

# guelph

## UNIVERSITY NEWS BULLETIN

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82 03 25

## Super AP

*NSERC grant buys really big computing*

The Natural Sciences and Engineering Research Council has awarded \$275,000 to a team of physicists in the Guelph-Waterloo Program for Graduate Work in Physics (GWP)<sup>2</sup>. The money will be used to purchase one of the latest examples of computer wizardry, a Floating Point Systems array processor (AP), a high-powered small computer especially suited to large-scale computing needs. The facility, which will be located on campus, will serve physicists at both universities.

Led by physicist Chris Gray, the team members who will be the AP's major users are Prof. Gray (liquids and surfaces simulations and theories), and Professors Jimmy Law (atomic physics), Peter Egelstaff (liquids and gases simulations), Ross Hallett (light scattering experimental analysis), Bernie Nickel (hydrodynamic turbulence simulations), Duk Poll (molecular physics) and Don Sullivan (liquids and surfaces simulations and theories). Mathematics and Statistics Chairman, Professor Bill Smith (liquids simulations) is also a team member as are Waterloo physicists, Professors John Leech (solids simulations) and Kim Papp (galaxy simulations). Adjunct member, Chemistry Professor Saul Goldman, will be using the AP for his research in liquids simulations.

### Millions Per Second

The array processor's value lies in its speed of operation. Especially designed for time-consuming programs requiring lengthy matrix or array multiplications, the new machine, unlike older models, performs the arithmetic operations involved not in series but in parallel. This means it can perform a number of calculations simultaneously. Under optimum circumstances its capacity can be mind-boggling. For example, within one second it can "perform 12 million floating-point additions or multiplications,



*An elated group of (GWP)<sup>2</sup> scientists pictured beside the Nova II computer, soon to be upstaged by the new array processor. Left to right: Professors Saul Goldman, Bill Smith, Jimmy Law, Duk Poll, Chris Gray, Don Sullivan and Ross Hallett.*

12 million memory accesses, and six million conditional-branch operations as well as compute 12 million memory addresses."

About the size of a large refrigerator, the array processor, which is expected to arrive within a few months, is in some ways similar to a high-powered minicomputer such as the VAX except that it cannot "stand alone." It requires a host machine, such as the Institute of Computer Science's Amdahl, to handle input and output functions, but these functions take up only seconds of the Amdahl's computing time.

The AP is at least 10 times faster than the VAX and twice as fast as the Amdahl in raw computing speed.

Scientists working in simulations require hundreds of hours of computing time, notes Prof. Gray. For the past four years a group of Guelph physicists working in this area have been trying to find a solution to their large-

scale computer needs and have been looking for a machine that could handle them cost effectively.

In the mid-1970's Guelph was among the leaders in the world in simulations of liquids, says Prof. Gray. They wrote the first liquid computer simulation programs in the world for a minicomputer, Guelph's Nova II, and proved it was feasible, but since then the research problems have rapidly become too large for the Nova to handle, he continues.

Over the past 10 years the Guelph group, and especially Prof. Gray, has been working closely with Cornell University scientists in a number of projects with Guelph generally providing the theory work and some simulations and Cornell, which has an earlier model AP, doing the bulk of the simulations. ICS director, Dick Mason and the Computer Services Council have also been very accommodating and helpful during this stop-gap

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The newly-formed OVC computer group currently consists of Professor Alan H. Meek, as co-ordinator and Barry Stahlbaum, Wendy Woodhouse, Randy Willis, and Karen Earle. The computer group, part of the Department of Veterinary Microbiology and Immunology, is responsible for the development of an integrated information management system for the College.

**Barry Stahlbaum**

Barry Stahlbaum has been appointed staff analyst in the computer group.



Mr. Stahlbaum joined the Institute of Computer Science as a data control clerk in January, 1970. After having worked in Administrative Systems and Programming on various financial applications (including payroll, personnel, pension, accounting and budget), he moved to Academic Computer Services in 1975 to take on the duties of APL service manager. In ACS, he taught and consulted in the uses of the APL system. In September, 1980, Mr. Stahlbaum was seconded to OVC to assist in the development of an electronic information management system.

Mr. Stahlbaum graduated from the University of Guelph in 1974 with a Bachelor of Science. The president of Physical Science Alumni Association, he was also chairman of the University's 1981 Alma Mater Fund Advisory Council.

**Wendy Woodhouse**

Wendy Woodhouse has been appointed senior analyst programmer in the computer group.

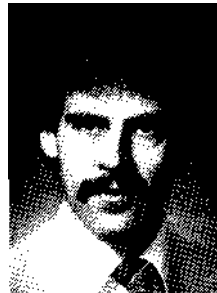


Mrs. Woodhouse joined the Institute of Computer Science in 1970. In Academic Computer Services she was involved in the development of an on-line hotel operation simulation for a fourth year School of Hotel and Food Administration course and participated in the training program as a teacher and consultant in the use of APL and text formatting. Subsequently, in Administrative Systems and Programming, and most recently, Financial Services, she was responsible for the development of a budget information and planning system.

Mrs. Woodhouse will be assisting in the development of an electronic information management system within the College.

**Randy Willis**

Randy Willis has been appointed analyst/programmer in the computer group, Department of Veterinary Microbiology and Immunology.



Before this appointment, Mr. Willis was an operations research analyst at the University of Waterloo where he provided analytical support for senior university executives. Prior to this, he gained experience in systems development in a number of application areas while working for Kodak Canada from 1978 to 1980.

Mr. Willis has a Bachelor of Mathematics from the University of Waterloo, obtained in 1978, and has an extensive programming background, including a knowledge of APL.

**Karen Earle**

Karen Earle has been appointed computer user services assistant in the computer group.



A graduate of Centralia College, 1957, Mrs. Earle has been the senior field technician for a large interdisciplinary dairy research project at the University since October 1980. Besides data collection on farm visits, she had responsibility for data entry and for the maintenance and integrity of the project's data base. Prior to working at the University, Mrs. Earle served as an animal health technician with several veterinary practices in southern Ontario.

In her new position, she will assist the user's of OVC's electronic information management system.

## Town and Gown honor Professor Murdo MacKinnon



*Niki Goldschmidt gives Guelph Spring Festival gift; Dean Murray looks on.*



*Prof. MacKinnon receives a photograph of the MacKinnon building from President Forster.*

*The Choir sings to its best cheese-seller.*



Continued from page 1.

period, says Prof. Gray. (Cornell is also in the process of obtaining the same kind of array processor, twice as fast as its previous model, and co-operative research is expected to continue between the two institutions.)

#### Cuts Computing Costs

Cost effectiveness of the new array processor can best be seen by the following example: a program requiring 4,000 hours' computing time on Guelph's Amdahl would cost several million dollars, says Prof. Gray; with the AP it would cost approximately \$5,000.

With the AP in place, the Amdahl's involvement in the total exercise is the few seconds of inputting and outputting, and the hours of "number crunching" or "brute force arithmetic" calculations are carried on, cost-free to the user, in the AP. The Guelph community will benefit from the "freed up" computing time on the Amdahl, now relieved of some of its heaviest users. In addition, spare time on the AP will be made available to the University community.

Computer simulations are a vitally important part of liquids physics research, since they play an intermediate role between theory and experiment. By comparing computer simulations, in turn, with theory and experiment, one can obtain, in time, both a valid theoretical model and also a realistic intermolecular force model. In addition, computer simulations provide results difficult or impossible to obtain experimentally or theoretically, such as those pertaining to the study of matter at extreme density or temperature conditions or to the ordering of molecules at liquid surfaces. The Guelph group is involved with all these projects, says Prof. Gray.

ICS is enlarging its computer room facilities to handle the AP and possibly other new equipment, and Dr. Murray Alexander has already arrived at Guelph to act as consultant on the AP's hardware/software problems. He will act as liaison with users at the University of Waterloo and supervise funneling of computer programs, which in the case of Waterloo, are to be sent and received via the DATAPAC network.

Prof. Gray, on behalf of the physics team, expressed appreciation of the support received not only by colleagues at Cornell and Waterloo, but particularly from resident

#### Red Cross Blood Donor Clinic

The Canadian Red Cross Society is holding a blood donor clinic in Peter Clark Hall of the University Centre Wednesday, March 31.

Hours are 10 a.m. to 12:15 p.m. and 1:45 p.m. to 3:45 p.m.

There will be only one spring clinic, and the Red Cross is hoping for a good turnout. □

expert Prof. Law, who mastered the details of the AP's hardware and software; ICS director, Dick Mason; ICS associate director of academic computer services, Ted Swart, and President Donald F. Forster and Vice-President, Academic, Professor Howard Clark, who communicated to NSE RC the strong support of the University. □

#### Sir Rudolf Peierls

Professor Sir Rudolf E. Peierls will be a distinguished visitor in the Department of Physics from Tuesday, March 30 to Monday, April 5.

Sir Rudolf is a well-known theoretical physicist who has made important contributions to many branches of physics: solid state, atomic, nuclear and particle physics.

Sir Rudolf retired a few years ago from the Chair of Theoretical Physics at Oxford University, a position which he held from 1964. Prior to that time he was professor of theoretical physics at the University of Birmingham. Many of his former students and associates are in Canada pursuing research in theoretical physics.

While in Guelph, Sir Rudolf will give the Physics Department Colloquium Tuesday, March 30 at 4:10 p.m. on "Recollections of the Early Days of 'Quantum Mechanics'" and a lecture Thursday, April 1 at 3:10 p.m. entitled "Fallacies on the Arms Race." Both these lectures, open to non-specialists, will be held in Room 113 of the Physical Sciences building. On Friday, April 2 Sir Rudolf will give a more specialized lecture on "Momentum of Light in a Refractive Medium" at 3:10 p.m. in Room 260 of Chemistry and Microbiology. Details: Ext. 2261.

## Music students successful at Kiwanis Festival

Several students studying voice with faculty members in the Department of Music, fared admirably at the Kiwanis Music Festival, held in Guelph.

Hazel Graham, soprano, began her voice training in Trinidad before coming to the University to pursue a Bachelor of Arts degree with a major in music. Now in her third semester, she has studied with Elizabeth Neufeld, and is a student of Marcus Kramer, both members of the music faculty. Ms. Graham took first place honors in three categories at the festival: "Church Solo Any Voice" (grade 88.2); "Soprano Solo Open" (grade 88.2); and "Oratorio Solo Any Voice," where she inspired adjudicator Alec Clark to give her the first 90 marks of the festival. Ms. Graham performed at the final concert March 13. She was awarded a \$250 scholarship to further her musical studies.

Other winners included: Ron Greydanus, a former student of Elizabeth Neufeld, who placed second in "Church Solo Any Voice" (grade 87.3) and Gilda Dicola, a drama major, studying voice with Anna Tamm, who tied first place in the "Soprano Solo 18 and Under" category (grade 84) and tied second place with "Church Solo Any Voice 20 and Under" (grade 84.3). Also placing first in the "Girls Double Trio" class was Elaine Kelly (grade 84.2), another student of Ms. Tamm's. Susan Muramets, a high school student and newcomer to Guelph, also studying with Ms. Tamm, took three firsts: "Girls 14 and Under, Classes 93 and 99"; "Girls 16 and Under," and a second place in musical comedy. Miss Muramets was awarded a \$100 scholarship. □



A far-out entry in the College Royal and University Open House "Developing Our Dreams" exhibit competition was this Austin "mini tank" by School of Engineering students. Impaled on the old canon in Branion Plaza, the car has this message: "Developed by Canadians, for Canadians, and to be used against Canadians."

# RDOP studying foreign ownership of Ontario farm land

Concern is beginning to be expressed in many parts of rural Ontario about a reported rise in the number of absentee owners of farm land. Huron County, where Guelph's Rural Development Outreach Project has direct community involvement, is one of those areas undergoing changing land ownership patterns.

In Huron County, as in most other rural areas, most of the absentee land owners live in Ontario. Many of them are probably descendants of early settlers. But with Canadian land prices much lower than those in Europe, European buyers have appeared on the scene in Ontario. Some of these buyers later become immigrants and farm their own land, but some remain absentee owners.

To try to help clarify the picture, the Huron County Federation of Agriculture asked RDOP researchers to study foreign land ownership in Huron County.

The core of the study is focused on concerns over the possible effects that absentee ownership may have on farm prices and on the community, especially in terms of schools, churches and community facilities. The concern over land prices arises from the fact that farm land is priced much higher in Europe than in Ontario at present, coupled with a weak Canadian dollar. Another fact, of course, that also pushes up land prices in areas such as Huron County is the outflux of farmers who have sold farms near major areas of urban expansion, and who go "farther out" seeking new farms.

The study began by measuring the extent of absentee ownership in Huron County. Inventories of farmland ownership for nearly one million acres of land, an area larger than Prince Edward Island, were taken. A township-by-township survey established figures for 1975 and 1979, and a 1980 update which expanded into the southern part of Bruce County was added. Categories of absentee ownership were: non-local, Ontario; other Canadian, and foreign. The first findings showed that a majority of absentee ownership was in the hands of the non-local Ontario residents. Foreign holdings constituted the smallest percentage, with European ownership increasing markedly from about 1,800 acres in 1975 to over 8,000 acres in 1980, as American ownership dropped from 3,600 acres (1975) to 2,400 acres (1980). Non-local Ontario owners still represent 75 per cent of the absentee ownership, controlling four times as much land as the foreign owners.

The second phase of the study looked at actual land use on all foreign-owned parcels of land. In addition, it considered changes in make-up of absentee population and extended the area covered to the southern townships of Bruce County (Huron, Kinloss, Carrick

and Culross), where concentrations of foreign land ownership had been reported. The investigation showed that foreign ownership increased from 0.61 per cent to 1.03 per cent of the total farmland area, or by nearly 1,100 acres per year. These parcels were concentrated particularly in the northern "lakeshore townships." The land use, however, was almost entirely for agricultural purposes, largely through rental to local farmers.

An interesting point made in the study was that land transference was not necessarily a one-way street. Change of ownership often involved resale to local residents, or meant in some cases that absentee owners moved into the area and "became part of the social and economic community."

The third phase of the study, now under way with support from the Ontario Ministry of Agriculture and Food and the Canadian Agricultural Research Council, as well as RDOP, will attempt to assess the socio-economic and community impact of the changing land-holding patterns.

RDOP Director, Professor Tony Fuller, has involved a large number of faculty members from several Departments throughout the study. These include: Julius Mage, Geography; George Brinkman, Agricultural Economics and Extension Education; Rick Richards, Land Resource Science; Mark Lapping, Director, School of Rural Planning and Development; Fred Dahms, Geography, Ted Gray, School of Agricultural Economics and Extension Education; and research associate John FitzSimons of RDOP.

Prof. Mage says that the "case of Huron County" offers unique study opportunities. The specific concern of the residents and farm operators is being considered for ways in which the growing pains of an old, but vital, area of Ontario can be eased. As well, it offers a picture of the long-term directions of Canadian land use in an increasingly mobile

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**IF YOU FLY** Air Canada this summer, don't be surprised to see a film on board by Norm Lightfoot of the Office for Educational Practice. A 25-minute documentary *The Nature Art of Robert Bateman*, is Mr. Lightfoot's second documentary on wildlife artist Robert Bateman. The first, *Images of the Wild* was produced with the National Film Board's Toronto office in 1978.

The new film is being distributed by Crystal Bear Films in Pickering, the same company which handles the University's documentary, *The Harp Seal*.

**NEW DIAL-UP** lines into the Gandalf Network are being installed. On Monday, April 5 the extension numbers 8501 to 8506 will no longer be in operation. The new number will be 821-0290. Information: Kent Percival, network co-ordinator, Ext. 3775.

**WINTER BLUES** getting you down? *Not Now Darling* could be the answer! This hilarious comedy is the next show for the University Centre's Royal Alex Shuttle. Starring the noted English actor Leslie Phillips and co-starring Andrew Sachs, *Not Now Darling* is the most famous of the British farces written by Ray Cooney and John Chapman.

The shuttles to the Royal Alex are Thursday, April 8 and Tuesday, April 13. The travel cruiser leaves the University Centre at 6:30 p.m. Tickets, at \$16.50 are available at the central box office in the courtyard of the University Centre.

**CANADIAN HISTORY** records that a pioneer woman was not ready for marriage until she had completed 13 quilts. When her engagement was announced she began a marriage quilt which epitomized all she had learned and displayed her best stitchery — 10 to 12 stitches to the inch.

Early Canadian quilts were made for functional purposes but they were designed for beauty. Most of them contained a deliberate error, for the belief was that only God was able to make something perfect. The quilts, and the beds they covered, were handed down from mother to daughter, and many are preserved in museums across Canada. Twenty-one quilts, hand made by University of Guelph women and their friends are on display in the Faculty Club to Saturday, April 3, level 5, University Centre.

Details: Sandra Webster, Information Services, Ext. 3864.

**THE TORONTO** Institute of Medical Technology is offering a nine-month course in cytogenetic laboratory technology beginning in September. Applications will be accepted until May 28. Pre-requisites are an R.T. or a B.Sc. with background in genetics or biology. Apply to: The Registrar, TIMT, 222 St. Patrick Street, Toronto, Ontario, M5T 1V4, or telephone 1-416-596-3143.

**AN EVENING** of one-act plays will be presented at the Department of Drama's Inner Stage, Monday, March 29, Tuesday, March 30 and Wednesday, March 30.

Tom Stoppard's *After Magritte* and *Sexual Perversity in Chicago* will be presented.

Tickets at \$2 are available at the box office in the courtyard of the University Centre.

**THE UNIVERSITY OF GUELPH CHOIR**, conducted by Gerald Neufeld, will present its annual spring concert Sunday, March 28 at 3 p.m. in War Memorial Hall. Soloists will be Theresa Thibodeau, soprano, Elizabeth Simmons, contralto, and Marcus Kremer, tenor. Mary Louise Vosburgh and Gerald Manning will be the accompanists.

The features work will be Brahms' "New Love Songs." Other composers to be represented on the program are Britten, Debussy, Faure, Rachmaninoff, and Schubert. A selection of madrigals will also be performed.

The 75-voice choir comprises students and faculty and staff members of the University.

Tickets for the concert are available at the central box office in the courtyard of the University Centre, Ext. 3940; from members of the Choir and at the door on the evening of the performance. General admission is \$4, students and senior citizens, \$3.

# Philosophy professor named executive director Here's looking at you, SSFC



Prof. Michalos and six-foot office door picture of Bogart.

Philosophy professor Alex Michalos is to take a three-year leave of absence to serve as executive director of the Social Science Federation of Canada, a role which he describes as "ambassadorial."

The Federation represents more than 12,000 Canadian anthropologists, educators, geographers, historians, law teachers, political scientists, psychologists and sociologists. One of its functions is to provide a central reference point through which people working in these disciplines can communicate both with one another and with the community at large.

"I see myself as a bridge builder," says Prof. Michalos. "I like the idea of mediating among several different kinds of groups and bringing their work to the attention of parliamentarians, academic social scientists, government representatives and members of the news media."

There is, he believes, an inclination for people who do any kind of research to be isolated from the people who fund that research. In Canada, where most of the funding comes from the public purse, it is important that the public should have some idea of what it is getting for its money, he believes.

Prof. Michalos' personal specialty has been the philosophy of science with particular reference to probability and decision theory, which, in turn, has involved him in management science and welfare economics.

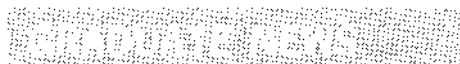
He became interested in the so-called "social indicators" movement, which came with the death of welfare economics. It involves the idea that there was something which could be described as "the good life" — a concept as old as Plato — which might possibly now be subject to quantitative analysis. "It was my interest in this area which opened up for me an overview of the social scientific enterprise — how it works in society, and what contribution it has to make towards the 'good life.' This, it seems to me is what the Federation is about — finding ways in which the social sciences can make

he most effective contribution to the nation's welfare."

Prof. Michalos' ambassadorial role will be tempered by a wealth of administrative responsibilities. Apart from its function as clearing-house for the social sciences and a bridge to the wider community, the Federation also administers an annual budget of \$1 million for its aid-to-publication program which makes it possible for about 150 works of advanced scholarship to be published each year.

Keeping up-to-date with the work of 12,000 Canadian scientists and being able to answer their questions about related work in the field calls for a sophisticated data bank and information retrieval system which is constantly processing significant quantities of material. It maintains contact with international social science bodies and works closely with such institutions as UNESCO and CI DA.

Prof. Michalos will assume his duties as executive director of the Federation in August. □



The Ontario Milk Marketing Board is offering a scholarship of \$12,000 per year to a student enrolled in or accepted for admission to a doctoral program in the OAC or the OVC. The research program of the graduate student must deal with an area of interest to the OMMB, such as mastitis, management systems for dairy cattle, nutrition, economic aspects of milk production and marketing, and processing and quality of dairy products. Experience in the Canadian agricultural industry will be an advantage.

A student may hold the scholarship for three years. Renewal each year will be contingent upon satisfactory progress. Application must be submitted to the Faculty of Graduate Studies office, level 4, University Centre, by June 30. □

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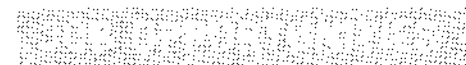
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**Stenographer, Clinical Studies.** Salary range: \$183.17 - \$268.53.

**Examinations Clerk, Office of the Registrar. Clerk III.** Salary range: \$263.40 - \$375.58.

#### ASLA Vice-President

Professor Cameron Man, Director, School of Landscape Architecture was installed as vice-president of the American Society of Landscape Architects at the 81st annual meeting.

#### Re-elected to post

Professor William Christian, Political Studies, was re-elected director and vice-president of the Harold Innis Foundation. He has also been invited to serve as a member of the advisory board of the *Windsor Access to Justice* yearbook.

#### Travels and Seminars

Dr. P.K. Basrur, Biomedical Sciences, was the guest speaker at the fourth annual symposium of the Brazilian College of Reproduction held at the Veterinary College, Federal University of Minas Gerais.

Dr. Basrur's guest lecture on "Mutant Genes That Cause Pregnancy Wastage in Cattle" was sponsored by the Brazilian College of Reproduction and the University of Minas Gerais, Brazil.

Dr. J.G. FitzSimons, Rural Development Outreach Project, attended and participated in the conference "Extension: A Key Resource for Citizen Involvement" held at the University of Massachusetts, Amherst.

The conference provided an opportunity to learn about citizen involvement training projects initiated by the Co-operative Extension Service in Massachusetts and brought together resource people from other states to discuss extension programs in such areas as public policy education, state and local government and citizen group training.

Professor Bruce A. Forster, Economics, served as a member of the agricultural effects peer review panel for the United States Environmental Protection Agency's "Acid Precipitation Ecological Effects Research Review" held in Raleigh, North Carolina.

Professor D.E. Gaskin, Zoology, attended a joint meeting of the committee on whales and whaling in Winnipeg with officials of the federal Department of

Fisheries and Oceans. They discussed the management and habitat protection for white whales in the St. Lawrence estuary, Hudson's Bay and the western Arctic.

He has just returned from a conference on "Reproduction in Cetacea," held at La Jolla, California. This conference was sponsored by the International Whaling Commission, the U.S. Marine Mammal Commission, and the U.S. National Marine Fisheries Service. He presented an invited paper on behalf of his research group at Guelph, entitled "Reproduction in Phocoenids: Implications for Management."

At the invitation of the department of sociology, the 1982 Manel Memorial Lecture at Atkinson College was given by Sociology and Anthropology professor Ian Currie. Focusing on the sociology of death and dying, Prof. Currie spoke on "Scientific Research on Life after Death: Resuscitation Experiences" and "Research on Reincarnational Memories."

Professor Bruce J. Holub, Nutrition, was an invited seminar speaker at the Thrombosis Research Center, Temple University, in Philadelphia. The title of his lecture was "The Metabolism and Function of Individual Molecular Species of Cellular Phospholipid."

Professors J.J. Hubert and E.M. Carter, Mathematics and Statistics, were invited speakers at the department of statistics, McMaster University. Their seminar was entitled "Growth Curve Modelling for Multivariate Quantal Bioassays."

Professor Irene Pages, Languages and Literatures, presented three papers, "Femininity, Madness and Writing"; "Simone de Beauvoir: (evolution de don feminisme)," and "New Directions in Feminist Critical Theories in France" at the annual meeting of the Modern Language Association held in New York.

Professor Francois Paré, Languages and Literatures, was asked to help as a committee member in the organization of the first Annual Conference for Franco-Ontarian Writers to be held at Laurentian University in June. The conference is sponsored by the Ontario Arts Council and Laurentian University.

## Seals in the news

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# SCIENCE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE



Guelph's research interests in seals is making the news in a number of areas this month.

Office for Educational Practice cinematographer Norman Lightfoot, with technician Bob Frank and CBS graduate student Johanne Ouellette, have photographed the birth of a Hooded Seal pup for the first time ever. The footage was captured on sea ice in the Gulf of St. Lawrence.

The February issue of the prestigious journal *Science* carries Mr. Lightfoot's photograph of the harp seal on its cover (see above). Inside is a paper by College of Biological Science Dean, Keith Ronald, and research assistant J.L. Dougan entitled "The Ice Lover: Biology of the Harp Seal (*Phoca groenlandica*)." Copies of the journal are available at the campus bookstore.

*The Harp Seal*, a film depicting the life and habits of this controversial animal, will receive its television premiere on the CBC's "The Nature of Things" Thursday, April 1 at 8 p.m. The 28-minute sound/color film, produced by the Office for Educational Practice, offers unique coverage of a harp seal birth, which was shot by Mr. Lightfoot. Dean Ronald was scientific advisor to the film. □

**PIANO STUDENTS** of Anya Laurence, Department of Music, will be heard in concert Thursday, April 1 at 12:10 p.m. and 1:10 p.m. in Music Room 107 of the MacKinnon building. The program will include works by Grieg, Mozart, Moussorgsky, Valenti, Liszt, Villa-Lobos and Chopin; piano concertos by Mendelssohn and Brahms, and the "Sonata for Two Pianos, Eight Hands" by Bedrich Smetana. Joan Swoboda, saxophonist, will be the guest performer at the 12:10 p.m. concert and Lawrie McEwan, baritone, will sing at the 1:10 p.m. concert. Admission is free, and the public is invited to attend.

**PIANIST KAREN QUINTON** will give the Thursday Noon Hour Concert March 25 in Music Room 107 of the MacKinnon building.

The first program at 12:10 p.m. will include Mozart's "Sonata in D Major, K. 576," and the "Ginastera Sonata." Program II at 1:10 p.m. will consist of Mussorgsky's "Pictures from an Exhibition."

Sponsored by Concert Management, the performances are free and open to the public.

**A DINNER AND DANCE** is to be held in the Faculty Club, level 5, University Centre Saturday, March 27. Dinner includes a hip of beef buffet and dancing is to the music of Stere-Roe. Cocktails are at 6 p.m., with dinner at 7 p.m. Cost is \$15 per person, plus tax. Reservations must be made by Thursday, March 18, at Ext. 8578.

**TWO SIGMA XI** public lectures are planned. On Friday, March 26, Professor Hewson Swift of the department of biology, University of Chicago, will speak on "Dissecting the Chromosome." Sponsored by the Guelph chapter of Sigma Xi, the Scientific Research Society, in co-operation with the Department of Botany and Genetics, the interdepartmental group on genetics, and the Department of Biomedical Sciences, the lecture will be held in Room 105 of the Physical Sciences building at 3:15 p.m.

On Wednesday, March 31, Dr. Morris Schnitzer of the Chemistry and Biology Research Institute, Agriculture Canada, Ottawa, will speak on "Advances in Our Understanding of Soil Organic Matter" at 4:10 p.m. in Room 124 of the Land Resource Science building. This lecture is co-sponsored by the Guelph chapter of Sigma Xi, the Scientific Research Society, and the Department of Land Resource Science.

## Awards Banquet

The third annual co-educational intercollegiate awards banquet was held last Friday evening. Numerous athletes received honors for hard work during the 1981-1982 season.

Harry Doering of the football and wrestling Gryphons was named "Male Athlete of the Year" while, Janet Beatty of the cross country and track and field Gryphons and Kelly Rogers of the nordic ski team both received "Female Athlete of the Year" honors.

Tom Heslip, a five-year veteran of the basketball Gryphons, and Fiona Rintoul a five-year veteran of the tennis Gryphons, were honored for their outstanding sportsmanship and service to athletics by being named recipients of the W.F. Mitchell Award.

Other major awards went to John Hammill (hockey) and Mark Scott (basketball) in a tie for the Don Cameron Trophy as players showing most improvement over three years.

Sue Nagata was named winner of the Cathy Rowe trophy as top manager/trainer of the year, while Brenda Banning of the swimming and diving and nordic skiing Gryphons took the Mary Beverley-Burton Rookie of the Year Award.

The following is a list of other award winners presented at the banquet.

### Men

Most Improved Basketball: Ron Henry  
Bill Dimson Trophy (MVP): Tom Heslip  
Walter Rickard Memorial (Hockey Rookie): Brett Kelleher  
Jack Pos Award (Hockey MVP): Louis Malbeuf, Ray Irwin  
Swimming Trophy (MVP): Ian James  
Swimming Most Improved: Dan Hurnik  
Volleyball Most Improved: Rob Turland  
Volleyball MVP: Vilis Ozols  
Wrestling MVP: Bob Pronk  
Curling MVP: Dave Ryder  
Art Hackett (cross-country MVP): Murray Eby  
Badminton MVP: Paul Briggs  
Football Most Improved: Mitch Chuvalo  
Football MVP: Carmen Sferrazza  
Ivan Evans (rugby MVP): Mark Lawrence, Gary Whitley  
Bill McAnuff (soccer MVP): Rick Whelan  
Soccer Most Improved: Mark Newcombe  
Wrestling Most Improved: Gavin Carrow

### Women

Basketball Most Improved: Cindy McMaster  
Basketball MVP: Sue Lindley  
Volleyball Most Improved: Colleen Long  
Volleyball MVP: Trish Davies

Field Hockey Most Improved: Sandra Minors  
Field Hockey MVP: Bev Rankin  
Synchro MVP: Carol Fraser  
Swimming Most Improved: Kate Russell  
Swimming MVP: Avril Peaker  
Tennis MVP: Fiona Rintoul  
Hockey Most Improved: Joan Christensen  
Coaches Hockey Trophy (MVP): Tina Vlad  
Badminton MVP: Kelly Breedon  
Archery MVP: Sandy Giffen  
Cross Country MVP: Janet Beatty

### High School Basketball Tournament

The Department of Athletics, in conjunction with Catelli will host the best in eastern Canadian women's high school basketball in the main gym Friday, March 26 to Sunday, March 28. Five of the top ranked women's high school teams will be on campus.

The tournament convenor and Gryphons head basketball coach, Karen Lee, is pleased that the tournament is on. The teams are Cobequid from Truro, N.S., ranked number one in the province; Tantramar, from Sackville, N.B., ranked number one in the province; College Jesus-Marie from Quebec City, ranked number one in the province; Sudbury Secondary School, OFSSA Champs and Sarnia St. Pats, OFSSA Consolation Champs.

The three-day round robin event will see three sessions broken down as follows:

**Session One (Friday)** 5 p.m. Cobequid vs. Sarnia; 7 p.m. Quebec vs. Tantramar. Students, \$1; General, \$2.

**Session Two (Saturday)** 10 a.m. Tantramar vs. Sudbury; 12 p.m. Quebec vs. Sarnia; 3 p.m. Cobequid vs. Tantramar; 5 p.m. Sarnia vs. Sudbury; 8 p.m. Cobequid vs. Quebec. Students, \$2; General, \$3.

**Session Three (Sunday)** 9 a.m. Sudbury vs. Quebec; 12 p.m. Sarnia vs. Tantramar; 2 p.m. Cobequid vs. Sudbury. Students, \$1; General, \$2.

Following the final game, the Catelli awards will be announced and presented. □

**JOB WILSON**, the celebrated clarinetist and saxophone-playing leader of Washington's Smithsonian Jazz Repertory Ensemble, will give a workshop for jazz lovers May 13, the morning after the Ensemble's performance at the Guelph Spring Festival. The workshop will be given from 10 a.m. to 12 noon in the Music Room 107 of the MacKinnon building. Admission is \$5.  
Information: 821-7570.

THE GUELPH YM-YWCA is having a book sale Thursday, March 25, Friday, March 26 and Saturday, March 27. Donations are welcome at the 'Y', 400 Speedvale Ave. East, or telephone 824-5150 for pick-up.

### Goods and Services

**For Sale** — Rolleiflex SL35, 3 lenses (20, 50 and 85 mm), case and accessories, 821-2103; brand new airtight wood stove, size 9 wedding dress, mare with foal, 822-8578 after 5:30 p.m.; child's white bed and dresser, excellent condition, 836-0142; used Westinghouse dryer and Kenmore heavy duty washing machine, lady's sheepskin jacket, size 42, antique goblets (knotty ash), oval mirror, diamond and 18 karat gold 3-pc. ring set, bird cage, rug hooking wool, boy's suit size 16 (brown tweed), 836-3006; Kenmore 30" stove, Kenmore electric floor polisher, brass chain firescreen, 821-6107; girl's collapsible bicycle, 824-9389.

**Available** — Responsible person for housecleaning, ironing or babysitting, Carrie, 836-3006; responsible person for painting, gardening (with utility trailer), Brian, 836-3006; neat, fast typing on IBM Selectric, Bibiane, 822-2713.

**Wanted** — Experienced babysitter for 20-month girl, preferably in my own home, 8524.

### Accommodation

**Wanted to Rent** — Large 2-bedroom apartment or house, from June 1, utilities included in rent, within walking distance to University, 824-4238 after 6 p.m.

**To Sublet** — Two-bedroom, furnished apartment, from May 1 to September 1, 10-minute walk to University, 837-0177 after 5 p.m.; 3-bedroom apartment near University of Western Ontario, London, May to September, 1-439-5282; 2-bedroom apartment for summer, large rooms, back yard, garden, parking, convenient location, very affordable, 837-1727.

**For Sale** — Three-bedroom house on mature, fenced lot, Stuart Street, hardwood floors, natural woodwork, new airtight woodstove, 836-1449.

THE MATINEE PERFORMANCE of the Guelph Spring Festival's *The Tin Soldier* by the National Tap Dance Company was sold out three days after the box office opened March 2. The Guelph Spring Festival will present an extra afternoon performance at Ross Hall at 1:30 p.m. Thursday May 13.

The National Tap Dance Company is also presenting *Oliver Button is a Sissy*, depicting the trials and triumphs of a boy who wants to be a dancer despite the teasing of his friends. This will be performed on Friday, May 14 at Ross Hall at 8 p.m.  
Information: 821-7570.

Next Week at Guelph *Continued from page 8.*

### THURSDAY, 82 04 01

**Luncheon Special** — 1130 - 1330, PCH, UC.

**UC Noon Hour Concert** — M.P.T.F., 1200, UC courtyard.

**Thursday Noon Concert** — PIANO STUDENTS OF ANYA LAURENCE, Department of Music, with guest saxophonist, Joan Swoboda (1210 concert) and guest baritone, Lawrie McEwan (1310 concert) 1210 and 1310, MacKinnon bldg. 107. Admission free; open to the public.

**University of Guelph Faculty Association** — EXECUTIVE MEETING, 1200, board room, Faculty Club, level 5, UC.

**Mathematics and Statistics Colloquium** — MATHEMATICAL MODELS OF MORPHOGENESIS VI, Dr. R. Rosen, 1500, Chem./Micro. 260.

**Physics Lecture Series** — FALLACIES ON THE ARMS RACE, Sir Rudolf E. Peierls, distinguished visitor, 1510, PS 113. Open to non-specialists. Final lecture: 82 04 02.

**Computerized Occupation Program** — CHOICES WORKSHOP, 1600 - 1700. Register: Connection Desk by 1400.

**Spotlight on University of Guelph** — PRESIDENT DONALD F. FORSTER, 1900, over Guelph TV channel, Cable 8.

Pub — APRIL FOOLS HAT PARTY, 2000, PCH.



# Next Week at Guelph

## THURSDAY, 82 03 25

Exhibit — THE CHARISMA OF QUILTS, 21 handmade quilts by University of Guelph women and their friends, Faculty Club, level 5, UC until 82 04 03.  
YM-YWCA — BOOK SALE, 400 Speedvale Avenue East. Continues 82 03 26 and 82 03 27. Donations of children's books, cook books, comics and records to the "Y" or telephone 824-5150 for pick-up.  
Luncheon Special — 1130 - 1330, PCH, UC.  
UC Noon Hour Concert — WINCHESTER, 1200, UC courtyard.  
Middle East Confederation — Film on Palestine: TO LIVE IN FREEDOM, 1200, UC 103; Seminar: ISLAMIC ECONOMY, 1900, UC 442.  
Computerized Occupation Program — CHOICES WORKSHOP, 1200 - 1300. Register: Connection Desk by 1100.  
Thursday Noon Concerts — KAREN QUINTON, piano, 1210 and 1310, MacKinnon bldg. 107.  
Philosophy Colloquium — UTILITARIANISM AND RIGHTS, Prof. Ray Frey, University of Toronto, 1400 - 1600, MacKinnon bldg. 132.  
Mathematics and Statistics Colloquium — MATHEMATICAL MODELS OF MORPHOGENESIS III, Dr. R. Rosen, 1500, Chem./Micro. 260.  
Careers and Jobs — INTERVIEWING SKILLS CLINIC, 1800 - 2100. Register: Connection Desk by 1600.  
Spotlight on University of Guelph — PRESIDENT DONALD F. FORSTER, 1900, over Guelph TV channel, Cable 8.  
University of Guelph Faculty Association — COUNCIL MEETING, 1930, Faculty Club lge.  
Pub — WINCHESTER, 2000, PCH.  
Ballet — THE PAVLOVA CELEBRATION, with Starr Danias, featured dancer in the film, *The Turning Point*, 2000, WMH. \$8.50 (general); \$7.50 (students/seniors).

## FRIDAY, 82 03 26

Workshop — TEENS AND DIVORCE, a workshop for teenagers, aged 14 to 18, whose parents are divorced or separated, with co-leaders Kathy Beatty and Helen Aucoin-McElroy, 0900 - 1600, Child and Family Services Research Unit. Registration: Ext. 3773. \$5.  
Food Science Lecture Series — QUALITY CONTROL AT THE CELLULAR LEVEL, Dr. H.O. Hultin, acting director, Marine Foods Laboratory, dept. of food science and nutrition, University of Massachusetts, 1110, Food Science 202.  
Luncheon Special — 1130 - 1330, PCH.  
Fellowship — FACULTY CHRISTIAN FELLOWSHIP, 1200, UC 306.  
Worship — MUSLIM FRIDAY PRAYERS, 1215, Chapel, level 5, UC; ANGLICAN EUCHARIST, 1700, UC 334.  
Middle East Confederation Seminar — ISLAMIC ART, 1300, UC 103.  
Sigma Xi Public Lecture — DISSECTING THE CHROMOSOME, Professor Hewson Swift, department of biology, University of Chicago, 1515, PS 105. Sponsored by the Guelph Chapter of Sigma Xi, the Scientific Research Society, in co-operation with the Department of Botany and Genetics, the interdepartmental group on genetics and the Department of Biomedical Sciences.  
Friday Flicks — VICTORY, 1900 and 2130, PS 105.  
Audubon Wildlife Film — LAND OF THE SHORTGRASS PRAIRIE, Lorne Wallace, 2000, WMH. \$2.50. The last in the series.

## SATURDAY, 82 03 27

Arboretum — MAPLE SYRUP EXHIBIT, a demonstration of syrup making techniques and tours of the sugar bush, 0930 - 1530. Information: Ext. 3932. Continues tomorrow, and the weekend of 82 04 03.  
Faculty Club — DINNER-DANCE, 1800 (cocktails), 1900 (dinner), level 5, UC.

## SUNDAY, 82 03 28

Worship — CATHOLIC MASS, 1010, PCH; CAMPUS CHURCH SERVICE, 1030, PS 113; SUNDAY ZUHR PRAYER AND ARABIC TEACHING, 1330, 9th fl. lge., MacKinnon bldg.  
Spotlight on University of Guelph — PRESIDENT DONALD F. FORSTER, 1100, over Guelph TV channel, Cable 8.  
Concert — UNIVERSITY OF GUELPH CHOIR, with Gerald Neufeld, conductor, 1500, WMH. \$4 (general); \$3 (students/seniors).  
UGCSA Cine-Series — BODY HEAT, 2000, WMH. \$2.

## MONDAY, 82 03 29

Mathematics and Statistics Colloquium — MATHEMATICAL MODELS OF MORPHOGENESIS IV, Dr. R. Rosen, Dalhousie University, 1500, PS 101.  
Drama Presentation — AFTER MAGRITTE by Tom Stoppard and SEXUAL PERVERSITY IN CHICAGO by David Mamet, 2000, Inner Stage, MacKinnon bldg. 101. \$2. Continues nightly to 82 03 31.

## TUESDAY, 82 03 30

Mathematics and Statistics Colloquium — MATHEMATICAL MODELS OF MORPHOGENESIS V, Dr. R. Rosen, 1500, PS 121.  
Physics Colloquium — RECOLLECTIONS OF THE EARLY DAYS OF QUANTUM MECHANICS (more about physicists than about physics), Sir Rudolf E. Peierls, distinguished visitor in the Department of Physics and retired professor from the Chair of Theoretical Physics, Oxford, 1610, PS 113. Open to non-specialists.  
Worship — CATHOLIC MASS, 1710, Chapel, level 5, UC.  
Careers and Jobs — RESUME WRITING CLINIC, 1800, Counselling and Student Resource Centre. No need to register.

## WEDNESDAY, 82 03 31

Red Cross — BLOOD DONOR CLINIC, 1000 1215; 1345 - 1545, PCH, UC.  
Luncheon Special — 1130 - 1330, PCH, UC.  
Worship — ANGLICAN EUCHARIST, 1200, UC 334; CATHOLIC MASS, 1210, Chapel, level 5, UC.  
Staff Development Workshop — YOU ARE CAPABLE, E. Karen Sendall, assistant manager, Employment Services and Training, 1330-1630, UC 442. Continues 82 04 07.  
Mathematics and Statistics Colloquium — MATHEMATICAL APPROACHES TO SENESCENCE, Dr. R. Rosen, 1600, PS 105.  
Sigma Xi Public Lecture — ADVANCES IN OUR UNDERSTANDING OF SOIL ORGANIC MATTER, Dr. Morris Schnitzer, Chemistry and Biology Research Institute, Agriculture Canada, Ottawa, 1610, LRS 124. Co-sponsored by the Guelph Chapter of Sigma Xi, the Scientific Research Society and the Department of Land Resource Science.  
Food Science Lecture Series — SUBCELLULAR LOCATION OF ENZYMES, Dr. H.O. Hultin, 1900, Food Science 202.

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