herold, to investigate sexual and contraceptive attitudes and behavior among teenagers. The contract, worth \$40,473 in US funds, is the first NIH contract to be awarded to a Guelph faculty member in recent years. It comes from the Institute of Child Health and Human Development within the NIH.

The study will address some questions not adequately answered by researchers in the United States. It will look at sexually inactive teenagers as well as sexually active adolescents. Most studies concentrate only on the sexually active.

Results of studies differ significantly depending on the way contraceptive use is measured.

Prof. Herold will define how these measuring techniques influence the outcome of the studies.

Teenagers may not use contraception because of "contraceptive embarrassment." This study will determine sources of contraceptive embarrassment and how important embarrassment is as a deterrent to contraceptive use.

Attitudes toward abortion may also influence contraceptive use. This study will determine if acceptance of abortion as a birth control method results in lowered contraceptive use among sexually active teenagers.

Prof. Herold notes that only 15 per cent of the proposals submitted to NIH in response to this request received funding. This study started in May, 1979 and will be completed by October, 1980. □

#### To Serve on Task Force

R. Paul Gilmor, Provost, has been asked to serve as the external member of an evaluation task force to review and assess the division of student personnel services at the University of Calgary.

The task force will examine, review and provide recommendations regarding the objectives, staff, program, financial support, organization and management of the division of student personnel services. The report is expected to be available by mid-April, 1980.

#### Committee on Copyright

Mr. B. Katz, Library, has been invited to join the Canadian Library Association's Committee on Copyright. The Committee's terms of reference are to study copyright law and practice and to inform and make recommendations to the members of the Association concerning copyright.

#### Author of Textbook

Dr. M.A. Soltys, Professor Emeritus, Veterinary Microbiology and Immunology, is the author of a text-book. *Introduction to Veterinary Microbiology*, published in 1979 by Penerbit Universiti Pertanian Malaysia. Dr. Soltys was a visiting professor at this university for four years following his retirement from the University of Guelph.

#### Travels and Seminars

Virginia Gillham, Patricia Grenier, Bernard Katz and Carolyn Pawley, Library, recently attended a meeting of the Librarians' Association of the University of Waterloo. The subject under consideration was copyright in Canada, led by speaker A.A. Keyes, special advisor on copyright to the Office of the Secretary of State and co-author of the 1977 report, *Copyright in Canada: Proposals for a Revision of the Law*.

Professor K. Michael Haywood, School of Hotel and Food Administration, spoke recently to the Ontario Ski Resort Operators Conference at Collingwood, Ontario, on the topic "Effect of Energy Supplies on the Utilization of Ski Resorts in Ontario in the 1980's."

Prof. Haywood also attended the recent meeting of the International Food Service Management Guild at the Four Seasons Hotel, Toronto, where he led a seminar on "Managerial Concerns for Small Businesses in the 1980's."

Professor E. Herold, Family Studies, was an invited participant at the Social Science and Humanities Research Council workshop on the family and socialization of children held at the University of Western Ontario. The objective of the workshop was to make recommendations to SSHRC regarding the possible establishment of a strategic grants program on the topics of the family and socialization of children.

**Professor P.B. Little**, Pathology, attended the Canadian Association of Neuropathologists meeting at Sherbrooke, Quebec and presented a paper on auto-fluorescence in experimentally induced cerebral necrosis.

Professor A.H. **Marston**, School of Hotel and Food Administration, acted as judge and demonstrator for the culinary art competition and exhibition at the International Gourmet Show held at the International Centre in Malton in October.

**Dr. S.W. Martin**, Veterinary Microbiology and Immunology, recently attended the annual meeting of The Order of Veterinary Medicine in Quebec City. While there, he and Dr. P. Willeberg of Copenhagen, Denmark gave a six-hour introductory course on epidemiology to the attending veterinarians. In addition, Dr. Martin recently spoke at a continuing education seminar at McMaster University Medical School. The topic presented was epidemiology in veterinary medicine.

Professor John McMurtry, Philosophy, presented a keynote paper entitled "The Case For Children's Liberation" to an international interdisciplinary conference on children's rights held in Ottawa recently. Two papers were written in response to Prof. McMurtry's article, and subsequent to its presentation, follow-up interviews were conducted by CBC Television National News, CBC Radio International, CBC Radio Africa, the *Ottawa Journal*, the *Ottawa Citizen*, and two Ottawa FM stations.

Members of the Department of English Language and Literature who participated in a conference on biography and Canadian literature at Wilfrid Laurier University included Professor Nancy Bailey, Leslie Monkman, Mary Rubio, and Elizabeth Porter. Professor Douglas Killam chaired one of the panels and Professor Elizabeth Waterston presented a conference summary.

Prof. Waterston also presented a paper recently at the Canadian Federation of University Women's Conference in Quebec City, on "Growing Up in Canadian Literature" and spoke on "Burns: The Canadian Connection" at the International Conference of the Burns' Federation at the University of Western Ontario.

Professor Alex Michalos, Philosophy, gave two lectures at Concordia University on quality of life measurement, its role in public policy-making and its relation to traditional problems in philosophy.

He also presented a paper at the Hastings Institute for Society, Ethics and Life Sciences, New York, on the fact-value distinction and its use or abuse in decision-making related to health care policy planning.

Prof. Michalos, recently addressed the Conference on Business Ethics at Western Michigan University on the topic of freedom of expression in the workplace.

Professor Donald Mullin, Drama, delivered a paper entitled "Illusion, Action and Illumination on the Early Eighteenth-Century Stage" before a meeting of the Northeast American Society for Eighteenth-Century Studies, at the University of Toronto.

Professor J.R. Ogilvie, School of Engineering, presented the luncheon address, "Accreditation of Agricultural Programs: An Agricultural Engineer's Viewpoint," to the annual meeting of the Association of Faculties of Agriculture of Canada (AFAC) during the Agricultural Institute of Canada meetings in Fredericton.

Prof. Ogilvie also attended the AIC National Council meetings in Fredericton, representing the Canadian Society of Agricultural Engineering. He was elected to the executive of the Council representing scientific societies for 1979/1980.

Professors L. **Otten** and Ralph Brown, School of Engineering, attended a symposium at Manhattan, Kansas on grain dust. They also toured the US Grain Marketing Laboratory.

Professors David Piggins and Peter **Leppmann**, Psychology, both presented papers at the European Conference on Visual Perception held in Noordwijkerhout, the Netherlands. Prof. Piggins also spent two days in the laboratory of Dr. Henk Gerrits, Laboratory of Medical Physics and Biophysics, University of Nijmegen, collaborating upon a retinal image stabilization study also being carried out at Guelph.

Prof. Piggins also gave a colloquium recently on "Art and Visual Perception," at the School of Visual Arts, Sheridan College, Brampton.

Professor J. Pos, School of Engineering, presented a paper at the Fredericton Agricultural Institute of Canada meeting on "Design and Operation of Pilot Plant Anaerobic Digester for Hog Manure" with co-authors R. DeBochers and V. Pavlick.

Dr. R.C. Povey, Clinical Studies, and Professor Sam Luker, Family Studies, were speakers at the annual meeting of the Canadian Federation of Humane Societies held at the Chateau Laurier, Ottawa. Dr. Povey's paper was entitled "An Animal Research Project Specifically for Cats" and Prof. Luker's paper was on "Implementing Humane Education in Schools."

Professor W.R. Smith, Mathematics and Statistics, recently presented a paper entitled "Exponential-Type Approximations for the Pair Distribution Function of Polar Fluids," at the meeting of the Chemical Society/Thermodynamics Group at Aberystwyth, Wales. He also attended a conference on the industrial uses of thermochemical data held at Guildford, England, which was sponsored by the National Physical Laboratory.

Professor Frank Theakston, School of Engineering, spoke to the Shade Tree Conference held at the Holiday Inn, Guelph. His topic was "Snow Control by Proper Tree Planting."

Professor H. Tiessen, Horticultural Science, recently presented invited papers at two International Vegetable Meetings in Europe. One paper, "Asparagus Production and Research," was presented at the International Asparagus Symposium in Geisenheim, Germany. The other, "Production of Tomatoes for Processing in Canada," was presented to the International Tomato Symposium in Evora, Portugal.

While in Germany Prof. Tiessen also visited a number of commercial asparagus production operations and the research stations in Geisenheim and Hanover and participated in a seminar with graduate students and faculty at the Vegetable Research Institute in Hanover.

Prof. Tiessen also visited a number of horticultural research institutes and commercial horticultural operations both in Portugal and Spain.

Professor Richard E. Vosburgh, Consumer Studies, addressed the annual meeting of the Canadian Advertising Advisory Board held in Montreal on the subject of "The Social Implications of Advertising."

While on study leave in Britain, Professor W.G. West, Sociology/Anthropology, attended the British Educational Research Association Conference at Shereditch, the National Deviancy Conference at Liverpool, the Marxist Symposium and the Critique Conference in London.

## Towards imaginative academic administration

Thirty-eight of Guelph's senior academic administrators recently participated in an on-campus teaching evaluation workshop with Richard I. Miller, a professor of higher education at the State University of New York and recently vice-president at Brockport. The author of three books on evaluation of teaching, administration and college performance, Dr. Miller is currently completing a commissioned study for Jossey-Bass Publishers entitled *Higher Education in the 1980's*. Dr. Miller has held several senior administrative positions in American colleges, universities and state systems. He was also chairman of President Lyndon Johnson's National Commission on Experimentation and Change in Education.

### Must Innovate, Test New Approaches

The workshop was arranged at the request of the Vice-President, Academic, Professor Howard Clark by the Office for Educational Practice. In his opening remarks Prof. Clark noted that universities in general had carried out very few programs to assist chairmen in preparing and discharging their responsibilities of managing budgets, personnel administration, faculty development and taking innovative action in the face of changing conditions. The future will require imaginative administration and a readiness to innovate and test new approaches in addition to the traditional duties of chairmen, he said.

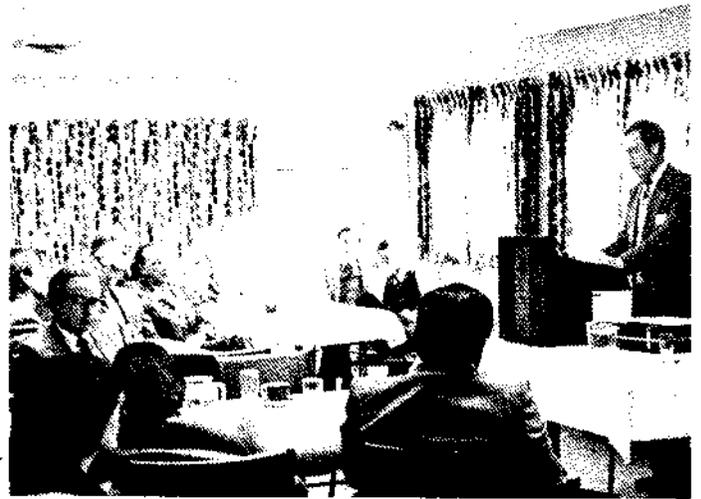
As part of Guelph's continuing effort to maintain and improve its educational environment, Prof. Clark indicated he planned to arrange, from time to time, workshops and seminars for senior academic administrators on specific topics which would be helpful to them in their positions. He said that in meetings with groups of chairmen and the Deans' councils he had become aware of an eagerness to participate in such activities.

Dr. Miller drew on his experiences as an academic administrator and an evaluation researcher in his opening address. He stressed that the evaluation question should be considered as involving total academic performance which would include, in addition to research and teaching, a range of activities such as student advising, publication, faculty relations and service, professional service, public service, management and administration. A substantial body of information and experience has been developed on teaching evaluation. The University of Washington has had a program in operation since the 1930's and at Michigan State the work has been going on for the past 20 years.

### Teaching Evaluation

In the evaluation of classroom teaching Dr. Miller suggested that several sources of information should be used. He considered student evaluation through questionnaires to be reliable if good questions are asked. Stu-

Dr. Miller addresses senior academic administrators.



dents are professional "teacher watchers," since they have had years of experience watching teaching and they can give good appraisals within their competence, he believes. They can judge pedagogic competence in explaining a subject well, in assessing fairness of treatment and in reporting on the teachers' interest in the subject and in the students. However, he contended that students are not capable of judging the adequacy of content in the subject or in the course syllabus. In both of these areas colleague consideration is essential to achieve an adequate appraisal.

Student evaluation, he stated, was a complement to other sources of information, which could include classroom visitation (two people should be involved, one a content specialist and one a good teacher), evaluation of course outlines and teaching materials, special incidents (for example, teaching awards, innovative instructional practices and delegations to the chairman) and self-evaluation. Dr. Miller remarked that in his tenure as a vice-president he had refused to approve a recommendation for promotion where there was no solid evidence of teaching competence. He did not accept letters of recommendation as being sufficient evidence; while, being nice to read, you need something more systematic.

Dr. Miller cautioned the group that the evaluation system is needed to provide results which can be easily understood and used by faculty, students and administrators. The evaluation program must be affordable in terms of effort and cost and based on data humanistically interpreted. "It is better," said Dr. Miller, "to be generally right than precisely wrong." Evaluation for us all can be a very threatening experience and those being evaluated need to know the purpose for which the data will be used and how they will be used, he continued.

The responsibility for developing and maintaining a good evaluation program rests with the departments and, in Dr. Miller's view, good departments, are those which

have committed all their procedures to paper and not only those related to evaluation.

Following Dr. Miller's presentation participants worked in small groups to identify major concerns and questions on which they wanted further information.

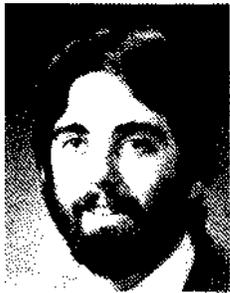
### Observations

In response to the questions raised by the work groups Dr. Miller observed that:

- Some teachers believe that low student ratings at the time are changed in later years as alumni gain a better appreciation for the value of their university experience. However, research evidence indicates that alumni do not change the opinion of the teaching they received as undergraduates. If one gets low ratings from students one will get low ratings from them as alumni.
- Corridor gossip or faculty opinion not based upon actual classroom visitation should be replaced by serious evidence from colleagues based upon an examination of course outlines, teaching materials and classroom observation.
- Students are good assessors of classroom behavior. They can usually discern when a teacher is putting on a show to gain popularity.
- It is important to make provision for improvement opportunities for those who receive low ratings. The department head is the key figure in following up on the results of the evaluation and the thrust should be that of help. Increasingly, more universities are providing units to help develop teaching skills.
- Personnel decisions including tenure, promotion and salary should not be based on the results of one poor rating but should be taken over a series of semesters. Teachers who have a record of teaching well may get into the "flats" in one semester and this alone should not be allowed to affect their career.
- There is some advantage to having a common core of questions on a student appraisal form which are common across a university. These should not be more than 14 to 15 in number, with additional questions from the instructor as an option.
- Good researchers generally make good teachers. They will probably not make brilliant teachers, but will likely be as good as the average good teacher.

Following the workshop Dr. Miller met with several departments to discuss specific departmental concerns. □

O. Brian Allen has taken up a joint appointment with the Departments of Animal and Poultry Science and the Department of Mathematics and Statistics as assistant professor. He graduated from the University of Guelph



with a B.Sc. degree in mathematics and biology in 1972 and an M.Sc. degree in statistics in 1973. Subsequently, Prof. Allen studied at the Biometrics Unit, Cornell University, obtaining his Ph.D. degree in 1979. The subject of his Ph.D. thesis was "Maximum Likelihood Estimation for Birth-and-Death Processes."

Prof. Allen taught for a year and a half within the Department of Mathematics and Statistics before taking up his present position. In addition to teaching and statistical consulting, he plans to be involved collaboratively with applied research as well as maintaining research into more theoretical statistical questions.

Frederick L. Baudais recently joined the Department of Chemistry as assistant professor. Prof. Baudais is a graduate of the University of Alberta (B.Sc., 1971) and the University of Wisconsin (Ph.D., 1978) and spent a year as a postdoctoral fellow at the University of Toronto.



The title of his Ph.D. thesis was "Photoelectron Spectroscopy Using a Variable Wavelength Source and a First Order Focussing Cylindrical Mirror Electron Energy Analyzer." His research project as a postdoctoral fellow was the design of a new infrared ellipsometer to study the catalyzed methanol decomposition on a Ni(100) surface using infrared ellipsometry as a spectroscopic probe for following the decomposition reaction.

His primary teaching responsibilities at Guelph will be in the area of analytical chemistry and his research will focus on the development and applications of new analytical methods.

C. Young Cho, a fish nutrition specialist with the Fisheries Branch, Ontario Ministry of Natural Resources, has been named adjunct professor in the Department of Nutrition.



Born in Haman, Korea, Prof. Cho received his B.A. degree from the University

of Foreign Studies, Seoul in 1958 and his Cand. agro. degree from the Royal Veterinary and Agricultural University, Copenhagen in 1967. Prof. Cho has had close ties with the University of Guelph since 1968. He was a research assistant in the Department of Nutrition from 1968 to 1970, received his M.Sc. (Agr.) from Guelph in 1970 and, from 1970 to 1978, was a research scientist in the University's fish nutrition laboratory. This year he took up his present dual positions working with the Department of Nutrition and the Ontario government.

Prof. Cho's responsibilities at Guelph have included supervision of graduate students and instruction in fish nutrition. He and Professor S.J. Slinger established fish nutrition research at the University in 1970 and also designed the University's fish nutrition laboratories.

Prof. Cho's main research areas include the formulation of diets for Salmonids and Walleye and energy metabolism of fish at different water temperatures. In connection with his work, he has acted as a consultant for fish feed and aquaculture industries in Canada and Europe and travelled extensively in North America, Japan and Europe to present research data and study fish culture.

Stephen D.M. Jones has been appointed assistant professor in the Department of Animal and Poultry Science. A native of Swansea, Wales, Professor Jones received a B.Sc. (Hons.) from the University College of Wales, Aberystwyth in 1972, an M.Sc. in animal production from the University of Reading in 1973 and a Ph.D. in animal production, with emphasis on growth and carcass quality of beef cattle, from the University of Reading in 1976.



His Ph.D. research, which was funded from 1973 to 1976 by a Meat and Livestock Commission postgraduate scholarship, concerned aspects of beef production from British Friesian bulls, their genetic variation and target growth rates during the finishing period of grass/cereal systems.

Prof. Jones's research interests continue to be in the areas of livestock growth and meat production.

## BRIEFLY

DEPARTMENT OF INFORMATION publications manager Peter Taylor tied for second prize in the ninth annual Dorothy Shoemaker Literary Award Contest. Mr. Taylor's poem, *Insomnia*, was entered in the senior poetry division. The contest, named after former Kitchener librarian Dorothy Shoemaker who retired in 1971, is sponsored by the Midwestern Library System which covers Waterloo Region, Perth, Huron and Wellington counties.

## Seminar on correspondence education

Professor C.G.W. Hill, Dean of the Faculty of Education at Massey University in New Zealand, will share some of his extensive professional experience in correspondence education at an on-campus seminar Tuesday, December 11.

Dr. Hill, a visiting professor in the Department of Family Studies, has been involved in the development of correspondence education within an existing university. This approach differs significantly from establishing a new institution, such as the open university, to offer correspondence education. Dr. Hill's experience at Massey University could have some relevance to the University of Guelph.

The seminar, sponsored jointly by the College of Family and Consumer Studies and the University School of Part-time Studies and Continuing Education, will take place at 3:30 p.m. in Room 311 of the School of Hotel and Food Administration. □

## Young Authors Symposium

A Young Authors Symposium entitled "General Electrochemistry" will be held on campus Saturday, January 12. Sponsored by the Electrochemical Society, Inc., Ontario-Quebec section, all sessions will be held in Room 113 of the Physical Sciences building.

Some 200 graduate students, postdoctoral students, and recently graduated graduate students from the universities of Guelph, Western, Trent, Toronto, Ottawa and the State University of New York at Buffalo, will gather for the presentation of seven papers. The main speaker will be Dr. E.J. Casey, director of the energy conversion division of the Defence Research Establishment, Ottawa. The public is invited to attend Dr. Casey's speech at 11:30 a.m.

For more details telephone graduate student Alex McDonald, Chemistry, Ext. 3807.E

### Accommodation

To Sublet — One bedroom apartment, available December 1, Talisman Square, Edinburgh Road South, 836-4410 or 822-0844 after 8 p.m.; furnished 2 bedroom townhouse, all utilities included, for married student, available December 1 to May 1980, Tom, 2681.

For Rent — Fully furnished apartment to share, on good bus route, Tim Straiton, 822-0959.

Wanted to Rent — Furnished one bedroom apartment for visiting professor in Land Resource Science, for March 1980 only, 2447 or 2448; responsible married couple wishes to caretake or rent home with garage and work/storage area, references, will consider short term occupancy, 823-5579 after 6 p.m.

Available — Horses boarded 10 minutes from Guelph, new box stalls, 824-8460, days, 843-5834 evenings; disc jockey, 824-8356.

Alyea, E.C., S. Dias, G. Ferguson and M. Khan, 1979. "Structural Studies of Steric Effects in Phosphine Complexes. Synthesis, Crystal and Molecular Structure of the Chloroperchloratetri(o-tolyl) phosphine-mercury (I) dimer," *Can. J. Chem.* 57: 2217-2222 (Chemistry).

Baker, Susan, 1979. *Sing Out: Christmas Songs and Carols for Senior Citizens*, Toronto: Gordon V. Thompson Limited (Music).

Barker, I.K., B.L. Munday and P.J.A. Presidente, 1979. "Coccidia of Wombats: Correction of Host-parasite Relationships. *Eimeria wombati* (Gilruth and Bull, 1912) Comb. Nov. and *Eimeria ursini supperer*, 1957 from the Hairy-nosed Wombat and *Eimeria arundeli* sp. N. from the Common Wombat," *J. Parasitol.* 65: 451-456 (Barker: Pathology; Munday: Tasmanian Department of Agriculture; Presidente: University of Melbourne).

Brookfield, M.E., 1979. "Anatomy of a Lower Permian Aeolian Sandstone Complex, Southern Scotland," *Scott. J. Geol.* 15: 81-96 (Land Resource Science).

Herold, E.S., J. Mottin and Z. Sabry, 1979. "Effect of Vitamin E on Human Sexual Functioning," *Archives of Sex Research* 8(5): 397-403 (Family Studies).

Hedges, N.A., D.E. Gaskin and G.J.D. Smith, 1979. "Renclar Morphology and Renal Vascular System of the Harbour Porpoise *Phocoena phocoena* (L.)," *Can. J. Zool.* 57: 868-875 (Zoology).

Gaskin, D.E., G.J.D. Smith, B.M. Braune, W.G. Halina and B. Vari, 1979. *Status of Resident and Transient Sea Birds in Head Harbour Passage and Vicinity, New Brunswick, Canada*. Report to the United States Fish and Wildlife Service, Boston, 68 pp. (Zoology).

Kleywegt, H.S., J.C. Jofriet, 1979. "Hoop Tension Loss and Elastic Shortening in Concrete Stave Silos," *Concrete International* 1(8): 28-30 (School of Engineering).

Kremer, M.K. *et al.*, 1979. "Beckh, Johann Joseph" entry in *Schleswig-Holsteinisches Biographisches Lexikon*, Neumeunster 1979, 40-42 (Languages).

Mahon, R., E.K. Balon and D.L.G. Noakes, 1979. "Distribution, Community Structure and Production of Fishes in the Upper Speed River, Ontario: A Pre-impoundment Study," *Environmental Biology of Fishes* 4: 219-244 (Zoology).

Markham, R.J.F., K.H. Nielsen and B.N. Wilkie, 1979. "In Vitro Activation of Complement by *Bacillus subtilis* Protease Correlation with the Response of Guinea Pigs to Aerosols of the Enzyme," *Immunology Letters* 1: 79-83 (Veterinary Microbiology and Immunology).

McRae, James J. and Francis Tapon, 1979. "A New Test of the Administered Pricing Hypothesis with Canadian Data," *The Journal of Business of the University of Chicago* 52(3) July (Economics).

Newman, Jay, 1979. "The Parable of the Three Rings in *Nathan der Weise*," in *Mosaic* 12: 1-8 (Philosophy).

Newman, Jay, 1979. "Prejudice as Prejudgment," *Ethics* 90: 47-57 (Philosophy).

Ryan, B.A., 1979. "A Case against Behavior Modification in the 'Ordinary' Classroom," *Journal of School Psychology* 17: 131-136 (Family Studies).

Ryan, B.A., 1979. "Of Red Rags, Bulls and Sacred Cows: A Reply to Woody," *Journal of School Psychology* 17: 141-144 (Family Studies).

Tong, J.E., V.J. Knott and P. Henderson, 1979. "Influence of Alcohol and Tobacco on the 'Cost' of Mental Work: Heart rate and Variability Changes During Vigilance Performance," Chapter in C. Mackay and T. Cox, eds., *Responses to Stress*, Guildford: IPC Science and Technology Press, pp. 178-189 (Psychology).

Waterston, Elizabeth, 1979. "Literature of Exploration: Canadian Travel Books of the 1870's," *Studies in Canadian Literature*, 4(2) Summer: 44-61 (English Language and Literature).

Waterston, Elizabeth, 1979. Review article, "The Old Adams," *Canadian Review of American Studies*, 10(2) Fall: 205-208 (English Language and Literature).



**RESERVATIONS** should be made now for the Faculty Club's annual Christmas Party Saturday, December 15 at 8 p.m., level 5, University Centre. Telephone Ext. 2211.

**GOOD TOYS** may be purchased at the Amnesty International sale Saturday, December 8 from 10 a.m. to 3 p.m. at 22 Bellevue Street, Guelph. Profits will go to Amnesty International, Group 6, Guelph. For more information contact Professor Margret Andersen, chairman of the Department of Languages and Literatures.

**SCHOOL OF HOTEL AND FOOD** Administration students are to host Hospitality Update '80 January 31, February 1, 2 and 3. This year's theme is "2001 Is Not Far Away," and delegates will discuss future trends in the hospitality industry. Leaders in the industry will give seminars and workshops on tourism, management, computer applications and solar energy usage. Students from hotel schools across Canada and from the northeastern United States have been invited to attend. For more information contact convention chairman, Peter Woytiuk, Exts. 2404 or 3703.

**DATES HAVE BEEN ANNOUNCED** for the 1980 Waterloo-Wellington Science and Engineering Fair. The annual event, which alternates between the two counties, will be held this year at Preston High School from April 16 to April 19. Entrants, who last year totalled 200 students from grades 7 to 13, are encouraged to submit projects that answer scientific questions. The University of Guelph is a sponsor of the fair, as are Conestoga College, Wilfrid Laurier University, the University of Waterloo, local Rotary Clubs, area industries and organizations.



## CSA president

Nancy Brown is happiest, she says, when working with people, accomplishing goals. The bigger the challenge, the more it seems to appeal. Right now, as president of the Central Student Association, she is faced with a number of challenges, of which, she believes, the biggest is to achieve solvency for the organization and build up its credibility with students, administration and faculty.

When one learns of all the groups that Nancy is actively working with, one wonders how she has managed to find time to study. But Nancy came to University with the philosophy that if she could maintain a 70 per cent average and do the things she wanted to do on campus, she would get a great deal more out of university life. Accordingly, from the first week on she was heavily involved with student government. She was president of her freshman year, OAC '79, chairman of the Student Federation of OAC, Open House supervisor of College Royal, OAC student representative on the Central Student Association council and now CSA's president. She is also chairman of the University Centre board and is very much occupied with its search committee's task to find a new director for the University Centre. In her "spare time" she continues to lead, with her father, a 4-H Club in Beaverton. "I need a lot of sleep sometimes," she admits.

Following her set of priorities for CSA, the diminutive president is endeavoring to make the organization's operation more visible to the students by such means as moving some of the open business meetings to the residences. She is also working to establish internal controls, helpful in evaluating the whole operation. In an effort to increase student representation on higher governing bodies, Nancy hopes to get one more student on the University's Board of Governors. She would also like to improve student services and programs, specifically the health plan and student entertainment.

One of her first tasks, however, is to put the CSA's books in order. Nancy believes it will take two years to put the CSA as a whole on a strong financial footing again. She prefers a slower rather than a faster recovery, because the latter would demand a more drastic reduction of services than she feels is advisable.

What is the future for this B.S. (Agr.) graduate who has majored in animal science, minored in business and specialized in University community affairs? She admits she enjoys the university environment and is considering graduate work leading to an M.B.A., but has made no firm decisions as yet.

# Next Week at Guelph

## THURSDAY, 79 12 06

Exhibit Opening - EXHIBITION OF WORKS IN VARIOUS MEDIA BY THE FACULTY OF THE DEPARTMENT OF FINE ART, main floor, McLaughlin Library until 79 12 16.

Luncheon Special - 11:30 PCH, UC.

Seminar - GONOCOCCI IN VIVO AND IN VITRO: GENOTYPIC SELECTION AND PHENOTYPIC CHANGE IN RELATION TO PATHOGENICITY AND IMMUNOGENICITY, Dr. Harry Smith, chairman, department of microbiology, University of Birmingham, England, 11:00, Pathology 220.

University of Guelph Faculty Association - EXECUTIVE MEETING, 12:00, Faculty Club board room.

Biochemistry Seminar - THE APPLICATION OF STEREOLOGICAL TECHNIQUES IN ANALYSIS OF MORPHOLOGY, Dr. W. Woodward, Department of Nutrition, 12:00, CM 319.

Seminar - SELLING AGRICULTURAL GRAIN SYSTEMS IN FOREIGN MARKETS, James White, Westeel-Rosco Ltd., 16:00, School of Engineering 112A.  
Tea - MOTHER CHRISTMAS TEA, sponsored by the University of Guelph Association for Women, 16:30, 9th fl. lge., Arts.

Worship and Religious Meetings - CATHOLIC MASS, 17:00, Chapel, level 5, UC; ANGLICAN EUCHARIST, 17:10, UC 334; INTERVARSITY CHRISTIAN FELLOWSHIP, 19:00, 9th fl. lge., Arts; CHRISTIAN DOCTRINE CLASS, 20:00, UC 334.

Meeting - NAVIGATORS NEW LIFE, 19:00, UC 442.

TV - SPOTLIGHT ON UNIVERSITY OF GUELPH, panel on the Iranian situation, 19:00, Cable 8.

Men's Ice Hockey - GUELPH vs. WATERLOO, 19:30, Memorial Gardens.

## FRIDAY, 79 12 07

Classes conclude.

On-campus Recruiting - SHELL CANADA, APPLICATION DEADLINE FOR PRESCREENING, for students graduating in agriculture; IMPERIAL OIL, for students successful in the November 9 prescreening; BANK OF NOVA SCOTIA APPLICATION DEADLINE FOR PRESCREENING, for students graduating in arts, science or agriculture; JOHN DEERE LIMITED APPLICATION DEADLINE FOR PRESCREENING, for students graduating in agricultural engineering.

Biomedical Sciences Seminar - THE BENEFITS OF HISTAMINE, Dr. P. Eyre, Biomedical Sciences, 11:00, OVC 309.

Video Tape - TBA 11:00, UC 103.

Luncheon Special - 11:30, PCH.

Worship and Religious Meetings - CHRISTIAN FACULTY AND GRADUATE STUDENT FELLOWSHIP, 12:00, UC 301; MUSLIM FRIDAY PRAYERS, 12:30, UC Chapel, level 5; UNIVERSITY BIBLE STUDIES, 19:30, UC 103.

Perception/Cognition Series - THE FUNCTIONAL ARCHITECTURE OF WORD PERCEPTION, Tom Carr, Michigan State University, 12:30, UC 442.

Two-Bit Flick - THE WILD ONE, Marlon Brando, 19:00 and 21:00, Phys. Sc. 105.

## SATURDAY, 79 12 08

Faculty Club - CHILDREN'S CHRISTMAS PARTY, last names beginning with A-L, 10:00; last names beginning with M-Z, 14:00, members' children up to ten years old only, Faculty Club lge., level 5, UC.

Amnesty International - GOOD TOYS FOR SALE, 10:00 to 15:00, 22 Bellevue, Guelph. Profits to go to Amnesty International Group 6, Guelph. Telephone Prof. Margret Andersen, Ext. 3883, for more information.

Arboretum Series - WINTER'S WEEDS, with Alan Watson, 14:00, J.C. Taylor Nature Centre. Dress warmly; hot chocolate and tea available after the walk.

## SUNDAY, 79 12 09

Worship and Religious Meetings - UNIVERSITY BIBLE STUDIES, 10:00, UC 429 and 442; CATHOLIC MASS, 10:10, PCH; MUSLIM ZOHR PRAYERS, 13:30, 9th fl. lge., Arts.

TV - SPOTLIGHT ON UNIVERSITY OF GUELPH, panel on the Iranian situation, 11:00, Cable 8.

Cine Series - TBA, 19:00, WMH. Admission \$1.75.

## MONDAY, 79 12 10

Examinations commence.

Video Tape - TBA, 11:00, UC 103; continues 79 12 12 and 79 12 14.

Worship - CAMPUS CHRISTIAN FELLOWSHIP, 19:30, Chapel, level 5, UC.

## TUESDAY, 79 12 11

Worship - ANGLICAN EUCHARIST, 12:10, Chapel, level 5, UC; CATHOLIC MASS, 17:00, Chapel, level 5, UC.

Seminar - CORRESPONDENCE-BASED EDUCATION: THE OPEN UNIVERSITY CONCEPT AS DEVELOPED AT AN ESTABLISHED UNIVERSITY, Dr. C.G.N. Hill, Dean, Faculty of Education, Massey University, New Zealand, 15:30, Hafa 311. Dr. Hill is visiting professor in the Department of Family Studies, and the seminar is co-sponsored by the College of Family and Consumer Studies and the University School of Part-time Studies and Continuing Education.

## WEDNESDAY, 79 12 12

Luncheon Special - 11:30, PCH.

Worship - CATHOLIC MASS, 12:00 Chapel, level 5, UC; IMMANUEL FELLOWSHIP, 19:00, 8th fl. lge., Arts.

Dance Club - INTERNATIONAL DANCE CLUB, 20:30, Gryphon Room (upstairs at the Stadium). Everyone welcome.

## THURSDAY, 79 12 13

Luncheon Special - TBA, 11:30, PCH.

Physics Lecture - EXPERIMENTAL TESTS OF BOLTZMANN EQUATIONS IN DENSE GASES, Dr. Sow-Hsin Chen, Nuclear Enninn<sup>P</sup>ring Department, Massachusetts Institute of Technology, 14:00, Phys. Sc. 121.

Worship and Religious Meetings - CATHOLIC MASS, 17:00, Chapel, level 5, UC; ANGLICAN EUCHARIST, 17:10, UC 334; CHRISTIAN DOCTRINE CLASS, 20:00, UC 334.

Meeting - NAVIGATORS NEW LIFE, 19:00, UC 442.

TV - SPOTLIGHT ON UNIVERSITY OF GUELPH, panel on the Iranian situation, 19:00, Cable 8.

University of Guelph Faculty Association - COUNCIL MEETING, 19:30, Faculty Club lge.

Field Naturalists' Club - MEMBERS' NIGHT AND CHRISTMAS PARTY, 19:45, Arboretum Centre.



**THE COLLEGE WOMEN'S CLUB** annual dinner/dance is Saturday, February 9, at the Holiday Inn, Guelph. Tickets, \$12 each or \$24 a couple are available by telephoning 824-2038, 822-1502 or 823-5403.

**PROVINCIALY ASSISTED** Ontario universities received a total revenue of \$1.29 billion and expenses totalled \$1.27 billion for the fiscal year ending April 30, 1979. These figures are in a report of the Committee of Finance Officers-Universities of Ontario entitled *COFO-UO Report of University Revenues and Expenses*.

The document, accepted by the Ontario government as the single annual financial statement for Ontario universities, was submitted to the Minister of Colleges and Universities, Dr. Bette Stephenson. It will also be used by the Ontario Council on University Affairs in developing recommendations to the government on university funding.

Copies of the document are available from the COU Secretariat, 130 St. George Street, Suite 8039, Toronto, Ontario, M5S 2T4.

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