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Botany Journal Comes to U of G

Publication a coup for University, says new editor

PROF. LARRY PETERSON, chair of the Department of Botany, has been named editor of the *Canadian Journal of Botany* in what he describes as a "coup" for the department and for the University. He has received an operating budget of almost \$500,000 from the Ottawa-based National Research Council (NRC) to edit the journal during the next five years. Peterson says of his appointment: "I think it lifts the department's profile. Guelph's name is out there around the world in botany."

Bruce Dancik, editor-in-chief of the 14 scientific journals and a monograph series published by the NRC Research Press, says Peterson's new title is "certainly an honour. It's something that indicates the quality of the people on the staff of the University of Guelph."

According to Dancik, the 70-year-old journal ranks among the top one-quarter of plant science journals worldwide. Referring to rankings maintained by the Philadelphia-based Institute for Scientific Information — the worldwide arbiter of research journals' standing and influence — he says: "The *Journal of Canadian Botany* is well-cited in ISI data and well-respected."

First published as the *Canadian Journal of Research*, the publication was renamed in 1951. It is the sec-

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AN INSIDER'S VIEW

More than 450 alumni, donors and friends applauded when the doors opened on U of G's restored 1931 conservatory greenhouse during Alumni Weekend. They mingled, danced and told nostalgic stories at a reception that culminated seven years of planning, fund-raising and renovations to the greenhouse and surrounding gardens. For more Alumni Weekend photos, see page 5.

PHOTO BY MARTIN SCHWALBE

CFI Awards to Create Two New Research Centres

Multidisciplinary studies will focus on food safety, function of foods and soft materials

UOF G WILL RECEIVE almost \$6 million from the Canada Foundation for Innovation's (CFI) Institutional Innovation Fund for two multidisciplinary projects.

The projects will establish research centres for food safety and for food and soft materials involving more than 50 researchers from 12 departments. With CFI funds (\$5.8

million), in-kind and industry support and potential matching funds from the province, these projects could reach a combined total value of \$15 million.

The CFI awards consist of \$3 million to create a Canadian Research Institute in Food Safety (CRIFS) and \$2.8 million to create a Centre for Food and Soft Materials Science.

CRIFS will be directed by Prof. Mansel Griffiths, who holds the Chair in Dairy Microbiology, and Prof. Scott McEwen, Population Medicine. Directors of the Centre for Food and Soft Materials Science are Profs. Rickey Yada, chair of the Department of Food Science, and Prof. John Dutcher, Physics.

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Dwivedi Named FRSC

Political science professor honoured for scholarship

PROF. O.P. DWIVEDI, Political Science, has been named a Fellow of the Royal Society of Canada, becoming the 23rd U of G faculty member to receive the honour.

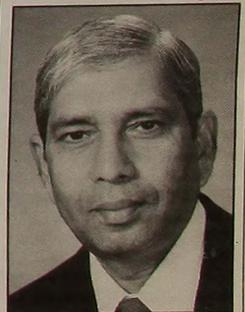
Dwivedi says he was "pleasantly surprised" when he received a letter notifying him of the accolade last month. "Election as a Fellow of the Royal Society is an honour and the highest scholarly recognition a Canadian academic can receive," he says. "It is also wonderful recognition for our new college (College of Social and Applied Human Sciences)."

A faculty member at U of G since 1967, Dwivedi has focused his research on environmental policy and management, and comparative and development administration. Two new books out this summer — one he co-authored, the other he co-edited — bring to 29 the total of books he has written or edited during his career. This is in addition to 85 book chapters and journal articles.

Prof. Michael Nightingale, dean of the College of Social and Applied Human Sciences (CSAHS), says the college is "thrilled" to learn of Dwivedi's recognition by the Royal Society. "His interdisciplinary scholarship, recognized internationally, is an outstanding example of how members of the CSAHS community are fulfilling our aim to be responsive to societal needs," Nightingale says.

Prof. Maureen Mancuso, chair of the Department of Political Science

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Prof. O.P. Dwivedi

SENATE REPORT

Building, renovation activity related to targeted capital funding, boost in facilities renewal allocation

AT THE FINAL Senate meeting of the academic year June 15, President Mordechai Rozanski informed senators that a number of capital projects and renovations will get under way on campus in the coming months, thanks in part to confirmation of new federal and provincial capital funding. These capital improvements will bring immediate benefits to students, faculty and staff while positioning the University to move forward with its strategic directions for the future.

A key allocation, announced in the May '99 provincial

budget, is a new infusion of facilities renewal funding. U of G will receive \$2.68 million for facilities renewal in 1999/2000, more than double last year's \$1.035 million. This will allow the University to undertake a number of high-priority deferred-maintenance projects, he said (see story on page 4).

Other building and renovation activity is related to targeted provincial and federal capital funding, said Rozanski. This includes renovations at various locations around campus to accommodate the physical resource requirements of research

projects funded by the Canada Foundation for Innovation and Ontario Research and Development Challenge Fund. With funding from the provincial Access to Opportunities Program, and subject to Board of Governors approval, the Thornbrough Building will be expanded and renovated to accommodate increased enrolment in Guelph's computing science and engineering programs. The expansion, which will extend into adjoining parking lots and is expected to be completed by August 2000, will provide space for classrooms, labs and offices.

Board approval is also pending on Phase 4 of the improvement plan for U of G's athletics facilities — a plan fully funded by a student referendum in the 1980s. Rozanski said Phase 4 will involve the creation of a four-season athletic dome over an artificial turf sports field, new drainage and other improvements to the soccer field, renovations to the men's and women's locker rooms in the Mitchell Athletics Centre and relocation of tennis facilities to South Residences. The athletic dome will allow students to participate in intramural sports year-round. Plans for Phase 4 are now subject to final architectural review and timing needs.

(Editor's note: At the subsequent meeting of Board of Governors June 24, the board approved proceeding to tender for both the Thornbrough Building expansion and Phase 4 of the athletics improvements.)

Discussions are also under way with B of G about the need to build a new 500-bed suite-style residence for continuing students, said Rozanski. This is in response to the current situation on campus, not yet to projected increases in enrolment related to the "double cohort" and demographic changes, he said. The University wishes to respond to the needs of current students who want to continue their residence experience beyond first year. Financing for the residence would have no impact on the operating budget, he said, and if approved, the project would be targeted for fall 2001.

Rozanski added that U of G plans to undertake a comprehensive review of the quality needs of Guelph's living, learning and research facilities in anticipation of increased capital funding. This review and planning must be part of the University's overall academic planning that looks ahead to the institution's future over the next 30 years, he said.

Following on the recent provincial election, the Council of Ontario Universities will continue to build on earlier discussions with the Ministry of Education and Training and other government representatives about the projected significant increase in student demand over the next five to 10 years, said Rozanski. These efforts will continue their goal of convincing the provincial government of the need to increase operating grants for Ontario universities to improve quality for existing students and to accommodate further growth in university enrolment, he said.

ENROLMENT FIGURES ON TARGET

Prof. Alastair Summerlee, associate vice-president (academic), informed Senate that,

according to preliminary figures, U of G appears to have exceeded its undergraduate enrolment targets for the 1999/2000 academic year. He noted two new trends this year — greater interest in U of G's BA program and an increase in the number of students interested in computing science. Both these trends are welcome, he said.

Summerlee also reported that preliminary information about international enrolment suggests that Guelph has exceeded its targets for international undergraduate students. And acting graduate studies dean Isobel Heathcote noted that graduate enrolment is ahead of last year at this time.

The fact that U of G enrolment is on target reflects an enormous amount of faculty and staff effort, said Summerlee. Rozanski joined in commending faculty and staff for this achievement, particularly while facing the external challenge of a competitive environment and the internal challenge of a new student information system. He thanked Summerlee, registrar Chuck Cunningham, associate registrar Brian Pettigrew and other staff in Registrar Services for their efforts.

Rozanski added that it was important to note that in meeting its numerical targets, Guelph had sought not to sacrifice student quality. The University remained committed to the cutoff marks that it had announced early on while also admitting students using the profile form.

DVM 2000 CURRICULUM APPROVED

Senate approved a new curriculum for the DVM program, to be implemented beginning in fall 2000. Prof. John Leatherland, chair of the Department of Biomedical Sciences, outlined for senators the history, philosophy and design of the new curriculum, which focuses on the progression and development of students in a series of competencies based on U of G's learning objectives in general and veterinary skills in particular.

The competencies were established after broad consultation with the professional community, food and animal interest groups, companion animal interest groups and the general public. Designed to reflect the changing nature of the veterinary profession, the competencies include the knowledge and skill base expected of entry-level veterinarians, but also emphasize the professional, literacy and numeracy skills central to the profession.

Six years in the making, the new curriculum will be carried out in four phases rather

than semesters or years, with students building on prior skills and experience in each phase, said Leatherland. The program will be more integrated, will put more emphasis on professional values and self-learning, will offer students earlier clinical experience and will, for the first time, allow students to take electives outside the DVM program.

Provost Iain Campbell commended OVC and all those involved in creating the new curriculum for their vision. He said the document before Senate reflected not just imagination, but also a huge amount of courage and a vast amount of hard work. Senators offered a round of applause.

In other Board of Undergraduate Studies Business, Senate approved the India semester, subject to review in the fall of 2004. Initiated by Prof. O.P. Dwivedi, Political Science, the India semester was launched on a trial basis in the fall of 1995 at the University of Rajasthan. The next semester is scheduled for winter 2000, to be followed by semesters in winter 2002 and winter 2004.

Senate also approved two new majors in the B.Comm. program — human resource management and public management.

DOUBLE COHORT WORKING GROUP REPORT PRESENTED BY SCUP

Senate Committee on University Planning (SCUP) vice-chair Prof. David Prescott, Economics, presented the report of the Double Cohort Working Group. He said the document makes a start at identifying fundamentals of the process to help U of G deal with the significant increase in the number of students expected to seek post-secondary education over the next 10 years. The process will be an open one, he said.

Both VPAC and SCUP, which are taking a leadership role with Board of Governors in developing the University's plan for dealing with growth in student demand in ways that will best serve the University's goals, have discussed the report and have proposed a number of possible approaches, said Prescott. These include increasing enrolment, building partnerships with other institutions — including colleges — further expanding open learning programs and boosting use of the summer semester.

Planning must begin now, said Prescott, because if Guelph were to take its share of the expected province-wide increase in student numbers over the next 10 years, the University would see an eventual increase of about 4,900

students, boosting enrolment from 15,000 to about 20,000. That would dramatically change the nature of the University and would have a deleterious effect on the character and culture of the institution, he said. It would also require a lot of new construction that would be disruptive for students already on campus.

Summerlee outlined one proposal under consideration — increased collaboration with Humber College in Toronto. Guelph is now in the process of developing a memorandum of understanding with Humber on the proposed collaboration; it's hoped this will lead to a formal agreement that defines the programs under consideration and many aspects of the prospective collaboration. SCUP and VPAC will play key roles in the process.

The collaboration could involve joint degree and diploma programs, with up to 2,000 students eventually participating, said Summerlee. This, in turn, could provide a springboard for a host of other collaborative activities, including a Toronto semester for U of G students, and would allow greater accessibility.

Summerlee and Rozanski both stressed that such collaboration would not occur without the financial support of the provincial government.

SELECTION COMMITTEE FORMED FOR DEAN OF GRADUATE STUDIES

Senate approved the membership of the selection committee for the dean of graduate studies. Chaired by Campbell, the committee consists of Prof. Larry Milligan, vice-president (research); College of Biological Science dean Bob Sheath; Prof. Asha Sadanand, Department of Economics; Prof. Alan Sullivan, Department of Plant Agriculture; Prof. Susan Brown, School of Literatures and Performance Studies in English; graduate student Tejwant Gidda, School of Engineering; and staff member Bo Wandschneider, Computing and Communications Services.

GUIDELINES APPROVED FOR CONDUCT OF SEMESTERS ABROAD

Senate approved guidelines for the conduct of semesters abroad, as presented by the Senate International Committee. The guidelines cover the membership and responsibilities of study-abroad committees, the responsibilities and authority of on-site co-ordinators, the selection of participating faculty and students, emergency response and student assessments of the study-abroad programs.

@Guelph Summer Schedule

THE LAST @GUELPH FOR THE SUMMER WILL APPEAR AUG. 11.
COPY DEADLINE IS AUG. 4. THE FIRST ISSUE OF THE FALL SEMESTER IS SEPT. 15. COPY DEADLINE IS SEPT. 8.



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@Guelph is published every two weeks by Communications and Public Affairs, Level 4, University Centre, University of Guelph, Guelph, Ontario N1G 2W1. Inquiries: 519-824-4120; Editorial: Ext. 6580; Distribution: Ext. 8707; Advertising: Ext. 6665; Classifieds: Ext. 6581; Fax: 519-824-7962; Web site: <http://www.uoguelph.ca/atguelph>.

Articles may be reprinted with credit to @Guelph

Subscriptions
\$44 (includes GST);
\$51 outside Canada
ISSN 08364478 @ 1998
Printed on recycled paper



MARRIOTT PRESIDENT NAMED NEW CHAIR OF BOARD OF GOVERNORS

Simon Cooper, president of Marriott Hotels of Canada in Etobicoke, has been named chair of Board of Governors, effective July 1. He succeeds Doug Dodds, chair and CEO of Schneider Corporation in Kitchener, who had served as chair since 1995. Cooper, who joined the board in 1995, was vice-chair in 1998/99.

FOOD SCIENCE FOCUS OF SEPTEMBER CONFERENCE

Innovative food research done by U of G and its partners will be the focus of a conference titled "Food Science at Work" Sept. 16 and 17 at Guelph. The conference will highlight excellence in research and bring together key food researchers to learn about trends in the food industry. The conference will also celebrate the research achievements of the Department of Food Science and will be followed by the ribbon-cutting for the renovated Food Science Building. For more information, call David Castle in the Office of Open Learning, Ext. 4737, or visit the Web at www.oac.uoguelph.ca/foodsci/.

CO-OP SPONSORS HONOURED

The Secondary School Co-operative Education Program in Guelph recently presented plaques to U of G departments that have sponsored and mentored hundreds of high school students over the past 10 years. Awards went to Accounts Payable, the Athletics Department, the Arboretum, the departments of Biomedical Sciences, Computing and Information Science, Environmental Biology, Geography, Land Resource Science, Microbiology, Pathobiology and Zoology, the drama program in the School of Literatures and Performance Studies in English, the School of Engineering, Hospitality Services and Security Services.

U OF G WINS CCAE AWARDS

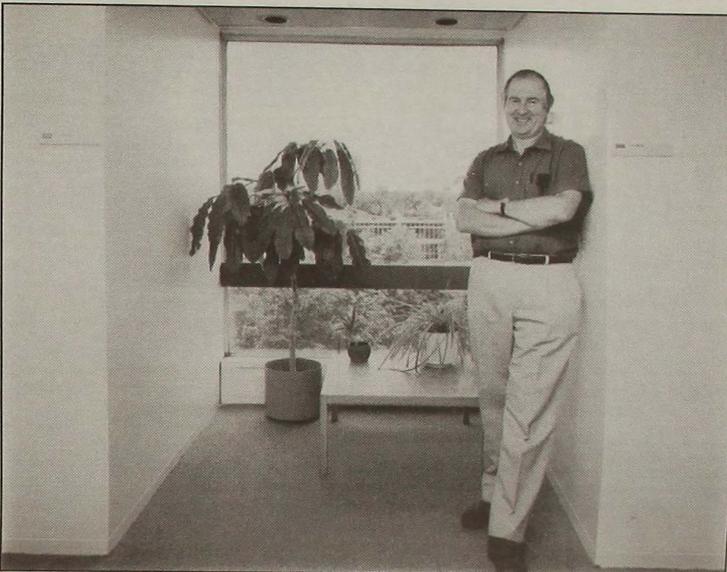
U of G received two awards from the Canadian Council for the Advancement of Education at its annual meeting last month. The Office of Research received a silver award for best newsletter for the publication *PigPens*. U of G won a bronze medal for "Best Private-Sector Partnership" for its collaboration with the City of Guelph on the 1998 Ontario Summer Games.

CUPA MEMBERS MEET

The Office of Institutional Analysis and Planning recently hosted the Committee on University Planning and Analysis (CUPA) conference for institutional planners from Ontario universities and senior officials and staff from the Ministry of Training, Colleges and Universities and the Council of Ontario Universities. This was the first time the CUPA conference has been held at U of G. Presentations focused on performance indicators, the double cohort and data warehousing.

Former Dean of Arts Wins College Teaching Award

History professor invites students to beat a path through his door



Award-winning professor David Murray says it's a challenge to try to excite students about Canadian history. PHOTO BY DEAN PALMER/SCENARIO IMAGING

THE ONCE GRAY CARPET on the floor of Prof. David Murray's third-floor office in the MacKinnon Building shows the wear of 32 years of teacher feet shuffled under the desk and student feet crossing the threshold. Napless carpet and faded drapes are part of the history that lives in Room 368 — the operative word being "lives."

Murray is a historian who says his discipline is anything but threadbare, and he disputes the common perception that history is dull to young people.

It's true that the students who just completed his new introductory course in Canadian history had little exposure to the subject in high school — many hadn't studied Canada's history since Grade 10 — but Murray says most of them were genuinely interested in learning about their own country.

"It's a challenge to try to excite students about Canadian history," says the professor who just received the College of Arts Teaching Award.

The recognition comes from the college Murray served as dean for 11 years. Between 1980 and 1991, he presented many similar awards and says he is honoured by this recognition from his peers. "It's wonderful to teach in a department, a college and a university where there is a strong commitment to students," he says.

Murray's personal commitment kept him teaching undergraduate courses each year that he resided in the dean's office. "I thought it was important to stay in touch with students and with the undergraduate teaching process."

On a campus dotted with century-old limestone buildings, the MacKinnon tower is seldom at the top of anyone's list of favourite places on campus, but Murray has a

particular fondness for the building. Its chronological history parallels his career at U of G, beginning in 1967. When he was dean, Murray spearheaded a move to name the building for Guelph's first dean of arts, Murdo MacKinnon.

As an early faculty representative on Senate and Board of Governors through the 1970s, Murray helped instill the traditional values of the humanities on a campus that was dominated by non-humanities disciplines. The wear evident in the MacKinnon Building illustrates that liberal arts programs are no longer the new kid on the block at U of G. Part of the history that lives in Murray's office are the stories of growth in the College of Arts and the BA program.

When he left the dean's office, Murray made a conscious decision to return to teaching full time in the Department of History. The introductory course he taught last year is the first two-semester survey course offered in the department, and it gives students a more comprehensive and co-ordinated approach to Canadian history. He has developed and taught a new undergraduate course in Canadian political history and honours-level courses in Canadian legal history and the Cuban revolution. He maintains an early interest in Latin America through research and teaching courses on Latin American comparative history.

Murray's students enjoy a lecture style that emulates the tales of a good storyteller. After all, history really is the story of how people lived and how they governed themselves in the past, and how their society has influenced ours. The award-winning professor says he often dwells on the continuity of major issues in Canadian history that have gone unresolved since pre-Confederation

times, such as Quebec's place in Confederation.

The stories most often told in Room 368 these days took place in the Niagara area in the early 19th century when Upper Canada was governed by British law. Murray is researching some of the oldest legal records in Ontario for a book that will shed new light on the way society functioned in the 1830s. He says it was his wife, Ann, who sparked his interest in Canada's early legal system and the way Canadians have defined morality in the context of law. She has served on the Ontario and Canadian parole boards for more than 20 years.

Murray says her work with Canada's penal system provides an interesting comparison with the interpretation and enforcement of morality within the context of early 19th-century law. Legal records from the Niagara area tell the story of magistrate Bartholomew Tench, who was powerless to enforce the law against profaning the Sabbath when he witnessed five men building a house on a Sunday afternoon in 1833. The magistrate in Thorold, however, easily accommodated a local Quaker who turned himself in for the same offence. Robert Hobson fined the Quaker five shillings.

The inconsistent prosecution of immorality was typical of law enforcement in the early 19th century, says Murray. "In Canadian society today, morality is defined by the state rather than by Christian beliefs, but our legal system is equally inept at preventing crime and criminality."

In his characteristic way of looking at history, the professor tells the stories of everyday life and shows again the continuity of issues facing Canadian society.

BY MARY DICKIESON

PEOPLE

WOOD HONOURED FOR REDUCING BARRIERS

Prof. Janet Wood, Microbiology, is one of the first recipients of the Guelph-Wellington Barrier Free Committee's new Excellence in Access awards, presented to businesses, individuals and groups that have made significant contributions to reducing barriers for people with disabilities. Wood received the award for her activism through the local Committee for Ontarians with Disabilities Act.

UGAA EXECUTIVE ELECTED

The U of G Alumni Association elected its new executive during Alumni Weekend in June. New president is Scott vanEngen, B.Sc.(Agr.) '88, a chartered accountant and management consultant with Robinson & Company in Guelph. Past president is Jim Weeden, B.Sc.(Eng.) '71, of Woodstock, an agricultural engineer with the Ontario Ministry of Agriculture, Food and Rural Affairs. First vice-president is Guelph lawyer Robin Lee Norris, BA '80. Second vice-president is John Watson, BA '69, a regional manager at Empire Financial Group in Mississauga. Elected to the position of secretary is Rita Sterne, B.Comm. '87, who is self-employed in Guelph. Treasurer is Brad Hull, BA '89, of Guelph, who works for Campana Systems Inc. in GoldCarle Sales and Marketing.

PLANNING PROJECT EARNS HONOURABLE MENTION

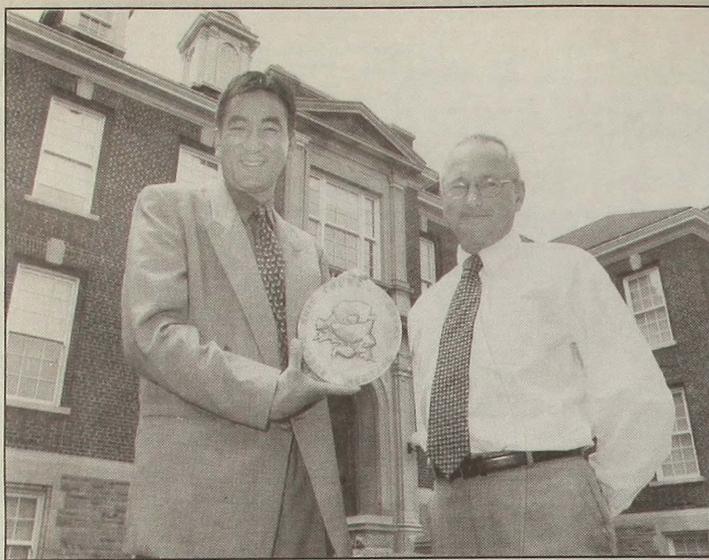
Prof. Nancy Pollock-Ellwand, Landscape Architecture, is part of a research consortium that received an honourable mention for planning excellence from the Canadian Institute of Planners at its annual meeting last month in Montreal. The consortium, made up of university faculty, high school teachers, students, curriculum writers and editors, created curricula and software tools for high school-based community heritage and economic online resource centres. Pollock-Ellwand's contribution to the project involved cultural landscape issues and community facilitation.

SCHOLARSHIP TO ENGINEER

Kevin McKague, a M.Sc. student in environmental engineering, is one of six professional engineers to receive a 1998 national scholarship from the Canadian Council of Professional Engineers. McKague received the CCPE-Manulife Financial Scholarship, a \$10,000 cash award to pursue further engineering study or research.

AG ECONOMICS GRAD WINS DAWN MORRIS AWARD

Laura Green, a 1999 agricultural economics graduate of OAC, is this year's recipient of the Dawn Morris Memorial Award from the Canadian International Farm Equipment Show. Named in memory of farm show pioneer Dawn Morris, the award recognizes contributions to the University community.



BUILDING ON THE PAST

The Food Science Building is this year's winner of the Guelph Arts Council's bronze plaque recognizing outstanding efforts to restore, preserve or develop heritage properties in Guelph. The building was cited as an "excellent model of an institutional renovation sensitive to the heritage of the building." OAC dean Rob McLaughlin accepted the plaque on behalf of the University. Showing off the plaque, above, are Prof. Rickey Yada, chair of the Department of Food Science, and Ian Britt, an adjunct professor in the department who submitted the nomination.

PHOTO BY MARTIN SCHWALBE

University Collaborates on English-Language Program

Program aims to make it easier for international students to improve their English skills

PEERAPOL (or Jo-Jo, as he likes to be called) is trying to explain the difference between Thai boxing and kick-boxing to his classmates. He is speaking very slowly and carefully in broken English, the language he and his fellow students from South Korea, Venezuela, Mexico, Brazil and Japan have come to Guelph to learn. Jo-Jo is enrolled in U of G's English-language certificate program, a university-level English preparation course developed a year ago in collaboration with Global Awareness Through English (GATE) Enterprises, located in downtown Guelph. Today, he is giving a presentation on his homeland. Boxing is one of Thailand's favourite pastimes, Jo-Jo tells the class. "Not like kick-boxing; Thai boxing more difficult, more dangerous," he says, pulling classmate Addison, a Japanese-born Brazilian, from his chair.

"In Thai boxing, you can use hands, legs like this," says Jo-Jo, kicking his leg and stopping just short of making contact with Addison's neck. "Or like this," he says, swinging an elbow toward Addison's face and raising one knee near his friend's side. "Very dangerous. In kick-boxing, not allowed."

Jo-Jo's classmates nod in understanding as he goes on to describe other aspects of Thailand — the crowded streets of Bangkok, popular foods, the education system, currency and the price of housing and automobiles. "More cheaper in Canada, cannot buy in Thailand,"

he says, explaining that cars are assessed an import tax. "Oh, yes, you mean it's more expensive," adds teacher Lynne McIntee, who helps and encourages Jo-Jo during his presentation. The other students ask questions, occasionally referring to translation dictionaries on their desks.

Jo-Jo, a machinery mechanic, is in Guelph for only a few weeks, taking a crash-course in English on his way to working and studying in Saskatchewan. He and his classmates spend nine hours a day studying English and participate in outside activities in the evenings. Most also live with English-speaking host families.

U of G started the collaboration with GATE as part of an effort to expand its international offerings to facilitate admission qualifications for foreign students and to assist U of G students in language and communication skills. The program runs in monthly sessions with five levels, from beginning to advanced. Up to 10 students are in each class at a given time, studying English — reading, writing, listening, speaking and grammar. Emphasis is on conversation, presentation skills and integration into Canadian society.

Students also prepare for the Test of English as a Foreign Language, which they must pass to be admitted to a Canadian university.

Those who complete Level 4 of the certificate program and pass a minimum of four open learning courses with a 70-per-cent average are guaranteed admission into the

University's BA program. Participants also have access to U of G's library, e-mail, computers, academic counselling, physical amenities and international student advisers.

Peggy Nagle, program manager in the Office of Open Learning, says the certificate program is intended to make it easier for international students to improve their English skills and gain admittance to U of G.

"Anytime there are international students in a classroom, it broadens the knowledge and level of instruction in the classroom because it adds different perspectives and experiences," she says.

Many of those enrolled in the program have studied English before, says Nagle, and some have even attended universities with English textbooks, but communicating in English is a much different experience.

Students in U of G's certificate program are immersed in the culture by studying English daily, living with local families and examining pertinent Canadian issues such as pollution and gender equality.

"When you feel strongly about an issue, the desire to speak out and create discussion in the classroom is great," says Nagle. "It promotes participation. A person can't hide, and they don't want to hide."

For Jo-Jo, U of G's program is a chance to boost language skills, meet some new people and tell them about his home. "Thailand is a smiling land," he says. "In my opinion, it has a good heart for everyone. You are all welcome in my country."

BY LORI BONA HUNT

U of G to Move Ahead With Critical Projects of Deferred Maintenance

Province boosts facilities renewal funding for 1999/2000

ASIGNIFICANT INCREASE in government funding for facilities renewal at Ontario universities this year will allow U of G to move ahead with critical deferred-maintenance projects over the summer, says Nancy Sullivan, vice-president (finance and administration).

U of G will receive \$2.68 million for facilities renewal in 1999/2000, more than double last year's figure of \$1.035 million. Sullivan says the province has indicated that this year's allocation is a one-time increase and will be reduced again in 2000/2001 (Guelph's share would then be \$1.8 million), but the Council of Ontario Universities is lobbying to maintain this year's level.

Although the boost in funding is good news, the \$2.68 million will not go far in addressing Guelph's deferred-maintenance problem, which is estimated at \$60 million, says Sullivan. The funds are also used to deal with health and safety projects and renovations resulting from changes in use of space. This year, U of G received \$24 million worth of requests for facilities renewal projects from across campus. Of those, \$6.6 million worth are considered "absolutely critical," she says, but the University can fund only about half of them through facilities renewal funding and the Physical Resources operating budget. "That still leaves a huge gap."

Funding requests were reviewed by Sullivan and provost Iain Campbell, with highest priority going to projects affecting health and safety and bringing facilities up to code. The next priority was preventing already deteriorating buildings from deteriorating further, largely through painting, caulking and waterproofing. Projects were reviewed with VPAC and Executive Group.

A total of \$653,000 will be spent on projects related to health and safety and bringing facilities up to code. These include installing a dust-collection unit in the grinding facilities in the Department of Animal and Poultry Science, improving ventilation and installing new metal and dust collectors in the School of Fine Art and Music in Zavitz Hall, eliminating fire-protection deficiencies in the College of Physical and Engineering Science, and installing a ramp and renovating two rooms in the Couple and Family Therapy Centre in Macdonald Hall.

The Macdonald Hall ramp and renovations will, for the first time, provide access to the centre for persons with disabilities. "I'm pleased that we are able to provide handicapped access into the centre," says Campbell, "because lack of such access was noted in the centre's recent accreditation assessment. We have been able to correct the deficiency

within six months."

Another \$640,000 has been allocated to structural projects, ranging from caulking and waterproofing in various buildings to repairing a beam that poses a safety hazard in Alumni Stadium. A total of \$565,000 goes to air quality projects related to ventilation, heating and air conditioning. These include new ductwork in the Department of Pathobiology and upgrading growth rooms in the Department of Plant Agriculture. Another \$335,000 has been allocated for plumbing, \$270,000 for flooring, \$222,000 for electrical work and \$156,000 for roads and sidewalks. A major part of the flooring allocation will go to replace carpeting in the U of G Library that has deteriorated and become a safety hazard.

The bulk of these projects will be done this summer.

A total of \$365,000 has been designated for projects related to academic restructuring across campus and for planning for future facilities. Renovation of a room in the FACS Building, for example, reflects the need for changes in space use following the creation of the College of Social and Applied Human Sciences, says Campbell.

Other funding will allow the University to hire a consultant to determine how to physically facilitate various elements of restructuring and related academic planning, he says. This will include looking at issues involved in bringing together the various partners in the Department of Plant Agriculture and the College Faculty of Environmental Design and Rural Development, rehousing the Department of Land Resource Science and looking at the Richards Building as an eventual home for the Department of Computing and Information Science.

"I am very pleased that we can gain the services of a consultant to assist with facilities planning," says Campbell. "This planning must accelerate to recognize and support the academic gains that have been made within the highly effective academic restructuring that has been carried out in several colleges."

About \$185,000 has been designated to start work on establishing a Learning Commons in the U of G Library. A partnership of existing U of G services that support teaching, learning and research, the Learning Commons would provide learning, writing and research services for students and faculty in a central location at the heart of the University's information resources. It is envisioned that the "nucleus" of the Learning Commons will be established by September, starting with Learning and Writing Services and the Library's Information Literacy and Open Learning Services.



Alumni Weekend brought more than 1,300 visitors to campus June 18 to 20 to share the past and celebrate alumni achievements. Top: President Mordechai Rozanski and representatives of the alumni classes and individuals who supported U of G's six new thematic gardens cut the ribbon to officially open the gardens. From left are Bill Gregg, BSA '53 and DVM '61, Don Grieve, BSA '55 and MSA '57, Harold Shield, BSA '51, Sandra Hannam, Clay Switzer, BSA '51 and MSA '53, Rozanski, Marilyn Robinson Murray, B.H.Sc. '55, Ted McNinch, BSA '49, Bruce Stone, BSA '53 and MSA '54, Harold Bentley, BSA '64 and M.Sc. '66, Craig Hunter, B.Sc.(Agr.) '74 and M.Sc. '77, and Les Laking, BSA '39 and HDSC '71. Centre left: 1951 OAC graduate Don Rutherford and his wife, Jean, right, lead other family members in the first dance inside the conservatory, which was restored because of their leadership gift. Centre right: U of G's student ambassadors gather to recognize the corporate sponsors for Alumni Weekend '99: General Motors Canada, IBM, John Deere Canada, U of G Alumni Association, Royal Bank Financial Group, Meloche Monnex, Glaxo Wellcome, Manulife Financial, Monsanto, Novartis Animal Health Canada Inc. and S.C. Johnson and Sons Ltd. From left are Kate Sharpe, Jeff Reid, Julie Donohue, Nadine Devin, Amy Boeckner, Tamara Small, Mark Hallman and Marie-France Gravelle. Bottom left: Serving guests at a celebrity barbecue are Scott vanEngen, left, new president of the UGAA, and Rudy Putns, executive director for campaign programs. Bottom right: Mary and Rick Richards, centre, were recognized at the Golden Anniversary Dinner as the first inductees in a new Order of OAC (see accompanying story). Foundation chair Ginty Jocius, left, and Rozanski made the presentation.



PHOTOS BY MARTIN SCHWALBE

Order of OAC Introduced at Alumni Weekend

KEEPING WITH THE TRADITION of recognizing the importance of U of G graduates, Alumni Weekend was a fitting time to introduce the new Order of OAC and to congratulate its first inductees, Mary Richards and Rick Richards, a 1938 graduate of the Ontario Agricultural College.

The new recognition award was presented at the Golden Anniversary dinner June 19 by OAC Alumni Foundation chair Ginty Jocius, a

1970 graduate of OAC.

The Order of OAC was developed to recognize significant contributions to the OAC Alumni Foundation's endowment fund, as well as to other college endowment initiatives, says Jocius. "The OAC Alumni Foundation felt the timing for the OAC Order was right and would appeal to those individuals wishing to make significant contributions," he says.

The order recognizes individual

donors who give gifts of \$100,000 or more. These gifts may be granted as documented bequests, irrevocable insurance policies, planned gifts or cash donations. The donations may be applied as endowments to the OAC Alumni Foundation or to the college, as approved by the foundation directors.

The order concept, to be capped at a total of 50 inductees, was introduced to the foundation committee in February, and the Richards have

set the pace of Order of OAC inductees, with Mary and Rick both being recognized for their contributions of \$100,000.

For the Richards, the recognition is just a sidebar to the real reason for their leadership gifts. They say their satisfaction comes from helping the OAC endowment fund and providing the necessary money to bring faculty to campus to enhance OAC students' experience at Guelph.

Rick, who served as dean of OAC

from 1964 to 1972, says there are many examples of faculty members who made a difference in his time as a student at OAC. "The faculty had a great deal of influence on shaping my professional life," he says.

His professional life and achievements were recognized during Alumni Weekend when he was named Alumnus of Honour. Mary also worked in OAC (where they met) and has been a longtime supporter of the college.

BY GAYLE ANDERSON

New Pig Breed A Boon to the Environment

Researchers come up with idea of using biotechnology to make a pig able to digest phosphorus more efficiently

IT WAS ABOUT MIDNIGHT by the time graduate student Serguei Golovan found the sample with the golden gene. Working overtime in the lab of his supervisor, Prof. Cecil Forsberg, Microbiology, he was checking samples taken from a tail docked from a piglet born this spring to a surrogate sow at the Arkell Research Station.

Using a standard technique for separating out DNA, Golovan was studying the characteristic bar-code pattern left on the gel when he spotted the telltale glowing band that marked this little piggie as the beginning of a new breed that could solve the biggest environmental problem facing hog farmers in Ontario and further afield.

The clock ticked into the wee hours as he ran further tests to confirm that the pig was indeed carrying a bacterial gene that U of G researchers had fused into its embryo.

"I got a positive on the gel at 12 o'clock at night, but I didn't know whether the pig was still alive," says Golovan. "I couldn't sleep very well that night."

The particular Yorkshire porker — dubbed "Wayne" by the researchers and the Arkell crew — turned out to be alive and thriving. Further tests showed that Wayne was producing copious amounts of the phytase enzyme in its saliva, more than enough to tackle phytate — a form of phosphorus that normal pigs cannot digest — in the feed the animal has been wofling down since.

Says Golovan: "You can imagine I was very, very happy." So were Forsberg and Prof. John Phillips, Molecular Biology and Genetics, who had come up with the notion of using biotechnology to make a pig able to digest phosphorus more efficiently.

"How do you create a pig that produces the enzyme phytase, which breaks down phytate, releasing phosphorus so that it's digested and absorbed in the small intestine?" says Forsberg.

He and Phillips linked the phytase gene from the common intestinal bacterium *E. coli*

to part of a mouse gene controlling production of a salivary gland protein, injected the transgene into a pig embryo, then inserted the embryo into a surrogate sow.

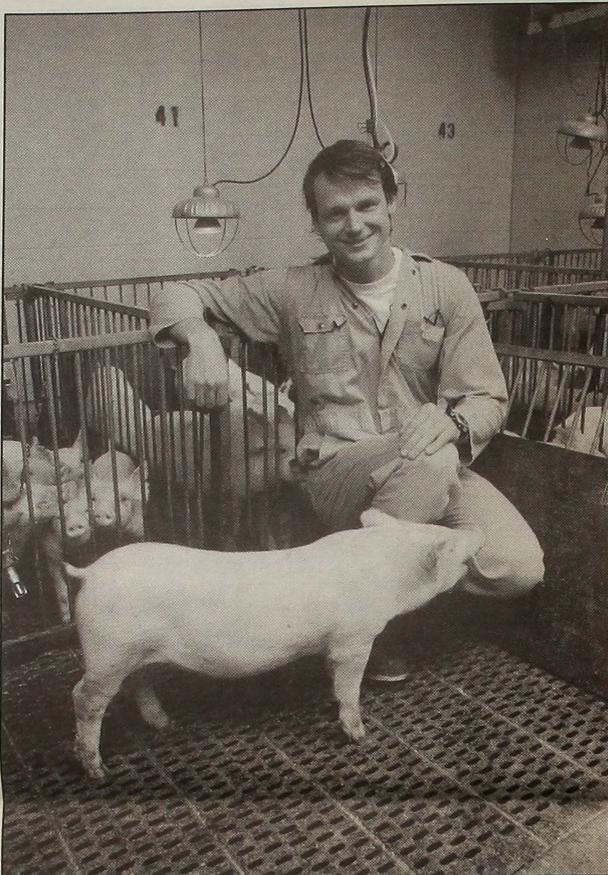
"It was a very important collaborative project," says Golovan, noting that it has involved faculty in the departments of Animal and Poultry Science and Population Medicine, as well as technicians and hands at Arkell. "Without that, we probably would not have been able to get these results."

Transgenic pigs engineered to digest natural plant phytate would save hog producers up to \$1.70 per animal in readily digested phosphorus that farmers currently need to feed pigs as a supplement. And by excreting up to 50 per cent less phosphorus, the animals could prove an environmental boon. Farmers use high-phosphorus pig manure for fertilizer, but the substance washes into streams and lakes, where it promotes the growth of algae that eventually starve the water and fish of oxygen.

News that the Yorkshire pig can make its own phosphorus-digesting enzyme has already generated interest among hog farmers and breeders represented by the Ontario Pork Producers' Marketing Board. The non-profit organization paid for a chunk of the research — along with the Ontario Ministry of Agriculture, Food and Rural Affairs, Ontario Swine Improvement Inc. and the Natural Sciences and Engineering Research Council — and plans to take the "Enviropig" to market through its exclusive worldwide licence. The University will retain ownership of the pigs.

News of the breakthrough was first reported in an issue of *Farm & Country* magazine last month and has since turned the pigs, and the U of G researchers, into media darlings. Rolling his eyes at the end of an interview that is just one of dozens of contacts with reporters over the past three weeks, Golovan says: "I need to get back to my work after all the interviews."

BY ANDREW VOWLES



Microbiology graduate student Serguei Golovan poses with Wayne, the transgenic "Enviropig."
PHOTO BY MARTIN SCHWALBE

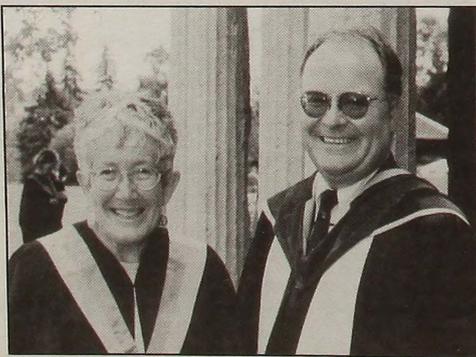
Learning Never Stops for Retired Zoologist

After years of teaching at U of G, retired professor Mary Beverley-Burton is proud to be one of the University's newest grads

RETIRED ZOOLOGY PROFESSOR Mary Beverley-Burton has a unique definition for retirement. She says it's a time for "really doing a lot of different things." And one of the different things she's been doing is completing an Ontario diploma in horticulture by independent study, which she received at spring convocation in June. She also shared the Ontario Ministry of Agriculture, Food and Rural Affairs Award of Excellence for her contributions to the Guelph and Wellington County chapter of the Master Gardeners of Ontario.

Beverley-Burton, who retired from Guelph in 1995 and launched the Guelph chapter of the Ontario Master Gardeners with Maria Hiltz in 1996, first enrolled with Independent Study (IS) because three IS courses are required to qualify as a master gardener. After completing the courses, however, she decided to go on and earn an ODH.

"I wanted to do a diploma for my own satisfaction and to encourage other master gardeners that this was — to quote George of *Seinfeld* — a



OAC dean Rob McLaughlin congratulates ODH graduate Mary Beverley-Burton at convocation.
PHOTO BY MARTIN SCHWALBE

doable thing."

Ontario Master Gardeners has some 800 members in 36 chapters across the province dedicated to developing home gardening expertise. As a master gardener, Beverley-Burton is responsible for hotline counselling ("people always ask how to deal with white grubs"). She and her colleagues also staff a booth at

the Guelph Farmers' Market on Saturdays throughout the spring, are involved with the Arboretum and serve as judges in the Communities in Bloom competition.

Beverley-Burton's academic career began in 1953 when she completed her first degree in agricultural zoology at the University of Wales Aberystwyth. She was the only

woman in a class of 70 men "who were mostly Second World War veterans — not a typical cohort." She went on to a career in parasitology, obtaining a PhD at Imperial College in London, followed by a post-doctoral fellowship at the College of Rhodesia and Nyasaland (now Zimbabwe) and a teaching stint at the University of West Indies in Jamaica.

Her international studies offered Beverley-Burton a chance to learn gardening in a variety of extreme climates. In Zimbabwe, where the altitude was high and the rainfall low, she grew cacti, citrus, tropical fruit and vegetables. In Jamaica, where the altitude was low and the rainfall high, she developed a big vegetable garden. Back in England for two years, she tried her hand at rose gardens and learned some of the gardening methods needed for success in a temperate climate.

Beverley-Burton joined the Department of Zoology at Guelph in 1968 and faced her greatest horticultural challenge when she and her family moved to a Puslinch farmhouse in 1972. Her husband "res-

cued" trees from urban properties that were being developed, and soon they had their own "mini arboretum," including black walnut, hemlock and sugar maple trees. Eventually, they transformed their 27 acres into a "landscape." A large vegetable garden fed the family. A formal perennial garden evolved during the 1980s. A "pleasure garden" became the ideal backdrop for family wedding receptions.

Beverley-Burton says her love of horticulture is hereditary. "In South Wales, my mother had an absolutely fantastic garden with a Roman wall and an 18th-century gazebo. It was quite exquisite. I've always been an outdoors person and have always taken an interest in the environment."

After years of teaching at U of G, Beverley-Burton says she is proud to be one of its newest graduates and to have come full circle as an "Aggie." But true to form, she doesn't believe learning stops with the receipt of a diploma. She is now training to be a docent at the Arboretum.

BY RENEE TAVASCIA

Musicians Say Give Peace a Chance

New CD responds to NATO bombing of Yugoslavia with songs about war and peace

PEACE, NOT WAR. Decades after the Vietnam War, Lewis Melville felt that '60s rallying cry reverberating again with the far-off pounding of NATO bombs over Yugoslavia. Despairing over what he saw as a political failure to explore options, and feeling a need to register his opposition to the campaign, the Department of Botany research technician and musician co-produced a new double CD of songs about war and peace recorded by more than 100 musicians from Guelph and further afield.

To be released this month, *Music for Peace* includes tunes by 34 area singer-songwriters, including many represented by his independent DROG record label. "The title speaks for itself," says Melville, pointing to the pair of CDs whose covers bear his drawing of aircraft shaped like musical instruments bombarding a tank and a cannon with musical notes and symbols.

During a recording blitz this spring, musicians either recorded their songs themselves or visited the Guelph studio run by Melville and Dave Teichroeb, formerly a research technician in U of G's School of Engineering. Both accomplished musicians, the pair co-founded DROG in 1993 to represent about 30 regional recording artists.

Other U of G contributors were Prof. Hank Davis, Psychology; Prof. Alan Wildeman, Molecular Biology and Genetics; and several botany PhD students and technicians.

"I thought: 'Oh my God, I'm never going to be able to come up with anything,'" says Wildeman, recalling the tight time line that saw him write and record his contribution in just a few days. His song, *Maus*, is a children's poem that evokes the German concentration camps of the Second World War.

"Like everybody else on the album, I picked up my instrument and started noodling away on it," he says. "I didn't spend a lot of time worrying about the details but just let it come out."

The project was born partly out of a trip to Southeast Asia earlier this year that saw Melville record a cassette of conversations and songs by refugees in Thailand camps. The tape is now being distributed covertly in Burma. Earlier, he had participated in a benefit album



A new CD called *Music for Peace* brings together more than 30 Guelph-area artists, including U of G staff, faculty and students. Back row, from left: Prof. Alan Wildeman, Molecular Biology and Genetics; John Neville, John Gerrath and Lewis Melville, Botany; and Prof. Hank Davis, Psychology. Front: Kevin Stevens and Ron Deckert, Botany; Tannis Slimmon, Plant Agriculture; and Alison Sherwood, Botany. PHOTO BY MARTIN SCHWALBE

that raised about \$2,500 for land-mine relief in Cambodia.

More recently, he felt compelled to speak out against the NATO bombing campaign in Yugoslavia and what he saw as Canada's failure to explore alternatives to participating in the air war.

"I'm a scientist. When you say that it's the

only choice, my red flags go up. What were the other possibilities?" That conviction is reflected in his own track on the album, *An Ounce of Prevention*. "I knew I wasn't the only person who felt this way. The obvious thing came to me. I had just done the recording in Mae Sot, Thailand, with young Karen-Burmese refugees who were using music to tell

their story and express their feelings. Why not do something similar here?"

He asked various musicians and songwriters, including U of G acquaintances, to write and record songs about alternatives to war.

"My initial response was no," says Davis, a longtime singer-songwriter. "I didn't want to contribute because I've never written, performed or even enjoyed political music. Then Lewis explained that these didn't have to be conventional anti-war songs; these could be peace songs."

Davis ended up recording *Glass Bottom Boat*, a song he'd written earlier. "It's about finding a safe, peaceful corner of the world. It was an oddity to me — unlike most of my other music. Now it's found a home."

Botany PhD student Ron Deckert says he contributed to the project because "I liked Lewis's idea of doing something positive about a situation that we, as Canadians, were tacitly contributing to through our elected representatives. Getting involved with the *Music for Peace* project allows me to feel good about what I did during that time and, in a small way, sends the message that we should try being creative when looking for alternatives."

Adds Davis: "My ideal world is one in which there is nothing but peace. Whether this CD will singlehandedly produce that kind of existence is anybody's guess. Maybe the best we can hope for is that collectively we can continue to raise people's consciousness about the futility of war. It's hard to predict how efforts like this snowball or coalesce into political change. I lived through the '60s and I know that efforts like this led to an anti-war movement that got the U.S. to withdraw from Vietnam."

Melville, who also recalls growing up during the turmoil over the Vietnam War, says the message of peace and love "may be a little bit tired, but maybe it's as simple as that."

Music for Peace will be distributed by individual artists. Although the project is not a fund-raising effort, Melville says he plans to send proceeds to Doctors without Borders. For more information or to purchase a copy of the CD, contact Melville at lmelvill@uoguelph.ca or Teichroeb at dave@drog.com or 821-3551.

BY ANDREW VOWLES

Alfred Receives Funding for Waste-Water Centre

Program will involve close collaboration among industry, government, education stakeholders

COLLÈGE D'ALFRED has received an \$845,000 grant from the Ministry of Economic Development and Trade's Strategic Skills Investment Fund for a waste-water management centre for innovation, research and training.

The Ontario Rural Waste-Water Centre will feature sites located in Guelph and Alfred and outreach training services at the Baxter Conservation Area of the Rideau Valley Conservation Authority. The centre will offer extensive and varied skills training to an estimated 1,000 students each year. They will learn how to install and maintain on-site rural waste-water treatment systems for use in subdivisions, agri-food processing plants, farms and other areas.

The centre will also focus on innovation and research and will test new technologies in collaboration

with the private sector. The bilingual program involves close collaboration among industry, government and education stakeholders, and will offer seminars, courses, co-op programs, consulting and testing activities.

Alfred research head Claude Weil, who will direct the centre, says the goal is to facilitate rural development in Ontario. "As an example, the technologies tested and demonstrated at the centre will allow the establishment of food-processing plants in the rural landscape by treating efficiently their waste-water streams and helping minimize environmental impact," he says.

Weil co-authored the proposal for the centre with Prof. Doug Joy, Engineering, and Terry Davidson of the Rideau Valley Conservation Authority. Joy, who will direct the

site to be located at the Guelph Turf-grass Institute, says the centre will allow Ontario to become one of Canada's leaders in environmental protection for on-site waste-disposal systems. "It will open up new opportunities for people working in the field with advanced training on these systems and create new opportunities for the development of advanced technologies," he says.

Waste-water management is a highly skilled, high-paying and rapidly expanding sector, and there is a shortage of trained workers. In fact, one of the largest constraints on economic development in rural areas is the lack of skills in providing cost-effective, sustainable and easy-to-operate infrastructure for rural municipalities and businesses. There are 1.2 million on-site systems already in place in Ontario with more

than 25,000 installations every year.

"This represents a bold and innovative investment in the young women and men who will be shaping Ontario's future," says president Mordechai Rozanski. "It is practical because it will enable students to apply the knowledge they will gain here to find new, creative solutions to old issues that have vexed rural communities for years."

Gilbert Héroux, director of Alfred, adds that the collaboration among government, private industry and education "is part of our ongoing commitment to promote and provide new educational opportunities, which in turn might foster creative solutions for the 21st century. By supporting this project, the government recognizes the ability of Collège d'Alfred to make a significant contribution to waste-water

management on a province-wide scale. We are pleased and grateful for the support of the University, the waste-water industry and our own community council in preparing and submitting our proposal."

The funding will cover startup costs and development of a training curriculum. The project is supported by industry, the Ontario Ministry of Agriculture, Food and Rural Affairs, the South Nations River Conservation Authority and the National Soil and Water Conservation Program.

"Our government's number one priority is job creation," says Economic Development and Trade Minister Al Palladini. "This kind of co-operation is a perfect example of how we can plan for tomorrow's jobs today."

BY ALEXANDER WOOLEY

FOR THE LOVE OF IT

"One of the positive sides of the human personality is its desire to be involved, at least some of the time, in satisfying, life-enhancing forms of employment."

Editor's note: Jane Urquhart, a 1971 BA graduate of Guelph who is one of the most widely read novelists in Canada, received an honorary degree from U of G June 8. The following is an edited version of her convocation address to graduates of the College of Arts.

BY THE TIME one is half a century old, one has usually come to accept certain things about memory, how the narrative of certain events is altered by the mind, occasionally for the simple purpose of making a better story. But there is one aspect of memory that is reliable, and that is its own process of natural selection. I am not speaking here about trauma or about wild joy, but about those moments that can be recalled to the mind from the ordinary course of a daily life, in this case the daily classroom life of my undergraduate liberal arts education.

I remember, for instance, the language of Chaucer gradually beginning to make sense or how logic never really seemed to me to be logical. Since I had always been a compulsive reader, I remember the absolute pleasure of purchasing a bundle of bright new books in the University Bookstore, or of walking through the doors of what was then a sparkling new library full of books that could be read in gorgeous leather chairs. I remember the exact moment that I learned how to use the periodicals index and how from then on, my hastily constructed term papers felt like a kind of Easter egg hunt, one clue leading to the next. But most important, I remember watching in amazement as in course after course, I saw an individual at the front of the classroom become carried away by enthusiasm for his or her subject. Naturally this didn't happen every day — professors are only human, after all — but it happened enough that I can call to mind, even today, the facial expressions of some of these professors when they hit on a passage of literature, a period of history or a philosophical idea that they particularly loved.

So how did this help me, you may well ask. Did I catch fire, develop an equal enthusiasm for the subject in question? The answer is no, I did not. Although I walked away from this university with a solid body of knowledge that would help me see and understand the world with greater clarity, I was not destined to be an academic. But what I did develop was an enthusiasm for enthusiasm, and the knowledge that regardless of which watercourses the river of my life would follow, there was going to have to be some part of it devoted to the pursuit of something I loved. I graduated from university with a desire for the animation that this kind of passion can add to a life, and whether you are aware of it or not, I would bet that most of you are entering



the outside world with a desire for this life enhancement as well.

The question is, how does one manage to satisfy this desire? It may be helpful at this point to differentiate between vocation and career. Although the thesaurus in my computer would have me substitute career for vocation and vice versa, I take exception to this piece of cyber advice. To my mind — although in the best of all worlds, they may sometimes overlap — career and vocation are very different from each other. My fourth edition of the *Concise Oxford Dictionary* seems to make more sense. It defines career as "swift course or progress through life" and as "way of making a livelihood," whereas vocation is defined as "divine call to, sense of fitness for an occupation." Please take special note that there is no reference to making a livelihood in the definition of vocation.

And this may be the crux of the matter: your vocation is the activity you are driven to engage in whether or not it results in financial gain. Most of the artists and writers I have been fortunate enough to come to know in the past couple of decades have a very strong sense of vocation. They spend a large percentage of their life either thinking about or actively engaging in their

work, and as far as I've been able to tell, this percentage of time does not vary at all in relation to the amount of money they are able to make as a result of their efforts. This is because the true reward is the making of the art itself, and money, if and when it arrives, is often seen as a means towards buying the time necessary for the work. As the sculptor Yosef Drenters once said to me, the difference between artists and the rest of humanity is that while most people work to make money, artists make money so they can work.

And yet, in recent years, I have come to believe that the difference between artists and the rest of humanity may not be as radical as Yosef believed, that one of the positive sides of the human personality is its desire to be involved, at least some of the time, in satisfying, life-enhancing forms of employment. Everyone, it is true, must make a living, and often the job that provides us with this living is not necessarily made in heaven. But thankfully, in this country, even the most menial workplace is not completely unbearable and — the best news of all — one is required to be there only 40 hours a week. A week comprises 168 hours. If one subtracts from this the 56 hours necessary for a good eight-hour sleep, and a few hours here and there spent on maintenance of one kind or another, one is still left with more than twice the amount of time one spends in the workplace. For many, it will be this time that will enable them to discover and develop their vocation.

The word amateur is one of the many that have been misused and degraded in recent years. We now use it in a negative and derogatory way, announcing that he or she is merely an amateur, or that this or that performance is "amateurish." We forget completely that the word itself is derived from the Latin verb *amare* — to love — and that in earlier times, the noun was meant to be applied to someone who engaged in an activity for the love of it. The first museums were assembled by amateurs. Even earlier, the first poems and stories and paintings were created by amateurs, as was the first music and dance. Many of the world's most important inventions were the result of amateur scientific investigation and experimentation. A person who volunteers for work at a charitable organization is a kind of amateur, as are the many wonderful people who act as patrons and supporters of the arts. Your liberal arts education will have given you the tools necessary to be a wonderful amateur if your vocation does not happen to provide you with a livelihood.

Of course, I would wish for a good standard of living for all of you. May you all have decent food, shelter, clothing and access to some of life's comforts. But may you also find something — not necessarily related to your pocketbook — that you will do for love. Quality of life need not be measured by a calculator, and success can be defined in many, many different ways.

Advertisements Reflect Cross-Cultural Differences

ADVERTISING MESSAGES must get under the cultural skin of the society they're targeted at, says Prof. Lianxi Zhou, Consumer Studies.

"To create successful ads, advertisers must consider the cultural context of their audience," he says. "Ads should carry messages that agree with cultural values."

Zhou conducted a study to discover which messages and strategies were used most prominently in ads found in different cultures. He used advertising samples featuring athletic shoes from China and Canada

and analysed the content, messages and overall strategies of the ads. To determine audience response, he used mail surveys.

The most common advertising techniques are broken down into three different categories — the functional approach (focusing on the utility of the product), the social approach (focusing on how the product will enhance social status) and the sensory approach (focusing on personal pleasure the user derives from the product).

Zhou predicted that strategies would vary across cultures and that

they would reflect values likely to be held by particular audiences.

He anticipated, for example, that Canadian advertisements would primarily use sensory and functional dimensions to reach audiences because Canadians tend to seek personal pleasure and place great value on individualism. In contrast, he predicted that Chinese audiences would be more receptive to ads emphasizing the social function of the product because community is highly valued in this culture.

Results supported his hypotheses. Ads in China highlighted the so-

cial utility of the products and emphasized the ways the product could enhance the social status of the buyer. These ads appealed to an audience interested in belonging to a strong community and in maintaining and enhancing social status.

The overall tone of the Canadian ads also supports Zhou's hypotheses. These ads play up the pleasurable and useful qualities of the product to appeal to an audience that values individuality, personal pleasure and competence.

Zhou suggests that if ad messages make sense to their audiences and fit

into their social agenda, the ads are more successful in selling products because people can relate the product to their life in a meaningful way. He says the media are a powerful vehicle for conveying ideas and can be used to the advertisers' advantage if the advertiser knows the cultural context of its audience.

"Cultural differences affect many aspects of life," says Zhou. "This includes the role and the slant of the media. Product advertisers must remember that."

BY MARIANNE CLARK
OFFICE OF RESEARCH

THE RIGHT EQUATION

Mathematician is the sum of her experiences in Poland, U.S. and Canada

FROM COMPLEX SYSTEMS to probability theory, Anna Lawniczak consistently topped her mathematics and physics classes en route to earning her master's degree in Poland. A year into her PhD, she even managed to adjust to the idea of being plucked from her native country to complete her doctorate in small-town United States.

But when the Polish government imposed martial law in the early 1980s in a bid to break the Solidarity movement, Lawniczak found herself facing a more difficult problem than anything she'd ever encountered in math class. Would she give up her chance at an academic post in the United States to return to a strife-wracked country? Or would she close the door on her homeland and bear forever after the label of defector?

"I was trying for as long as possible to keep all my options open," says Lawniczak, now a professor in U of G's Department of Mathematics and Statistics. "I didn't come to the U.S. under the assumption that I would stay."

The emotions from that time still linger near the surface for Lawniczak. But she's found a way to put her own bad experience to good use in teaching and studying with today's students in Guelph and in Toronto, where she is finishing a one-year stint as a visiting scientist at the Fields Institute for Research in Mathematical Sciences.

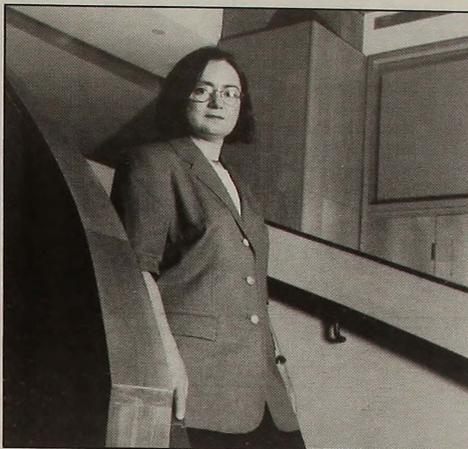
In her top-floor office at the institute, located on the University of Toronto campus, the labels affixed to a row of cardboard boxes lined up on a shelf hint at the range and applicability of her research interests: immune system, networks, epidemics, cellular automata. Continuing a theme begun when she first enrolled at Wroclaw Technical University, she straddles the border between basic and applied research—a connection that she regularly stresses to students here in Guelph and during lectures at the institute in everything from cryptography to data mining to image compression.

"Often I think mathematics students see mathematics as something that is very static and very far away from reality," she says.

That perception had been banished early in life for Lawniczak, who decided to become a mathematician at age 12. That decision was largely prompted by her engineer father, who emphasized how mathematics underpinned so much of the world around her. He also underlined the simplicity of the field, using a favourite Aesop-like dictum: "Good explanations should not require more space than a box of matches."

She encountered none of the stereotypical barriers that often turn North American girls away from math and science. Indeed, growing up in Wroclaw, which had lost many of its sons to the Second World War, she saw many women in professional roles, including her mother, an economist in an engineering firm.

She capped her master's studies by winning a national award for the best thesis in probability theory and applied mathemat-



ics, then began her PhD with the promise of a job at Wroclaw already awaiting her. Perhaps more important in a country where people routinely waited for up to 15 years for accommodation, her academic standing had guaranteed her a spacious apartment within a year of graduating.

"Everything for me was carved out. I was supposed to get an apartment within a year. I even bought champagne glasses to celebrate when I got the new apartment."

She'll never forget the day in 1978 when the university's director walked into her classroom with several members of an American delegation. When the director asked for students able to speak English, she and two other women obediently raised their hands. Unwittingly, they had just "volunteered" themselves to complete their doctoral studies abroad under a new exchange agreement between Poland and the United States.

It was her father who encouraged her to pursue what he termed "a valuable life experience." Despite those early childhood discussions about the ubiquitousness of mathematics, he said, "Mathematics is not everything. There are other things in life that are important."

Within months, she was on a flight to the American Midwest, where she and her two compatriots were to complete their studies at Southern Illinois University in Carbondale. "I didn't take it seriously until I was sitting in the plane," she says.

Lawniczak returned to Poland twice while completing her doctorate, but her last visit revealed an almost-alien country. "I landed in 1980 on the day the general strike started in Gdansk," she says, referring to the uprising in the Gdansk shipyards. "It was a terrible feeling to be in a country paralysed by general strikes." Even after only two years away from Poland, "I real-

ized: 'I don't belong anywhere.' I suddenly felt I was a stranger from the Polish reality."

Back in Illinois a year later, preparing to defend her thesis, she wrote to ask Wroclaw Technical University whether she might extend her U.S. stay to take a post-doctoral position. By then, Solidarity had been recognized by the government. The answer was encouraging, and later in 1981 she landed a job at Louisiana State University.

The news from Poland turned grim with the imposition of martial law and the repression of Solidarity. Finally came the day when she received an official letter from overseas with an ultimatum: return in three months or be labelled a defector.

Almost two decades later, the memory still draws tears. "I was bitter," she says, her voice shaking as she bites off short, angry sentences. "I have been bitter till now. It was very difficult. It took me 15 years to go back."

She moved to the University of Toronto in 1983, then to U of G in 1989, a year before her parents immigrated to Canada. Today she is U of G's representative on the council of the Fields Institute. Named after Canadian mathematician John Charles Fields, the institute was set up in 1992 to bring together scientists from 12 universities in collaborative mathematics research and teaching.

Broadening the scope, Lawniczak has represented the institute on the scientific networking committee of a recently funded Network of Centres of Excellence called MITACS (Mathematics of Information Technology and Complex Systems). MITACS, which last fall received \$14.5 million in federal funding, involves scientists from across the country in projects designed to forge research links between universities and industry and to train young researchers. Lawniczak now works on two of those projects—building semiconductor nanostructure devices and modelling the spread of epidemics.

She says her experience in Poland and the United States helps her today in dealing with her own students. "Since I went through a rough road, I can better understand some of the problems they are facing."

One prime example is her former undergraduate student Jon-Paul Voroney, whom she persuaded to continue his studies. With a second child on the way a few years later, he had decided to forgo his doctorate, but she was able to change his mind, even arranging for him to make up his own work schedule and to share her offices at U of G and the Fields Institute. "I convinced him to do his PhD, to stay in the program. When he fell down, I was trying to lift him up."

Last month brought a reward for both Voroney, now studying medicine at U of T, and his former professor. Lawniczak, currently president of the Canadian Applied and Industrial Mathematics Society (CAIMS), saw him become the first U of G student to pick up the CAIMS award for the year's best doctoral dissertation.

PHOTO BY ROSE SMUSA

Royal Society Lauds Stewardship of the Earth

Continued from page 1

ence, says the department is "extremely pleased and proud" of Dwivedi. "This appointment is an honour to him personally and an honour for the department to have one of its members recognized in this fashion. We're thrilled that he has received this prestigious acknowledgment of his career achievements."

Earlier this year, Dwivedi was in India with Profs. Clive Southey, Economics, May Aug, Consumer Studies, and Narinder Kaushik, Environmental Biology, as part of a national project looking at regulating environmental risks in

India, with a special focus on harmful household products and their impact on women and children. The research project is located in Kanpur, India, a city of three million, and is funded by the Shastri-Indo Canadian Institute.

Dwivedi stopped at Guelph in the spring only briefly before he was off again to Loyola Marymount University in Los Angeles, to an appointment that institution's 1999 International Scholar.

The Royal Society of Canada was established 117 years ago and differs from most other scientific societies in encompassing a range of disci-

plines, including the natural and applied sciences, medicine, social sciences and humanities. In its citation for Dwivedi, the society notes that pervading all his work "is the concept of stewardship of the Earth, as reflected in world religions and their accompanying ethical value systems. . . . Both as an 'enabler' for other scholars as well as a prolific contributor in his own right, Dwivedi has attained national distinction and international recognition."

A former chair of Guelph's Department of Political Science, Dwivedi is president of the Canadian

Asian Studies Association and past president of the Canadian Political Science Association. He also chairs the research committee of the International Political Science Association. In addition, he is a part-time Hindu priest with U of G's campus ministry.

Dwivedi has served as a consultant to the Canadian government; as an adviser to the World Health Organization and the World Bank in India, Papua New Guinea and Mauritius; and as a scientific panel member with UNESCO.

"The entire U of G campus community shares in Prof. Dwivedi's de-

light at being named a fellow," says provost and acting president Iain Campbell. "It is a well-deserved mark of recognition for his distinguished career and valuable service to international development and the environment on an international level. It is typical of O.P. that at this moment he shares this recognition with his college. This honouring of one of its scholarly leaders is indeed a great boost for the college, which is now just over a year old."

Dwivedi will be formally inducted into the society at a ceremony in Ottawa this November.

BY ALEXANDER WOOLEY

SPARKs Will Fly

U of G's student writing program spreads its wings at universities across Canada

WHEN Jiselle Griffith approached the Office of Research last summer about becoming a student writer, she was viewing Guelph's SPARK program as a way to hone her interviewing skills for talking with prospective faculty supervisors about ideas for a master's degree in environmental sciences. Six months later, the program had given her unexpected options to explore. By the time she graduated last December, Griffith was parlaying her newly sharpened writing skills and her science degree into today's full-time job as a writer and account co-ordinator with a local marketing and communications company.

She says she now applies many of the skills learned under the Students Promoting Awareness of Research Knowledge program in writing and editing documents and publications for national and international clients of Guelph's Kahntact Marketing. She says her work with SPARK taught her the importance of focusing on "the five W's and the H" in researching and writing a story. "It strengthened my writing capabilities — telling the story and telling it quickly."

Helping students become stronger research communicators is one of the goals of Guelph's 10-year-old program — and one of the benefits that 10 other Canadian universities also hope to reap as they begin establishing their own SPARK replicas under a three-year pilot pro-

gram funded by the Natural Sciences and Engineering Research Council (NSERC).

The granting agency and the institutions involved in this pilot have another goal in mind — raising the profile of university research in Canada and further afield and, in the process, showing stakeholders in government and business clear results from their investment in that research.

"It's a win-win investment all around," says Joyce French, NSERC's editor-in-chief, corporate communications. "Students get to sharpen their communication and writing skills and learn more about the business of research, university researchers have an opportunity to have their research promoted, and NSERC can ensure that the research it supports is communicated to Canadians in a language they can understand. I think we've seen that researchers are not the best at promoting their own research, and that's something students can help them do."

Earlier this year, NSERC awarded startup grants worth \$4,000 to each of 10 research-intensive universities chosen for the pilot program: Victoria, Calgary, Saskatchewan, Regina, Manitoba, Carleton, Laval, Montreal, Dalhousie and Memorial. Beyond that first year's seed funding, participating universities that line up industry funding will receive a total of \$3,000 from NSERC during the remaining two years of the pilot. Af-

ter that, each university will be expected to maintain its program mainly through external sponsorship, as at Guelph.

In all, 23 universities from across Canada applied for the NSERC funding. "It shows they've been watching us," says Owen Roberts, assistant (communications) to the vice-president (research), who launched the SPARK program and has served as mentor to the roughly 40 undergraduate and graduate students who have participated over the past decade.

Prof. Larry Milligan, vice-president (research), who first broached the idea with Roberts in the late 1980s, says: "Getting students involved in research writing definitely links university research and undergraduates."

French says Guelph's program "stood out because it's getting the research out there. We think a similar program can do a lot for NSERC and for the universities themselves."

Those kinds of results were already apparent to Kahntact Marketing president Len Kahn, who completed his B.Sc. and master's degrees in agricultural economics at Guelph before starting his company more than four years ago. His firm became a sponsor of the program three years ago when it began working with SPARK writers on a new agricultural media clipping service.

"We find the program incredibly valuable," says Kahn, adding that Griffith is the second SPARK alum-

nus he's hired. "What we're finding is that people who come out of the SPARK program are probably two to three years ahead of comparable graduates in their ability to write and in their overall communications ability. They write better, speak better, do presentations better. Since we're a communications company, that is probably the most critical skill of anything we hire for."

Today, the Office of Research hires nine students to write articles for various publications, including @Guelph, the Research magazine and the weekly SPARKplugs column in the *Guelph Mercury*.

Under the University's enhanced partnership with the Ontario Ministry of Agriculture, Food and Rural Affairs, SPARK students also write communications materials for Laboratory Services. They have produced the semi-annual newsletter of the Canadian Network of Toxicology Centres, based at U of G, since the network's inception. Agri-food agencies have contracted with the program to provide industry-specific research articles and publications such as *Nuggets*, written for the feather industry, and *Piggens*, for the swine industry.

Roberts says he wants to strike up more such partnerships. "That's where I think the future is going to be for SPARK," he says. "Essentially we're getting involved in corporate research communications for specific commodity groups involved in University of Guelph research."

The program, as well as its individual publications and initiatives, has won national and international acclaim, including awards for "Best New Idea" from the Canadian Council for the Advancement of Education and "Best Student Involvement Project" from the Council for the Advancement and Support of Education.

Several SPARK alumni have pursued related careers as writers and editors for newspapers and magazines as well as more specialized publications of agri-food agencies.

Explaining that the costs of Guelph's program, including student wages, are funded mostly by corporations and associations, Roberts says: "Sponsors view it as a good investment to be training young research writers."

So does NSERC. Roberts, who belongs to the federal granting agency's recently minted communications advisory committee, says NSERC has taken a new interest in communications. "Like other granting agencies, it has recognized the need to show the relevance of research to the public."

Roberts, French and NSERC promotions staffer Monique Martin selected the pilot institutions based on several criteria. Generally, successful universities had identified a program mentor, had outlined a plan to integrate students directly into their research communications and had solid prospective sponsors in mind. Like Guelph, all are research-intensive institutions and have established research communications

officers or departments.

During a recent U of G workshop sponsored by the Office of Research, communications officers from eight of the 10 universities learned about setting up their program, training and mentoring students, and seeking external funding.

Catherine Young, manager of internal communications for Dalhousie University's public relations department and editor of *Dalhousie News*, says she collected ideas that will be useful in hiring and training a student to write stories and releases to be pitched to various features editors about research at Dalhousie. "Looking to Guelph is like being at ground zero and looking up at Mount Everest," she says.

BY ANDREW VOWLES

The Little Berry That Grew

LIKE A KILLER TOMATO, the giant raspberry rolled throughout North America, attracting reporters from around the continent before coming to rest at David Letterman's door. But hopes of *Late Night* glory for the large flavourful fruit discovered by Guelph plant agriculture professor Al Sullivan were dashed when it turned out the talk-show host wanted monstrous produce grown by children, not by university professors.

Still, it hadn't been a bad media run for what had begun as a small article written in 1994 by student Kerith Waddington in the SPARK (Students Promoting Awareness of Research Knowledge) program run by the Office of Research. "It was a great experience and continues to be," says Sullivan.

Catherine Young, manager of internal communications at Dalhousie University's public relations department and editor of *Dalhousie News*, says it's often thought that only hard science or applied sciences will be appealing to the media, "but those stories that might seem a little lighthearted often get more media spin."

Referring to Sullivan's giant raspberry story, which she heard during a recent SPARK workshop at Guelph, she says the tale "underscored the fact that if you're a good communicator and a great talker and amusing, it'll help sell the story even more."

Learning the Value of Communication

ULTRAVIOLET RAY-PROOF SOYBEANS? The virtues of narrow-row corn? Probes to prevent overcooking of steaks? Until 1992, I had little idea that folks pondered such matters. My initiation to student research writing was my entrance into a new world.

I had always been drawn to the craft of writing and even harboured fantasies of pursuing a career in journalism. My dilemma: zero formal training or experience. I was a political science undergraduate, my head spinning with neo-realist paradigms and theories on how the Berlin Wall eventually crumbled. Journalists were those distant figures on Parliament Hill who followed trench coats and press conferences.

On my first day as a SPARK writer, I was handed a story assignment. Off I went to the NSERC research application files for some background, then to the interview, then to the word processor. It's true what they say about the thrill of seeing your name in print for the first time.

For the rest of that semester, I wrote stories for numerous U of G research publications and gained insight into whole new worlds of research and industry. Biotechnology. Animal welfare. Turfgrass innovations. Aquaculture. All of it was happening at my university, and I was charged with informing a wider audience about it. I even tried my hand at photography. Once, a crop scientist nearly perished beneath a combine while I awaited the perfect shot. We both made it out alive, and the photo was a keeper.

For me, lightning struck and struck well. Or, rather, it SPARKed. When I began, we were a dedicated crew of two research writers, both from the social sciences. Meat quality probes and transgenic plants had not been part of my lexicon. Frankly, I found the science

somewhat daunting at first. That's where the SPARK training came in. I learned to ask the right questions — to make sense of the research for myself so that readers could make sense of what I wrote. I learned the art of writing a lead, those magical opening words that can make or break a story.

"There's no such thing as a stupid question," my editor, Owen Roberts, told me. "Questions open up doors, and that's what communicators have to do."

I wrote for SPARK until 1994 and did a few freelance pieces afterward. By then, the ranks of student writers had swollen and the number of publications had tripled. During my time with SPARK, I learned the art of communication. I learned I was not the only person unfamiliar with the byways of meat quality research and crop planting methods. And I came to appreciate the communicator's role as a bridge of sorts, a translator. I realized how essential it was to have wordsmiths acting as intermediaries to convey research breakthroughs to the public.

SPARK gives students the chance to develop skills in "collapsing the world" or giving understandable expression to the complexities of research and other fields. My training prepared me well for nearly four years of work as a reporter and editor with a newspaper published half a world away, in the Baltic states. There, I returned to the world of politics, cooling my heels in parliamentary antechambers, waiting to ask questions.

More questions. Communications. Opening doors. It worked for me.

SPARK alumnus Andras Kahar was deputy/acting editor of *The Baltic Times*, published in Riga, Latvia. He is now doing graduate work at Brock University.

Aiming for New Readers

Continued from page 1



Prof. Larry Peterson, new editor of the *Canadian Journal of Botany*, will be assisted by Guelph ecology graduate Jane Gurney. PHOTO BY DEAN PALMER/SCENARIO IMAGING

ond NRC journal currently edited at Guelph; the respected *Canadian Journal of Fisheries and Aquatic Sciences* has been co-edited by zoology professors Moira Ferguson and John Roff since 1997.

No stranger to the *CJB*, Peterson served as associate editor for 12 years. The journal has published many of his nearly 200 papers on mycorrhizas — interactions between mutualistic fungi and roots of plants — studied by his root biology and mycorrhiza research group at Guelph. He has also served on the editorial boards of three other journals and has done extensive reviewing for additional publications.

Peterson's predecessor as *CJB* editor, Iain Taylor, of the University of British Columbia had recommended Peterson as his successor. Taylor describes Peterson, a Fellow of the Royal Society of Canada, as "one of Canada's best-known botanists. He is incredibly organized and somehow manages to find time to

run a department, be an outstanding teacher, undertake meticulous and cutting-edge research, and do outside activities."

Peterson's plans for the *CJB* include changing its appearance to enliven the publication and attract more readers, including the popular press. He plans several changes, from using colour photography on the cover to soliciting more reviews and commentary on current topics from top scientists. He will also look for more articles on plant physiology, biotechnology and plant molecular biology.

"It's a very broad-spectrum journal," he says. "That's going to be one of the real challenges — to try to reach all of the communities that use it."

Besides keeping track of citation rates, Peterson says his personal measure of success will be the number of papers submitted to the journal by respected scientists. "I would be watching for papers com-

ing from what I consider the best labs in the country and elsewhere."

He plans to maintain a full teaching and research load, although he has relinquished editorial duties with several journals, notably *New Phytologist*, *Mycorrhiza* and *In Vitro*. He estimates he'll spend about 20 per cent of his time on his new editorial duties during the next 18 months and more after completing his term as department chair next year.

The NRC funding will pay for editing costs during the next five years, including the initial costs of setting up offices near the Axelrod Building. Peterson's editorial assistant will be Jane Gurney, who has worked in several positions in the department since completing her B.Sc. at Guelph. Says Peterson: "Jane is one of the most professional, dedicated and organized individuals I have met, and I am looking forward to working with her."

BY ANDREW VOWLES

Victorious . . . Again!

Guelph wins Evaluation Society competition for second year in a row

TWO TRIES, two wins and teamwork. That's the formula of choice for U of G students — two-time winners of the annual Canadian Evaluation Society competition. It was Guelph's second year participating in the four-year-old competition, which was held in Ottawa this spring.

This year's winning team, students of Prof. Harry Cummings, Rural Planning and Development, consisted of Farah Chandani, Chris Khng, Jonnalagadda Murty and Nick deSalaberry. Cummings, who works closely with the Canadian

Evaluation Society, encourages his students to enter the competition, which strives to highlight the importance and purpose of evaluation — determining how tasks get done, how well they get done and whether or not outcomes correspond with initial goals.

Eight university teams, including Carleton, Waterloo, McGill, Memorial and Ottawa, participated in the competition.

What gave the Guelph team the edge? Cummings and the students say U of G's international development and rural planning and devel-

opment programs emphasize group work and presentation skills, which help prepare students for real-life situations.

Another key factor is the balanced competencies of group members. "Some people have strong analytical skills, while others excel at leadership," says DeSalaberry. "Everyone on our team brought along their own bag of tools."

Cummings also cites the value of processing skills. "Regardless of subject matter, if there's a solid method and plan for processing the problem, you're never stuck."

Health Management Program Benefits Sheep Producers

Two-stage program developed by OVC professor

SHEEP PRODUCERS and veterinarians will be working in close partnership to improve and expand Ontario flocks and bring quality assurance to provincial farms through the new Ontario Sheep Health Program (OSHP).

Developed by Prof. Paula Menzies, Population Medicine, the program is an intensive plan that requires producers and vets to examine a farm's animals and management practices. By voluntarily participating in the program, sheep farmers can reach the goal of improved health and productivity for their flocks and become OSHP-certified — a quality-assurance designation unique in Canada.

The OSHP is industry-driven and was developed as part of the Ontario Lamb Improvement Breeding Strategy, an initiative designed to produce ewes with exceptional maternal traits and the ability to reproduce prolifically. As producers sought to expand their flocks under the breeding strategy, they soon realized there was no way of knowing the health history of the animals they were buying. For some farmers, difficulties arose when they bought sheep that looked healthy but brought potentially devastating disease into their new flocks.

"Producers had a dilemma," says Menzies. "How do they source animals without diseases? We had to consider the health management of the flock and thought we should focus on this to deal with the big issue of disease."

The program is divided into two stages. The first involves a comprehensive evaluation of flock health and health management completed by the vet and the producer. An intensive questionnaire requires the producer to record and discuss on-farm practices and issues, biosecu-

urity, risks and flock productivity. In addition, the farmer is asked to select three management areas to improve, to be implemented with the aid of the flock veterinarian. During a vet's mandatory visit, flock records and medicines are inspected and a minimum of three goals are set for a farmer to achieve. Once the evaluation is completed, the results are sent to the Ontario Sheep Marketing Agency, which is administering the program and is helping to fund the project's development in conjunction with the federal government and the Ontario Ministry of Agriculture, Food and Rural Affairs.

The second stage of the program, which is still under development, will focus on disease eradication. Farmers must complete the first stage before moving to the next level of the program.

Menzies says that having the producer and the vet working together on the questionnaire creates a level of health and production awareness.

"We're educating the farmers, and that's important," she says. "Going through the process of this program doesn't guarantee a flock's freedom from disease, but it does show that the producer is managing the health of the herd."

Ontario is Canada's largest sheep-producing province, with more than 5,000 sheep farming families. The farm-gate value for sheep, lambs and wool is more than \$28 million.

"This industry is growing in a healthy way," says Menzies. "We've got producers who are taking into consideration health and genetics."

And now, with the OSHP, farmers are promoting on-farm quality assurance to improve the quality of Ontario lamb and mutton marketed to consumers.

BY GAYLE ANDERSON

APPOINTMENTS

Clayton Barrows of New Orleans, La., has been appointed associate professor in the School of Hotel and Food Administration, effective Jan. 1, 2000.

Ludovic Bouré was appointed assistant professor in the Department of Clinical Studies Feb. 1.

André de Carvalho of Universidade de São Paulo, Brazil, will join the Department of Computing and Information Science as an associate professor Sept. 1.

Gary Grewal of St. Catharines will join the Department of Computing and Information Science as assistant professor Sept. 1.

Scott Maitland of the University of Victoria will join the Department of Family Relations and Applied Nutrition as an assistant professor Sept. 1.

David McCaughan of the University of Alberta will join the Department of Computing and Information Science as an assistant professor Sept. 1.

Jean Mayer will join the Department of Political Science as an assistant professor Aug. 15.

Paola Mayer of Calgary has been appointed assistant professor in the School of Languages and Literatures, effective Aug. 1.

Monica Tap of Halifax will join the School of Fine Art and Music as an assistant professor Aug. 1.

Hongde Zhou of Memorial University will join the School of Engineering as an assistant professor Sept. 1.

Jon Warland was appointed assistant professor in the Department of Land Resource Science July 1.

• *Mystery of Mysteries: Is Evolution a Social Construction?* by Prof. Michael Ruse, Philosophy, was the subject of a lengthy review in the May 14 issue of *Science* magazine.

• Prof. Cindy Adams, Population Medicine, was interviewed by six CBC radio stations May 19 and CFYK in the Northwest Territories June 15, about the human/companion animal bond and a recent study on the positive impact of companion animals on the Canadian economy, prepared by Prof. John Livernois, Economics.

• Prof. Terry Gillespie, Land Resource Science, was interviewed by CBC Radio's *Metro Morning* and by CBC affiliates in Ottawa and Sudbury May 25 about the dry weather and its effects on farming.

• Prof. Julie Conquer, director of U of G's Human Nutraaceutical Research Unit, was quoted in a June 2 *Globe and Mail* article about the health benefits of canola oil and other alternatives to olive oil.

• Prof. Michael Sobol, Psychology, was interviewed June 7 on CP-24's *Toronto Live at Five* about the long-term effects of adoption.

• *North of Tourism*, a new novel by Prof. Stephen Henighan, School of Languages and Literatures, was reviewed in the *Globe and Mail* June 7.

• Prof. Gord Surgeoner, Environmental Biology, appeared on CTV's *Canada AM* June 7, discussing "bug zapper" devices, which are used primarily for outdoor insect control. In May, Surgeoner was interviewed by Canadian Press and radio stations in Toronto and London about mosquitoes and blackflies.

• Prof. Ed Herold, Family Relations and Applied Nutrition, was interviewed June 7 by CITY-TV's *Breakfast Television* about the Guelph Conference and Training Institute on Sexuality, as well as the results of his national survey of relationship and sexual attitudes and behaviours of Canadians.

• Prof. John Simpson, Physics, was quoted in a June 13 *Toronto Star* article on the Sudbury Neutrino Observatory. Simpson is a researcher at the observatory, which is detecting neutrinos to gain new insights about the inner workings of the sun.

• Henry Kock of the Arboretum was interviewed June 14 on the Discovery Channel's *@Discovery.ca* program about plans to save the Dutch elm.

• Prof. Gerry Mackie, Zoology, was quoted in the *Toronto Star* June 22 in an article about new technology that prevents damage to industrial water pipes from zebra mussels. Mackie was the principal investigator for the project,

which involves sending acoustic waves down pipelines to kill zebra mussels and prevent others from settling. On June 11 and 17, CBC Radio stations in Windsor, Whitehorse, Sudbury and Quebec City interviewed zoology graduate student David Zanatta about his research on the effects of zebra mussels on the freshwater mussels of Lake St. Clair.

• The creation of transgenic pigs that produce reduced levels of phosphorus received national and international coverage in June. The pioneering research by Profs. Cecil Forsberg, Microbiology, and John Phillips, Molecular Biology and Genetics, was the subject of a front-page article and photograph in the *Globe and Mail* June 23 and an editorial and editorial cartoon in the *Globe and Mail* June 24. News articles also appeared in the *Boston Globe* June 24 and the *Sunday Times* (London, England) June 27 and on the Reuters and CNN news service wires. Forsberg and Phillips were the subject of a CBC-TV news story and were interviewed by more than a dozen CBC-affiliated and other radio stations across Canada, as well as National Public Radio in the United States.

• Prof. Christine Bold, Literatures and Performance Studies in English, was featured in an article distributed by Torstar News Service on how pop culture influences language. The article focused on how the movie *Austin Powers* has spawned a language craze.

• Prof. Leon Kuczynski, Family Relations and Applied Nutrition, was quoted in the June issue of *Today's Parent* magazine in an article on what's fact and what's fiction about today's fathers.

• The spring edition of *Golf Canada* magazine featured an interview with Prof. Tom Hsiang, Environmental Biology, about his background and his work on turfgrass diseases.

• Prof. Jack Callaghan, Human Biology and Nutritional Sciences, was quoted in the July issue of *Chatelaine* magazine, where he discussed the damage that can occur to the back if one exercises immediately after awakening. He explained that the ligaments and intervertebral discs are tighter than usual on waking.

• Also in the July issue of *Chatelaine*, Prof. Doug Powell, Plant Agriculture, was quoted on the topic of food safety and sources of food-borne disease. Powell also wrote a column on food safety for the May issue of *Food in Canada* magazine, was interviewed by radio stations in Saskatchewan June 9 on the occasion of the Saskatchewan Stock Growers' Association annual meeting, and appeared on CBC Radio in Winnipeg June 16 discussing food safety.

Saudi Delegation Explores Collaboration with U of G

Guelph signs memoranda of understanding with three universities

THE HIGHEST-RANKING delegation of Saudi Arabian education officials to ever visit Canada was at U of G last month to explore possible collaborative projects.

Prof. Jim Shute, director of the Centre for International Programs, says the delegation was interested primarily in U of G's agri-food, engineering and food science programs, as well as research projects and opportunities in those fields.

"We are hoping to develop a long-term relationship for mutual benefit, initially in receiving graduate students in these fields," Shute says.

The Saudi group was visiting a select group of Canadian universities as part of a nationwide tour to review programs and universities that may be of interest to Saudi students. Some 6,000 Saudi nationals study overseas — most supported by government funding — but there are only about 400 Saudi students in Canada, almost all in faculties of medicine.

The Saudi minister of higher education is considering increasing the number of funded graduate students in Canada, especially in fields of engineering, computer science, medical science, accounting, law and agriculture.

The delegation included the minister of higher education, Khalid bin Mohammed Al-Ankary; the deputy minister of educational affairs, Khalid Saleh Al-Sultan; and rectors, deans and directors from King Saud University, King Faisal University



President Mordechai Rozanski, right, welcomes to campus Khalid bin Mohammed Al-Ankary, Saudi Arabia's minister of higher education. PHOTO BY DEAN PALMER/SCENARIO IMAGING

and King Abdulaziz University.

Officials from the three universities signed memoranda of understanding in both English and Arabic with president Mordechai Rozanski. These will act as umbrella agreements for future specific programs of faculty exchange, research co-operation and graduate student training.

Representatives from the Saudi Arabian Cultural Mission in Canada, Canada's Department of Foreign Affairs and International Trade, and the Saudi Ministry of Higher

Education attended the signing.

"We value this opportunity as a university committed to internationalism to work together in education and research," Rozanski told delegates. "The memoranda of understanding are the beginning of a relationship we hope will continue to develop."

Abdullah Al-Faisal, rector of King Saud University, added: "I hope these memoranda are a strong first step of collaboration between our universities."

Tri-University Data Service Earns Kudos from CAUBO

TRI-UNIVERSITY Data Resources (TDR), a collaborative electronic data service established by Guelph, Wilfrid Laurier and the University of Waterloo, was honoured last month at the annual conference of the Canadian Association of University Business Officers (CAUBO) in Sherbrooke, Que.

The project received the Ontario Regional Award in CAUBO's Quality and Productivity Awards Program. Sponsored by the Royal Bank and Ricoh Canada, the award recognizes university achievements in improving the quality and reducing the cost of higher-education programs and services. The award was accepted by Doug Horne of the U of G Library.

TDR allows users to access and process large data files via the World Wide Web, providing easy and virtually free access to a wide array of electronic data such as the population census, the survey of labour income and dynamics, and the

agricultural census. In the past, this information has been accessible to only a few people with the necessary resources and expertise, says Guelph project leader Bo Wandschneider, Computing and Communications Services (CCS).

TDR evolved out of Guelph's Data Resource Centre, a joint project of CCS and the library. Once the concept had been proven at Guelph, broadening the service to the wider audience of the Tri-University Group was the next logical step, Wandschneider says. There are now close to 300 data sets accessible over the Web retrieval system.

"The opportunities for teaching and expanded research have been greatly enhanced," he says, "and statistics show that the use of this service at Wilfrid Laurier and Waterloo is growing quickly, just as has been seen at Guelph."

Wandschneider says CAUBO's recognition of the TDR service is significant because "it shows that uni-

versities are open to adopting new technologies and seriously looking at ways to deliver services more effectively and efficiently."

Response to TDR has also been positive at presentations made to such groups as the Ontario Universities Computing Centres, the International Association for Social Science Information Services and Technology and the Ontario Library Association, he says.

"People are getting excited because we have proved we can easily extend our model and work collaboratively, which is essential during these times of fiscal restraint. The logical extension of this would be to involve other universities, which can only help our researchers and improve the quality of our students."

Institutions from around the world are looking at what is being done at Guelph, he says.

For more information about TDR, visit the Web site dr.c.uoguelph.ca.

Science Liaison Officers, Counsellors Join Forces

Science liaison working group co-ordinates recruitment efforts, shares information about Guelph's science programs

THINK U OF G for science studies. That might be the motto for a recently established working group of science liaison officers and program counsellors that is intended to share information about Guelph's science programs and units and to co-ordinate their recruitment efforts among prospective students.

The science liaison working group has been meeting regularly since last fall to develop joint liaison ideas. "So many of us were asking questions of the Admissions Office separately that it made sense to meet as a group," says Lori Jones, B.Sc. liaison co-ordinator.

Chaired by Susan Vercauysse, assistant registrar for student recruitment, the group includes Jones; Tara Curtis, liaison officer in the Department of Computing and Information Science (CIS); Laura Thomas, School of Engineering liaison officer/program counsellor; Jill Johnson, program counsellor in the Faculty of Environmental Sciences; and Joanne Mezenberg, OAC's liaison officer. All six are U of G graduates.

"As recruitment efforts become more strategic and admissions competition increases in Ontario and Canada, we want to ensure we're all in the loop," says Vercauysse, who sees the group as a model for partnerships between liaison staff in the Admissions Office and in other de-



A recently formed science liaison working group at U of G includes, from left, Joanne Mezenberg, Jill Johnson, Lori Jones and Laura Thomas. Missing from the photo are Susan Vercauysse and Tara Curtis.

PHOTO BY VERN MCGRATH

partments and colleges across the University.

"For CIS, liaison is particularly important given the competition we

face in the Technology Triangle," says Curtis, referring to the growing concentration of high-tech expertise in Cambridge, Guelph and

Kitchener-Waterloo.

By co-ordinating liaison activities, the group hopes to ensure not just that more students consider

Guelph for sciences, but also that the group members themselves have sufficient information to guide students in making appropriate program choices. For example, Johnson points to a recent Guelph Connection Conference where prospective students interested in environmental issues learned that U of G's School of Engineering offers both biological and environmental engineering programs. During Campus Days, Thomas was able to route a student interested in genetics into courses offered by the Department of Molecular Biology and Genetics.

Among the working group's initial ideas for new liaison initiatives is a proposed U of G science essay or poster contest for high schoolers and elementary school students across Canada, along the lines of mathematics contests run by other universities.

Group members have also cooperated in creating liaison information and classroom materials for teachers attending the annual gathering of the Science Teachers Association of Ontario. "A more united front allows us to be a more cohesive group," says Johnson.

As of last November, full-time students in B.Sc. programs (including B.A.Sc. students) made up nearly half of Guelph's full-time undergraduate enrolment.

BY ANDREW VOWLES

Multidisciplinary Approach Earns CFI Support

Continued from page 1

Prof. Larry Milligan, vice-president (research), says the CFI awards "result from having built very strong research groups that extend beyond campus and from the University having committed to an institutional leadership position by creating the Food Council. The infrastructure that will be built will be a major step ahead in campus-wide research interest in the foods area."

CRIFS will bring together top researchers from the departments of Food Science, Mathematics and Statistics, Pathobiology, Population Medicine, and Animal and Poultry Science, the School of Engineering, Laboratory Services, Health Canada and Agriculture and Agri-Food Canada (AAFC), to deal with complex food-safety issues and to improve food safety for Canadians.

The institute will focus on generating new knowledge, training scientists and providing information applicable to public policy and advocacy in the realm of food safety.

"This group is unique because it can address food-safety issues at all levels of the food chain," says Griffiths. "Last year, an estimated two million cases of food-borne illnesses were reported in Canada, representing a \$3-billion to \$5-billion drain on the economy in production losses and medical expenses."

Adds McEwen: "The interdis-

ciplinary breadth of this centre will help reduce food-safety hazards in a way that very few research institutes in the world can."

CRIFS will be headquartered at Building 43 on McGillivray Street, formerly occupied by the Ontario Ministry of Agriculture, Food and Rural Affairs and now the temporary home of AAFC researchers. CFI

funding will be used to renovate and equip the building with state-of-the-art instrumentation and to build an addition to house a Level 3 testing facility. This facility will allow Guelph researchers to work safely with highly infectious pathogens for the first time. Griffiths says this will inevitably lead to more successful grant applications and will attract more top-class researchers to U of G.

CRIFS will also offer graduate students experience in a variety of fields pertaining to food safety and will help attract high-calibre students.

The project includes the acquisition of new equipment for molecular typing and gene analysis, computing

facilities, culture storage, analytical instruments and processing equipment.

The new Centre for Food and Soft Materials Science will establish an interdisciplinary team to address the structure and function of various foods and soft materials. Researchers in such departments as Physics, Food Science, Chemistry and Bio-

chemistry, Microbiology, and Molecular Biology and Genetics will collaborate on research designed to understand the various properties of soft materials such as food matter, polymers, biological membranes and proteins.

"The interdisciplinary effort is the strength behind the centre," says Dutcher. "We'll gain a new viewpoint and new perspective on things."

CFI funding will be used to renovate research space and to acquire equipment that will link the basic and applied researchers in the centre. A 600-megahertz nuclear magnetic resonance spectrometer will be used for a range of studies, from im-

aging food materials at a small scale to studying the structure and dynamics of proteins and lipids in biological membranes.

Other infrastructure will also be acquired, including food processing/packaging equipment, scanning probe microscopes, an X-ray generator and special equipment for food chemistry and molecular biology.

Scientists associated with the centre will identify the unique properties of different soft materials by concentrating on the continuum of the microscopic to the macroscopic. This will lead to alternative uses for conventional soft materials. For example, soybeans, traditionally used for food products such as soybean oil or tofu, could find uses in the pharmaceutical industry.

"We've covered off all the things we can do with food," says Yada. "We've sliced, diced and flavoured it, but we need to continue to look for improvements. Now we are focusing on finding alternatives for the components found in food."

But working in isolation, scien-

tists can't necessarily see the potential alternative use for their product, he says. A food scientist working on starches and proteins might not be aware of how useful that research is to a chemist working on adhesives. That's where the multidisciplinary approach comes in.

"The possibilities are limitless," says Yada. "Before, we had the solutions to these problems, but didn't know exactly what the problems were. Now that we have a dynamic dialogue, we can all work on the common goal of solving problems in soft materials science in a more comprehensive manner."

The U of G awards are among 122 infrastructure projects at 51 universities and research institutions across Canada that will receive a total of \$226 million in CFI support. The two recent awards bring the number of CFI-funded projects at Guelph to seven.

"This is truly a remarkable performance for the University of Guelph," says Prof. Ross Hallett, assistant vice-president (research infrastructure programs). "It is clear that the CFI has rewarded the multidisciplinary approach we have taken."

BY LAURA LEVAC
AND KELLY CROWE
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LETTERS

PROFS RESPOND TO LETTERS ON FACULTY SALARY INCREASES

The June 2 edition of *At Guelph* contained a letter from Prof Dilip Banerji, Computing and Information Science, commenting on the recent salary settlement for faculty and on a comparison made with salary increases of a number of administrators. It also carried a lengthy response from Nancy Sullivan, vice-president (finance and administration), in which she argued that simple comparisons between faculty salary increases and those to senior administrators cannot be made.

We were the authors of a document that was originally presented to an open meeting of faculty called to vote on the proposed 1999 to 2001 salary settlement and subsequently circulated as part of the information given to faculty when it was decided to put the proposed settlement to a ballot. The comparison of salaries that Prof. Banerji referred to was part of that document. We would like to respond to several points raised by Ms Sullivan and to offer a broader perspective. We focus on four issues:

1) A key objective of our document was to raise awareness of the erosion of the *salary base* of faculty and librarians at the University as a result of the failure of base increases to keep pace with increases in the cost of living. Under the memorandum of agreement that governs the salary system for faculty and librarians and the terms of salary negotiations, the salary base — and thus the salary grid — must at least keep pace with increases in the cost of living over a period of several years. As we pointed out, over the 1992 to 1998 period, the CPI increased 8.3 per cent and the salary base rose 1.2 per cent. Although this is partly a result of the salary freeze during the social contract period, the University has made little effort to redress this situation. Our salary levels have fallen well behind those at universities in a number of other jurisdictions and behind those in industry. One result of this is that an increasing number of faculty, particularly in the middle ranks, have been leaving U of G for other positions. Another result is that Guelph is increasingly having to hire new faculty at grid positions well above the base, a practice that is ultimately unfair to faculty hired earlier.

2) A second key issue for us was the failure of the University to acknowledge the considerable losses to lifetime earnings of faculty over the past eight years as a result of a number of factors. During 1992/93, when there was an initial budget crisis, a large number of faculty voluntarily gave up one or two weeks' salary to secure the jobs of staff. During the social contract, we lost three days pay every year for three years, and this was extended to the year after the social contract ended. During the social contract, no merit

(TAPSI) increments were given, so actual salaries paid to faculty were below their proper grid placement. Implementation of a plan to bring faculty up to their proper position on the salary grid, as dictated by the past-due merit, did not begin until January 1998 and will not be fully implemented until May 2000. In terms of the past-due merit payments alone, high-performing faculty at the senior level will have lost on the order of \$8,000 since the end of the social contract, and high-performing junior faculty may have lost on the order of \$35,000 to \$40,000.

3) Nancy Sullivan points out that a simple comparison of salary increases for individual administrators with base increases to faculty is misleading. But our document did not draw conclusions from simple comparisons, as she suggests. It simply presented data on historical increases to tuition fees, cost of living, senior administrators' salaries and the faculty salary base. The vice-president implies that the one-year (1997 to 1998) salary increases for senior administrators were the result of "some extraordinary circumstances." For the six individuals noted in our document, she reports that the average increase was 4.46 per cent. Is this "extraordinary"? The average increase for these six senior administrators for the previous period, 1996 to 1997, was 4.9 per cent. And for the three individuals on this list who were in their present positions during the year before that, their 1995 to 1996 salary increases averaged 3.9 per cent. In contrast, the published salaries, including merit and past-due merit, of the 11 faculty (in non-administrative roles) increased an average of 1.25 per cent between 1997 and 1998. The salaries of many other faculty who have been at Guelph for more than 10 years will not have fared much better.

4) A final issue concerns the pension holiday that Guelph has taken for the past several years. The University continues to make no contribution to the professional pension plan, in large part to cover the costs of the special early retirement program that the administration extended beyond its initial commitment (and ability to pay). At the same time, the administration has refused to agree to a pension plan holiday for faculty and librarians. We pointed out in the document we circulated that a number of universities have used a pension holiday for faculty as a means of increasing net pay over the short term, thus compensating for some of the salary forgone over the past few years. In addition to the case of McMaster, which we cited, both Ryerson and the University of Toronto have seen settlements that included pension holidays for faculty. Faculty at U of T have had a full pension holiday for the past two years and, under the terms of the new agreement, will have a full holiday for the next two years and a 50-per-cent holiday in the third year. A

full pension holiday for senior faculty represents a savings on the order of \$5,000 annually.

Ms Sullivan's letter sets out one view of reality. It is true that on an age-weighted basis, our assistant professors are ranked number one in Ontario, but there are very few of them. The majority of faculty who are at the senior associate or professor rank have seen very little change in their take-home pay over the past eight years. At the same time, we have seen an increase in teaching loads and demands on our time for administrative service, while maintaining or increasing our research output and commitment to graduate supervision.

As president Mordechai Rozanski has acknowledged, we have continued to perform at a high level during these hard times, a fact that is reflected in our increasing rank in the *Maclean's* survey. Faculty and librarians have done so largely out of professional pride and goodwill toward the University. After eight years, we believe that little goodwill remains, and our perception is that the University administration either does not understand this or chooses to ignore it.

Profs. Reid Kreutzwiser
and Robin Davidson-Arnott
Department of Geography

CONSERVATORY, GARDENS A COUP FOR ALUMNI VOLUNTEERS

Congratulations to the U of G alumni community and Development and Public Affairs for their dedicated effort to transform a derelict site adjacent to the University Centre into the crowning jewel of the campus — the conservatory and gardens.

The metamorphosis of the site is striking. What a coup for past OAC dean Clay Switzer and the visionary volunteers and generous contributors in changing what was once to be a parking lot into six thematic gardens, inviting walkways and colourful and diverting perspectives, as well as a vintage 1930s-style horticultural building.

I would also like to commend John Reinhart, head of the Grounds Department, and his staff, who consistently maintain this campus in its best state, as anyone remotely aware of their surroundings can see. John's commitment to the project cannot be overstated.

I would especially like to acknowledge the enthusiastic and dedicated contribution of my colleague Steve Fleischer to the conservatory and gardens project. As site manager last summer — when much of the installation of the nursery and landscaping material was done by landscape architecture students under his watch — Steve deserves the appreciation of all who applaud this project's completion.

Bill Culp, Director
Independent Study/
OAC ACCESS

CLASSIFIEDS

FOR SALE

Sofa, loveseat and footstool, medium blue plaid, good condition, great for family room or cottage, 824-6509 after 5 p.m.

Hard-shell rooftop carrier for car; sofa and matching coffee table, knotty pine from IKEA, suitable for students or cottage, Ext. 3235.

Barnsby Crown dressage saddle, black, 17-inch seat, medium tree, excellent condition, Cecily, 362-0370 or send e-mail to cstrutt@ovc.uoguelph.ca.

1986 Toyota Corolla, four-door, standard, 190,000 kilometres, excellent condition, many new parts, certified, 763-8101.

1992 Dodge Shadow Sport hatchback, white, AM/FM cassette, sunroof, tinted windows, air, mint condition, bra on hood, remote starter, one owner, 62,000 km, Viviane or Jerry, 824-0628.

FOR RENT

Basement bedroom in three-bedroom townhouse for July and August, share rent and bills, about \$250 a month, Cory, leave message at 823-8601.

Furnished one-bedroom main-floor apartment in stone house, ensuite bath, study, parking, close to campus, ideal for visiting faculty, \$1,100 a month inclusive, 821-5096.

One-bedroom apartment on 11th floor, laundry room, near river and downtown, available July or August, rent negotiable, leave message at 826-6918.

Spacious three-bedroom furnished/unfurnished house for rent in old south end, available September or late August, two-minute walk to campus or OMAFRA, large yard and

close to park, pets OK, 826-3205 days or 824-7251 evenings.

Furnished two-bedroom apartment on second floor of house for mature tenants, close to downtown, washer and dryer, available September to April 2000, \$750 a month inclusive, Ext. 3524 or 822-8762.

Furnished upscale apartment, parking, air, central vac, no lease required for short-term rental, available Aug. 1, \$795 a month inclusive, Carol, 823-1857.

Furnished basement room, close to bus stop, parking, private shower, microwave, mature male preferred, non-smoker, no pets, \$300 a month, 822-3129.

Furnished one-bedroom basement apartment, north end, washer and dryer, central air, private entrance, parking, suit responsible couple or single non-smoker, no pets, \$450 a month inclusive, references required, 763-2632.

Four-bedroom, two-storey home adjacent to campus, two baths, attic storage, wood-burning fireplace, garage, driveway parking, fenced backyard, perfect for professional couple or family, available Oct. 1, \$1,200 a month plus utilities, Ext. 5003 or 767-5003.

One-bedroom basement apartment in private home, Victoria/Speedvale area, refrigerator/stove, laundry, parking, separate entrance, suitable for quiet mature female, non-smokers, no pets, available immediately, references, \$600 a month, 836-7587 after 6 p.m.

Spacious two-bedroom penthouse apartment in historic stone house near Exhibition Park, dining, living room, library, quiet setting, perfect for professional couple, references required, available Aug. 1, \$899 a month; three-bedroom bungalow

on June Avenue, two baths, rec room, gas heat, central air, available Sept. 1, \$1,150 a month, 824-1773.

WANTED

Caring temporary foster homes needed for Rhodesian Ridgeback Rescue Club to house dogs until adoption, 763-0994 or 519-638-3802.

One- or two-bedroom condo in Fort Myers, Fla., area for February or March 2000, for two adults, no children or pets, 824-6509.

Four-bedroom house for responsible university students, four females, walking distance to campus, appliances, required for Sept. 1, Michelle, 846-1144 or send e-mail to mwilso04@hotmail.com.

Two-bedroom condo/apartment/townhouse for Toronto-commuting executive and spouse for fall relocation, nice neighbourhood, modern amenities, minimal outdoor maintenance, no pets, no children, 905-876-2898 after 7 p.m. or send e-mail to bruvell@globalserve.net.

Two-bedroom apartment or house for two graduate students, prefer downtown/University location, close to bus route, \$800 a month plus utilities, needed Sept. 1, send e-mail to bethmari@hotmail.com.

Bachelor or one-bedroom apartment for September to May 2000 for quiet student, preferably under \$500 a month inclusive, send e-mail to cjrusell@uoguelph.ca.

One-bedroom furnished apartment for 50-plus single male, walk to downtown and/or campus, Aug. 1 to Jan. 15, 2000, up to \$700 a month, send e-mail to graeme.wells@anu.edu.au.

One- or two-bedroom furnished accommodation for mature

exchange student and child, walking distance to campus, on bus route, September to April 2000, send e-mail to jag07@students.stir.ac.uk.

Room or apartment for Sept. 1, within walking or cycling distance of the University or on bus route, willing to share, Angela, 905-828-4137 or send e-mail to awlin@hotmail.com.

Loving home for small six-year-old dog, Barb, Ext. 2043 or 821-7069.

Two- or three-bedroom house with fenced yard for prof with mature dog and small caged pet in Guelph/Elora/Fergus area for Aug. 1, Scott, 250-472-4303 or send e-mail to sbm1@uvic.ca.

Functional slide projector and carousel, Denise, Ext. 6717 or send e-mail to dtom@uoguelph.ca.

Two-bedroom accommodation for prof and family from Aug. 1 to May 1, 2000, downtown/University location, close to bus route, price range \$800 plus utilities, Robert, Ext. 2176.

Furnished three-bedroom accommodation for professional couple, Aug. 1 to Oct. 30, Stephen or Janet, 822-2424 after 8 p.m. or send e-mail to sgawron@uoguelph.ca.

Clean room with laundry facilities for single student, close to campus, needed for fall and winter semesters, Annie, send e-mail to annie@uoguelph.ca.

Accommodation for female student for fall semester, close to campus, on bus route, \$350 a month inclusive, send e-mail to rjairfield@intra-net.ca.

Five-bedroom house for responsible, clean university students, appliances needed, required for Sept. 1, non-smokers, no pets, 905-331-

6660, Ext. 269, days, 905-319-2056 evenings or send e-mail to mgravis@uoguelph.ca.

Furnished one-bedroom apartment close to campus for female co-op student, September to December 1999, Laura, leave message at 416-712-5814 or send e-mail to urastranger@hotmail.com.

AVAILABLE

Mature woman to house-sit from July to December 1999, teacher, non-smoker, references, 836-2654 or send e-mail to bsmit@uoguelph.ca.

FOUND

Academic hood, black with three-inch brown border, cream lining with three unequal diagonal red/rust stripes, about 5/8, one and 1.5 inches, maker's tag reads Paul A. Willsie, Detroit, Omaha, Keith, Ext. 8258.

LOST

Paintings by former assistant director of residences John Eccles, who retired in 1981. The paintings hung on the walls of the former Department of Residences when it was located on Level 3 of the University Centre. One painting was called *Birth of a Prairie Flower*, another portrayed a human eye. If anyone has seen the paintings, call Eccles at 822-9376.

Classifieds is a free service available to staff, faculty, students, alumni and retirees of the University. Submit items by Wednesday at noon to Linda Graham on Level 4 of the University Centre, fax to 824-7962 or send e-mail to lgraham@exec.admin.uoguelph.ca. For external and commercial advertising, call Brian Downey at Ext. 6665 or send e-mail to bdowney@exec.admin.uoguelph.ca.

\$87,900 — Two bedroom condo in newer building. Recently painted, feels and looks fresh. Includes appliances.

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Astronomer, author and educator John Daicopoulos presents "Strictly Stargazing," a four-evening workshop for new astronomers, Aug. 24, 26 and 31 and Sept. 2 from 8 to 10 p.m. Cost is \$50. Register by July 27 at Ext. 4110.

NOTICES

The Inter-American Institute for Co-operation in Agriculture is offering 15 grants for two- to three-month research periods in Latin America or the Caribbean. The awards are for faculty and graduate students in agricultural science, agricultural economics, veterinary medicine, biotechnology and environmental protection. Application deadline is Aug. 30. Application forms are available at the Centre for International Programs InfoCentre or on the World Wide Web at www.iicacan.org.

The Human Rights and Equity Office can provide anti-racism educational materials, including "Unlearn Racism" stickers and posters, the information booklet *Racism. Stop It!* and a list of books that address racism. Also available are copies of 1994 and 1996 reports produced by U of G's President's Task Force on Anti-Racism and Race Relations. For more information, call Ext. 3000 or visit the office at 15 University Ave. E.

Students are needed to work at new student registration Sept. 7 from

7:45 a.m. to 4 p.m. Applications are available at the academic records section of the Office of Registrarial Services on Level 3 of the University Centre. Early application is advised.

The International Development Research Centre (IDRC) offers internship awards to provide exposure to research for international development through program work and research under the guidance of IDRC staff. Internships run four to 12 months in Ottawa or at a regional IDRC office. Application deadline is Sept. 15. For information, call 613-236-6163, Ext. 2098, fax to 613-563-0815, send e-mail to cta@idrc.ca or visit the Web site www.idrc.ca.

THESIS DEFENCES

The final examination of M.Sc. candidate Leanne Philip, Department of Botany, is July 8 at 9:30 a.m. in Axelrod 117. The thesis is "The Effect of Mycorrhizal Fungi on the Vegetative Growth and Sexual Reproductive Potential of Purple Loosestrife (*Lythrum salicaria* L.)." The advisers are Profs. John Klironomos and Usher Posluszny.

The final examination of Kimberly Rose, an M.Sc. candidate in the Department of Zoology, is July 13 at 9 a.m. in Axelrod 265A. The thesis is "Development and Production of Planktonic Crustaceans: A Test of the Frequency of Animals in Apolysis Method." The adviser is Prof. John Roff.

The final examination of Serena Lowartz, an M.Sc. candidate in the Department of Zoology, is July 14 at 2 p.m. in Axelrod 265A. The thesis is "Novel Patterns of Gonadogenesis and Steroidogenesis in Sea Lampreys." The adviser is Prof. Bill Beamish.

The final examination of master's candidate Betty Brouwer, Family Relations and Applied Nutrition, is July 21 at 10 a.m. in Hafa 243. The thesis is "Stop Fighting! There's Enough for Both of You: An Observational Study of Parents' Socialization of Moral Orientation During Sibling Conflicts." The adviser is Prof. Susan Lollis.

The final examination of M.Sc. candidate Rebecca Vincent, Zoology, is July 27 at 9 a.m. in Axelrod 265A. The thesis is "Species Richness, Extirpations and Introductions Among the Noctuid Moths (Lepidoptera: Noctuidae) of New Brunswick's Fundy Coast." The adviser is Prof. Vernon Thomas.

The final examination of PhD candidate Elaine Campbell, Family Relations and Applied Nutrition, is Aug. 3 at 1 p.m. in Hafa 243. The thesis is "Constructing Child Abuse: Beliefs of Reported Parents, Exemplary Parents and Child Welfare Agents." The adviser is Prof. Judy Myers Avis.

The final examination of PhD candidate Yolanda Romsicki, Chemistry and Biochemistry, is Aug. 12 at 1:30 p.m. in MacNaughton 222. The thesis is "Modulation of the Function of

the P-glycoprotein Multidrug Transporter by Lipid Environment." The adviser is Prof. Frances Sharom.

COMMUNITY EVENTS

The Guelph Food Bank is holding fund-raising sales and silent auctions July 9 and 10, 16 and 17 and 23 and 24 from 8 a.m. to 8 p.m. at Crimea St. For more information, call 767-1380.

The annual Hillside Festival runs July 23 to 25 on the Guelph Lake island, rain or shine. Weekend passes are \$55 in advance, \$65 at the gate. A single day is \$35 and a single evening, \$25. Admission for children 12 and under and seniors 65 and over is free. Tickets are available at the Farmers' Market, the Bookshelf, Music in Orbit and the Stone Store or by calling 763-8817. For more information, visit the Web site www.hillside.on.ca.

The Guelph Concert Band performs Sunday evenings until Aug. 15 (excluding Aug. 1) at 7 p.m. at Riverside Park. Special guests are featured each week, and admission is free. For more information, call Leslie MacDonald or Tim Allman at 837-0276.

"Women's Work," a daytimer and directory for Guelph women produced by U of G graduates Joanne Bruce, Klari Kalkman and Alison Bruce, is now available on the Web at www.womenswork.on.ca.

The Wellington County Museum and Archives has launched a Web

site at www.wcm.on.ca. It features information on exhibitions and special events, art classes and summer workshops. Users can also search for information on the historical resources available in the county archives. Upcoming events at the museum include a Grand Garden Tour and Summer Thyme Herb Fair July 10 from 10 a.m. to 4 p.m. and "Insights," a juried art show, July 28 to Sept. 6. For more information, call 846-0916.

The Victorian Order of Nurses needs volunteers throughout the Waterloo region and Wellington County to help out with volunteer visiting, transportation, foot-care clinics, office work, fund-raising and promotion. To volunteer, call 822-5081.

The Distress Centre of Wellington-Dufferin is looking for volunteers to help with its bingo games, which are held about once a month from noon to 4 p.m. at Bingo Country on Victoria Road. Volunteers are needed to sell tickets, help patrons and do cleanup at the games. Non-smokers can request the non-smoking section, which is closed off by glass partitions. For more information, call 821-3761.

The Fergus Scottish Festival and Highland Games run Aug. 13 to 15 in Fergus. Events include a Friday night tattoo, a Theatre on the Grand production, highland dancing, athletic events, a Celtic jam dance, storytelling and a Celtic concert. For more information and tickets, call 787-0099.

Where Will You Be on New Year's Eve?

If you're a U of G computer analyst, you may be holed up on campus, waiting for something — or nothing — to happen

THE "NEW YEAR'S EVE to remember" will be memorable for Doug Blain for a different reason than for most revellers. As *Auld Lang Syne* rings in the Year 2000, he'll be holed up in the so-called Y2K bunker on campus, watching to ensure that the University's cyberlocks and dependent systems tick over hangover-free to the new millennium.

Blain, manager of Systems Technical Support in Computing and Communications Services (CCS) and chair of Guelph's Year 2000 Committee, will spend the night of Dec. 31/Jan. 1 in a basement computer room in the Animal Science and Nutrition Building. With him will be a handful of CCS staffers connected to the outside world through a cellular phone, the campus phone system and a Bell line for phone or e-mail.

The group will monitor the University's computer equipment during the infamous date change and field telephone reports from staff across campus to ensure that equipment controlling everything from

lights to water is operating correctly.

Blain is expecting most of the calls to bring good news. "We anticipate that, as the clock ticks over, not a lot will happen," he says, echoing a growing sentiment that earlier Chicken Little prognostications about a global Y2K calamity were largely overblown. "Everything is not suddenly going to grind to a halt at the stroke of midnight."

A cross-campus inventory of computer systems undertaken during the past year has shown that about 80 per cent of applications are already Year 2000-compliant, meaning that computers should handle the date change. Blain says other applications will be brought up to snuff before the end of the year.

Besides the normal complement of Physical Resources staff scheduled to be on campus New Year's Eve, the University plans to schedule more security staff for that evening.

Typically, fewer than 20 students and staff remain in the single student residences on campus during the holidays, but residents in family housing number about 1,000.

"We have to assume most of them will stay," says Blair Capes, assistant director, housing services and family housing, in Student Housing Services. "We're currently developing plans. The biggest concern we would have would be power failure. We will be working with the Year 2000 Committee and Security Services over the next few months to identify what kind of emergency shelter and emergency services we should provide."

Physical Resources has a contingency plan that outlines emergency procedures (the plan covers a variety of potential emergencies, not just those that might relate to the date change). If an emergency were to occur, staff would notify Executive Group, which would implement the University's emergency plan.

"The vast majority of people on campus will not be affected," says CCS senior analyst Bob Creedy. He adds that a few computer users running budgetary spreadsheets might encounter problems in the new year. Any problems caused by Y2K glitches might not show up for sev-

eral days or even weeks and are likely to be relatively minor, he says. "The program will probably run, but it's a question of whether it will produce the right numbers."

Creedy says that as long as PC users have ensured that hardware and software are compliant, they should encounter no problem if they remember to turn off the computer before leaving the University for the holiday and then reboot in the new year.

With six months left before the new year rings in, CCS is planning its final communications initiatives for campus members. These include:

- printing a Y2K message on faculty and staff pay stubs;
- putting Y2K information on bookmarks, posters and a video monitor in bookstore checkouts; and
- inserting a brochure in first-year registration kits.

CCS plans to assemble a team of students this fall to help offices with any problems ensuring Y2K compliance. The department continues to

offer Y2K training sessions for staff and faculty. Computer users who have yet to test their equipment for Year 2000 compliance, and who have no CCS technical staff in their unit, can contact CCS directly or visit its Web site at www.uoguelph.ca/ccs/ or check out the campus Y2K site at www.uoguelph.ca/Y2K/.

Computer experts on campus are betting the Y2K problem will turn out to be anti-climactic. "If everyone has done their job properly, this will be a huge non-event," says Blain.

Referring to the billions of dollars and untold hours of employee time worldwide spent on the Y2K problem — including planning here at U of G since 1995 — Creedy adds: "This is probably the biggest project in history put together to make sure that nothing happens."

If you have questions or comments about Y2K preparations on campus, contact your unit's technical staffer or call the CCS Helpline at Ext. 8888.

BY ANDREW VOWLES