

Victoria may have been victorious at the CIAU basketball championships on March 17 but Dalhousie's organizing committee looked equally triumphant. As hosts of the championships, Dal brought in 6000 spectators for the final game and won the CHNS New Sound Sports Achievement Award for the organizing committee's efforts that weekend. The Victoria Vikings beat the Brandon Bobcats with a score of 70-62. (Childerhose photo)

Tuition fees rise by seven per cent

Tuition fees at Dalhousie will increase seven per cent in 1984-85, university president Dr. W. Andrew MacKay and student union president Tim Hill announced at a press conference last week.

Students in the Faculty of Arts and Science will be charged \$1,410 for tuition next fall, up from \$1,320. In 1983, tuition increased 13 to 15 per cent (depending on the faculty) over the previous year.

The timing of the announcement was a departure for the university, which has traditionally waited until the provincial and university budgets are in before setting tuition fees for the upcoming academic year. As a result, students often complained about being kept in the dark until classes were over.

"It's unusual for us. We've usually waited until we've known what the government has set for us," MacKay said. "That's been unfair to students in many respects so we've tried to do it now."

MacKay said the announcement was made without any inkling of what provincial government funding would be (tuition fees were announced last Wednesday and the provincial budget was not tabled until Friday). He explained at the press conference that the university took a gamble with the announcement.

"Our budget estimates are based on our hunch last fall of what government might do, but public finance is very tight in this country

and various provinces have been doing things more drastically than what I would have thought even three months ago, so we're not quite sure where that leaves us."

MacKay said the seven per cent figure will not change when the university decides on its own budget.

He explained that the provincial government has been quite reasonable in recognizing the needs of students compared to other provinces and he hopes that situation will continue.

Tim Hill termed the increase reasonable, but not a bargain. The students had been calling for a limit of 5.5 per cent on any tuition hikes.

"We find it difficult to be happy about any increase but, like anybody else in these times, we have to face up to the reality of the economy we live in," Hill said, warning that there is a danger that finances, rather than academic ability, will become the determining factor for admission to university.

"I'm pretty sure a seven per cent increase is going to mean some students — I don't know how many and I don't know who — will probably not be back next year. If you're in the middle income, you might not think \$100 is going to make much difference, but to some people that is a lot of money."

Although he did not consider the increase a victory for the students, he called it a victory for common sense, noting Dalhousie

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NS Budget indicates operating grants up

Nova Scotia's universities will receive \$7,960,200 more in operating grants for 1984-85 than they did for 1983-84. This represents an increase of 5.614 per cent.

The Nova Scotia Estimates for 1984-85, presented by finance minister Greg Kerr in the Legislature last Friday, show that total gross expenditures for education in the province are estimated at \$745,130,000. This is 4.63 per cent more than the \$712,140,000 forecast for 1983-84 year, which ends on March 31.

Figures in the Estimates show that for post-secondary education, actual operating grants in 1982-83 totalled \$132,851,149. The total forecast for 1983-84 was \$141,775,800 and the total estimated for 1984-85 is \$149,736,000.

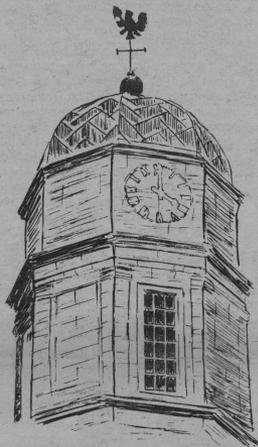
In addition, actual spending on non-space (alterations and renovations) in 1982-

83 totalled \$2,974,986. Non-space funding was suspended for 1983-84, but the estimates for 1984-85 show that \$2,797,000 has been included in that category.

In his budget speech, Kerr referred to the education estimates: "... the degree of success of our training initiatives ... is highly dependent upon the quality of basic education ... for young Nova Scotians."

"A firm educational foundation must be a prerequisite to ensuring that our young people gain the most from whatever vocation they may wish to pursue."

"The devotion of more than one quarter of the ... total operating budget to all types of education indicates the high priority this government places on developing human resources to reap maximum benefit from the economic opportunities which will develop." DM



Dal News

Volume 14, Number 13, March 29, 1984



CKDU gets ready to go FM

Click!
"It's 8 a.m. on CKDU-FM. Time for the BBC radio news..."
BBC?

Yes, the BBC news will be a regular part of the day for many metro residents when Dal's student radio station gets its FM licence. Not only the BBC news, but a variety of programming not normally heard in this area will be available next fall at 93.1 on the FM dial.

CKDU-FM needs only the final approval of the Canadian Radio-Television and Telecommunications Commission (CRTC) to begin broadcasting ... that and a little more time to order the right equipment.

CKDU's enthusiastic station manager Keith Tufts says all looks well for the newest addition to the metro radio market. "The application was sent March 3 and we'll know for sure by May 4 what the decision is. If no one files an opposing intervention, we'll be on the air by late September, early October ... finally."

"It's been a long haul.
"And a lot of 14-hour days," says Tufts, who became station manager a little less than a year ago. He is credited with turning the station around from a disorganized

operation (on-air and off-air) to a slick, professional enterprise.

Gina Wilkins, a member of CKDU's board of directors, says the record library, which is the backbone of any radio station, has been completely reorganized. "Finding a record used to be a matter of hit and miss." Now the library follows industry standards.

Because of the large number of applications, program hosts were chosen for their on-air ability, their knowledge of the program material and their professionalism.

These factors, coupled with Dal students' approval of a \$6.50 raise in student fees to cover costs, have made CKDU a viable operation, Wilkins says.

It is worth noting that the station solicited and received support and guidance from metro area radio stations, especially from Barry Horne of CJCH/C-100.

While it may seem unusual to have established radio stations help another get on the air, Tufts says CKDU is little threat to them. "We won't take away any advertising dollars because we won't carry any commercials as such."

The station will operate in the same manner as PBS in the U.S., with sponsors

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DAVID MURPHY — THE MAN BEHIND THE MASK

The thing that struck me first when I met Dr. David Murphy was his firm handshake. When he told me later that he had performed open heart surgery that morning, I couldn't help but think about those hands — the number of patients they had cured, the number of lives they had saved — and I thought about how valuable they were to the many people in the Atlantic region who suffer from heart disease.

Heart surgeons are a mystery to most people. Heroes almost. They are able to cure pain, prolong and save lives. But what are they really like? Who are those men and women behind the masks?

Dr. Murphy's modest, easy manner hides the prestige and importance of his position. With his casual and friendly air, it's easy to forget he holds three directorships in cardiovascular surgery, at the Victoria General Hospital, the Izaak Walton Killam Hospital for Children and the Dalhousie Medical School.

He performs about 180 open heart operations a year, averaging five or six a week. Since he took over his directorship at the VG in 1973, he has seen the number of open heart operations performed there increase tenfold (there are now about 700 cases of cardiac surgery each year as opposed to about 70 ten years ago), and he anticipates many more advances in the years to come, culminating, he hopes, with an institution of a cardiac transplantation unit in the next few years.

How does he juggle the life of a doctor, an administrator, a teacher (he is also an associate professor of surgery in Dal's Medical School), a husband and a father in a normal 24-hour day?

Dr. Murphy's day usually starts at about 6 a.m. with a run around Point Pleasant Park in the south end of the city, where he lives. By 7:30 a.m. he is in the operating room area of the hospital, preparing for his teaching rounds, which begin at 7:45 a.m. From 8:45 in the morning to 6 p.m. he is in surgery, some days performing two open heart operations, one in the morning and another in the afternoon. At 6 p.m. he does his rounds, visiting the patients he has operated on the day before and interviewing those who are coming up for surgery. He usually leaves the hospital at about 7:30 p.m., when he goes home for supper and to catch up on his medical reading. By 10 p.m., he says, "I'm usually in the sack."

Fortunately, his life coincides well with his wife's. Dr. Sonia Salisbury is also a doctor, an endocrinologist at the Killam Hospital and a faculty member in Pediatrics in the Medical School.

When Dr. Murphy began his studies, he had no intention of becoming a heart surgeon. In 1952, he enrolled in the Ontario Veterinary College in Guelph. By the time he was in his third year, doing summer residency work on small animals in Chicago, "I realized that this wasn't the career I wanted." He stuck it out though, graduating as a doctor of veterinary medicine in 1956. Then he used that degree as his pre-med training to get into the medical school at McGill, where he was trained in pediatric surgery.

After doing his residency at the Children's Hospital Medical Centre in Boston and the Hospital for Sick Children in London, England, he returned to his home town to set up a practice at the Montreal Children's Hospi-

tal and to assume a teaching position in surgery at McGill University. That's when he became interested in an even more specialized kind of work — cardiac surgery.

In 1973 he came to Halifax to work at the Killam Hospital for Children. His interest in cardiac surgery grew, so that in 1974 he took a four month leave to "buff up" on his knowledge of the techniques used on adults at St. Luke's Medical Centre in Chicago (where, incidentally, he did surgery on Mayor Daley).

When he returned to Halifax, a cardiac program had been developed by a group of cardiac surgeons and cardiologists at the VG.

The Halifax program is unique, says Dr. Murphy, because it gives him the opportunity to work on both adults and children. "The two complement each other. Techniques learned on adults can be applied to children and vice versa."

The program also offers great opportunity for training new surgeons because of the large volume of patients treated, he says. "The problem with training is that although our program is recognized nationally, we have received no government funding to set up a proper residency system. Residents must either come with their own money or we have to find them funding from other sources. I get about 30 applications a year that I have to turn down because we have no money."

Dr. Murphy says he carries a light teaching load with the Dal Medical School, doing bedside teaching for medical students and training interns and residents in the operating room.

What does Dr. Murphy get out of his work?

"The perks are that the patients generally all get well. It is gratifying to see patients come back six weeks later with no pain and doing whatever they want to do."

And what about the few that don't make it?

"There's always a sense of frustration that you haven't been able to pull it off. Most of the time it's something that is completely out of our hands. You know from the start that the destiny's there, but you try anyway."

"And it's harder for everybody with the kids. Adults are good because they usually get better. Their hearts are about the size of a softball. Babies' hearts are about the size of small walnuts. Pediatrics is more difficult because they don't all get better."

Although some don't make it, the survival rate of patients continues to improve. That's another perk, says Dr. Murphy, as is watching new and better equipment and techniques being developed.

For example, several of his colleagues have developed new and improved techniques for operating on and treating heart attack victims. "And we're almost certainly looking at cardiac transplantation in the next couple of years. The paper work and ground work is already underway."

Dr. Murphy disagrees with the mystique surrounding heart surgery. A coronary bypass, for example, holds only a one to two per cent risk of death. "That's about the same as having major stomach surgery," he says.

Even the awesome heart transplant is not such a complicated operation, he says. "The heart is very easy to replace from the sewing point of view." The difficulty is in finding compatible donors and handling whatever complications may arise.

Dr. Murphy belongs to about 20 medical societies, holding fellowships in three of them. On top of his surgical, administrative and teaching duties, he attends numerous conferences and seminars and has presented 17 papers at national and international meetings since 1973.

As if all these activities don't keep him busy enough, Dr. Murphy is also a sheep

farmer. "I own about 100 sheep," he admits. "I started out with pigs, but now I'm in the lambing business. It's a good hobby. It's only labor intensive at certain times of the year and I can do my own vet work."

Dr. Murphy has three children, two in university and one in high school. His eldest son, Luke, is considering a career in medicine.

"I'm very lucky to be as happy as hell," is how he sums up his life.

He laughed a bit when, after another firm handshake, we said "good-bye" and I commented, "Take care of those hands." He looked at them modestly, almost as if he, too, was amazed by what they could do. GW



Dal News



Dal News is published by Dalhousie University for members of the Dalhousie community. Produced by the Public Relations Office, Dal News is published every two weeks between September and April, with a break at Christmas and occasional summer issues.

The staff of Dal News includes:

Dick Bowman (DB) Director of Public Relations
Derek Mann (DM) Director of Publications, Editor-in-Chief
Susan Williams (SW) Information Officer, Editor
Gina Wilkins (GW) Senior Information Officer, Editorial Consultant
Stuart Watson (SRMW) Information Assistant, Reporter, Special Sections Writer
Roselle Green (RG) Public Relations Consultant, Writer
Ed MacLellan (EM) Reporter
Kathi Petersen, design & technical production, and
Doreen St. Onge, What's on at Dalhousie.

Inquiries and submissions should be addressed to The Editor, Dal News, Public Relations Office, Dalhousie University, Halifax, NS B3H3J5. Tel: 424-3643.

DEADLINES MOVED AHEAD

The deadline for all submissions to Dal News is now noon the Wednesday preceding publication.

MAILING LIST: We're revising our mailing list for next year based on the new telephone directory. If you are incorrectly listed in the directory, please let us know. No further changes will be made to the present mailing list. Please accept our apologies for any inconvenience this may cause.

CONTRIBUTIONS: It takes the efforts of many dedicated Dalhousians to put out every issue of Dal News. Thanks to all those who have helped with this issue, some of whom are listed here: Mark Childerhose, Barbara Hinds, Blanche Potter, Ian Meinertzhagen, Murray Trott, Gordon Duff, Richard Brown, Donald Betts, Ken Hill and Olga Neale.

MRC at Med School to discuss budget plans

Twenty members of Canada's Medical Research Council (MRC) met at the Dalhousie Medical School earlier this month to plan the allocation of the council's \$153 million budget for 1984-85 in support of the country's medical research programs.

The members also made final decisions on the use of MRC funds still available from the \$137 million budget for the current year. Specific awards were not announced when the meeting ended but some are expected early next month and others in June.

The council now has more than 600 applications for equipment which would cost more than \$40 million. Only \$5.5 million from the remaining 1983-84 funds are still available. They were allocated at the Halifax meeting, bringing this year's total allocation for laboratory equipment to \$12.5 million.

Almost 50 applications for equipment grants were made by each major Canadian university, except for Alberta, where no application was received, from Calgary and only five from the University of Alberta in Edmonton. Medical research in that province receives about \$40 million a year from the Alberta Heritage Fund.

In planning its expenditures, the MRC allocated: \square \$16.4 million on research support. Of this, \$72 million is for commitments made in previous years. The rest will go towards 500 renewal grants and 320 new grants. Final decisions on most of the new and renewal grants will be made in June.

\square \$16.3 million on research training. Among the awards will be 112 new studentships (trainees for research degrees in Canada) and 150 post-doctoral fellowships (advanced research training in Canada and abroad), of which 80 are planned for health professionals, mainly physicians.

\square \$9.6 million for salary support programs. Among these will be 30 new MRC Scholarships and 12 MRC Scientists. These are five-year awards to enable outstanding young scholars or established scientists to spend their full time at research.

\square \$9 million will be spent on equipment.

Remaining funds were allocated to a range of programs which will allow working visits by scientists to other laboratories, to support of scientific meetings and workshops, and other related matters.

During the meeting, MRC awarded 66 studentships (out of 587 applications), 30 fellowships to holders of PhD degrees (134 applied), 44 fellowships to holders of a medical, dental, veterinary or pharmaceutical doctorates (188 applied), 30 scholarships (122 applied), 11 MRC scientists and 12 Centennial fellowships, half of which will go to health professionals.

Further decisions will be made in June regarding research grants, equipment and trainee support.

— Barbara Hinds

Committee on VP

Membership of the committee to advise on the appointment of a Dalhousie vice-president (planning and resources) has been approved by Senate.

At its March 12 meeting, Senate accepted the nominations of the committee on committees.

Serving on the advisory committee are: Dr. C.W. Helleiner (Biochemistry), Dr. R.N. Anderson (Medicine), Dr. John Eisner (Dentistry), Dr. T.L. Maloney (Recreation and Physical and Health Education), Dr. Norman Horrocks (Library Service), Dr. Marcia Ozier (Psychology), Dr. Edith Angelopoulos (Biology), Dr. E.Z. Friendenberg (Education), Patricia Burt (Killam Library), Prof. H.L. O'Brien (Law) and Shaun Houlihan (Student Union).

Senate also approved the nominations of faculty to serve on the following review committees:

Canadian Marine Transportation Centre: Dr. R.A. Ellison (Business Administration), Dr. K.R. Rozee (Microbiology).

Centre for Development Projects: Dr. A.P. Ruderman (Public Administration), Dr. T.M. Shaw (Political Science).

Ocean Studies Program: Dr. I.A. McLaren (Biology), Dr. C.J.R. Garrett (Oceanography).

Professor Paul Thomas (Law) was appointed to the committee to investigate student discipline. DM



Awards for spirit, participation and sports were all a part of the fun and frolic at Howe Hall's awards and recreation night banquet. Special recognition was also given to the students involved with the campus escort service. Maurice Molfett (right) was the recipient of the Howe Hall Athlete of the Year Award. Gary Zed, out-going president of the Howe Hall Residence Council made the presentation. (Wilkins photo)

CKDU TO GO FM

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announced at the beginning and the end of a program and no sales pitch. So-called advertising time is limited to four minutes per hour. The rest of the station's funding comes from student fees.

Tufts says the established stations will not lose large parts of their present audiences because CKDU's programming is community-oriented and varies greatly. It's a case of a little bit of everything for everyone, and not a lot of one thing for some.

"We won't be playing top 40 hits all day long," says Tufts. "In fact, no song will be played more than once a day. Programming will be consistent, not like a few years ago when a piece of classical music would be followed by the latest new wave hit" only to be followed by the "Ode to Jed Clampett".

That's the backbone of the new format — consistency. Each show must have a theme, be consistent and professional. That means no more disk jockeys yelling or screaming in the middle Beethoven's Fifth, Wilkins says.

As part of the station's alternative programming format, CKDU will feature a lot of new musical talent. "What we play today, will turn up on regular radio about a year later," Tufts says. "We'll also be featuring a lot of local talent, using either their own demo tapes, if they don't have a record, or recording them live in the SUB — the cafeteria has great acoustics." SRMW



Keith Tufts, station manager at CKDU, gets ready to go FM. CKDU has filed for an application and is now making the necessary preparations in expectation that the proposal will be accepted. (Wilkins photo)



Gina at work on her last issue of Dal News. (Petersen photo)

Many people here have helped me immensely in my work with University News and other projects that I have taken on. Members of the administration, the faculty, staff and, of course, the students have helped me make the News what I consider to be a valuable communications tool on campus. The staff of the Information Office, too, has always been more than supportive. I am eternally indebted to Derek Mann, who allowed me to take on the editorship of the newspaper and run with it. Without his guidance and advice, I don't think I ever would have made a go of it. And the other staff in the office, some of whom are no longer here — they have worked so hard with me, helping to fulfill my dream of making University News as good as it could possibly be. I drove them hard and they always rose to the occasion. We always knew the paper still had (and has) a long way to go, but they stuck with it and I admire and thank them all for that. And I wish Susan Williams, who has been acting editor of the paper since January, the best of luck with it. Have fun, Susan, and "go crazy."

I want to say "thank-you" to all those people who were good friends and colleagues, who kept in touch on a regular basis with encouragement and constructive criticism. I'll miss them. I wish them, and all of Dal actually, all the best in the years to come. These are hard times for universities, but I know that Dal will rise above its problems. It's one of the best universities in the country, and I have come to recognize that Dalhousians are a special breed of people. As long as they hang together, I know that Dal will go on to be even better than it already is.

I'd like to say goodbye to all my friends at Dal tomorrow (March 30) at Happy Hour (4:30 to 6:30 p.m.) in the Faculty Club.

Gina Wilkins

Dynamo departs Dal

Gina Wilkins, the diminutive dynamo who has provided much of the motive force behind *Dal News* (formerly *University News*) for the past five years, is bidding adieu to her many friends at Dalhousie.

Gina will be homeward bound to Montreal in a matter of days as she prepares for a summer of relaxation and travel. By the time the leaves begin to fall, she will be studying journalism at Carleton in Ottawa.

She leaves behind, with more than a little regret, she says, her adopted hometown and the little paper on which she has labored so hard to put her stamp.

From the softball field to the Graduate House to the Dalplex and all other places where Dal people gather, Gina has kept her ear tuned to the active internal politics that are part of any university. Co-worker Susan Williams has been known to complain that it takes an hour to walk across campus with Gina because everyone wants to stop and pass on the latest piece of university news.

By her own admission, Gina has taken Dalhousie to heart. "I'm very fond of Dal and I love the campus and the interesting people I've met."

From talking with Gina, it seems as if the university has always been a part of her life. Actually, she did not move to the area until 1976, when she took up residence in Dartmouth and began working in a downtown bank. Ironically, she thought that the south end university where she applied for a job the next year was Saint Mary's. She didn't take long to sort out institutions, however, and was hired as a library assistant at Dal's Kellogg Library "in the serials department, of course."

In August of 1978, she was hired as an information officer for the Information Office (now the Public Relations office) and began to work on *University News*, which, at the time, consisted of a four-page weekly and a monthly issue with major feature articles.

By January, 1979 she had taken over the weekly and the rest is history.

For the next four years, the newspaper was Gina's life, says Derek Mann, editor of publications for the Public Relations office. As editor, she spent many long hours poring over notices, writing stories, thinking up headlines, editing, taking photos, working out the kinks in the office's computer typesetting system and finally making it all fit into four or more pages in time to meet the printer's deadline. Much of this was accomplished in a time of tight budgets and small staffs.

"From the beginning she always reminded me of the girl in the song, Honey Bun, in South Pacific (that dates me, doesn't it?). A 101 pounds of fun... Only 60 inches high (I think Gina's even less than that)... Every inch is packed with dynamite (well, if not dynamite, she was a bundle of energy — made me tired just to watch her)... Her curls all hurly-burly (when she had them, that is)...", Mann says.

Above all, Gina strove to make the newspaper a readable and relevant publication.

"I think *Dal News* has gained integrity as a newspaper," she says, adding that she feels one of her accomplishments has been to carry hard news, rather than pump out press releases on situations such as salary negotiations between the faculty association and the administration.

After a rape occurred on campus in 1980, Gina devoted a lot of time to communicating the fact that sexual assaults definitely do occur in Halifax. She helped produce an anti-rape brochure and made sure that the issue got good coverage in *University News*.

"The paper was my whole life while I was editor," says Gina, who was known to stay into the wee hours of the morning on more

than one short-staffed occasion. "When I lived at LeMarchant Towers (adjacent to the university), I ran to have a look every time I heard the fire alarm go off at Howe Hall to see if it was burning down. If it was on fire, I had my camera loaded with film to take the pictures."

Gina relinquished her job as editor in January and has since been serving as editorial consultant, while doubling as senior information officer.

"I believe a newspaper should change editors every three years because you need a young keener in there, especially when you're dealing with university activities."

Susan Williams, who has worked under Gina for the past year, says it was Gina's keenness that has made the paper what it is today. "Even when we were still laying out the paper at 11 p.m., Gina would not cut corners. She wanted the paper to be as perfect as she could make it."

With a BA in English from McGill, two summers of editing the Imperial Tobacco Company *Leaflet*, and five years experience at *Dal News*, it might seem surprising that Gina would want to study journalism at university. But she doesn't think so.

"I've never had any journalistic training and I find I've become much more interested in my writing skills." She says a full-time editing job can take its toll. "I studied English literature but I haven't read a book critically in years. It's difficult to read at night when you've read all day at work."

She would like to try her hand at writing for a publication which is not a house organ. But she does feel she has learned a lot on the job and from other Dalhousie-related activities, such as her work with last year's inaugural edition of *University Avenues*, the journal of the Dalhousie Association of Graduate Students (DAGS).

She was production editor for that publication, a job which involved design and layout (in whatever spare time she could find from her job). She has also assisted the staff of *Fathom*, the publication of the English Department, with production procedures.

In 1982, while laid off for the summer because of university restraint, she served as co-ordinator of the Elderhostel program at Dal. She must have done a good job at that post because some of the participants bought her a pair of roller skates as a tribute to the fact that she was always on the move.

She has also found time to serve on the boards of the Faculty Club and CKDU. Three times a week, she hurries off to Lunch Fit class at the Dalplex, where, although she's probably the smallest person bending and stretching, she's also the most energetic. As well, she's managed to attend many of the functions on campus and to get to know a good portion of the people, including students, staff and faculty.

"I don't know if I can go into the real world after working at such a stimulating place as Dalhousie," she says. "I've learned a hell of a lot and in a sense I've grown up here. I've learned a lot about politics and academia and I've had the great experience of meeting several Nobel laureates."

"I've watched a lot of students go through and graduate and send them go out and start successful careers," continues Gina, who confides that she was a student who did not get involved during her stint at McGill. But she has done such a good job of becoming a Nova Scotian that she is taking up that fine old Maritime tradition of "goin' down the road."

"Sometimes you just need a change," she says, and adds with a grin, "I promised myself I'd retire before I was 30 and I'm 29 now." EM

What makes a good teacher? Dal profs tell all

"No one ever learned anything in the classroom if they were asleep." — Max Cynader, Psychology

"You have to be especially sensitive to what your students don't know." — Herb Gamberg, Sociology

"A lecturer's love of the subject can excite the student." — Jim Pincock, Chemistry

Three quotable quotations by Dal teachers in different disciplines who have pondered the art of giving a good lecture. Whatever the field of study, faculty continually need to fine tune their lecturing skills in order to motivate students.

There are, of course, as many ideas on the subject as there are teachers.

Philosopher **Robert Martin** and political scientist **Roger Dial** use literature as a frame of reference for their lecture sessions. Martin says that writers of literature often reflect current attitudes and suggest partial solutions. Their works present people, ideas and issues in a real way. The net result is that his students respond positively when they are asked to think about philosophical issues through fiction.

The parallel is Dial's class on politics through literature. Dial says the characters in literature represent symbols and the dialogue serves as a framework for understanding political thought. He explains: "For the author, the characters are the exposition of the story. For the students, the characters are unfolding some theory of politics — for example, bureaucracy, anarchy, power, capitalism or revolution. The dialogue in fiction is a device for shaping the character. In political science, dialogue is the medium for political ideas and/or messages."

The technique in both cases serves its purpose — it arouses student curiosity and, at the same time, develops their appreciation for the subject.

Another mechanism is used in a first year history class where professors **Graham Taylor** and **John Godfrey** take a team approach to teaching a class on history and the modern world. They address the subject by selecting a particular event (or problem), and then asking their 175 students to try to relate different events to that particular incident. They also look at the long term implications of the initial act. Within that context, the August, 1945, bombing of Hiroshima leads to a review of the last days of World War II, a profile of the scientists who worked on the bomb, an examination of why arms control has failed and a discussion on the current anti-nuke movement and the nuclear dilemma.

For Chemistry professor **Tom Forrest**, the microcomputer is an aid to teaching and learning about organic chemistry.

In the classroom, it's an "add-on" feature to the regular lecture and is used to simulate various chemical reactions by generating graphics on a screen. "The students can actually see molecules dance on the screen carrying out these reactions," Forrest says. However, the main use has been to supply the students with an alternate medium so they can study the subject themselves.

Forrest has created a series of drill exercises for use on the micros, which are supplements to the traditional textbook problems and are available in the Chemistry Learning Resource Centre. Students may go to the centre at their leisure to practice the exercises. The computer randomly generates organic structures (enough to fill the books in 1,000 Killam libraries) which the students use for exercises or synthetic problems. In the latter case, for example, a starting material and a target molecule are generated and the student is asked to supply the reagent necessary to carry out the conversion. An incorrect answer will cause the real product of the student-oriented reagent to appear and the student must try again.

Forrest says the programs are still under development, with various help levels being added and new programs being written. He has not done a formal evaluation of his teaching method but says there are times when the two computers are going full tilt as 300 students take advantage of his software to bone up on organic chemistry.



Professor George Milligan uses a personal approach in helping students.

Meanwhile, two other teaching approaches on campus have withstood the test of time. One is an audio-tutorial method used in Biology 1000. The other is used in Psychology 1010 where students work through readings at their own pace and, when they have mastered a unit, attend an individual tutorial which consists of a brief test on the readings, a review of the test and discussion.

Acquiring a set body of knowledge before coming to class may be unrealistic but **Herb Gamberg** claims it's the ideal staging ground for a good lecture. He says professors lecture to students at the wrong time. If students are going to listen well, they need some established point of reference. He says readings and tutorials should come before a formal lecture, especially in introductory courses, like Sociology, where stu-

dents come to class with no previous knowledge on the subject but with certain assumptions which have to be distilled.

It's clear Gamberg is concerned about motivating students in their early years at university. Psychologist **Max Cynader** agrees. In his introductory class, he tries to communicate the excitement in his research to the students in the lecture hall.

The same holds true for geologist **Barrie Clarke**, whose philosophy is that a teacher should make an investment in the student in the freshman year. He does this by spending time with them, taking them on extended field trips and holding informal meetings with them. "It's the best way to build bonds."

What makes a good lecture? Is there an ideal way to deliver a good lecture?

Forty faculty met recently in the Learning Resources Centre to share their thoughts on

the subject. They viewed five videotapes of professors lecturing both undergraduate and graduate classes, large and small, in different disciplines. A discussion followed, led by Jim Pincock, former winner of the Alumni Association's Teaching Award of Excellence. He had some personal observations about what constitutes a good lecture: try to make the lecture as much of a conversation as possible; know your material well; don't use notes; get your own enthusiasm across to the student.

Although Physiology and Biophysics professor **Bill Josenhans** does not deny that these are important criteria for a good teacher, he says, in the final analysis, it's still "easier to say what is not a good lecture than what is a good one."

— Roselle Green

Alcoholics can find help on campus

It starts off innocently enough — a few drinks in the Grawood with friends after a tough exam, the habitual social meeting at the Faculty Club or Graduate House after work on Friday. For many, it only takes one or two evenings of overindulgence to learn the lesson — drinking to excess on a regular basis isn't worth the money or the next day's miseries.

For others, however, that innocent beginning is the start of something bigger. The sense of camaraderie while out drinking with peers feels a lot better than going back to the library to study or home to an empty apartment and more work.

After a while, the Friday night social event becomes the Thursday and Friday night binge. In time, a person's social life may begin to revolve around a club and "drinking buddies." Touching base with them every day for the cocktail hour and then making an evening of it becomes a habit, as does spending valuable time and money on this new "entertainment."

Dr. Joe Johnson, director of the university's Health Services, says alcoholism and drug abuse are no more prevalent at Dalhousie than in the community at large. He estimates that about 15 per cent of the population has the problem but says Dalhousie is no exception.

Reports in other university publications and the media suggest that university life with its high stress level, liberal attitudes and

flexible schedules, can be very conducive to such problems. Some claim that university students and professors rank high in the statistics of alcoholics and drug abusers.

"When it starts interfering with your life and your ability to function, you are probably an alcoholic or a drug abuser," says Dr. Johnson.

"We see it in both students and staff here at Dalhousie. Alcohol is the worst. After that comes soft drug abuse, like tranquilizers and marijuana. Then there are the hard drugs, like cocaine and heroin.

"There's nothing sadder than to see people unable to cope with work, research, teaching loads or studies."

Dr. Johnson is so concerned about the alcoholics and drug abusers on campus that he is once again sending out the message from Health Services and Counselling and Psychological Services that help is available here on campus.

Maybe you recognize a little of yourself in the description above. Maybe you have let your drinking or drug habit get a little out of hand but wouldn't call yourself an alcoholic or drug abuser.

The hardest part of dealing with the problem is admitting you may have a problem, Dr. Johnson says. The next step is wanting to get help.

"Once a person has admitted he or she has a problem and asks for treatment, we can help," he says. All approaches for

assistance at either Health Services or Counselling are absolutely confidential. "We don't have a hot line to the president, the deans, heads of departments or anybody."

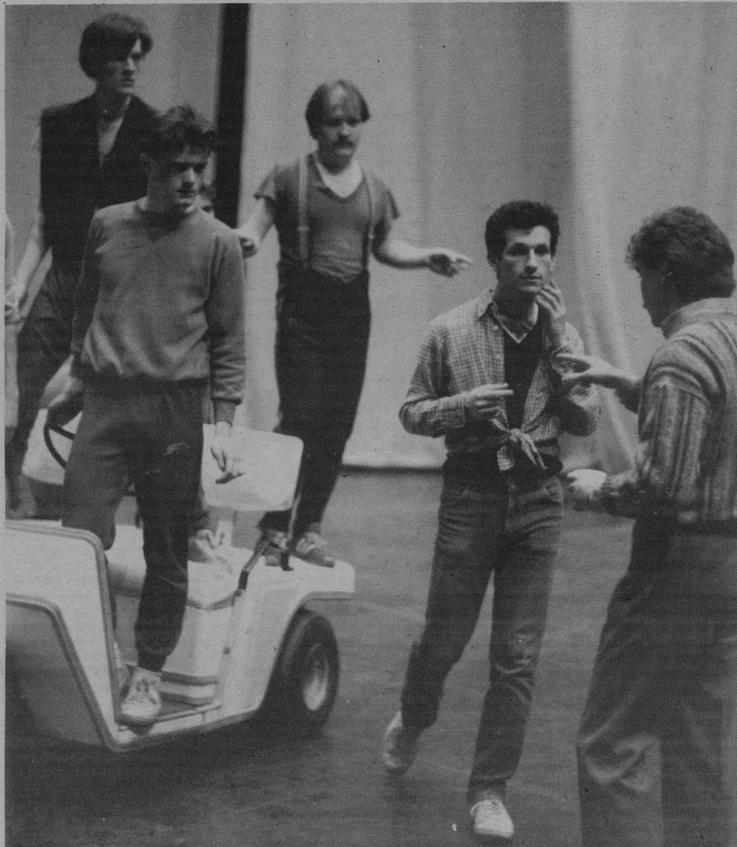
The professionals at Health Services and Counselling are trained to help people in need. And they are people, too, sensitive to the feelings of their patients and clients. For some, treatment may be available at either Health Services or through Counselling and Psychological Services. "We look after a significant number of people ourselves here, without having to refer them outside," says Dr. Johnson.

Others may need or request to be referred to such establishments as the Drug Dependency Commission or Alcoholics Anonymous.

Coping with work or study situations may be the root of an alcohol or drug problem. Interpersonal relationships, money problems or discontent in a job situation can also initiate behaviour that leads to abuse, says Dr. Johnson.

Think about it. When was the last time you had a drink? Did you feel you needed it? Why? If you have a problem, why not reach for help instead of the bottle? It could be the start of something great. GW

What's on at Dalhousie



Director Brian MacKay and choreographer Eric Emmanuele rehearse "The Burger Place Boys" for Dalhousie Theatre Productions' Grease. The show opened last night. (C. Cheung photo)

Thursday March 29

ON STAGE AT THE COHN: Rita MacNeil, she writes and sings about the things she feels and sees. Reg. admission \$7/\$6. Students/Sr. Citizens \$6/\$5.

CHEMISTRY DEPARTMENT SEMINAR: "Kinetics of Photochemical Reactions via Radical Ions." Dr. S.Y. Farid, Eastman Kodak, Rochester, N.Y. 8 p.m., Room 215, Chemistry Building.

MATH, STATISTICS AND COMPUTING SCIENCE COLLOQUIUM: "Toeplitz Operators in Several Variables." Paul Muhly, University of Iowa. LSC Room 2895, 3:30 p.m.

CENTRE FOR AFRICAN STUDIES SEMINAR: "Class fractions, cycles, contradictions and coalitions: in Zambia 1964-1984." Timothy Shaw and Jane Parpart, 1444 Seymour St., 4:30-6 p.m.

Friday March 30

ON STAGE AT THE COHN: Carlos Montoya: legendary Spanish master of flamenco guitar. 8 p.m. Reg. admission \$14/\$12. Students/Sr. Citizens \$12/\$10.

CONTINUING MEDICAL EDUCATION: "Short Course on Rehabilitation Medicine," for family physicians. Rehab. Centre, University Ave. For further information, call 424-2061.

MUSIC DEPARTMENT: Noon-hour recitals. Voice students. Art Gallery, 12:45 p.m. Admission free.

PSYCHOLOGY DEPARTMENT COLLOQUIA: "Infant Speech Perception." Peter Jusczyk, Psychology Dept. Oregon University. LSC, Room 4258/63, 3:30 p.m.

CANADIAN INSTITUTE OF INTERNATIONAL AFFAIRS: "The Future of the Canadian Navy." Commodore F.J. Mifflin, chief of staff, plans and operations for Maritime Command. The Ward Room, CFB Stadacona, Halifax, 11:30 - 1 p.m. For more information, call Doris Boyle, 424-3769.

EDUCATION DEPARTMENT SEMINAR: "The Four E's: Education and Examinations, Excellence and Elites." Dr. Antony Flew, Philosophy Dept., York University, Toronto. Canadian Learning Materials Centre, Killam Library, 4 p.m.

FRIDAY AT FOUR: "Cellular Targets involved in Multistage Carcinogenesis." Dr. I. Bernard Weinstein, Div. of Environmental Sciences & Institute of Cancer Research, Columbia University, N.Y. Lecture Theatre A, Sir Charles Tupper Medical Bldg., 4 p.m.

CHEMISTRY DEPARTMENT SEMINAR: "Cyclodextrin Inclusion Complexes Studied by Fluorescence Probes." Dr. S.Y. Farid, Eastman Kodak, Rochester, N.Y. 1:30 p.m., Room 215, Chemistry Bldg.

APPLIED MATHEMATICS SEMINAR: "Underwater Sound Transmission: A Simple Model." Dr. Dale Ellis, DREA, Killam Room 2622, 4 p.m.

MATH, STATISTICS AND COMPUTING SCIENCE: Operating Theory Seminar. "Groupoids in Operator Theory." Paul Muhly, University of Iowa. Killam Room 4410, 3:30 p.m.

CONTINUING EDUCATION IN DENTISTRY: "Ortho-Perio-Restorative." Dr. Normand Boucher, Philadelphia, along with faculty members Crawford Bain and Gary Foshay. March 30, 31. Room 4116, Dental Bldg. For more information, call 424-2248.

Saturday March 31

SYMPHONY NOVA SCOTIA MAIN SERIES: An all Beethoven concert featuring William Valleau, William Tritt, and Chantal Julliet. Rebecca Cohn Aud. For more information, call 421-7311.

Sunday April 1

SUNDAY FILM SERIES: "Querelle." 1981 Germany. German with English subtitles. Color. Fassbinder's erotically charged film of homosexual lust, domination and murder. Rebecca Cohn Aud. 8 p.m.

Monday April 2

DALHOUSIE COMPARATIVE COMMITTEE: "Why Literary Theory?" Gerald Graff, Northwestern University. Co-sponsored by Dalhousie's English Dept., St. Mary's Faculty of Arts and the Nova Scotia College of Art and Design. MacMechan Auditorium, 8 p.m.

ADVANCED MANAGEMENT CENTRE: "Managing People More Effectively." Resource leader Jim Macaulay, graduate of Dalhousie University, BSc and MBA. Henson Centre, 1261 Seymour St., April 2-4. For more information, call 424-2410.

Tuesday April 3

DALPLEX: Tai Chi class begins today.

ART GALLERY FILM: "Appalachian Spring." WQED TV, 1959, black and white. A story of a young pioneer couple's courtship and wedding, preacher's sermon on the malevolence of fate, and a final regenerative blessing.

"Dance: Four Pioneers." NET, 1966, black and white. A study of four pioneers in modern dance. Screenings in the MacAloney Room, 406, 12:30 p.m., Student Lounge, Arts Centre, 8 p.m. Admission free.

SYMPHONY NOVA SCOTIA CHAMBER MUSIC: "Copland, Appalachian Spring, Stravinsky, Soldier's Tale." Dunn Theatre. For tickets call 421-7311.

ANATOMY DEPARTMENT SEMINAR: "The Anatomical Basis of Acupuncture." Dr. Ian Purkis, Anaesthesia Dept. Tupper Bldg., Room 14B, 11:30 a.m.

Wednesday April 4

GERMAN DEPARTMENT FILM: "Emilia Galotti." Killam auditorium, 8 p.m. Admission free.

ON STAGE AT THE COHN: Royal Winnipeg Ballet will perform: Allegro Brillante, Bluebird pas de deux, Corsaire pas de deux, Translucent Tones, Les Patineurs. Rebecca Cohn, April 4-5. For tickets, call 424-2298.

Thursday April 5

CONTINUING MEDICAL EDUCATION: In co-operation with Pediatrics Dept., presents a "Short Course on Pediatrics for Family Physicians." I.W.K. Hospital for Children, University Ave., April 5 & 6.

EDUCATION DEPARTMENT SEMINAR: "The New Right in Education." Gordon Coombes, Education Dept. Arts Annex, 4 p.m.

ART GALLERY LECTURE: In conjunction with The 7th Dalhousie Drawing Exhibition, John McEwen will give a talk on his work. Art Gallery, 8 p.m.

BIOLOGY DEPARTMENT SEMINAR: "Aspects of copepod ecology." I.A. McLaren, Biology Dept., LSC Room 2970, 11:30 a.m.

Financial woes force enrolment limitations — Betts

The following editorial on enrolment limitations in Canadian universities was written by Donald Betts, dean of the Faculty of Arts and Science.

In Canada during the past four or five years universities have found themselves in steadily worsening financial difficulties. In most Canadian universities enrolments have increased each year throughout the 80's; in Maritime universities enrolments have increased 25 per cent during the past four years. These additional students would fill a university the size of University of New Brunswick, the second biggest university in the Maritimes.

At the same time governments have been decreasing their financial support for universities in real terms; annual "increases" in government grants have in fact been annual decreases when inflation is taken into account.

Boards of Governors, faculty, staff and students alike at universities in Nova Scotia are well aware of and sympathetic to the financial plight of the provincial government with its substantial and increasing debt. However, provincial governments in recent years have been assigning a decreasing fraction of their budgets to post-secondary education. In Nova Scotia in 1977, post-secondary education received 7.3 per cent of the provincial budget while in 1982 support has declined to 5.7 per cent.

I suggest there is a paradox here. The people of Canada are voting with their feet — they are saying clearly, through enrolling in universities in ever increasing numbers,

that university education is a high and increasing priority in their lives. The governments of Canada are voting with their pocketbooks — they are saying quite clearly, through starving the universities financially, that university education is a low and decreasing priority for governments.

What have been the reactions of universities to diminishing financial support from governments? Universities' first priority is to maintain their level of service by a variety of financial measures. Research grants and contracts have been eagerly sought for their overhead, alumni have been canvassed vigorously for annual gifts, major capital fund drives have been launched by several universities and, regrettably, students fees have been increasing at a rate exceeding inflation. Universities have been vigilant in reducing waste and eliminating inessential non-academic operations. In Nova Scotia and other provinces which permit it, universities have gone into debt to support their academic activities. Finally universities have been co-operating more than ever before to share resources and to rationalize programs wherever that is feasible. Such co-operation is particularly noticeable in the Halifax area. Nevertheless each of these measures is of limited effect and all of them together have been unable to compensate completely for increasingly inadequate government support.

What then has been the effect on education of a real decrease in the available financial resources on a per student basis? Universities strive both to maintain standards of instruction and to maintain accessibility to all

qualified students in the face of financial adversity.

Up until now there have been few limits on enrolment as universities have opted instead for a gradual, not very noticeable, erosion of standards of instruction. At Dalhousie, for example, class sizes have increased slowly each year as numbers of students have increased, while numbers of faculty members have decreased due to partial nonreplacement of those who resign or retire. Some low enrolment classes have been cancelled. More and more instruction is given by part-time faculty members hired on a per course basis. Such part-timers are difficult for students to find outside lectures, sometimes are not fully qualified and often have other full-time occupations which command their primary loyalty. In laboratory science courses, equipment is gradually becoming outdated, inadequate in quantity and more and more often in need of repair.

In Nova Scotia the situation worsened suddenly in August 1982 when the government cancelled universities' non-space capital (equipment) grants for 1982-83 and failed to restore such grants for 1983-84. Non-space capital grants are also required for the acquisition of library books and periodicals, another essential but declining resource. The inadequate government operating grants have had the further effect of preventing universities from purchasing adequate amounts of scientific supplies such as chemicals and biological specimens for undergraduate laboratories.

In my opinion and that of many of my colleagues at Dalhousie University, further erosion of standards of instruction is not acceptable.

The Association of Atlantic Universities has recommended that government grants to universities in 1984-85 increase by 12.6 per cent over 1983-84 and the MPHEC has recommended a 9 per cent increase for Maritime universities. If the 1984-85 grants to Nova Scotia universities do not increase by at least six per cent, significant limitations will have to be placed on first year enrolment in Arts and Science at Dalhousie on a faculty-wide basis. There were already at Dalhousie in 1983-84, limitations on enrolment in first-year Engineering and Education and second-year Geology and Computing Science. In addition, enrolment in

first-year courses in English, French and German reached capacity at an early stage last fall and dozens of students were turned away to seek admission to classes in other departments. Next year Biology, Chemistry, Mathematics and Philosophy will also have enrolment limitations and other departments may be forced to follow suit. I understand the situation is not very different in other universities.

Surely it is unwise for governments to continue the financial squeeze on universities. Surely it is unfair for a newspaper to comment, as the *Chronicle-Herald* did editorially on March 17, that universities are "using students as pawns in their negotiations with governments."

TUITION FEES

continued from page 1
already has the highest tuition in the country of any university with more than 3,000 students.

"If you look at last year, it was a 13 to 15 per cent increase. In relative terms, seven per cent is pretty good for the students," he concluded, adding that the decision should bode well for students throughout the province because other universities will not want the dubious distinction of having higher tuition rates than Dalhousie.

Dalhousie, with an accumulated deficit of \$11.5 million, is attempting to chop expenses at a time when new facilities and equipment, especially of a scientific nature are needed. MacKay said the university will cut its \$105 million operating budget by four per cent without faculty layoffs, although it will allow some losses by attrition.

Student representative Karl Nightingale said it was absolutely essential the two sides get together.

"We can't underfund the university because the whole system is in danger of falling apart," he said. "But, although students have to make a reasonable contribution to the cost of funding the university, the cost to the student can't be determined on the basis of shortfall to the university in other areas. I think that by starting on the basis of a sensible tuition policy, the ball is now in the government's court. They have to deal with the whole situation." EM

Physiotherapy — an integral part of treatment

For many injuries and other medical problems, physiotherapy is an integral part of treatment. Just as a physician prescribes medicine to a patient, a physiotherapist prescribes exercise and manipulation of affected areas.

This is Physiotherapy Week (March 25-31), both across Canada and at Dalhousie. To demonstrate to the public the physiotherapist's role in medicine, the Dal School has set up displays at the Kellogg Library and Micmac Mall and is involved with a television feature on the local cable station.

"There are several broad areas into which physiotherapy can be divided — musculo-skeletal, neurological (stroke victims, cerebral palsy patients and others who have some type of motor dysfunction) and cardio-respiratory are the main divisions," explains Ken Hill, acting director of the School of Physiotherapy at Dalhousie.

The school also deals with sports physiotherapy, which has grown in importance with the fitness boom of recent years.

Physiotherapists are largely concerned with restoring or increasing mobility to patients who have suffered physical or neural trauma, Hill says. However, there are other factors involved, such as the psychological needs of the patient or the lingering pain that can accompany an injury and hinder full recovery.

A large part of the physiotherapist's work is involved with treating pain, he says.

"Pain is usually a sign of disruption of some sort, such as pressure, strain or compression on a certain area. Sometimes the disjunction may be remedied and pain can be treated."

Electrical stimulation of affected areas is one method that can be effective in alleviating pain.

"In the case of a patient with intractable pain such as someone with terminal cancer, drugs prescribed by a doctor and electrical stimulation given by a physiotherapist together, might relieve pain."

Most physiotherapy patients are in the musculo-skeletal category, but there has been an increase in the number of neurologically affected patients. Hill cites two reason

— the increase in the average life span (more people reaching the age where they are susceptible to stroke) and the greater incidence of patients with spinal cord injuries (people are travelling more now than they did 20 or 30 years ago). These two factors mean there is a greater need for neurological physiotherapists.

Hill says physiotherapists see all ages of patients. Violent injury is more common in younger people, due to car accidents and sports-related damage, while most stroke patients are obviously older.

James Wall, associate professor, and George Turnbull, assistant professor, have been working extensively in the treatment of stroke patients. Their research involves improving the gait symmetry of stroke patients through therapeutic exercise that will achieve greater benefit to the patient at less cost.

Professor Lydia Makrides, whose specialty is aging and its effects on the body, is involved with the cardio-respiratory aspect of physiotherapy. Besides her work with the School, she is also involved with an innovative, interdisciplinary program of post-operative rehabilitation for people who have had openheart surgery.

The School of Physiotherapy works on this program in conjunction with the Rehabilitation Centre, the Victoria General Hospital and the Cardiology Department at Dalhousie. Psychologists, nurses and dieticians are all involved in the program which helps the patients immediately after surgery and follows through for eight months. There are currently 17 patients, all men, in the program.

Professor Brian Westers is working in the burgeoning field of sports orthopedics. Generally, physiotherapists involved with sports are not dealing with crippling injuries. However, in cases such as knee injuries, extensive therapy is necessary to restore the affected part of the body to health.

Dalhousie is the only university offering physiotherapy in the Atlantic Provinces. Approximately 30 students graduate each year. Hill describes current job prospects as "excellent." EM

"Grease" — product of three-man team

The Dalhousie Theatre Productions' (DTP) version of *Grease* opened last night, and if rehearsals are any indication, the show has at least plenty of energy to offer.

In a typical exercise class last week, the stage was crowded with 25 young bodies in dance and sweat togs, all jumping and gyrating to a pounding piano.

"Arms, lots of arms in this," choreographer Eric Emmanuele yelled and hands immediately started vibrating over bobbing heads. "Sing 'yeah' three or four times there," he yells. "Then give it three punches."

Emmanuele is part of a three-man team which is working hard to make sure DTP's last production of the year is its biggest success. Music is in the hands of John Hollis, who through all this bobbing and gyrating, is singing "bob-shoo-wop-de-bop" to keep everyone in time. Production is under the direction of Brian McKay.

McKay now makes his home in New York but is well-known locally for his roles with the Charlottetown Festival in Prince Edward Island (*On A Summer's Night*, *The Dumbells*, *By George*). He played in the one-man show *Come by the Hills*, which became an award-winning CBC *Superspecial*, in CBC dramas such as *Vanderbergs* and at both the Neptune Theatre and National Arts Centre. To add to his credits, John Hollis says, "He's got a great relationship with the kids."

Hollis, a Dalhousie graduate, is best known in Halifax as a saxophonist with local

"top 40" bands. He has arranged and performed music for national television and radio specials and was musical director for the CBC radio drama series *Once Around*. Two years ago, he directed the music for the DTP production of *Canterbury Tales*.

New York City native Eric Emmanuele was at Dal last year to choreograph *Joseph and His Amazing Technicolor Dreamcoat* for the Student Union drama society. He's also spent time in Venezuela choreographing a ballet for the Ballet Nuovo Mondo de Caracas, in Germany working on a rock video and teaching for the Halifax Dance Association.

The three agree that working together on *Grease* has been a great experience. "It's very communal, more than you would think," Hollis says. "We each take input from all sides and work with it." McKay adds, "There's energy, enthusiasm, a single intention and a lot of love for the hard work we've done."

One look at the rehearsal and it's obvious the enthusiasm is contagious. McKay has just driven on stage in the golf cart which is standing in for the show's hot rod. With a grin, he spins the cart and does a wheelie.

DTP's *Grease* was designed by Robert Doyle with Peter Perina and Robert Reinhold on lights. The show runs until April 1. Tickets are available from the Arts Centre box office. □

Research foundation awards studentships

The Dalhousie Medical Research Foundation has announced the winners of the 1984-86 foundation student scholarships.

They are four first-year medical students, who, with senior investigators, will carry out research on kidney disease, high blood pressure, pancreas transplantation and health problems associated with farming. They are committed to research during the next two summers and in their elective time for two years.

Dr. Raj Bhanot, formerly of Uganda and India, will work on the problems of pancreas transplantation with surgeon **Dr. Allan MacDonald** and pathologist **Dr. Malcolm MacAulay**. **Dr. Bhanot**, 27, has been studying at Dalhousie since 1973 and obtained his PhD in Physiology and Biophysics last year.

Angela Hallett, 22, of Peel, N.B., will study the health problems which arise in farm workers. She will be supervised by **Dr. David Shires**, professor of Family Medicine, Community Health and Epidemiology. **Hallett** received a BA with distinction from King's University.

Paulette F. Newcomb, 22, of Hantsport, N.S., will investigate aspects of circulatory

problems in patients with end-stage kidney disease. Her supervisor will be **Dr. T. J. Montague**, cardiologist. She was awarded a BSc with distinction from Acadia University last year.

Andrew A. Ross, 20, is the youngest to win a foundation studentship. He will conduct hypertension research in the Pharmacology Department under the supervision of **Dr. Harold Robertson** and with **Dr. R. A. Leslie**, both of the Anatomy Department. When he graduated from high school in 1981, **Ross** received the Governor General's medal.

A Foundation studentship is valued at \$10,000 over two years, with an additional \$500 for travel expenses to attend relevant conferences. Each student's supervisor receives \$2,000 to help defray the cost of laboratory expenses. The total value of the studentships awarded by the Foundation this year is \$50,000. They bring to 18 the number of studentships awarded by the Foundation.

—Barbara Hinds



Matti Järvillehto, a professor at the University of Oulu in Oulu, Finland, is at Dal doing research with the Psychology Department. (Watson photo)

Finnish professor studies visual systems

Under normal circumstances, **Matti Järvillehto** would be teaching animal physiology 100 miles from the Arctic Circle. Instead he is doing research with Dalhousie's Psychology Department for the next six months as an international scientific exchange fellow of the Natural Sciences and Engineering Research Council (NSERC).

Järvillehto is co-chairman of the Zoology Department at the University of Oulu in Oulu, Finland. He is at Dalhousie to research the developmental aspects of information transfer in visual systems, using the visual system of the common fly as his research subject. He says he is interested in how light affects photoreceptors and visual interneurons as the visual system develops.

"The fly is a very nice subject because its compound eye is a part of the brain and, like the (human) brain in miniature, its cellular architecture is beautifully organized. It's like a tiny neurological crystal, completely expandable and ideal for research."

to provoke a response, he fills a glass capillary tube (the tip of which is invisible to the naked eye) with a fluorescent dye. He puts the end of the tube into the cell and records its reaction to a flash of light. The dye is then injected into cells and examined under a microscope where the type and function of the cell can be identified and correlated, for both the individual cell and in connection with other cells.

"It is very basic research," Järvillehto says. It will act as the basis for a larger project concerning the effects of information processing on behaviour.

Järvillehto explains that he chose to come to Dalhousie because the university is responsive to research needs. The visit has also allowed him to work again with **Dr. Stephen Shaw** (they worked together on a previous project in Australia) and with **Dr. Ian Meinertzhagen**, whose work he has read about and respects. *SRMW*

New technique to detect leukemia early

Meet **Harvey Freedman**, new to the university and on the trail of a new technique for early detection of one form of cancer — leukemia.

Freedman, a toxicologist with the College of Pharmacy, says this method of detection is simple, takes only a few hours to perform and, to date, the results are promising.

Until now, researchers have faced a major roadblock in detecting leukemia because they have not been able to identify the illness early, says **Freedman**. Clinicians rely on blood tests and biopsies of bone marrow which are tedious and time consuming.

Freedman is using in-vitro blood cell cultures to develop a method that quickly and reliably detects a substance produced by

cancerous white cells. The substance is plasminogen activator, an enzyme that acts as a marker signalling the presence of leukemia and other cancers of the blood.

Freedman has been studying carcinogens for about six years. For the past three years he has been concentrating on developing a rapid assay for screening out cancer causing agents. He's particularly excited about the relevant cancer data that can be retrieved using human blood cell cultures. These cultures are ideal models, he says.

"I can produce data relating chemicals with leukemia or other forms of cancer toxicology. Now I want to share my findings with other university researchers who are involved in cancer-related studies." *RG*

UN new hangout for Dal students

The United Nations may not be a customary hangout for Dalhousie students but that's where a group of them will be in April as they participate in the National Model UN Conference in New York.

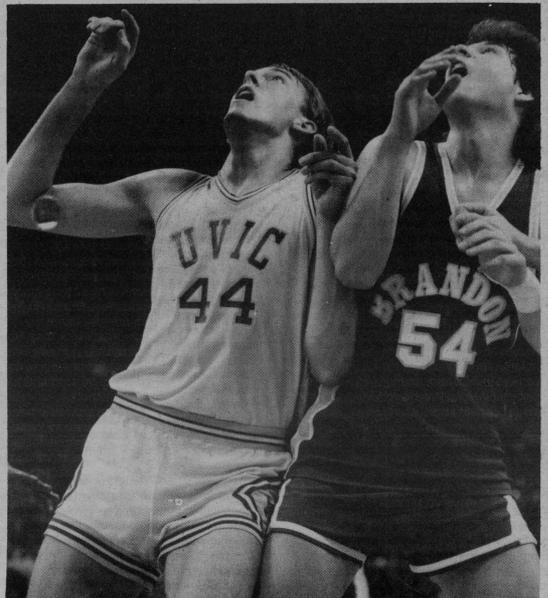
The 15 undergraduate and graduate students, who are relying on professors to reschedule exams and fellow Dalhousians to assist with funding, leave April 17. At the UN, they will join students from across North America and as far as Tokyo in extended simulation exercises involving 150 nations.

Dalhousie's students have been named as representatives of Malta, a small island nation in the Mediterranean which plays a disproportionately large role in world affairs because of its membership on the UN

Security Council and its active participation in the Non-Aligned Movement. To prepare for the conference, the group has been researching relevant themes during the past several months.

Throughout the week, students will sit on various committees to discuss current issues ranging from disarmament to international trade as well as political "hot spots" such as Central America, Lebanon and Angola. At the end of the week, a simulated General Assembly will consider a number of resolutions on priority issues.

To raise funds for the trip, Dal students held a raffie last week. Tickets were sold on campus and throughout the city for a grand prize of a trip for two to Florida. □



Greg Wilkins (44), of the Victoria Vikings, and John Bukich (54), of the Brandon Bobcats, wait for a rebound off the backboards during the final game of the CIAU basketball championships at the Metro Centre. Wilkins was voted most valuable player for the tournament. Dal hosted the championships, which were won by the University of Victoria. (Childenhouse photo)

The Stationery Department will be closed for inventory March 30 to April 2.

Getting to the heart of the matter

Calum MacAulay, a master's student in Physics at Dalhousie, is exploring one of the inner frontiers of science — the magnetic field produced by the electrical activity of the human heart.

Measurement of the extremely small magnetic field already has practical applications in some aspects of health care.

The magnetic signals of the heart of a fetus can be detected during pregnancy when the traditional electrical signals are too small to measure. They can also be used to estimate the build-up of dust in the lungs of coal and asbestos miners.

The practical application of the work is the main reason MacAulay has chosen this area of study. He says he became interested in the heart's magnetic field when he was working towards his bachelor's degree in Engineering and Physics. At an undergraduate conference at the University of New Brunswick, he heard his current supervisor, Dr. Gerhard Stroink, who is a pioneer in the field, talk about the topic and it fascinated him.

"I'm doing something I can see being applied and now it's getting to the point where I am starting to see results," says MacAulay.

The magnetic field is created when the body's natural pacemaker, the upper right-hand chamber of the heart, fires to start the electrical process that culminates in the beating of the heart. A wave of polarization goes through the heart and the cells of the organ contract, triggering the pumping action. The electrical signals that cause the heart to beat also generate magnetic signals.

There are theoretical arguments which indicate the information gleaned from the magnetic signals is somewhat different from that obtained from an electrocardiogram (ECG). In particular, circular currents in the heart would be expected to produce sizeable magnetic fields and very small electrical fields. MacAulay is trying to find out if the magnetic data contains any information the electrocardiogram cannot supply.

MacAulay takes 56 magnetic and electric measurements across the chest — eight rows of seven. He takes the ECG signals, breaks them down into 10 eigen functions (an eigen function is a mathematical device) and does the same thing for the magnetic signals. All the electrical signals can be described as a particular sum of the 10 electric eigen functions and all magnetic signals as a sum of the 10 magnetic eigen functions.



Masters student Calum MacAulay prepares to measure the magnetic waves given off by the body of a daring volunteer. Dal News' very own reporter Ed MacLellan. Ed is positioned under a gradiometer, which measures the magnetic field of the heart and other organs such as the liver and lungs. (Carlos photo)

He then goes to the mainframe computer at the Tupper building and plugs in the data.

"The magnetic eigen functions fit the electric signals quite well and the electric functions fit the magnetic signals quite well, although not as well," he says. "It's these small differences that can tell you whether there's any new information there ... it seems like my magnetic data holds a little more information than the electric signals do."

MacAulay hopes to present his results at an international conference in Vancouver this summer.

His readings are taken by a gradiometer, a device set in a specially designed cubicle of high purity aluminum to screen the mag-

netic radiation produced by the alternating current present in the electrical equipment in the building.

The signals at Dalhousie is one of the most sensitive in the world. The signals from the heart are about one hundred times larger than the sensitivity of the instrument, so that very accurate measurements can be made.

examining the heart is that people don't have to be hooked up to leads, as with an electrocardiogram. Therefore, large numbers of people can be processed in a comparatively short time.

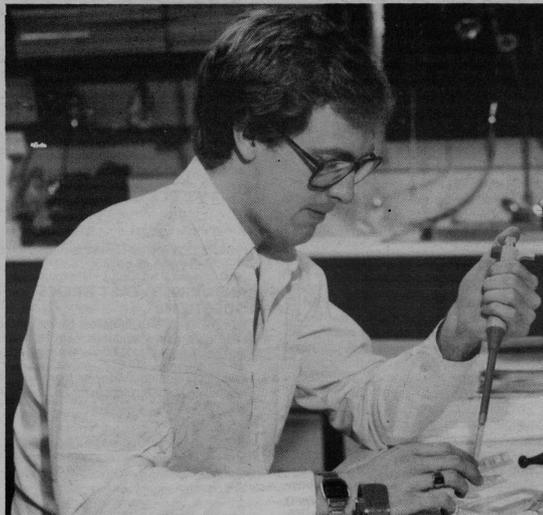
Since much of his research deals with medicine, MacAulay also works closely with Dr. Milan Horacek, a biophysicist with the

Department of Medicine and Physiology. He has received a grant for his research from the Natural Sciences and Engineering Research Council of Canada.

In the future, he plans to continue his studies and to eventually earn a PhD in Physics. He is also interested in pursuing another facet of biomagnetism — neuro-

magnetism. "The field is growing and I may well get into it. The magnetic field of the brain is about 10 times smaller than the heart's field but it is 10 times larger than the smallest we can measure." EM

King's research may show how brain area functions



According to popular analogy, the brain is the body's natural computer.

But, just as the man-made computer can be thrown off track by an unexpected surge of electrical power, the brain can be affected — in ways not fully understood — by the volatile mix of hormones secreted by the body's endocrine glands.

The septum is an area of the brain where, in unscientific terms, the hormones meet the mind.

"If you put information into a computer, you get a printout. If you put a hormone in contact with the septal area of the brain, you get a behavioral response."

Tim King, a doctoral student in anatomy at Dalhousie, is conducting research into this important segment of the brain. He is working with associate professor of anatomy Dr. Dwight M. Nance.

"I've been working with psychoneuroendocrine functions," explains King. "If you want to break that down, that's *psycho* — behavior; *neuro* — working with the brain; and *endocrine* — the hormone system."

King explains why he is working with the septum in his experiments which he conducts on rats.

"The septal area is a part of the limbic system, which is involved in modulating behaviors and emotions. It's like the interface between the higher brain functions, such as the cortex, and the endocrine system."

By using new techniques (neurotoxins) which damage selected areas of the septum, King is able to short-circuit certain brain functions without affecting other neural pathways. He then uses diagnostic techniques to determine which neurotransmitters have been altered.

"Hopefully, my research can be extrapolated to human conditions to find out how this area of the brain is functioning. You have to appreciate hormones, their importance to the brain, the effects they do have and the functions that they can modulate."

As one example, he cites a critical period of infant development when the presence or absence of certain hormones, such as testosterone, can result in masculinization or feminization.

King prefers not to spend much time peering through the microscope, but would rather study model systems, such as female sexual behavior (the focus of his research) or feeding behavior.

"It's obviously a lot different once you get into human populations because of the social factors that come into play," he says, explaining why the field holds so much fascination for him.

"It's over three disciplines, rather than strictly anatomical work."

Before enrolling at Dalhousie, King obtained an honours degree from Bishop's University in Lennoxville, Que. He was raised in Almonte, Ont., near Ottawa. EM

Beyond Dalhousie

FUNDING TASK FORCE ANNOUNCED

Former CBC president Al Johnson has been appointed head of a task force that will look into federal funding arrangements for post-secondary education. The task force will review overall policies that Parliament should adopt to ensure funds it approves for higher education are passed on to the students and the university community. (from the *AUCC Notes*)

SSHRC PLAN

AUCC president Dr. Andrew MacKay has written to federal communications minister Francis Fox concerning funding of the Social Sciences and Humanities Research Council (SSHRC).

The federal government has announced it intends to increase the base 1984-85 SSHRC budget by \$2 million in real terms and by \$2.8 million as an inflationary adjustment. MacKay stated the adjustment, although appreciated, is distressing because there is no mention of maintaining the special grants provided to SSHRC during the past three years in support of Canadian studies and other strategic grants. MacKay said the three-year (1981-82 to 1983-84) allocation of \$5.9 million should be continued and adjusted for inflation and urged the minister and Cabinet to integrate the special grant into SSHRC's base budget for 1984-85. (from the *AUCC Notes*)

SSHRC ANSWERS CRITICS

The Social Sciences and Humanities Research Council (SSHRC) says the number of persisting misconceptions about its allocation of money for research support have prompted preparation of the following statistical data.

The council's grant and scholarship support in current and constant dollars from 1968-69 to 1983-84 — a rise from \$15.6 million to \$54.4 million overall but, in fact, a decline in 1968-69 dollars to \$12.9 million.

An increase in research support, in current dollars, from \$4.3 million in 1968-69 to a budgeted \$26.5 million in 1983-84. The percentage allocated to these programs, as a proportion of the council's overall budget, also increased during this period from 27.6 per cent to 48.7 per cent.

Research in priority (strategic) areas received \$1.4 million in grants in 1979-80, with \$7.2 million budgeted for 1983-84. The proportion of the total grants budget for these programs has risen during the same period from 4.3 per cent to 13.2 per cent.

SSHRC was responding to recent criticism by such bodies as the Canadian Association of University Teachers and the Social Science Federation of Canada. A spokesman says SSHRC is committed to its repeatedly-stated priority towards "disciplinary based research."

DIFFERENTIAL FEE THREATENS STUDENT MOBILITY — AUCC

The Quebec government has announced that out-of-province university students attending Quebec universities will pay differential fees. Tuition for non-resident students will be double that paid by resident students.

In response, the Association of Universities and Colleges of Canada (AUCC) said the policy is "ill-advised and a threat to student mobility." It also said the provincial government's willingness to exempt non-resident francophone students from the higher fees is "discriminatory against Canadians on the basis of language and place of resident."

ENERGY DEVELOPMENT LECTURE

"Oil and Gas Development in *Have Not Regions: Lessons for Nova Scotia*" is the topic of a public forum at noon tomorrow (March 30) at the Bell Auditorium of the Nova Scotia College of Art and Design. The forum concerns the effects of development in Scotland, Newfoundland, the Caribbean and Ecuador and is sponsored by the Gorebrooke Institute and the International Education Centre of Saint Mary's University. For further information, call 429-9780, ext. 515.

SMU BEGINS FUND DRIVE

Saint Mary's University has joined other government funded educational institutions with an announcement of a \$13 million fundraising drive over the next five years.

Assuming the drive reaches its goal, the largest portion of the funds will go towards a \$9 million fitness and recreation centre, \$3 million of which will be paid for by the provincial government. A further \$2.4 million will be spent on new equipment (computer and library), while academic departments will get \$1.9 million. Scholarships, bursaries and fellowships will receive \$1.5 million, \$700,000 will be spent on equipment and services for the disabled and \$500,000 will go to research.

LEARNING CENTRE COMPLETES PHASE ONE OF PROGRAM

During the past two years, the Canadian Learning Materials Centre (CLMC) has instructed a large group of educators, the public and media in Atlantic Canada on improving the Canadian perspective in public school education.

As this first part of the program is completed, fund raising for the second phase is underway. The CLMC hopes to extend instruction in this area to other regions in Canada.

UNIVERSITIES TO PLAY KEY ROLE IN NEW TECHNOLOGIES

Canadian university presidents say their institutions are determined to lead, not lag, in the field of new information technologies.

At a recent conference of the Association of Universities and Colleges of Canada (AUCC) in Montreal, the presidents discussed issues arising from the rapid growth of new technologies, concluding that the information age is an opportunity, not a threat.

While acknowledging the need for universal computer literacy and technological education, the presidents reaffirmed the importance of fundamental analytical communication and problem solving skills. They stressed the need to relate new technologies to human values and to be concerned with the impact of these advances on society.

The presidents also noted the difficulties of coping with increased enrolment and providing up-to-date computer and library equipment in a time of severe financial constraints.

They have asked the AUCC board of directors to explore inter-institutional cooperation in the areas of university, public

and national library networking, issues of rights to intellectual property, the production of Canadian courseware for Canadian universities, the establishment of national consortia, and sources of funding to expand university use of new technologies.

ASTROPHYSICS INSTITUTE ESTABLISHED AT U. OF T.

The Canadian Institute of Theoretical Astrophysics has been set up as a national facility at the University of Toronto.

CITA will appoint long and short term fellows, sponsor conferences and encourage visitors to and from Canadian centres.

NEW STRATEGIC FIELD FOR NSERC FUNDING

Industrial materials and processes have been identified by the Natural Sciences and Engineering Council as new fields of support under its Strategic Grants program. This brings the total number of areas selected for support to eight. The other seven are biotechnology, communications and computers, energy, environmental toxicology, food-agriculture, oceans and an open category.

Staff Matters

Dr. Edgar Gold has been reappointed executive director of the Dalhousie Ocean Studies Program (DOSP) for the period Jan. 1, 1984 to June 30, 1987. It was announced in the Board of Governors *Staff Matters* last week. Dr. Gold also holds an appointment as professor, with tenure, in the Faculty of Law.

Dr. Michael Bishop has been named to the chair of the French Department. The appointment will be for a period of three years commencing July 1, 1984.

Dr. Ian McLaren, a tenured professor in the Biology Department, has been appointed to the George S. Campbell Chair, effective July 1, 1984.

A new appointment has been announced in the Faculty of Graduate Studies. Dr. Keith R. Thompson, BSc (Manchester, 1973), MSc (Manchester, 1974), PhD (Liverpool, 1979), will join the faculty as a full time assistant professor (research) in the Oceanography Department for a limited term, July 1, 1984 to June 30, 1987. Dr. Thompson will also be a member of the Faculty of Arts and Science.

Dr. Mary Brooks has been promoted to the position of associate professor, with tenure, in the School of Business Administration, effective 1984.

In the Faculty of Arts and Science, Dr. Ruth Bleasdale, who recently earned her PhD, has been promoted to the rank of assistant professor in the History Department, effective July 1, 1983. Dr. Jonathan M. Borwein has moved up from associate professor to professor in Mathematics, Statistics and Computing Science, effective March 15, 1984.

In the Faculty of Health Professions, Dr. Ingrid Sketris has been promoted to the position of associate professor in the College of Pharmacy, effective July 1, 1984. In the School of Nursing, Miriam J. Stewart has also moved up to the rank of associate professor, effective July 1, 1984. Cheryl Kozey, formerly a lecturer in the School of Physiotherapy, has also been promoted to assistant professor, effective July 1, 1984.

A number of sabbatical leaves were also announced. In the Faculty of Arts and Science, Dr. Nathan Brett, associate professor in Philosophy, will be on leave from Jan. 1, 1985 until Dec. 31, 1985. Dr. Peter Fillmore, professor of Mathematics, Statistics and Computing Science, will be away for the period July 1, 1984 to June 30, 1985.

Dr. Raymond Klein, associate professor in the Psychology Department, has been granted leave from July 1 to Dec. 31, 1984. Theatre's Robert Merritt, an associate professor, will be on sabbatical from Jan. 1 to June 30, 1985.

In the Faculty of Law, William Charles, the dean, will be on sabbatical leave from July 1, 1985 to June 30, 1986.

Dr. Robert Rudolph, associate professor in the Psychology Department, has been granted a leave of absence for the period July 1 to Dec. 31, 1984.

Dr. Charles A. Gordon, assistant professor in the School of Medicine, has accepted a part-time post-retirement appointment for a further two years, effective July 1, 1983.

Dalhousie was saddened by the deaths of two of its faculty members. Dr. C. Robert Dickson, professor emeritus since 1974, had been on faculty since 1955. Thomas Lawrie had been assistant professor in the Department of Diagnostic Radiology since 1967.

Trivaldal

THIS WEEK'S QUESTIONS

Where is the Forrest Building's sister edifice?

How was the Forrest Building's appearance changed in the late 1920s?

ANSWERS TO LAST WEEK'S QUESTIONS

Stan Whetstone is the tallest player on the Dal Tigers men's basketball team. He's 6'7" and plays guard.

The Tigers women's volleyball team won the last national championship for Dalhousie in 1982.

Library hours are being extended during the weeks of April 2 to April 20.

8am-Midnight, Sunday through Friday 9am-6pm, Saturday

Notebook



Jeff Taylor, lecturer in Pharmacy at Dal, was the 1984 recipient of the Organon Award of the Canadian Society of Hospital Pharmacists (CHSP). The award was for his manuscript entitled "An Evaluation of Medication Errors Made by Pharmacy Clerks in Filling Unit Dose Charts." Frank Potter (left), representing Organon Canada Ltd., is shown presenting the award at the CHSP Awards Night in Toronto. (Inn Studies photo)

OPENINGS FOR DALPLEX CLASSES

Dalplex spring leisure and fitness classes still have space available. Leisure classes include Golf, Squash and Racquetball lessons for all ages. Also offered are Jazz and Break Dancing, Slim, Trim and Swim, Tai Chi and an Athletic Trainer clinic.

For fitness buffs, try the Strength and Stretch clinic, Pre-Natal Fitness, Kids Fitness classes, Running and Jogging clinics or the Flexible Fitness package.

If you would prefer to swim, registration is also continuing for Aquatics classes. Openings exist in all classes including SCUBA, Ladies' Swim and Sauna, Noon Swim and Sauna, Pre-Natal Aquatics, Senior Aquatics, Kayaking and the Junior Leader Corps. For more information, call 424-3372.

IPA CONDUCTS SURVEY

Dal's Institute of Public Affairs is conducting a survey to determine the training needs of fire officers in Nova Scotia.

The survey questionnaire was sent out in December to over 200 of the approximately 750 fire chiefs in the Maritimes. It covers 80 different administration-related topics. Fire officers are asked to rate their own degree of knowledge and skill and also the importance of such knowledge and skill toward their own professional performance.

The survey was requested by the Maritime Fire Chiefs' Association and the Maritime Municipal Training and Development Board. It is being funded by these two groups as well as the Council of Maritime Premiers.

APRIL AT THE FACULTY CLUB

A "Surf and Turf" candlelight dinner featuring half a lobster and an eight ounce sirloin steak for \$13.95 will be featured at the Faculty Club on April 6. On April 11, sample a variety of foods from the "New Orleans" buffet for \$10.95. Two weeks later, on April 25, the Club will offer its "Spring Fling" Buffet for \$10.95.

FRIDAY AT FOUR

"Receptors and Neurotransmission Modulators in Medicine with Particular Reference to Anesthesiology" is the subject of the Walter L. Murr Memorial Lecture, April 6 at 4 p.m. in the Tupper Building's Lecture Theatre A. The lecture will be given by Theodore H. Stanley, professor of anesthesiology at the University of Utah Medical Centre.

A lecture entitled "The Cytoskeleton: Lessons Learned from High-Voltage Microscopy and Chromatophores" will also be given in Lecture Theatre A on April 13 at 4 p.m. Dr. Keith Porter, of the Department of Molecular, Cellular and Developmental Biology at the University of Colorado, will be the speaker.

AVOIDING LABOUR/MANAGEMENT CONFLICT

The Municipal Administration Program (MAP) of the Institute of Public Affairs is offering a two-day seminar, entitled "Avoiding Labour-Management Conflict," on April 12 and 13 at 1261 Seymour Street.

Attention will be focused on management rights, interpretation of collective agreements, discipline, developing effective relations with union representatives, grievance handling and strikes by public employees.

The registration fee is \$150. For more information, contact Vivian Jennings, IPA, Dalhousie University, Halifax, N.S., B3H 3J5 or call 424-2526.

LEARN HOW TO STOP SMOKING

If you've been having trouble keeping your New Year's resolution to kick the habit, try Dalplex's Smoking Cessation course from April 22 to 26. The course will include a fitness assessment, nutrition counselling, advice on stress management, fitness classes and smoking cessation training. For further information, call 424-3372.

WRITING COMPETITION

The Writers' Federation of Nova Scotia is sponsoring its Tenth Annual Writing Competition.

The competition is open to anyone. There are nine categories and over \$1,500 in prize money to be awarded. The categories are: novel, short adult fiction, non-fiction book, magazine article, poetry book, adult poetry, writing for children (booklength), writing for children (short manuscripts) and historical fiction.

First place finishers in book length categories will receive \$250. Winners in the short manuscript categories will receive \$100 to \$150. Runner up prizes will also be awarded. Deadline for submissions is May 31. For further information, write the Writers' Federation of Nova Scotia, P.O. Box 3608, Halifax South, Halifax, N.S., B3J 3K6, or call 423-8116.

PAEDIATRICS COURSE

The special concerns of family physicians treating sick infants and children will be discussed at a short course in paediatrics April 5 and 6 at the IWK Hospital for Children.

Lectures and workshops will cover such topics as resuscitation of the newborn, breast feeding, bottle feeding, weaning, fever, seizures, ear ache, viral infections and child abuse. The course is sponsored by the Division of Continuing Medical Education and the Department of Paediatrics of Dalhousie.

ADVANCED MANAGEMENT CENTRE IN APRIL

The Advanced Management Centre at Dalhousie is offering a number of workshops in April. They are:

"Managing People More Effectively," April 2-4; "Employee Termination: Pitfalls," April 10; and "Managing Technical Resources and Operations," April 11-13. For further information, contact AMC, care of the Institute of Public Affairs. Call 424-2410.

PASSOVER SEDARS

Shaar Shalom Synagogue invites out-of-town Jewish students to be guests at members' homes for Passover sedars. For more information, phone Richard W. at 424-2244 or 423-3331.

Academic Notes

AWARDS

The following awards are available to those eligible. For further information call in person at the Awards Office (AO), Room 124, A&A, or at the Office of the Faculty of Graduate Studies (GS), Room 134, A&A, whichever is indicated.

A.A. Heaps Scholarship. Applicants should have a knowledge of the contribution A.A. Heaps (one of the leaders of the Winnipeg General Strike of 1919) made in the field of social reform. A typed essay of 500 to 1000 words, outlining the applicant's education, employment history and background in community work, must be submitted by May 15. The \$3,000 scholarship is open to graduate or undergraduate students. (AO/GS).

The Law Foundation of B.C. Scholarship Program. Four scholarships, worth \$4,500 each, are available for students entering the first year of the three-year Bachelor of Laws degree program at the University of Victoria. Deadline for application is April 15. (AO)

George F. Flood Memorial Scholarship. This scholarship, with a value of up to \$2,000, will be awarded to the son or daughter of members, employees of members, or members of staff of the Saint John Construction Association. Applicants must be entering the second year of a program leading to

an academic degree. Deadline for application is August 1. (AO)

Lilian D. and Charles R. Bone Memorial Scholarship. A minimum of \$500 will be awarded to a female university graduate with high academic standing entering a post-graduate degree program. Applicants must be graduates of a high school in New Brunswick school district 20 or residents of the greater Saint John area. Deadline for application is May 31. (GS)

SUMMER SCHOOL IN MEXICO

A number of summer courses in the social sciences are being offered in Guadalajara, Mexico. The program is organized through the Faculty of Continuing Education at the University of Calgary. For further information, write: Spring/Summer Sessions, Continuing Education, University of Calgary, 2500 University Dr. N.W., Calgary, Alta. T2N

JUNIOR FELLOW POSITION OPEN AT KING'S

King's College invites applications for the position of junior fellow.

The primary responsibility of this position is tutoring in King's Foundation Year Program an average of 10 hours per week. Attendance at lectures is required. Approx-

imate salary is \$12,000. Candidates must have an MA or equivalent in some area of the humanities or social sciences.

Appointment is subject to budgetary restraints and projected enrolment. Send resume with names of at least two references to: Director, Foundation Year Program, King's College, Coburg Road, Halifax, N.S. B3H 2A1. Deadline is April 16.

MITCHELL CONTRIBUTES CHAPTER TO HANDBOOK

Dr. Donald Mitchell, of the Dal Psychology Department, has contributed a chapter to the latest *Handbook of Physiology*, published by the American Physiological Society. The handbook was last published in 1961. Mitchell's chapter is entitled "Post Natal Development of Function in the Mammalian Visual System" and examines cats and monkeys as well as humans.

Mitchell has also published an article in the January, 1984, *Proceedings of the National Academy of Sciences, USA*. The article explores the long term benefits of patching as a treatment for amblyopia, commonly known as lazy eye. He used animals as models for the treatment.

HAVE YOU EVER BEEN TO SEA, BILLY?

The classroom is a tall ship. The campus, the Caribbean Sea and the North Atlantic. It's all part of a program called SEAmester. For further information on how student participants complete a full college semester of course work on board this sailing classroom, write to: SEAmester, Long Island University, Southampton Campus, Southampton, N.Y., USA, 11968.

COLLECTIONS POLICIES PUBLISHED

The University Library has recently published a Collection Development Policy Statement. The 162-page work presents the university library's general collection policies and specific policies for 31 subject areas. The areas are grouped into the humanities, social sciences, sciences and multidisciplinary support.

The document will greatly assist in the planning of the long range development of the collection. It should also help future efforts in co-operative acquisition and collections rationalization with other Maritime libraries. Complimentary copies are being sent to all AAU libraries and interested metro Halifax libraries.

Dalhousie People

LAW PROF ON ASSIGNMENT FOR JUSTICE DEPARTMENT

Law professor Clare Beckton will be on leave from Dalhousie for two years on special assignment with the federal justice department. She will co-ordinate the review of legislation to determine if it is in compliance with equality rights guaranteed in the Charter of Rights.

While in Ottawa she will also be on an eight-month assignment for the MacDonald Commission on Canada's Future.

TPV'S WATERSON ATTENDS CONFERENCE

Transition Year Program director Karoly Waterston was recently invited to attend a federal-provincial conference on native education held in Truro. She will also take part in a follow-up workshop will be held on April 2 and 3 in Halifax. The workshop is being organized by J.G. Sinclair, of the Medical Services Branch of Health and Welfare Canada.

The Secretary of State has invited Waterston to attend a series of meetings in Ottawa in late April. The purpose of these meetings is to devise ways of implementing recommendations made by the parliamentary special committee on participation of visible minorities in Canadian society.

KEMP WRITING LITURGICAL MUSIC

New liturgical music is one recent project of the Music Department's Dr. Walter Kemp, who is currently on sabbatical.

A Latin mass *Messa Sancti Thomae de Aquino*, written especially for the Chapel Choir of King's College, had its first performance under the direction of choir conductor Helen Roby and is now in the regular Eucharist repertoire at King's. "The St. Paul's Service," a setting of the contemporary communion service Rite A, is now in use at St. Paul's Anglican Church in Halifax, where Kemp is music director. An anthem for treble voices and organ, "O Send Out Thy Light" was commissioned by the Girls Choir of Cambridge, Ont., and premiered yesterday (March 28).

Kemp's hymn tune "King's Halifax," which commemorates the 150th anniversary of the Oxford movement, has been sung in several churches. He has recently completed another hymn tune and a "Nunc Dimittis" for Candlemass.

ANTHROPOLOGISTS SPEAK AT TYP

"Grenada and South Africa" was the topic of two speeches by Dr. E.P. Skinner, internationally known anthropologist, and Franz Boas, of the Anthropology Department of Columbia University. The lecture was co-sponsored by the Transition Year Program, the Student Union and the International Students Organization.

RUGMAN EDITS BOOK

Alan Rugman, director of the Centre for International Business Studies, edited a recently released publication by Praeger of New York, entitled *Multinationals and Technology Transfer*. The book explores aspects of technology transfer from the viewpoint of a representative host nation (Canada) to foreign multinationals. Rugman also co-authored one chapter.

Rugman has published other works including: *Multinationals in Canada: Theory, Performance, and Economic Impact* (1980); *Inside Multinationals: The Economics of Internal Markets* (1981); and *New Theories of the Multinational Enterprise* (1982). He has two books in the works, one scheduled for this year and another for 1985.

MILLS TO GERMANY

Dr. Eric Mills, of the Oceanography Department, will conduct a short course on the history of biological oceanography at the University of Kiel in Kiel, North Germany.

Mills, whose guest professorship will last from April 15 to May 15, says that some of the earliest work in plankton studies was conducted at Kiel's oceanographic institute. He says the trip to Germany will give him a chance to teach and do research. He will be accompanied by his wife, Anne, who is a biologist and will also be doing research. They are both planning to attend an oceanographic conference in Monaco following their stint in Germany.

"FAST EDDIE" PURSUES TRIVIA

Dal News reporter Ed MacLellan teamed up with well-known Metro journalist Harry Flemming last weekend to win the Halifax Press Club's second trivia challenge competition. Competing against the Ottawa Press Club team, our man Eddie, one of the Press Club's current trivia champions, and Harry Flemming, also a long-standing Club trivia whiz devastated the "team from the Hill" by a whopping 76 to 24.

When asked how he remembers such obscure facts as the television show Dennis Weaver performed in right after "Gunsmoke" (the answer is "Kentucky Jones"), or the name of Ulysses' son (Telemachus), Eddie, a modest fellow, answered matter of factly, "In the course of my careers I have spent a few years on unemployment, and I read a lot. Some of the stuff just sticks. Once you start competing in trivia contests, you start paying attention to and remembering those little facts that you figure will show up as questions."

"Fast Eddie," as he's known in the sports and trivia world in Metro, started his career as a trivia whiz when he was just a youngster, competing in 4H radio quizzes and participating on a Reach for the Top team. He's been competing in the Press Club's trivia competitions since his team mate Harry Flemming initiated them in 1980.



Agnes Aidoo, of the African Training and Research Centre for Women in Addis Ababa, was at Dalhousie in March to participate in a workshop on Women and Development in Africa. (Carlos photo)

"Harry's like the 'godfather of trivia.' His knowledge, especially of political history, is just incredible. It makes it pretty easy to win this kind of competition with a partner like Harry."

Ed, who has also participated in sports trivia contests "with less success," has now taken over from Harry as the Club's trivia master, running the Saturday afternoon tournaments.

FELLOWSHIP AWARDED TO DAL PROFESSOR

A Commonwealth Medical Fellowship has been awarded to Dr. Richard MacLachlan, assistant professor of Family Medicine at Dal and physician at Cowie Hill Family Medicine Centre.

The fellowship, valued at about \$15,000, will allow MacLachlan to spend a year at St. Thomas' Hospital in London, England, working in community medicine and epidemiology and studying illness patterns in families and the use of computers in predicting such patterns.

AUTHOR TO GIVE PUBLIC LECTURE

Northwestern University professor Gerald Gaff, author of *Literature Against Itself* and other works, will give a lecture entitled "Why Literary Theory?" April 2 at 8 p.m. in the MacLellan Auditorium.

The lecture is sponsored by the Dalhousie Comparative Literature Committee in conjunction with the English Department, the Saint Mary's University Faculty of Arts and the Nova Scotia College of Art and Design.

PSYCHOLOGY PROFESSOR SPEAKS AT U.S. UNIVERSITY

Dr. Benjamin Rusak, of Dal's Psychology Department, was at Northwestern University to speak at the Third Annual Constance S. Campbell Memorial Lecture. His speech was entitled "Darkness at Noon: Physiology of Circadian Rhythm Entrainment".

Classified

FOR SALE: 1975 Chevrolet Bel Air. Needs some body work, half already done. Great second car. Call Audria at 2279 (days) or 652-3302 (eves). Asking \$350. Must sell. Unlicensed.

WANTED: Books for library at St. Lucia School for children ages 5-15. Will pick up. Call Dr. James Campbell at 422-6944 or 428-2682.

SUBLET: Two bedroom apartment. Heat, laundry, parking, option to renew. 423-6018 after 10 p.m.

WANTED: Quiet apartment for dentist student and working spouse. (No kids or pets). Prefer near Dal. 426-7151 (days) or 861-2963 after 4 p.m. Ask for Sandra or leave message.

FOR SALE: Books available at the Institute of Public Affairs. "Nova Scotia Blackie: An Historical and Structural Overview" and "Poverty in Nova Scotia: Brief for Special Committee on Poverty, Senate of Canada." Stop in at 1261 Seymour St or phone 424-2526.

WANTED: Furnished home near campus for professor, wife and child. Jan. 1 to May 1, 1985. 424-2385 (days) or 422-5382 (eves)

FOR SALE: Four bedroom house, 1 1/2 baths. 6165 Jubilee Rd. \$173,000. Call 423-3527 (eves)

WANTED: Three bedroom house for visiting prof. from July 1 to Dec. 31, 1984. Close to Dal. 424-7080 ext 133

FOR SALE: Single bed. Mattress and box spring. Excellent condition, easy to move. \$60. Call 425-3414 (late evening) or 424-2279.

FOR SALE: Radio Shack TRS 80 color computer, 16K. Extended basic with dataset. Brand new, reasonable price. Call 428-2648 until 4:30 p.m. or 445-4329 after 5 p.m. and on weekends.

TO SUBLET: Two bedroom apartment in Quinpool Towers. \$588/month, includes heat and hot water. June 1 to August 31. Option to renew. Available earlier if desired. 422-2485.

FOR SALE: Small fridge with freezer, 4 months old, excellent condition. Call lan at 423-8005 or 423-2915

TO SUBLET: 3-4 bedroom house, Henry St. near Jubilee. Rent is negotiable. Avail. July 1 to August 31. 424-3318.

FOR RENT: Two bedroom house, furnished, lake frontage, 15 km from rotary, just off hwy. 103. \$600/month plus utilities. Avail. July 1/84 to July 1/85. 424-3324 (days) 876-7068 (eves)

WANTED: Nostalgic scouting items of interest to present and future boy scouts. For more information, call Dave Winter at 424-2480 or 865-2051.

WANTED: New members for a food co-operative. In South End. Phone Marion at 423-5847.

If you have something to sell or rent, or if you want to buy something, this space is reserved for you. Dal News will list your Classified Ad, free of charge, just send in your submission (please keep it as short as possible) with a request for how long to run (we will try to run it for as long as possible, space permitting) to Classified, Dal News, Public Relations Office, Dalhousie University, Halifax, N.S. B3H 3J5. Please include a phone number, which will only be published on request. Sorry, no phone submissions accepted.