



Inside this issue: FACS Dean Richard Barham, chair of the Joint Faculty Policies Committee, talks about how the JFPC works towards quality working conditions for Guelph faculty.

Funding fiddle

The real number is 4.5%

The University estimates it will have a 4.5-per-cent increase in operating funds for 1987/88—not 9.6 per cent as implied by the Ministry of Colleges and Universities' March 10 announcement that grants to the Ontario university system would rise an overall 11.5%.

MCU press releases gave misleading information, says President Burt Matthews. "An increase of 4.5 per cent is the real, new money we expect to get for operating expenses."

MCU announced that operating grants for the University — which are still subject to adjustment — total \$83,885,383. This includes the basic operating grant, plus excellence funds and enrolment/accessibility funds. It does not include research grants and contracts.

In 1986/87, the University's basic operating grant was \$76,538,283 plus \$3,406,060 for excellence funds, for a combined total of \$79,940,343. (There is no enrolment/accessibility fund in 1986/87.)

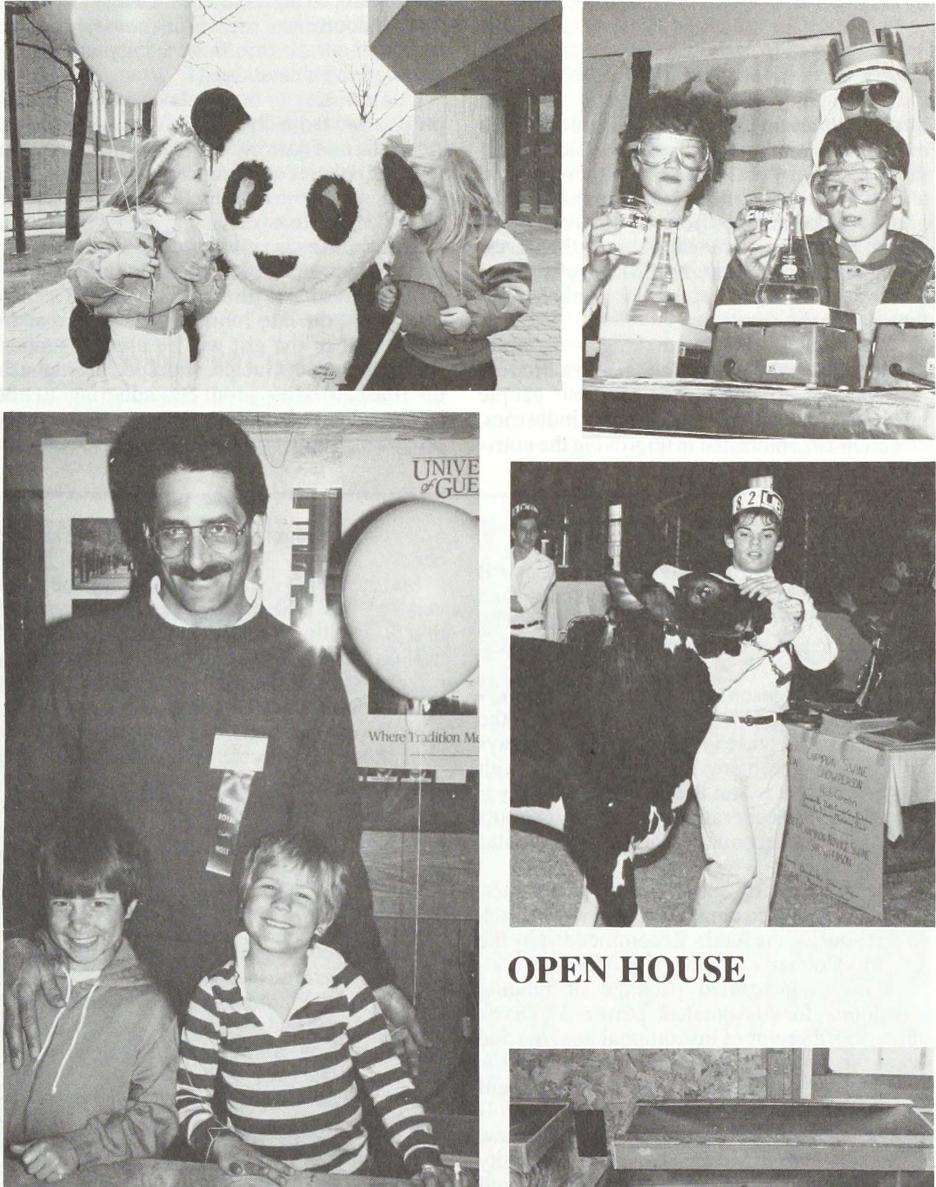
The \$83,885,383 million 1987/88 base budget represents a 4.9-per-cent increase in operating grants (excluding tuition fees) over the comparable figure of \$79,944,383 in 1986/87. When the tuition fees of \$16,196,000 in 1986/87 and \$16,560,000 in 1987/88 are added in, the year-to-year increase in operating grants, plus fees, is 4.5 per cent.

In the MCU news release, the University's total operating grants for 1987/88, including excellence funds and enrolment/accessibility funds (\$83,885,383), was compared to the basic operating grant for 1986/87 (\$76,538,282), excluding the excellence funds received for that year. On the basis of this comparison — which is misleading, says Matthews — the total operating grants for 1987/88 show an increase over the basic operating grant for 1986/87 of 9.6 per cent.

Information on MCU's and the University's calculations was distributed to all faculty and staff in a memo from the president March 11.

Vice-President, Academic, Jack MacDonald says it is unfortunate that the government feels

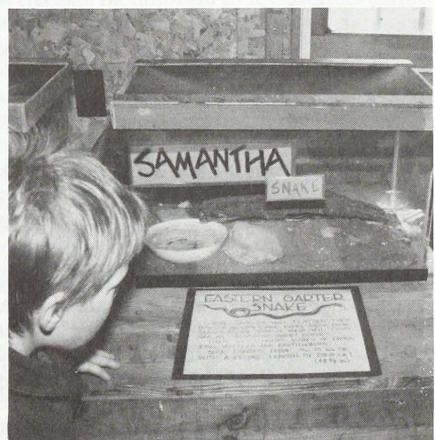
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OPEN HOUSE

College Royal '87 and Open House Weekend drew about 38,000 visitors to campus last weekend, says Laura Gillard, College Royal vice-president. There was lots to see and do: clockwise from top right, the chemistry magic show; the livestock competition; a reptile exhibit at the Arboretum's J.C. Taylor Nature Centre; the Registrar's Office exhibit with Keith Alnwick, Admissions; and a roving panda on Winegard Walk.

Photos by Sandra Couch, PRI



Contribution to fund textbook

A gift to the University from the National Dairy Council on behalf of the John R. Jackson Memorial Foundation will support the publication of a textbook that could help Third World countries develop markets for dairy products and ultimately strengthen their dairy industries. Prof. Peter Stonehouse, Agricultural Economics and Business, will author a portion of the book and serve as one of its editors.

The idea for a textbook on the market demand for dairy products has evolved from the efforts of Stonehouse and members of the Canadian dairy industry and the International Dairy Federation (IDF) to provide information on demand analysis and policy evaluation to the world's dairy industries. Stonehouse chaired a 1985 IDF conference in Ottawa that drew a great deal of interest from the industrialized world, but failed to reach many of the developing countries that could benefit from discussions of demand policy analysis and forecasting, he says.

"We thought that by making a textbook available, we would be able to reach a broader audience — not just academics, but people interested in developing their dairy industries, and countries interested in improving the nutritional welfare of their people."

Widespread access to the components of a well-balanced diet is still needed in many Third World countries, says Stonehouse, and the development of an efficient dairy industry is one way to achieve that.

Contributors to the textbook will be drawn primarily from North America, Europe, Australia and Asia. Stonehouse will address the topic of policies and programs in major dairy-producing countries. Publication is expected by the end of this year.

Stonehouse says it's appropriate that funding for this project comes from the memorial foundation of one of the dairy council's early presidents, the late John R. Jackson. An additional part of the gift will be used to support dairy research at Guelph, with special emphasis on finished dairy products, adhering to the dairy council's mandate to promote the dairy processing industry in Canada. ○

THE CAMPAIGN

Funding fiddle *Continued from page 1*

it must go through this kind of chicanery. "It does something by giving us more money than the previous government, and then undoes it by making the announcement in an underhanded fashion."

Charles Ferguson, vice-president, administration, says MCU has "grossly distorted" the real income increase to the University. He says one of the big problems the University has with the new budget is that the excellence money is not available as operating money, which must be used — and accounted for — for particular purposes.

The minister of colleges and universities, Greg Sorbara, also announced a new approach to distributing the funds. Recommended by the Ontario Council on University Affairs, it consists of an integrated package of funding envelopes for designated purposes. Derek Jamieson, director of institutional analysis and planning, says the new mechanism will allow the University to trade graduate student enrolments for undergraduate student enrolments without a loss of income. The new distribution mechanism will give the University the flexibility to do its planning without constantly keeping in mind the formula, he says.

Matthews says his estimate of the new money is \$4.6 million, all of which has been set aside in the budget for inflation on salaries and benefits.

Matthews says the reductions in the University's 1987/88 budget were necessary so that \$1.2 million for academic initiatives and \$1 million for research initiatives could be held in reserve. Most of this money will be going back into academic units in the next three months, he says. People get hung up on the cuts, he says, "but these are only so we can add back in a differential way."

Matthews admits that the cutback/addback budget process is not an easy one. "If someone could suggest a different way, I would be happy, but in the 15 years I have been doing budgets, I've never been able to come up with a better way."

Full budget information, including reductions and addbacks in all units, went to the Committee on University Planning (CUP) March 11. CUP was to take the budget to Senate for information and discussion March 17. (See details next week in *at Guelph*.)

The president admits that living with the 1987/88 operating budget won't be easy, but he says he's confident that the quality of programs will be maintained.

MacDonald says it's too early to know how the teaching units will absorb the \$1,266,000 removed from their base budgets, but they are eligible for about \$1.5 million in various addbacks — the New Initiatives Fund, the President's Special Fund and the Research Excellence Fund. MacDonald says the reductions could mean a loss of several faculty and staff positions. These would be eliminated as positions became vacant, and retiring employees would not be replaced.

No attempt has been made to ask academic

Pay equity panel airs the issues

The discussants on a panel dealing with pay equity March 4 were articulate and well-informed, says Prof. Susan McIver, chair of the Department of Environmental Biology. The panel was sponsored by the President's Advisory Committee on Equal Rights for Women and Men at the University of Guelph, which McIver chairs.

Pay equity advocate on the panel was Nan Weiner, faculty of management studies, University of Toronto; opponent was Tayce Wakefield, government relations officer for General Motors of Canada.

Richard Whiting of Personnel, resource person to the advisory committee, says Wakefield did a good job of pointing out problems and flaws in the proposed Bill 154. Both Wakefield and Weiner agreed that provincially there is about a five-per-cent wage gap directly attributable to gender discrimination, an additional 10-per-cent gap due to occupational distribution and a five- to 10-per-cent gap due to unionization participation, but they disagreed about how the differential should be addressed, he says.

Wakefield made a strong case for taking the \$1 billion she estimates it will cost to implement pay equity and using it to create investment and training opportunities instead. Weiner, on the other hand, maintained that legislation is required to end inequities. ○

units to eliminate programs, says MacDonald, but he expects there will likely be less richness in course offerings, fewer sessionals, and that senior-level courses will be offered less frequently.

Ferguson says the administrative and support units, which were asked to identify three-percent reductions, will get "very modest" addbacks. There has to be a reduction of services, he says, and some positions will be eliminated through vacancies or retirements, "but we are going to avoid layoffs."

Matthews admits University budgeting is going to get tougher: "We must be sure that there is no new expenditure that couldn't be reduced without affecting programs, and vacant positions will only be filled if they can be justified by the vice-presidents," he says.

The University's first-ever strategic plan will put the institution in a much better position for the next budget, says Matthews, because it will know where adjustments must be made. He expects to have the plan ready for CUP by July. CUP will take it to Senate for discussion and approval this fall.

The first plan may be primitive, says Matthews, "but it will get better as we go along." He sees strategic planning as the University's opportunity for forward-looking review and evaluation. "I don't care where we have been. What I am concerned about is where we are going in the future, and how we can adjust our resources to get there."

There may be further changes to the 1987/88 operating budget after hard data comes in from MCU. This may change what goes to Board of Governors for approval, says Matthews, but Senate will receive the document after it is approved by the board. ○

Emmy Lou is missing

A small tiger-striped cat disappeared between the Crop and Land Resource Science buildings while on her way to the College Royal cat show Sunday. Emmy Lou is beige, black and orange. Please contact Bonnie or Wayne Bridges at 846-5120 (Ariss) if you have any information.

Joint Faculty Policies Committee

Addressing issues to ensure faculty work under best conditions

by Barbara Chance

The Joint Faculty Policies Committee (JFPC), established in November 1983 under the terms of the *Special Plan Agreement*, has identified a number of issues requiring new policies or changes to existing faculty policies.

"There have been many changes, both in and beyond the University, since the current policies were designed," says committee chairman Richard Barham, dean of the College of Family and Consumer Studies. And the committee wants to ensure that faculty policy keeps pace with the changes that have occurred.

"For the best collegiality to exist on campus, and for positive morale, we need good, clear, well-operating policy," he says. "That's fundamentally important for the academic health of the University."

Last year, college representatives on the JFPC met with colleagues "to get a sense of the faculty policy issues that are most on the minds of faculty members around the campus," says Barham. Many of the policy issues raised by college members are now being dealt with JFPC's five subcommittees — the subcommittee on faculty leave, which is chaired by Prof. Fred Vaughan, Political Studies; the subcommittee on discipline, appointments and professional development, chaired by Prof. Ian McMillan, Animal and Poultry Science; the subcommittee on promotion and tenure criteria, chaired by Prof. Keith Cassidy, History; the subcommittee on selective increase appeals, chaired by Prof. Wayne Gatehouse, Psychology; and the subcommittee on selection committee composition, chaired by Prof. Bert Christie, Crop Science.

Study/research leave

In 1985, the subcommittee on faculty leave was responsible for the introduction of a maternity leave policy on campus, and has since written a new faculty policy on study/research leave that is now ready for submission to Board of Governors. The leave policy is "more a clarification than a radical change," says Barham, "but it should provide a clear statement about the purposes of faculty leave with salary . . . and should create more equity, from department to department, in the procedures used in applying for and granting leave." The policy will help "iron out" some problems with interpretation that have occurred in the past, such as the question of whose responsibility it is to find replacements for faculty on leave.

A future task of the leave committee will be to examine the possibility of creating a policy on leave for voluntary retraining, says Barham. "At a period when there has been less movement in and out of the University and fewer new people are being hired — but the disciplines are constantly changing — we might need to provide more deliberate opportunities for faculty retraining."

The subcommittee on discipline, appointments and professional development was set up to review and propose changes to policy on

disciplinary action, the definition of full-time appointments, and the operation of the research, study and professional development semester. The committee's priority has been to create a new policy statement on the professional development semester. "The conditions under which the semester was granted varied in some instances from one college to another," says Barham. "The new statement is designed to overcome those differences and establish more equitable and consistent procedures across the whole University." The statement is now ready for submission to Board of Governors.

A future task of the disciplinary committee is to revise the policy on disciplinary action. Barham says the current policy is "broadly stated and doesn't come to grips with some important issues." The revised policy "might aim to outline what matters should be subject to disciplinary action, what should be the proper process, and who should have responsibility for disciplining."

Review of P&T criteria

The most ambitious undertaking of the JFPC to date is a review of departmental promotion and tenure procedures. This process

was triggered by the *Special Plan Agreement* and is required by existing faculty policies, Barham says. All departments were asked to submit a statement of their guidelines on P&T and selective increase criteria to be reviewed by the JFPC.

Under the *Special Plan Agreement*, each unit must have a clear statement on P&T procedures so that there is "less assumption and more evident guidelines to faculty on what departments are looking for in terms of promotion," says Barham. With clear guidelines, "there is naturally less room for inappropriate expectations on the one hand or for questionable decisions by committees on the other."

The subcommittee on P&T criteria has examined individual statements with respect to their equity with other departments on campus and their consistency with both the University's aims document and the *Special Plan Agreement*. Only a few of the departmental statements reviewed currently meet all these criteria, Barham says. In making recommendations on how to revise individual guidelines, the sub-

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Jody Lavigne, left, daughter of Zoology professor Dave Lavigne and his wife, Sue, and Kathy Lemieux with their science project, "Birds of a Feather Feed Together." The girls are students at College Avenue School in Guelph, which will take part in the annual Waterloo-Wellington Science and Engineering Fair at Fergus April 8 to 11. Guelph faculty serve as judges at the fair, as well as at several other science fairs in southern Ontario.

Photo by Pam Healey, PRI.

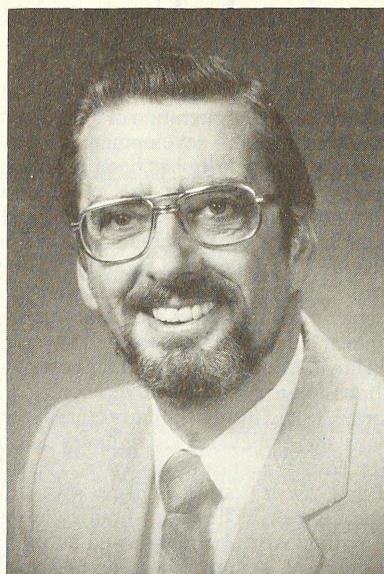
Centre provides focal point for conservation research

by Barbara Chance

The Guelph Centre for Soil and Water Conservation, established Feb. 1, will provide a focal point for research programs aimed at reducing the degradation of Ontario's soil and water resources, says the centre's director, Prof. Murray Miller, Land Resource Science.

"There is a lot of expertise in soil and water conservation in various departments and schools on campus," says Miller. "What we hope the centre can do is provide a focal point to bring those programs closer together and have a synergistic effect that will enable us to greatly increase the effectiveness of soil and water conservation programs in Ontario."

Soil erosion costs Ontario farmers an estimated \$68 million a year in nutrient and yield



Murray Miller

JFPC
Continued from page 3

committee has tried to strike a balance between the essential distinctiveness of each department and the fields it incorporates, and each faculty member's right to expect fair treatment on a campus-wide basis, he says.

The review of P&T guidelines "has taken quite some time because it is a new and complex task," says Barham. In addition, some departments have encountered difficulty in designing and submitting an appropriate guideline document. "It might have been easier for departments if they'd had some kind of model to work with, but the review of these criteria is a new activity for this University, and within the limits established by the *Special Plan*, we wanted to be as responsive as possible to the individual needs and existing traditions of each academic unit."

External employment

Over the past two years, the JFPC has also created and implemented a policy on employment in remunerative external activities. "There is some new understanding of the value of having faculty relate with business and industry in consulting roles," says Barham, "but, for the protection of everyone involved, we needed guidelines for what people can do and the conditions under which they can do it."

The JFPC has also completed the task of reconciling the wording and intent of the *Special Plan Agreement* and the *Faculty Policies Handbook* (the "green book").

Other issues the JFPC is examining through its subcommittees include the composition of selection committees for academic administrative positions, the mechanism for selective increase appeals and the procedures for dismissal and suspension.

The work of the JFPC has required "a substantial commitment" of time from members of the committee, says Barham, but it's been time well spent. "If the committee can improve the conditions under which faculty function, we're making a contribution to the excellence of the University." □

province of Ontario have agreed to spend \$30 million over five years to reduce the phosphorus inputs to the lakes. And the Ontario Ministry of Agriculture and Food has established a soil and water management branch to put greater emphasis on this area.

"There is a serious need for research on soil and water conservation," says Miller, "and Guelph will be much better able to meet that need with a co-ordinated program on campus." The centre will encourage a holistic approach to conservation problems that should strengthen the existing research programs in individual departments, he says.

Some 20 to 25 faculty members across campus are involved in research on soil and water conservation. These faculty are in the University School of Rural Planning and Development, the School of Engineering and the departments of Crop Science, Agricultural Economics and Business, Environmental Biology, Land Resource Science and Geography. Any faculty with an interest in conservation who are not already involved in the centre are encouraged to communicate their interest to Miller.

Miller expects the centre to increase the visibility and accessibility of Guelph's expertise, becoming a focal point for government, industry and other groups to turn to when they need assistance on soil and water conservation problems. In turn, the increased visibility should attract more funding for the centre's programs, he says.

One of the centre's first contracts is with Agriculture Canada's Soil and Water Environmental Enhancement Program, to prepare an in-depth background report on soil and water conservation in southwestern Ontario. □

Co-op programs — popular and expanding

Ninety-two students in co-op programs at Guelph are in work-term placements this semester. All students who sought employment found career-related opportunities, says Bruce McCallum, associate director, Career Services. Demand for co-op students exceeded the supply, he says, especially in the food science and computer science disciplines.

The number of students interested in the co-op program is on the rise, says McCallum. There were 94 students in the program in 1986, an increase of six per cent over the previous year. This year began with 64 new students in the winter semester, and 15 to 20 signed up for the spring semester, which usually attracts a smaller number of students.

Nineteen undergraduate programs participate in the co-op option, and a feasibility study is under way for a co-op program in resources management. The two most recent program entries are Horticultural Science, with the first student employment in winter 1986, and the food emphasis in Consumer Studies, with the first employment opportunity offered this semester. The only graduate program to date with a co-op component is the new master's of

agriculture, which has one co-op work term.

McCallum says the co-op program has the potential for significant growth with the continued support and interest of employers in both the public and private sectors and the encouragement of Employment Canada. This federal encouragement includes funds for start-up costs of new co-operative education programs at both the secondary and post-secondary levels in Canada. In fact, says McCallum, the number of high school co-op students interested in continuing the experience in their post-secondary learning situations makes the potential even greater. □

Appointments

Prof. Mike Matthews will begin a second five-year term as chairman of the Department of Psychology Aug. 1.

Prof. Ken Jeffrey will be acting chairman of the Department of Physics Sept. 1 to Aug. 31, 1988, while Prof. Robin Ollerhead is on administrative leave. □

Briefly

SOPHOCLES'S ELECTRA is the Drama Department's final production of the season March 30 to April 4 at 8 p.m. at the Inner Stage. Director Prof. Alan Filewod has selected a modern translation by Kenneth McLeish that remains faithful to Sophocles's text. Tickets are \$4 for performances Monday through Wednesday and \$5 for Thursday through Saturday, and are available at the University Centre box office and the Bookshelf Cafe.

BERNARD BRAUCHLI is the guest at the Department of Music's Thursday noon-hour concert March 26 at 12:10 and 1:10 p.m. in Room 107, MacKinnon building. Brauchli, who is on the faculty of the New England Conservatory of Music in Boston and music director of the Cambridge Society for Early Music, is widely known in the field of early keyboard music, most notably on the clavichord. His work ranks him as one of the leading exponents in the revival of the clavichord. Program I at 12:10 p.m. will include "Sonata XI in D dorico (Adante)" and "Sonata XII in D major (Allegro)" by Sebastian de Albera and "Sonata No. 25 in D minor" and "Sonata No. 16 in C Minor (Allegretto)" by Carlos Seixas. Program II at 1:10 p.m. will feature "Sonata K. 37 in C Minor (Allegro)," "Sonata K. 96 in D Major (Allegro)" and "Sonata K. 450 in G Minor (Allegro)" by Domenico Scarlatti.

VEG OUT at the HAFA Restaurant March 20. The day's menu features two kinds of quiche, curried cheddar cheesaroo and double fudgy chocolate cake. On March 26, the menu theme is "The Great White North," featuring Rocky Mountain cheeseburger pie, Bob's back bacon on-a-bun and Algonquin Park chocolate moose. Hours are 11:45 a.m. to 1 p.m.; for reservations, call Ext. 8116.

CANADIAN STUDENT PUGWASH invites undergraduate and graduate students to its fourth national conference, "Resolving Global Problems Into the 21st Century: How Can Science Help?" June 12 to 14 at Carleton University. Seventy-five students and 25 resource people will participate in five workshops and attend a series of public sessions related to the conference theme. All costs for student participants while they are in Ottawa will be covered by Canadian Student Pugwash. Applications for the conference are available at the Registrar's Office and the Office of Graduate Studies. Deadline for submissions is April 6. For more information, contact Karen Farbridge, Ext. 8387.

Our people

Karen Burrows, OAC '87, was elected 1987 College Royal Celebrant at the College Royal Ball March 7. She was official hostess for the campus-wide Open House last weekend. Burrows was elected from among six celebrant contestants to host the annual student-organized event. ○

THE COLLEGE OF SOCIAL SCIENCE

Alumni Association will hold a dinner March 26 at 6 p.m. at the Arboretum Centre to celebrate its 10th anniversary. Guest speaker is Wendy Lawrence of the special programs branch, Canadian International Development Agency, speaking on "International Development: A Decade of Progress." Other highlights of the evening include the CSSAA recognition awards of founding members and a presentation to the College of Social Science. Cost is \$18 for association members, \$22 for non-members and \$10 for students. For more information, contact Alumni Affairs, Ext. 6535.

THE COLLEGE EDITION of WordPerfect is now available in the campus bookstore for \$29.95, with an optional speller program at an additional \$19.95 U.S. This package contains an 85-page indexed book, with one disk containing WordPerfect files and a template for an IBM keyboard. The package is copy-protected; you will need the original disk to run. For more information about the package, contact Computing Services at Ext. 8888.

AN EVENING OF DANCE, sponsored by the Department of Athletics, is March 26 at 8 p.m. in Studio 204, Athletics Centre. The concert includes special guest artists, Toronto's "Northern Lights Dance Theatre," and a suite of dances by Gabby Kamino of Waterloo. Tickets are \$3 for students and \$5 general and are available at the cashier's wicket, Athletics Centre. Seating is limited. For more information, call Ext. 2216.

"INTERNATIONAL DEVELOPMENT"

Through Non-Governmental Organizations" is the topic of a seminar by Lewis Perinbam, vice-president of Special Programs, Canadian International Development Agency, March 24 at 5 p.m. in Room 442, University Centre. Sponsored by the Development Education Program of the Centre for International Programs, the seminar is limited to 30 people. Contact Susan James, Ext. 6914, for more information or to register.

A CONCERT OF EARLY MUSIC performed by the University of Guelph Collegium Ensemble is March 27 at 12:10 p.m. in Room 107, MacKinnon building. Directed by Shannon Purves-Smith, the program includes pieces by Dunstable, Vivaldi, Handel and Schein. The 11 members of the ensemble will use a variety of instruments, including sackbut, recorder, cortholt, harpsichord, krumhorn, viol and percussion.

THE GERONTOLOGY STUDENT Association, a newly formed organization, is sponsoring a career development night for students in gerontology/aging studies April 2 from 7 to 9 p.m. in Room 103, FACS building. Everyone is welcome. For more information, contact the Gerontology Research Centre, Ext. 6943.

THE 16TH ANNUAL MEETING of the United Way social planning council is March 26 at 7:30 p.m. at the Cutten Club. Prof. David Douglas, director of the University School of Rural Planning and Development, will speak on "21st Century — Collision Course or Collective Solutions?" Cost is \$5; RSVP requested at 821-0571.

THE GUELPH YM-WYCA, 400 Speedvale Ave. E., will hold a used book sale March 28 from 1 to 4 p.m. For more information, call 824-5150.

A NOON-HOUR SYMPOSIUM hosted by the Family Studies Laboratory Schools is March 31 at noon in Room 106, FACS building. Prof. Andor Tari, Family Studies, will discuss his longitudinal study of families in Hungary, which investigates the development of deviant behavior and the interaction patterns of deviant children and their families. Parking is available in the rear of 17 University Ave. E. for this meeting.

"MAKIZUSHI", an evening of sushi, is March 27 starting at 5 p.m. in the Faculty Club, Level 5, University Centre. Monica Lew, a Guelph student, will present a menu including butterflied shrimp, vegetable and eel, Korean beef, agezushi and hoisin chicken. Cost is \$5 plus tax and tickets are available at the club office.

GUELPH STUDENT PUGWASH is sponsoring a lecture and discussion on "Artificial Intelligence: Could Machines Have Rights?" with Prof. John Leslie, Philosophy, March 25 at 7:30 p.m. in Room 124, Land Resource Science building.

Graduate News

The final oral examination of Leonard Piche, Nutritional Sciences, a candidate for the doctor of philosophy degree, is March 20 at 9 a.m. in Room 141, Animal Science/Nutrition building. The thesis is "Factors Affecting Malondialdehyde Levels in Rat and Human Urine and the Identification of N-E-(2-Propenal) Lysine as a Digestion Product of Food Proteins Exposed to Peroxidized Lipids." Piche's supervisor is Prof. Harold Draper.

The final oral examination of Adolfo Perujo, Physics, a candidate for the doctor of philosophy degree, is March 20 at 3:30 p.m. in Room 222, MacNaughton Physical Sciences building. The thesis is "Advances in Elemental Analysis of Proton-Induced X-ray Emission." Perujo's supervisor is Prof. Iain Campbell.

The final oral examination of Barbara Horney, Pathology, a candidate for the doctor of philosophy degree, is March 25 at 2 p.m. in Room 2635 (old 209), OVC main building. The thesis is "Samoyed Hereditary Glomerulopathy: An Animal Model for Hereditary Nephritis in Man." Horney's supervisor is Prof. Ted Valli.

Interested members of the University community are invited to attend. ○

Zoologist tests theory to save parks species

by Pamela Healey

It's taking more than a human lifetime but natural processes and human disturbances are causing some mammal species to become extinct in Canada's large nature reserves. Point Pelee National Park has lost half the species that were there when Europeans first settled southern Ontario, including elk, beaver, wolves, six kinds of rodents and flying squirrels.

Zoology professor Tom Nudds says animals are disappearing from these protected areas because human encroachment has made them islands in a sea of developed land. He says that on true oceanic islands species composition may change but an equilibrium number remains as long as the immigration rate of new animal types equals the rate of local extinctions. Smaller islands have fewer species due to higher extinction rates from reduced food supplies and lower immigration rates because they're a smaller target size for migrating animals.

This equilibrium theory of island biogeography can be applied to Canada's parks, which behave as functional islands when the surrounding natural habitat is altered. When a park becomes isolated, the number of species it can support is lower and animal populations will be lost until this number is reached. This loss of animal species is called faunal collapse.

In Africa there have been gloomy predictions of high mammal extinction rates in the large nature reserves such as Kenya's Tsavo National Park. Researchers forecast these parks will lose 50 per cent of their large mammal species in the next 100 years because they have become functional islands. Nudds and M.Sc. graduate student Susan Wickham studied Canada's parks to see if the same invisible forces are at work.

Nudds says Canadians are fortunate because they have naturalists' descriptions of mammal distributions before Europeans settled widely in the country. These can be compared to current lists of mammalian species in many of Canada's parks. Wickham and Nudds looked at 10 parks in southern Ontario where 300 years of development has radically altered the environment and resulted in species extinctions exactly as predicted by the equilibrium theory. Many of the parks, like Point Pelee, have lost a significant number of mammal species. In Algonquin Provincial Park, however, there is still the same number of mammal species as before European settlement because of the surrounding wilderness.

Correction

In the Feb. 26 edition of *at Guelph*, in the story "Evening Primose: A Promising Alternative for Ailing Tobacco Industry," the acreage figures given for southern Ontario tobacco crops were incorrect. In 1986, about 28,000 hectares of southern Ontario farm land were planted in tobacco; in the late 1970s, acreage varied between 40,000 and 45,000 hectares.

Cottagers, hunters, fishers, boaters and campers provide just some of the human disturbances that combine with these natural processes to drive some species from nature reserves. Still, lots of other mammals in southern Ontario parks co-exist well with humans. White-tailed deer, skunks, raccoons, coyotes and foxes have learned to live in close proximity with humans. As a result, these mammals benefit because they can live in disturbed environments whereas those that most need park protection are still at risk and disappearing.

The Guelph zoologist says park management has taken a preservationist attitude in the past. Managers, unaware of the natural processes taking place over hundreds of years and thousands of square kilometres, thought that putting a fence around a park and leaving it alone would preserve it for future generations. As soon as a park is isolated, however, an imbalance occurs between extinction and immigration rates, and mammal species are lost, Nudds says.

A lesson can be taken from southern Ontario and applied to other Canadian nature reserves, he says. If the purpose of parks is to be natural and to preserve fauna and flora, and development occurs around them, active management procedures must be taken. This may involve aiding the immigration of species through reintroductions. Nudds says it should be possible to head off problems in other isolated parks now that there is an understanding of the invisible forces at work.

He hopes to get involved in forecasting collapse rates in other parks and in testing the equilibrium theory's application to other animals such as reptiles and birds. □

Letters to the Editor

Indonesian link questioned

CoSy is an appropriate name for the image that the Canadian government, the Canadian International Development Agency and the Sulawesi Project would like to project of our "increasingly important" trading partner Indonesia. The reality of the political, social and economic disparity in Indonesia is far from cosy, primarily because of that government's gross human rights violations.

If the CoSy system were being set up in South Africa, everyone would be willing to protest, but most people are not aware of the situation in Indonesia. Here are some of the facts, also cited in *Third World Quarterly*, January 1987.

World Bank criticisms of Indonesian economic management centre on the regime's "high-cost economy," a euphemism for payoffs and trade practices with Suharto-favored companies. Another example is that nine days after the Democratic Republic of East Timor was proclaimed in 1975, Indonesian troops invaded

Cities urged to get back to nature

Modern-day cities of glass and concrete are becoming increasingly divorced from the natural world, but they could accommodate much more of nature if they tried. So says David Goode, director of the Greater London Ecology Unit, London, England.

Goode, who was in Canada recently to attend the international conference "Greening the City" sponsored by Pollution Probe, spoke on campus at the invitation of Prof. Walter Kehm, director of the School of Landscape Architecture. Goode is head of a massive program to make London more livable, an effort that involves, in part, the creation, rehabilitation and restoration of open spaces and nature reserves throughout the city.

Some 75 per cent of Canadians live in urban areas and spend most of their time in that environment, said Goode. "They live and work in glass and concrete buildings and drive around in air-conditioned cars, and for most of their lives, they're out of touch with nature. They live totally artificial lives. But there's a very deep need for a link with nature; something inside people wants that beauty. And cities can have it, if they just look for it."

For example, he said, the City of Toronto could do a lot to alleviate the starkness of the Gardiner Expressway — "a totally artificial slum" — by growing plants that are tolerant of road salt along the edge of the road. "It would be fun, and I think it would change people's attitudes." □

the country, leaving 200,000 dead in the first four years. This is on top of a death toll of 600,000 by the same government in 1965.

Projects like CoSy and the Sulawesi Project with their links to the oppressive Suharto regime only help to strengthen and legitimize a mass-murdering government. Attempts to provide genuine development aid to Indonesia should be supported, but not the type of aid that wilfully ignores human rights. Let us examine the implications of our involvement. At what cost to the Indonesian people is Canada benefiting from our "trade relationship"?

As a concerned student, I urge the University administration and all individuals involved in development projects in Indonesia to consider the morality of their actions. As a Canada World Youth participant who was involved in a project in Sulawesi, my assessment and information in this regard is first-hand.

David Fell

Visitors

Peggy Antrobus, co-ordinator of the women and development unit of the University of West Indies, will be on campus March 23 to April 7. Her visit is a collaborative undertaking of the University School of Rural Planning and Development, the Department of Sociology & Anthropology and the Department of Psychology.

Antrobus is a leading figure in extramural studies at UWI, a well-known activist in women's issues in development in the Third World, a teacher and researcher in the Caribbean, and a collaborator with the Guelph in developing linkages with UWI.

Antrobus will give seminars (see "Next Week at Guelph") and a public lecture, "Women in Development: Fad, Fiction or Facts," March 30 at 7 p.m. in Room 121, MacKinnon building.

For more information, contact David Douglas, director of USRP&D, Ext. 3154.

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Dr. Linda Saif of the Agricultural Research and Development Centre, Ohio State University, will be a visitor in the Department of Veterinary Microbiology and Immunology from March 26 to April 3 under the short-term visiting professor program. Saif's main interests are in veterinary virology and viral immunology, particularly in relation to enteric virus infections in animals.

In addition to giving several lectures, Saif will be available for consultation during her visit. She will be located in Room 215D, VMI, Ext. 4734. Arrangements to meet with Saif may be made through Prof. Brian Derbyshire, Ext. 4729. ○

Job opportunities

As of *at Guelph* deadline March 13, 1987, the following opportunities were available to on-campus employees only:

Senior Systems Analyst, Computing Services. Salary commensurate with qualifications and experience.

Custodian 2, Housekeeping Department; two positions available. Job rate: \$9.77 per hour; probation rate: \$.20 per hour lower than job rate.

Custodian 4, Housekeeping Department; Job rate: \$10.70 per hour; probation rate: \$.20 per hour lower than job rate.

It is the University's policy to give prior consideration to on-campus applicants. To determine the availability of University employment opportunities, contact employment services and training, Level 5, University Centre, or telephone 836-4900.

Next Week at Guelph

Continued from page 8

WEDNESDAY, March 25, 1987

Theatre - BRONTOSAURUS, noon, Lower Massey, \$1.
CSRC - CAREER DEVELOPMENT ORIENTATION, UC 301; WRITING FINAL EXAMS, noon, UC 441; WRITING ASSISTANCE, 5:30 to 9 p.m., Lib 359.

Concert - KOINOINA BLUES BAND, noon, UC courtyard.

Biochemistry Seminar - INVOLVEMENT OF FREE RADICALS IN DAMAGE TO CELL MEMBRANES, Peter Krygsman, noon, MacN 222.

Worship - ECUMENICAL CAMPUS MINISTRY, 12:10 p.m., Chapel, UC Level 5; ROMAN CATHOLIC, Mass, 12:10 p.m., UC 103.

Lecture - OPPORTUNITIES IN BREEDING AND MANAGEMENT, John Passioura, 2:10 p.m., LRS 038.

Cycling Club - EDEN MILLS, 17 miles, novice ride, 5 p.m., UC south doors.

Guelph Student Pugwash Lecture/Discussion - ARTIFICIAL INTELLIGENCE: COULD MACHINES HAVE RIGHTS? John Leslie, 7:30 p.m., LRS 124.

THURSDAY, March 26, 1987

Board of Governors - MEETING, 9:30 a.m., UC 424.

Pathology Graduate Seminar - EXTRACELLULAR CALCIUM IN THE PATHOGENESIS OF HEPATOCELLULAR NECROSIS, G.W. Bredero, 11:10 a.m., Path 220.

CSRC - DECISION MAKING, 1 p.m., register at Connection Desk by 11 a.m.

Society for International Development - THE ROLE OF WOMEN IN THE DEVELOPMENT PROCESS: SOME LESSONS FROM THE CARIBBEAN, Peggy Antrobus, noon, MacK 132.

Worship - ECUMENICAL CAMPUS MINISTRY, MEET AND EAT, noon to 2 p.m., PCH; COMMUNITY EVENING, 5 to 6:30 p.m., OTAS Lounge, UC Level 5; EXPLORATIONS IN MEDITATIVE PRAYER, 5:10 p.m., Chapel, UC Level 5.

Concert - BERNARD BRAUCHLI, clavichord, 12:10 and 1:10 p.m., MacK 107.

Seminar - COMMUNITY DEVELOPMENT IN THE CARIBBEAN: ALTERNATIVE APPROACHES, Peggy Antrobus, 2 p.m., MacK 121.

Continuing Education - G.B. SHAW, 7 p.m.; MYSTICISM AND ALLEGORY IN THE BIBLE, 7:30 p.m., register Ext. 3956/3957.

United Way Social Planning Council Annual Meeting - 21ST CENTURY - COLLISION COURSE OR COLLECTIVE SOLUTIONS, David Douglas, 7:30 p.m., Cutten Club, \$5.

Recital - AN EVENING OF DANCE, 8 p.m., AC Studio 204, \$3 students, \$5 general.

COMING UP AT GUELPH

March 27: Concert of early music, University of Guelph Collegium Ensemble, 12:10 p.m., MacK 107.

March 30 to April 4: Drama, Sophocles's Electra, 8 p.m., Inner Stage.

April 25: Ken Danby exhibition, Macdonald Stewart Art Centre.

Personals

For Sale: Bateman, Loates, Parker prints, 824-5865, after 4 p.m. Wall unit; rocking chair; woman's brown tweed coat, size 8, 822-8484. Three-bedroom house, two years old, 822-9926, after 5 p.m. Older Gerhard-Heintzman upright piano, 837-2002, evenings. Dark double-peDESTAL desk with brass handles, circa 1940s, Ext. 2365. Five-bedroom house, older University area, 821-3595. Large desk, 822-1674, after 5 p.m. Man's three-speed bicycle, 822-4968. Chesterfield chair; plastic laundry hamper, electric popcorn maker, yogurt maker and can opener; winter and summer coats and suits, 822-5106. High chair; booster seat; infant seat; baby "Hitch Hiker" back carrier; toilet trainer; woman's skates, size 6; window mirror; drapes; low wooden pickets; bird feeder with stand, 822-3129. Nishiki bicycle, 21-inch frame; three-seat sofa, two chairs, Cathy, Ext. 2292.

For Rent: Converted garage suitable for hobby workshop or wood-working, available early April, 821-2103. Furnished apartment to

sublet, May to August inclusive, adults only, 821-1494, after 6 p.m. New basement apartment, partially furnished, private entrance, laundry facilities, cable, parking available, Ext. 3062 to 4 p.m., 837-3274 after 6 p.m.

Wanted: Small sailboat; BMX bicycle with 16-inch wheels; both must be in good condition and reasonably priced, 821-3814.

Available: Two mature adult females willing to maintain a property over the summer months for a professor on sabbatical, contact Bernadette Malak, 12 Orchard Cr., Guelph N1E 1X1. Typing for essays, reports, etc., available anytime, Alexandra, 836-9407.

"Personals" is a free service offered by *at Guelph* for staff, faculty and students at the University. All items must be typed, double spaced, and submitted to *at Guelph* one week before publication.

Next Week at Guelph

THURSDAY, March 19, 1987

Pathology Graduate Seminar - KIDNEY DISEASE ASSOCIATED WITH *RENIBACTERIUM SASMONIARUM* AND ITS IMPORTANCE IN NEPTEN CULTURE OF PACIFIC SALMON, R.D. Armstrong, 11:10 a.m., Pathology 220.

CSRC - RESUME WRITING CLINIC, noon to 1 p.m., register at Connection Desk, UC Level 3, by 11 a.m.

Society for International Development - CROP DIVERSIFICATION IN BANGLADESH, Jack Tanner, noon, MacK 132.

Worship - ECUMENICAL CAMPUS MINISTRY, MEET AND EAT, noon to 2 p.m., PCH; COMMUNITY EVENING, 5 to 6:30 p.m., OTAS Lounge, UC Level 5; EXPLORATIONS IN MEDITATIVE PRAYER, 5:10 p.m., Chapel, UC Level 5.

Concert - THE ALBORADA TRIO, 12:10 and 1:10 p.m., MacK 107.

Lecture - EXTENSION OF STERRETT GROUP TESTING TO FAULTY INSPECTION ENVIRONMENT and EXTENSION OF PFEIFER ENIS TESTING TO FAULTY INSPECTION ENVIRONMENT, Samuel Kotz, 3 p.m., MacL 102.

Apiculture Club - JUDGING OF MEAD MAKING ENTRIES, Geoff Hunter, 5:10 p.m., Graham Hall 200.

Film - JESUS, 6:30 and 9 p.m., CM 200.

Communication Seminar - CROSS-CULTURAL COMMUNICATION, DEVELOPING COUNTRIES SETTING, Jim Shute, 7 p.m., HAFA 301.

Dance - SPICE, 8 p.m., PCH, sponsored by the UC, tickets available at UC box office.

FRIDAY, March 20, 1987

Worship - CATHOLIC MASS, 8:10 a.m., Chapel, UC Level 5.

Sheep Course - WHAT DOES THE LAMB BUYER LOOK FOR, 1 p.m.; USING OUR GENETIC RESOURCES, 3 p.m., Arboretum Centre, 416-763-6503 for information.

Lecture - EXTENSION OF GRAFF AND ROELOFFS PROCEDURE TO HIERARCHICAL SET UP; EXTENSION OF GILL AND GOTTLIEB SEARCH PROCEDURE TO FAULTY INSPECTION ENVIRONMENT, Samuel Kotz, 2 p.m., MacN 202.

CSRC - DEVELOPING YOUR LEADERSHIP, 7 to 10 p.m., continues Saturday 9 a.m. to 4:30 p.m., register at Connection Desk by 4 p.m.

Theatre - THREE CANADIAN PLAYS, 8 p.m., Lower Massey, \$1.

SATURDAY, March 21, 1987

Sheep Course - MAKING THE MOST OF REPRODUCTIVE TECHNOLOGY, 8:30 a.m.; MANAGEMENT FROM CONCEPTION TO MARKET, 10:30 a.m.; ECONOMICS OF MARKET ALTERNATIVES, 1 p.m., MacN 113, 416-763-6503 for information.

Arboretum - MAPLE SYRUP DAYS, 9:30 a.m. to 4:30 p.m., Nature Centre.

Theatre - THREE CANADIAN PLAYS, 8 p.m., Lower Massey, \$1.

SUNDAY, March 22, 1987

Arboretum - MAPLE SYRUP DAYS, 9:30 a.m. to 4:30 p.m., Nature Centre.

Cycling Club - DIAGNOSTIC CLINIC, 9:45 a.m.; HESPELER, 25 miles, 10 a.m., UC south doors.

Worship - ROMAN CATHOLIC MASS, 10:10 a.m., PCH; ECUMENICAL CAMPUS MINISTRY (Anglican, Presbyterian, United), 10:30 a.m., Chapel, UC Level 5; GREAT COMMISSION STUDENTS SERVICE, 11 a.m., MacN 105.

Fair - GUELPH COLLECTABLES FAIR, 11 a.m. to 5 p.m., PCH, sponsored by the UC, \$2 students, \$3 general.

Concert - UNIVERSITY OF GUELPH CHOIR, 3 p.m., Dublin Street United Church, \$3 students and seniors, \$4 general.

International Cinema - TRAGEDY OF A RIDICULOUS MAN, (Italy) 8 p.m., MacN 105.

Film - PEGGY SUE GOT MARRIED, 8 p.m., WMH, \$2.50.

MONDAY, March 23, 1987

LRS Lecture - COMPONENTS OF YIELD IN WATER-LIMITED CROPS, John Passioura, 9:10 a.m., LRS 038.

CSRC - CAREER DEVELOPMENT ORIENTATION, noon, UC 301.

Lecture - A DENSITY-ORIENTED APPROACH TO DEPENDENCE BETWEEN RANDOM VARIABLES, Samuel Kotz, 2 p.m., MacN 121.

Engineering Graduate Seminar - EVALUATION OF THERMAL PARAMETERS OF AGRICULTURAL PRODUCTS USING MLPBS (maximum-length pseudo random binary sequence), Ralph Brown, 3:10 p.m., Eng 106.

Worship - INQUIRY INTO CATHOLICISM, 4:10 p.m., UC 332; ROMAN CATHOLIC MASS, 5:10 p.m., Chapel, UC Level 5.

Interdepartmental Seminar Series in Systematics - SYSTEMATICS AND BIOGEOGRAPHY OF PICEA, A. Gordon, 4:10 p.m., Graham 200.

Communication Seminar - MEDIA: A THIRD WORLD PERSPECTIVE, Clyde Sanger, 7 p.m., UC 442.

TUESDAY, March 24, 1987

Theatre - BRONTOSAURUS, noon, Lower Massey, \$1.

Land Resource Science Seminar - CASE STUDIES IN THE MINERAL NUTRITION OF BRASICA CROPS, Barry Shep, 3:10 p.m., LRS 124.

CSRC - CAREER DEVELOPMENT ORIENTATION, noon, UC 301; WRITING ASSISTANCE, 5:30 to 9 p.m., Lib 359.

Women's Resource Centre Film - THIS BORROWED LAND, noon, UC 441.

Worship - ECUMENICAL CAMPUS MINISTRY, Know Your Bible, noon, UC 444; ROMAN CATHOLIC MASS, 12:10 p.m., Chapel, UC Level 5; SCRIPTURE ALIVE!, 4:10 p.m., UC 334.

Our World - FILM, "FREE AT LAST," 12:10 p.m., UC 442.

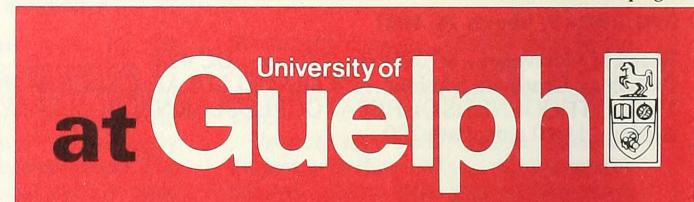
Seminar - INTERNATIONAL DEVELOPMENT THROUGH NON-GOVERNMENTAL ORGANIZATIONS, Lewis Perinbam, 2 p.m., UC 442.

Seminar - RURAL DEVELOPMENT IN THE THIRD WORLD: FEMINIST CRITIQUES, VISIONS AND PRIORITIES, Peggy Antrobus, 2 p.m., MacK 121.

Physics Lecture - THE AGE AND SIZE OF THE UNIVERSE: A NEW LOOK WITH MODERN DETECTORS, C.J. Pritchett, 4 p.m., MacN 113.

Cycling Club - MEETING AND FLEA MARKET, 7:30 p.m., AC 203.

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