

A proud moment for McGill: The installation of Principal David Johnston.

ANNUAL GENERAL MEETING



Notice is hereby given of the Annual General Meeting of the Graduates' Society of McGill University. Thursday, September 25, 1980 5:30 p.m. Oval Room Ritz-Carlton Hotel

For Graduate Governor on McGill's Board of

President, J.G. Fitzpatrick Construction Ltd.

Former Director, McGill Graduates' Society.

Former President, McGill Graduates' Society.

Former Director, New Brunswick Branch of the

Governors

Term—Five Years

For President

Term—One Year

For First Vice-President

J.G. (Gerry) Fitzpatrick, BSc'43

McGill Graduates' Society.

The Meeting is called for the purpose of receiving reports, presenting awards, electing and installing officers, appointing auditors, and other business. Harriet Sairs-Honorary Secretary

fo

GRADUATES' SOCIETY NOMINATIONS



J.G. Fitzpatrick



John M. Hallward

John M. Hallward, BA'50, MA'53 (Oxford) Vice-President, J.J.C.T. Fine Arts Ltd Director, Helix Investments Ltd Member, Board of Governors of The Study. Chairman of the Board, Centraide (Montreal) First Vice-President, McGill Graduates' Society. Chairman, McGill News Editorial Board.



Richard W. Pound



Carlyle Johnston

Term—One Year Richard W. Pound, BCom'62, BCL'67 Former Director, McGill Society of Montreal. Graduates' Society Representative, McGill Athletics Board. Trustee, Martlet Foundation. Second Vice-President, McGill Graduates' Society. Former Reunion Chairman, McGill Graduates Society President, Canadian Olympic Association.

Member, International Olympic Committee. Lawyer, Stikeman, Elliott, Tamaki, Mercier and Robb, Advocates.

For Second Vice-President Term-One Year Carlyle Johnston, BA'50, BCL'53 Chairman, McGill Alma Mater Fund. Lawyer, Lavery, O'Brien, et al, Advocates.

Director, McGill Graduates' Society. Member, McGill Fund Council. Class Agent, Law'53.

For Vice President Alumnae Term—Cne Year Joan McGuigan, BCom'55 For Secretary Term-Two Years Martha McKenna, BSc'49 For Treasurer Term—Two Years Edward Cleather, BA'51

For Members of the Board of Directors Term-Two Years David Cobbett, BA'66 Mitzi Doorin, BA'68, BCL'71 Gordon 3. Currie, BEng'56 BernardMoscovitz, BA'66 Peter Walsh, BA'52, BCL'55

For Regonal Vice-Presidents Term—One Year **Atlantic Provinces** - John William Ritchie, BSc(Agr)'51 Quebec(excluding Montreal) - Willian T. Ward, BEng'48 Ottawa Valley & Northern Ontario - JoAnre S.T. Cohen Sulzenko, BA'68 Central Ontario R. Janes McCoubrey, BCom'66 **Prairie Frovinces** - JanetPollock, BSc'53 British Columbia - Andrew Boak Alexander, BArch'62 Great Britain Barry J. Moughton, MCL'58 New England States Robeit Sylvester, BA'38 U.S.A. East - Richard M. Hart PhD'70, MBA'73 U.S.A. Central - Sidney A. Schachter, BCom'47 U.S.A. West - Norman D. Morrison, MD'34 Caribbean - George L. Bovell, BSc(Agr)'45 Bermuda - John D. Stubbs, MD'56

Article XIII of the Society's bylaws provides for nominatons by the Nominating Committee to fill vacancies on the Board of Directors and the university's Bcard of Governors. Additional nominations for any office received before July 31, 1980, and signed ty at least twenty-five members in good standing, will be placed on a ballot and a postal electionheld. If, however, the Nominating Committee's selections are acceptable to graduates, those named will take office at the Annual General Meeting



McGill News staff members receive letters from the four corners of the globe (a source of pleasure for editor and office philatelist alike). Increased printing and mailing costs for the publication, however, will soon result in *decreased* circulation. Beginning with the Fall 1980 issue, the magazine will be sent without charge only to Ama Mater Fund donors and recent graduates.

Beginning with the October 1980 issue, the *McGill News* will reappear quarterly as a *magazine*. (The summer issue, June 1980, will be the last to appear as a newspaper.) A recent readership survey confirmed that most graduates prefer the magazine format. We are happy to make this change; it will, however, significantly increase publishing and mailing costs.

Since 1976 the *News* has been sent without charge to 65,000 graduates, staff, and contributors to the university—55,000 in Canada, 9,000 in the United States, and 1,000 in other countries around the globe. We would very much like to continue to send it to all of you on the same basis, but it is no longer financially possible to do so.

Commencing with the October 1980 issue, we shall continue to send the McGill News without charge to all graduates in the first three years following their graduation, and to all other graduates and friends of the university who make annual contributions to McGill.

We very much hope that all alumni will want to stay in touch with McGill and receive news of their fellow graduates and their university during these important times. If you have not already done so, we invite you to make a contribution to McGill—and thereby continue to receive the *McGill News*.

Please make cheques payable to the Martlet Foundation (or, if you are a resident of the United States, to the Friends of McGill University Inc.) and forward to: Department ''N'', 3605 Mountain Street, Montreal, Quebec H3G 2M1.

Gifts are tax deductible in Canada and the United States.

John Hallward, Chairman, *McGill News* Editorial Board

Gary Richards, Executive Director, Graduates' Society

Editorial Board Editor Carol Stairs Assistant Editor Charlotte Hussey Members John Hallward (Chairman), Andrew Allen, Edith David Bourke, Gretta Chambers, David Cabbet, Kotia Mall
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The installation of the principal: A 150-year-old tradition

I. Edward Schreyer, Governor-General of Canada and by Letters Patent given by our Gracious Queen Victoria in the sixteenth year of Her Reign [1852]. Visitor of this University, do receive David Lloyd Johnston to the Office of Principal and Vice-Chancellor of the University and, in testimony thereof. I entrust the Charter and Seal of the University to his keeping.

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Surrounded by numerous government dig-nitaries, representatives of over fifty Canadian and American universities, and a thousand McGill staff members, students, and well-wishers, David Lloyd Johnston was formally installed as the university's fourteenth principal at a colourful ceremony held February 8 at Place des Arts. Thirty-eightyear-old Johnston, the youngest chief administrator of any Canadian university, took over the reigns of power last September upon the retirement of Dr. Robert Bell; the nod from the University Visitor, Governor-General Schreyer, symbolized the traditional approval accorded each new head of the 'Royal Institution for the Advancement of Learning.

The hour-long ritual featured an impressive "Inductio" composed for the occasion by Professor Bengt Hambraeus and performed from the celestial regions of the third balcony-by the Music Faculty's concert choir and soloists. There followed formal messages of welcome from representatives of the university's academic and non-academic staff, students, and graduates. Speaking on behalf of all McGill alumni, Graduates' Society President Edward Ballon said: "Mr. Principal, it is my happy honour to report the widespread enthusiasm with which your appointment has been received by the graduates of our great university. This enthusiasm stems partly from your dedication to the highest standards of scholarship, partly from your keen concern for the all-round development of the individual, and partly from your sensitivity to McGill's important responsibilities to our City, to our Province, and to our Country. We have welcomed, too, your concern for people, as you embark on a job involving the leadership of such a vast university community. On this occasion of your installation as Principal, may I, as the official representative of the Graduates' Society, express our warm welcome, our loyal support, and our delight.

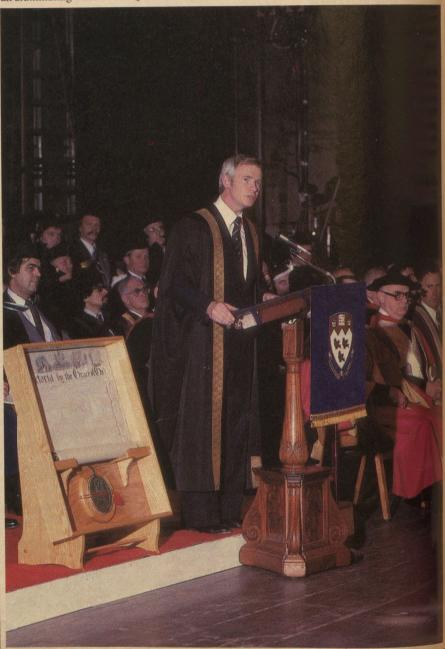
Johnston then removed his gold-tasselled mortarboard and stood proudly before the ornate, carved podium to deliver his formal address on the theme, McGill's mission in this

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decade: "Our fundamental mission is the advancement of learning....One may characterize this advancement in three geographical orientations, Quebec, Canada, and the international community, and a fourth that transcends geography—was it Frank Scott, McGill's towering poet-lawyer, who described it as the "Country of the Mind"?... Its mission in Quebec is defined by its remarkable opportunity to serve two cultures and, in serving, to bridge them and to provide an illuminating window for Quebec to the rest of Canada, to North America, and to the international community. This role of McGill in Quebec is not new, though it now takes on a new importance....

"That leads us naturally to McGill's role as a university in Canada. In its 1965 Brief to the Royal Commission on Bilingualism and Biculturalism, McGill said this: 'It cannot be doubted that the location of English-speaking universities in Quebec can be of inestimable benefit to the whole of English-speaking Canada, as a means of fostering the duality of Canadian culture and encouraging the growing understanding between English-speaking universities in other Provinces and French Canada'....

"Finally, McGill is an international university simply as a consequence of its commitment to the advancement of learning measured by international standards of quality. Thus its scholars in various disciplines contribute to and learn from the work of other scholars in every part of the world. Over 120 different countries are represented in



McGill's student body. One student in nine comes from beyond Canada's border and adds his unique experiences to a learning atmosphere which welcomes diversity and recognizes that each of us grows by contact and friendship with others of different traditions.

"In reflecting on these three geographical orientations we recognize that in the most fundamental sense we transcend borders. We speak of the country of the mind. We believe that the advancement of learning is liberating for the individual and for the society, for all of society, that the cause in which each of us is engaged is to provide continuously for a culture, for a number of cultures, in which freedom and rationality prevail.

What are the peculiar characteristics of McGill which shape and suit it for this mission? There are at least five. First the vigorous interaction of teaching and research; secondly a substantial number of professional schools; thirdly a broadly based, multifaceted university; fourthly a strong commitment to quality; and fifthly a collegial system of government and collegial goals. I wish to focus on the last two of these, quality and collegiality, because I think they present the most demanding challenges for us in this decade ...

The challenge of quality requires that we undertake individually and institutionally a renewing creativity that begins with the rejection of complacency and self-satisfaction, that welcomes critical appraisal, and that prays for the faith and the courage to insist on the best that lies within each of us in our mission to the country of the mind.

"And now to collegiality because I believe

Chancellor Conrad Harrington, University Visitor Edward Schreyer, and Board of Governors chairman Alan Gold welcome David Johnston (third from left) as McGill's fourteenth princpal.

As brightly garbed academics took their places on the stage, fouryear-old Catherine ("Sammy") Johnston caught sight of McGill's fourteenth principal, resplendent in black and gold. For the thousand guests, it was a silent moment of pomp and circumstance; but for Sammy, it was a family affair as she exclaimed, "There's my daddy!"

collegiality and quality will be closely interlinked in this decade, that we shall succeed in both or succeed in neither. A definition of collegiality would not confine it to any specific political forum. Perhaps it is closest conceptually to a democratic system. As for any such participatory system, it is probably above all an attitude....It will only work when most members of the group perceive that in fact the collective activities of the group conform most of the time to their idea of the common aims. And thus for us administrative structures must allow for the free flow of information throughout the community and must encourage wide interest in the decision-making function...

We have struggled hard and successfully to make collegiality work at McGill. But let us remind ourselves that it does not require individual participation in all decisionmaking. Chief Justice Bora Laskin of the Supreme Court of Canada, an early President of

the Canadian Association of University Teachers, was an articulate advocate for a greater voice for faculty in the affairs of the university, but he has asked recently if professors were not spending too much time away from their classrooms and their research in endless committee meetings.... He wonders whether administration by the many may result in administration by none.

"There is a final ingredient in the goal of quality and the concept of collegiality which is necessary to complete a working trinity and that is commitment-the commitment by each of us.... In underlining commitment may I pay tribute to our last Principal, Dr. Bell, who represented this quality so remarkably. Dr. Bell devoted a most significant amount of effort to the selection of academic leaders and selected people who shared his commitment to the University.... McGill has as fine a group of dedicated and deeply concerned University administrators as one could find anywhere."

A journey "down McGill's river of time" can be very instructive, Johnston stated. While the waters have been turbulent and the current fast, the voyage, like James McGill's furtrading ventures into the Northwest, has been invigorating. It leads relentlessly to a larger purpose. We come to know that from adversity comes strength, that from battling creatively comes self-reliance, and that from an unswerving commitment to enlightenment comes a legacy of enlightened service to the community. McGill's progress, like that of our country, confirms the prophetic vision of McGill's creators who seized for its motto the proposition, "By hard work all things increase and grow." Carol Stairs



WHAT THE MARTLET HEARS

"Matchmaker, matchmaker..."

"Employers are desperate for MBA graduates and they're paying excellent starting salaries to get them." In light of the 'gloom and doom' that usually clouds the employment horizon for graduating university students, this may seem a startling statement, but Dr. Robert Cooper, associate dean of the Management Faculty and MBA (Master's of Business Administration) program director, has the facts to back it up. In a recent survey conducted by the Financial Post, most Canadian business faculties predicted that all their students would be hired within six months of graduation; the majority would be offered jobs before they even received their sheepskins.

For McGill's MBA graduates, this bright outlook assumed an added lustre last summer with the establishment of the MBA Placement Office in the Faculty's Bronfman Building. 'But if MBA graduates are so marketable,' you may well ask, 'isn't a placement office somehow redundant?'

Not so, says director Brenda Martin. Rather, the Placement Office provides an important, and hitherto-untapped, communications link between potential employer and prospective employee—the 250 students now enrolled in McGill's day and evening MBA program represent a considerable resource.

"The office came into existence in response to the demand from corporations interested in recruiting our graduates," Martin explains. "Until now, these companies recruited either by going through the university's regular placement office and Canada Manpower, or by contacting individual professors in the Management Faculty."

About twenty-five multinational companies now actively recruit personnel through the Placement Office, says Martin. "Also, a good many smaller firms contact us to see if we have someone suitable for them, and we receive the occasional call from a university offering a non-PhD teaching position."

In a typical transaction, a company's personnel officer calls Martin and describes the kind of graduate his company wishes to hire. (General Foods, for example, is interested primarily in students with special training in marketing and finance.) The job description is then posted on the Faculty bulletin board. "Students interested in the position come to see me about making a formal application to the company," says Martin. "We screen by personal interviews and through a series of

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application forms, such as the one put out by the University College Placement Association.'' The office makes every effort to match student to position. ''A shy student, for example, is more likely to thrive in a research laboratory than in a marketing or public relations function,'' Martin observes. The student is also able to make an informed decision about the company to which he is applying the Placement Office has an up-to-date library of corporate literature.

Of great assistance to prospective employers is the 48-page booklet entitled McGill MBA 1980, to be updated and published annually by the Placement Office. The booklet profiles graduating MBA students, listing their names, addresses, and spoken languages, as well as their personal, academic, and employment histories. A photograph of each student is also included. "It's an excellent reference book," says Mario Donati, director of personnel recruitment for Montreal Engineering Company Limited, a large national firm with international contracts. "By presenting a bird's-eye view of the graduates' qualifications and interests, it's much easier for us to decide which students best meet our requirements. It also helps us remember them once the interviews are over.'

Since the Placement Office did not become fully operational until mid-August, it was January before the publication was available for distribution to recruiters. "We certainly would like to have seen the book last fall," says Donati. "As it was, we posted our job description on the university bulletin board and waited for response from students."

Aside from this small delay, Donati is high in his praise of the Placement Office. "Considering the very brief time it has been in operation, it's already a good program," he says. "The staff are super-helpful and accommodating." The MBA students who use and benefit from the service share Donati's enthusiasm. George Goodwin cites the office's convenient location in the Management building as an important plus. "In previous years, MBA students were recruited through the university's regular placement service up the hill," he explains. "Now, with the office, interview rooms, and classes together under one roof, life is that much simpler and we can schedule our time more effectively." "They offer a very personal, verv helpful program," adds Joan di Pietro. BEng'74, DipM'77, another final-year student. "The staff is never too busy to listen to your problems or to answer your questions. They keep careful track of everything and will even mail applications for you if they know you're too busy to meet the deadline."

Martin and her staff (one part-time and one full-time secretary) offer advice and helpful hints on every aspect of job hunting, from preparing a professional *curriculum vitae* to dressing for an interview. Students take their recommendations very seriously. Martin chuckles as she remembers the time that all her candidates "were spruced up and clean, wearing shirts and ties and looking very sharp" in readiness for a visit from a company recruiter. "You can imagine my surprise when the recruiter turned up dressed in a casual, short-sleeved sport shirt!"

Where does the fledgling Placement Office go from here? "What I want to do now," says Martin, "is encourage McGill alumni interested in changing jobs to use our office as a way of getting in touch with the various opportunities available in fields other than the one they're in now. I see it as a sort of clearing house, or alumni bank, of potential jobchangers to which I would refer whenever a suitable opportunity presents itself."

MBA program director Cooper recently wrote an article for CASE Currents, a magazine published by the Washington-based Council for the Advancement and Support of Education, in which he stressed: "A university is a business. Like any other business, it delivers a service or product to the marketplace....The key to business planning...is to recognize market needs and then develop a product or service in response to those needs."

McGill's new MBA Placement Office offers the business community the pick of its graduates and, in so doing, serves its students in a truly positive way. Given the Faculty's business acumen, one can rest assured that both product and service are being delivered first-class all the way. Christine Farr *****

Building second-language skills

"The enrolment of French-Canadian students at McGill is increasing all the time, so we offer special courses in English to help them develop the skills they need in order to be successful in their university studies," explains Assistant Professor Barbara Sheppard, director of McGill's Centre for Second Languages (known until recently as the French Language Centre).

At first glance, it may seem strange that English has been included in the "secondlanguage" category at McGill, an Englishlanguage institution down to its very roots. The fact remains, however, that 20 per cent of today's student body list French as their mother tongue; an additional 20 per cent list neither French nor English as their native language. Students from abroad are required to take tests for English proficiency before admission to McGill, so the university is able to help satisfy their language needs when they arrive on campus. There is, however, no test for French Canadians, many of whom speak English well enough to get by, but would benefit from additional training in composition, grammar, and comprehension.

In 1978 the Board of Governors approved a Senate proposal that urged the provision of increased language training for non-anglophone students. "McGill's language policy," reads the document, "reflects the university's determination to retain its essential character while meeting the changing needs of its students and assuming its role as a meeting point of the country's two main languages and cultures....We wish to make francophone students feel welcome at McGill."

For many years students have been permitted to write papers and examinations in either French or English, but for francophones wishing to improve their English-language skills there have been, until recently, only limited opportunities. (These include continuing education and summer school courses in English as a second language, a three-credit course in the Faculty of Agriculture, and an introductory literature and composition course in the English department.) "A francophone student can find his way through McGill in courses taught in French, but this is a bad solution," explains Associate Dean of Arts Dr. Leslie Duer, an associate professor of English. "Their ability to take part in the general education here is restricted by their limited use of English.

A survey conducted over a year ago by McGill's Planning Commission revealed that the withdrawal and failure rate among firstand second-year francophone students was higher than that among their anglophone classmates. The survey also found, however, that "the opportunity to study in English was one of the important reasons [francophone students had] for choosing McGill." Another reason was the excellence of programs and professors in their chosen field of study.

Last spring the Board of Governors authorized funding for voluntary English-language testing for more than a hundred students as well as for daytime credit courses in English as a Second Language. Developed by the Centre for Second Languages, the intermediate- and advanced-level courses have been enthusiastically received. More than 150 francophone and foreign students are now learning the complex rules—and exceptions—of the English language under the tutelage of eight experienced, part-time instructors.

With financial help from the centre for University Teaching and Learning, Sheppard and her staff are currently developing a series of modules that will enable students to work at their own pace as they overcome particular areas of weakness. "With language teaching," explains the director, "it becomes a very expensive proposition to teach in a traditional manner and give students sufficient individual attention. If you put some of the course into a modular form, you can release your staff to give more time to students in smaller groups." The Centre for Second Languages also benefits from the federal government's bursary program for language monitors. Says Sheppard, "They work in various institutions helping students learn the

other national language. McGill has about six French and six English monitors who help out in small groups. They work all over the campus, but we give them a fairly high proportion of their work."

The administration believes these programs are totally compatible with, and indeed enhance, the university's traditional role. "McGill is an English language university, and it is clear that it can best function and should continue to function in that language," asserts the 1978 Senate report. "An English McGill with a flexible policy on the use of French can best serve the interests of Quebec, Canada, and the international community, and has a unique role to play in developing understanding and cooperation in a pluralistic society." Valerie Lavoie-Simpkins

McGill's honorable graffiti

Editor's Note: Their curiosity piqued by the numerous quotations engraved on McGill's buildings or set into stained-glass windows, the News staff recently invited University Historian Dr. Stanley Frost to decipher the sayings and, if possible, identify the authors. He files this report:

The Graduates' Society tour had reached Egypt's Temple of Abu Simbel. As I gazed at the colossi carved out of the face of a mountain three thousand years ago, my eyes were drawn to the figure of the owl-god of Ancient Egypt. There, roughly carved into the stone, was the name of a fourth-century-B.C. Greek mercenary. Kheilla, like Kilroy, had been there! The scratching of graffiti is, it seems, a timeless occupation.

Most of the old desks in McGill's Arts Building, hoary with age and crumbling from the onslaught of initials, have given way to hygienic, arborite-topped panels designed to defeat even a ball-point pen. But if you retreat into the Redpath Museum and venture behind the pillars that overlook the amphitheatre, you



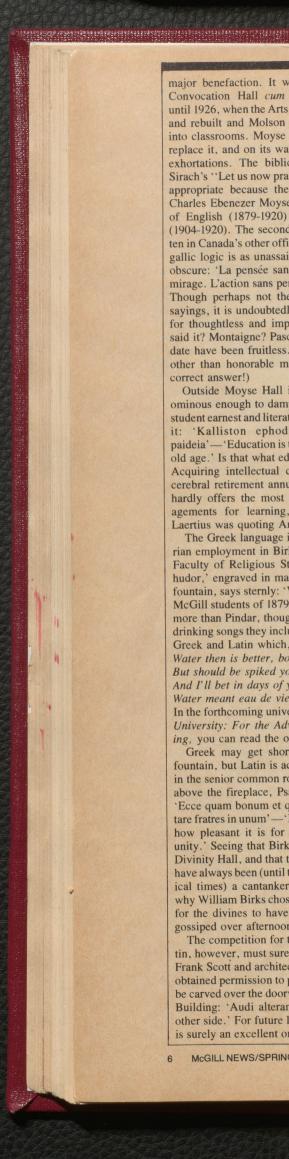
can still find a goodly crop of initials, names, and dates. The oldest is 'Reed, M.D. 1891.' No initials are given and the graduation date seems to have been a misplaced hope—no Reed appears in the medical class lists between 1871 and 1910. As for those "other" graffiti, only too frequently found in places unmentionable and sadly lacking in intelligence, wit, or any other grace, let us leave them unnoticed as they deserve, and move on to what might be called McGill's *honorable* graffiti—those professionally inscribed 'to adorn our buildings and to admonish succeeding generations.'

When you begin to look for them, you find a surprisingly large number, far too many to be dealt with in one brief article. But let us begin by simply looking out the window of my McLennan Library office. The "new" Redpath Library was completed in 1953, but the inscription running along its south wall (now largely obscured by the bridges to the even newer McLennan Library) sounds strangely Victorian in its sentiment. University librarian (1947-65) Richard Pennington, who undoubtedly chose the phrase, was spiritually a Victorian, if not an eighteenthcentury literatus. Yet the source is even earlier: 'Beholding the bright countenance of truth in the quiet and still air of delightful studies,' a quotation from John Milton's essay "The Reason of Church Government Urged Against Prelaty," cannot be called anything other than a noble observation. But is that what those feverish students scrambling to finish their term papers are really doing? As they anxiously await their turn at the Xerox machine, one does not get that impression!

Redpath Hall's "old" reading room (it was the "new" library in 1893) yields a splendid crop of honorable graffiti hidden away in the stained-glass windows of the stairwell leading to the musicians' gallery. Some are the standard Greek and Latin tags-even 'Ars longa, vita brevis' is there. But the interesting ones are those from English authors: 'Nature never did betray the heart that loved her,' William Wordsworth assures us, adding in another panel (rather more obscurely), 'Voyaging through strange seas of thought alone. Presumably, that is something readers in the Redpath are being encouraged to emulate. Chaucer, however, wants us to keep our minds strictly on our work- And out of old bokes in good feith, cometh al this newe science that men lere.' Reading is, on the whole, supported as a Good Thing. Francis Bacon is in favour of it: 'Reading maketh a full man, conference a ready man, and writing an exact man.' Bacon writes in quotations, as other men write in prose or verse. That claim cannot be made for the unknown who produced the pedestrian platitude on the complementary panel: 'Reading furnishes the mind only with materials of knowledge. It is thinking makes what we read ours.

The Arts Building's graffiti present a definite challenge to one's literary skills. High up on the western gable is a marble slab that commemorates in Latin William Molson's gift of Molson Hall in 1862, McGill's first continued next page

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major benefaction. It was the library cum Convocation Hall cum lecture auditorium until 1926, when the Arts Building was gutted and rebuilt and Molson Hall was converted into classrooms. Moyse Hall was erected to replace it, and on its wall we find two lofty exhortations. The biblical one, from Ben Sirach's "Let us now praise famous men," is appropriate because the hall is named for Charles Ebenezer Moyse, Molson Professor of English (1879-1920) and Dean of Arts (1904-1920). The second inscription is written in Canada's other official language and its gallic logic is as unassailable as its origin is obscure: 'La pensée sans action est un vain mirage. L'action sans pensée un vain effort.' Though perhaps not the most profound of sayings, it is undoubtedly a useful aphorism for thoughtless and impetuous youth. Who said it? Montaigne? Pascal? My enquiries to date have been fruitless. (There is no prize, other than honorable mention, for the first correct answer!)

Outside Moyse Hall is a piece of advice ominous enough to dampen the spirit of any student earnest and literate enough to translate it: 'Kalliston ephodion toi gerai he paideia'-'Education is the best provision for old age.' Is that what education is all about? Acquiring intellectual capital to provide a cerebral retirement annuity? The inscription hardly offers the most uplifting of encouragements for learning, even if Diogenes Laertius was quoting Aristotle.

The Greek language is put to more utilitarian employment in Birks Hall, home of the Faculty of Religious Studies. 'Ariston men hudor,' engraved in marble above the water fountain, says sternly: 'Water is better.' (The McGill students of 1879 seem to have known more than Pindar, though, for in one of their drinking songs they included a verse in doggy Greek and Latin which, in translation, ran: Water then is better, boys

But should be spiked you see And I'll bet in days of yore, boys Water meant eau de vie.

In the forthcoming university history, McGill University: For the Advancement of Learning, you can read the original version!)

Greek may get short shrift at the water fountain, but Latin is accorded some respect in the senior common room. Carved in stone above the fireplace, Psalm 133:1 proclaims: 'Ecce quam bonum et quam jucundum habitare fratres in unum'-'Behold how good and how pleasant it is for brethren to dwell in unity.' Seeing that Birks Hall was originally Divinity Hall, and that theological professors have always been (until these present ecumenical times) a cantankerous lot, one can see why William Birks chose that particular verse for the divines to have before them as they gossiped over afternoon tea.

The competition for the noblest use of Latin, however, must surely lie between lawyer Frank Scott and architect Percy Nobbs. Scott obtained permission to pay for three words to be carved over the doorway into the new Law Building: 'Audi alteram partem,' 'Hear the other side.' For future lawyers, the reminder is surely an excellent one. But Percy Nobbs,

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McGill's remarkable architect in the first three decades of the twentieth century, possibly outdoes even McGill's poet-lawyer when it comes to graceful Latin allusions.

In 1922 Nobbs was commissioned to design the new pathology building, which might not have been considered a very "lively" commission. But he rose to the challenge with great architectural imagination and made equally imaginative use of a number of Latin inscriptions. Two are particularly worthy of mention. Over the gateway through which many a corpse has passed, Nobbs carved the words: 'Locus ubi mors resurgens rediviva est'-'This is the place where death arises to new life.' The same thought finds expression in the main entrance hall: 'Hic est locus ubi mors gaudet succerrere vitae'-'Here is the place where death rejoices to be of service to life.' To have understood the Pathology Institute's role in that way was truly perceptive.

McGill possesses a wealth of "honorable graffiti." Should you recall a favourite one, I would be very pleased to hear about it! Stanley Frost

Man and nature

"Nature has a way of working, and the whole world has adapted to that," observes Dean of Science Dr. Svenn Orvig, a member of McGill's meteorology department. "Rivers, for example, have natural high and low cycles that dams change to something uniform, altering water temperatures, fish life, and so on. You can't just barge ahead with man-made changes without assessing the circumstances beforehand.'

For nearly twenty years Orvig and Dr. Eberhart Vowinckel, a fellow professor of meteorology, have studied the climatological changes that major engineering projects can cause. "Tall buildings, parking lots, huge power dams, all bring about changes in climate that must be assessed," claims Orvig. "Even one simple beaver dam can reduce the annual run-off of water by 20 per cent!'

To study the effects that both man-made and natural changes have on climate, the two meteorologists have developed a computer program called an "energy budget" model that takes into account the myriad of factors that influence climate-including winds, ocean currents, pollution, population density, and surface texture and colour. Whereas thirty years ago climatologists relied primarily on distribution maps for calculating temperature, wind, and precipitation, they can now make highly sophisticated predictions thanks to the modern computer.

In the fifties, prior to joining the meteorology department, Vowinckel had studied the energy balance of forests in South Africa; meanwhile, Orvig was examining arctic glaciers and ice caps. Since joining forces in 1960, the two professors have expanded their vistas and are now able to design energy budget models that apply to any climate zone on earth-and they needn't set foot outside their McGill climatology laboratory. Most, if

not all, necessary climatological information can be obtained through a world-wide network of scientific stations and agencies, and can be tabulated on university computers.

With the energy budget model, explains Orvig, "you effectively put a cylinder down on a region and study all the ways that energy-heat and water-are transported into and out of that box. Visualize the box extending down into the ground and up into the atmosphere. The sun pouring in heats the air in the box, and a good part of it goes down and heats the ground. Then things begin to happen!

The ground radiates long-wave heat that, in turn, heats the atmosphere," he continues. 'The atmosphere radiates too, up and out into space. Water evaporates and, because warm air rises, clouds form. Heat therefore enters the ground in daytime and rises at night. We split up these processes." The energy budget model is then able to measure them using wind and temperature data collected over many years by observation stations. "All of these processes must be in balance-it is much like a bookkeeping procedure," adds Orvig. "Imagine a box over Florida and another over Montreal. The warm spells we had from Florida last fall resulted from an energy deficit in the north-tropical air flowed in to regain a balance."

To calculate the climatic ramifications of man-made changes proposed for the James Bay Power Project-where a massive dam now backs up the La Grande River flooding extensive areas of Quebec's hinterland-the team "placed a box over the area" in 1975. With the computer, they estimated the magnitude of the component processes for every day and night of the year, simulated the future size of the lake, and then recalculated the component dynamics. One prediction they made was that the advent of both summer and winter would be delayed by several weeks at the site of the lake: deep water takes longer to warm and to cool than a forested area. "It is too early to know what the actual results are," says Orvig, though he is eagerly looking forward to them so that comparisons may be made

Altering nature will alter the climate, claim McGill meteorologists



Even more scientifically challenging than the James Bay energy budget model, says Vowinckel, is the team's partially completed study of the Nile River in the Sudan. (Their link with the project is strictly academic.) With the surrounding desert expanding as vegetation recedes, engineers are planning a diversion of the river around the Sudd swamps of the White Nile—this would reduce the heavy water loss caused by evaporation as well as increase the available water supply in the river downstream. Since moving water evaporates more slowly than stagnant water, a diversionary canal, to be built around the swamp near Jonglei, has been proposed.

Using the weather, humidity, and temperature data collected by weather stations in and around Entebbe, along with mean rainfall maps and information on vegetation types and land forms, the McGill scientists constructed an energy budget model to encompass the Nile's lakes, swamps, and surrounding land. Once they had established the irrigation potential given current meteorological conditions, they made changes in certain surface parameters in order to study other permutations and combinations. Draining the swamps, they concluded, would indeed eliminate water loss from evaporation; run-off would increase substantially and a significant water budget would result.

Among McGill's other energy budget models are a study on the climatological influences of forest fires in British Columbia and one on the changes in vegetation cover in Eastern Canada as an increasing number of abandoned farms revert to forest.

Given the large price tag for most modern scientific investigations, the cost of developing energy budget models is relatively low: "Our main expense is \$2,000 a year for computer time," explains Orvig. "Research costs are low because we need no other machines, both professors working on the program are already on staff, and meteorological data are freely available." The unique research opportunities the program provides cannot be given a dollar value. "About twenty graduate students have already written their theses on the subject," notes Orvig, "and the studies we are asked to do help make our department better known." *Cay Draper*

Bookshelf

Capsule summaries of recent books by and about McGill faculty members and alumni:

Sheila McLeod Arnopoulos and Dominique Clift—*The English Fact in Quebec*. Montreal: McGill-Queen's University Press, 1980. Award-winning journalists Sheila (Stone) Arnopoulos, BA'61, and Dominique Clift, BA'53, analyse the historical English-French interface in Quebec, pinpoint recent social changes that have led to a resurgence of French nationalism, and present perspectives for the future.

Yurko Bondarchuk—UFO Sightings, Landings and Abductions: The Documented *Evidence*. Toronto, Ont.: Methuen Publications, 1979. This chronicle by urban planning graduate Yurko Bondarchuk, BA'72, records documented cases of UFO activity on or above Canadian soil since 1947. The 200page volume, available in both English and French, is amply illustrated with government-issued photographs, eye-witness snapshots, and conceptual drawings. Writes Bondarchuk in his introduction, "The question is no longer, Do UFOs exist? But rather, Why are they here?"

Ian S. Butler and Arthur E. Grosser— *Relevant Problems for Chemical Principles*. Menlo Park, Calif.: The Benjamin/Cummings Publishing Co., 1979. In this third edition, Chemistry Professor Dr. Ian Butler and Associate Professor Dr. Arthur E. Grosser have devised up-to-date, introductory problems and solutions for chemistry students and have included all data in both conventional and SI (Système International) units to help "students who are taught in one system to attain competency in both."

Francisco Javier Campos-Cornejo— Enrique González Martinez: Ensayo psicológico. Mexico City: Editorial JUS, 1978. Mexican psychiatrist Dr. Francisco Campos-Cornejo, DipPsych'70, examines from a psychological perspective the creativity of modern Mexican poet González Martinez. The study relates his writings to his family, his medical profession, and his literary activities and concludes with the recognition of Martinez's major work, El hombre del búho, as a lyric, human message. (Note: The text of this book is Spanish.)

Michael Feuerstein and Eric Skjei— Mastering Pain. New York City: Bantam Books, 1979. Particularly useful for chronic pain victims seeking alternatives to drug addiction and despair, this study coauthored by Assistant Professor of Psychology Dr. Michael Feuerstein offers relaxation techniques for the self-regulation of stress and pain associated with such problems as arthritis, migraine, and ulcers. There is a psychological dimension to pain, claim the authors, "that is as subject to the influence of our thoughts and emotions as to that of the pill and scalpel."

Stanley Brice Frost—McGill University: For the Advancement of Learning, Volume 1:

The McGill Observatory

(1863-1963) : A detail from the montage, "The University of McGill College, 1882," first printed in the Canadian Illustrated News of August 26, 1882, and now reproduced in Volume I of Dr. Stanley Frost's history of McGill. Under founder Dr. Charles Smallwood and subsequent directors, the observatory became the outstanding time-keeping observatory in Canada. The stone building was demolished in 1963 to make way for the Leacock Building-faculty members and students now gaze at the heavens from a new observatory atop the Rutherford Physics Building.

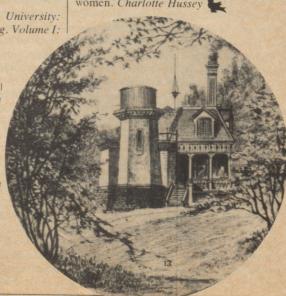
1801-1895. Montreal: McGill-Queen's University Press, 1980. In this well-illustrated study, History of McGill Director Dr. Stanley Frost traces the events leading up to the founding of McGill and chronicles its modernization under Principal John William Dawson. With the establishment of the first Medical School on campus in 1872, the admission of women students in 1884, and the construction of such notable buildings as the Redpath Museum and the Macdonald Physics Building, McGill had already achieved a position of prominence as the fledgling Dominion of Canada prepared to enter the twentieth century.

Norman Levine—*Thin Ice*. Ottawa, Ont.: Deneau and Greenberg, 1979. In this collection of twelve biographical short stories, Norman Levine, BA'48, MA'49, portrays with nostalgia and humour the cyclical nature of life.

John D. McCallum—*Crime Doctor*. Mercer Island, Washington: The Writing Works Inc., 1978. Journalist John McCallum has penned this biography of internationally known forensic pathologist Charles P. Larson, MD'36. Reports from his crime file include such unusual cases as "The Body in Striped Pajamas," "The Lady of the Lake" who turned to soap, and the infamous murderer Jake Bird.

Bryan D. Palmer—A Culture in Conflict: Skilled Workers and Industrial Capitalism in Hamilton. Ontario, 1860-1914. Montreal: McGill-Queen's University Press, 1979. Assistant Professor of History Bryan Palmer discusses the historical context, culture, and conflicts that surrounded the skilled workingmen who transformed Hamilton from a handicraft production centre to a modern, industrialized city.

Gustave and Alice Simons—Money and Women. New York City: Popular Library, 1979. Founder of Connecticut's Weston Workshop for Women and leader of its fiveyear study on the role of women in contemporary society, Alice (Winslow-Spragge) Simons, BA'36, has coauthored with her husband, a tax attorney and financial expert, this how-to book on financial management for women. Charlotte Hussey



McGILL NEWS/SPRING 1980

Microsurgery: A modern miracle

by Zoe Bieler

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Blood vessels less than a millimeter in diameter are reconnected with stitches invisible to the naked eye. Severed nerves are skillfully rejoined so that they are again capable of conveying sensation to and from the brain. A big toe is moved from foot to hand to replace a thumb lost in an accident.

These revolutionary operations have been made possible through the marvels of microsurgery. Using high-powered microscopes (some capable of magnifying forty times larger than life), microinstruments (some so small they are invisible unless magnified), and microsutures (half the diameter of a human hair), today's surgeons almost routinely operate on parts of the body that only a few years ago were considered too small or too delicate to be repaired.

In the forefront of microsurgery developments on the continent are McGill's largest teaching hospitals, the Montreal General (MGH) and the Royal Victoria (RVH). 'Without microscopes, many of our newer surgical techniques would be impossible,' says Associate Professor Dario Lorenzetti, BSc'58, MD'60, ophthalmologist-in-chief at the MGH. Using microsurgery, eye surgeons are able to strip the vein of the retina and remove blood clots from the vitreous body of the eye. "Before microsurgery, we could do nothing with these blood clots; we had to leave them to nature," explains MGH ophthalmologist and McGill lecturer Robert Lewandowski, MD'69. About 300 such operations are now performed annually at the hospital.

Neurosurgeons in McGill's teaching hospitals employ microsurgery techniques to repair or rebuild blood vessels, thereby minimizing the permanent damage caused by strokes. And today, nearly all patients who have cranial tumors removed come through surgery with no facial-nerve damage-about half would have suffered such damage without the new operating techniques. Gynecologists and urologists consider microsurgery an invaluable tool as well-it enables them to remove obstructions from the delicate Fallopian tubes, reverse tubal ligations and vasectomies, and correct certain kidney defects. In addition, university otorhinolaryngologists regularly perform microsurgery on the delicate tissues of the ear, nose, and throat.

For the layman, however, perhaps the most dramatic manifestation of modern microsurgery is the replanting of accidentally amputated digits or limbs. Dr. Bruce Williams, director of plastic surgery at the General and at the Montreal Children's Hospital and chairman of the plastic surgery division in McGill's Medical Faculty, reported the results of sixty-five digit replants to a recent medical symposium. The success rate, he explained, had been about 89 per cent when the amputation "was incomplete" and 60 per cent when it was complete.

The Royal Victoria's record is almost identical, says Associate Professor Dr. Rollin Daniel, MSc'74, who co-directs with Assistant Professor Dr. Julia Terzis the hospital's two year-old microsurgery research laboratory. Daniel makes an important distinction



between the survival of a replant and its functional capacity. "It must be emphasized to the patient that the replanted part will never be normal but that immediate reconstruction with the amputated part is superior to most upper-extremity prostheses and to a prolonged, multistaged reconstruction employing diverse, distant tissues," he wrote in the May 1979 *New England Journal of Medicine*. A "successful" limb replant may result in an arm that can carry a purse or an overcoat, but cannot control the finer hand movements necessary for writing or eating.

The success of digit and limb replants hinges on the first-aid given at the accident site, Williams stresses. The severed part must be kept cool and clean. (It should not be frozen, but should be packed in a clean plastic bag and placed, if possible, in a container of ice.) When the digit or limb is kept cool, replanting can be done up to twenty-four hours after the accident; otherwise, surgery must be performed within twelve hours.

In assessing the desirability of attempting a

replant, the surgeons take many factors into account: the age of the patient, whether the dominant hand is involved, the occupation of the patient, the level of amputation, the time of the accident, the first-aid treatment both patient and limb have received, and the type of injury—''whether the nerves, tendons, blood vessels, or bones need repair,'' notes Williams. Replanting is usually indicated if the thumb is involved, if multiple digits have been amputated, or if the patient is a child. The amputation, however, must be clean—if the accident has resulted in crushed tissue and bone, a replant is generally impossible.

Microsurgeons may spend up to two hours treating the amputated part before wheeling the patient into the operating room for surgery. Replanting a thumb may take four to six hours and reattaching four fingers can require as much as twenty-four hours of team effort; a full limb replant calls for an even more complex and lengthy operation. Microsurgery makes more physical demands on a surgeon than do traditional operations and techniques, concedes Daniel. "You must be able to operate for long periods of time." As long as one remains in good physical condition and can tolerate the gruelling pace, however, Daniel sees no reason that a microsurgeon should not continue to practise for as many years as other surgeons.

A typical operation requires a staff of about fifteen people-four or five surgeons, several anesthetists, and as many as eight nurses. An essential requirement in such surgery is visibility-microscopes must provide not only the needed magnification but also the appropriate illumination. Since the fifties, when the first good operating microscope was designed, technology has made rapid advances; today's models are highly sophisticated. They are focused by foot controls and have twin observation tubes so that a second surgeon can follow the progress of the operation and assist when necessary. Closed-circuit colour television monitors make it possible for other members of the team, including attending residents and fellows, to observe the microsurgeon's every move. Video cameras, meanwhile, document the case for teaching and evaluation purposes.

Most of the instruments used in microsurgery have been developed in the past decade. A basic set, explains Daniel, includes jeweller's forceps, a bipolar coagulator, spring-handled scissors, and needle holders. (The surgeon's arc-shaped operating needle and ultra-fine sutures are visible only under the microscope.) Manipulating the tiny instruments with skilled precision, the microsurgeon works on a magnified operating field that is a mere two centimeters square—he cannot even see his own fingertips!

The RVH team performs about a hundred microsurgery operations every year; some make the headlines. Last June Elizabeth McFadden, an eleven-year-old Long Island girl whose right leg had been amputated above the knee in a train accident and replanted by New York surgeons, journeyed to Montreal for microsurgery that, it was hoped, would restore sensation to the replanted limb



and foot, as well as use of the right knee. During the fifteen-hour operation, Terzis and her medical team repaired defects in the sciatic nerve and performed eight grafts of the sural nerve. Because nerves grow only about a millimeter a day, however, there was to be a long wait before the operation could be termed a success. (Hospital spokesmen said it would be "nine to twelve months" before it was known whether the operation would result in a fully functional knee, and "another twelve months" before doctors could determine whether sensation had returned to the sole of the child's right foot.)

In October a brave and smiling Elizabeth returned to the Royal Victoria for her medical examination. The news was good. The nerves had grown three inches more than had been predicted, perhaps due to the girl's age. Sensation as well as movement seemed to be coming back. "We're a long way from saying it is restored," Terzis said, "but if things go as they are going now, I think she'll get sensation in her foot." Elizabeth is only one of many non-Quebecers who travel to Montreal for microsurgery. One young boy came from Winnipeg for a toe-to-thumb replant and another from Trinidad for a vascularized bone graft. A Pennsylvania girl, her heel amputated in a car crash, also sought help; Daniel rebuilt her heel using a flap of skin and tissue from the front of her other ankle.

Such "free-tissue transplants," says Daniel, are as dramatic to medical professionals as digit or limb replants are to the public. In the past, multiple operations over extended time periods have been required to transfer tissue from one part of the body to another. With microsurgery, tissue can be moved in a single operation. In his May *Journal* article, Daniel, wrote : "A large skin flap was transferred from a patient's abdomen to his ankle and revascularization was achieved through microvascular anastomoses, thus accomplishing in ten hours what would have required three to six months with conventional techniques." Skin, muscles bones, intestines, nerves, and even toes have been successfully moved from one site in the body to another—in one operation.

Surgeons often spend many days planning operations of this magnitude, studying X-rays, and experimenting in the laboratory with different operating techniques. They also prepare the patient—not only physically, for the operation itself, but psychologically, for the long and painful period of recovery in intensive care.

Microsurgery has made it possible for cancer patients requiring head and neck operations to return home "with minimal deformity," notes Daniel. There is a team approach between the surgeon who removes the tumor and the plastic surgeon who repairs the deformity—"We try to do the reconstruction the same day the tumor is removed." Sixteen such tissue-graft cases have been handled by the RVH team; other operations have involved replacing bones in children with bone tumors, or correcting congenital bone defects. The MGH microsurgery research lab-

The microsurgeon operates in a magnified field only two centimeters square and uses needles and suture material so small they are dwarfed by the human eye.

oratory, says Williams, has made the revascularization of free bone and muscle grafts a focus of its work.

Without ongoing governmental and private research funding, "the future growth of microsurgery is precarious," claims Daniel. The RVH's new microsurgery research laboratory and adjoining clinic-unique in Canada and "probably the largest in the world"-were built at a cost of half a million dollars. They require a further \$200,000 each year to maintain. Through continued research, Daniel hopes that microsurgeons will one day gain the "ability to transplant tissues from one body to another," as is presently done with kidneys from accident victims. With this skill, surgeons could repair crushed hands and feet and perform major reconstruction following tumor operations. "Though it is an ultimate goal," cautions Daniel, "we are decades away from realizing it. We are not yet even trying transplants on animals.'

In the seventies alone, however, giant strides have been made in microsurgery. Daniel is optimistic about the future: "Microsurgery has revolutionized nearly all surgical specialities," he maintains. "It involves the perfection of previous techniques as well as the development of new operations." A microsurgeon, he says, needs no special dexterity. "If you can tie your shoe you can learn to do miscrosurgery. It is an acquired skill. Once you learn how to do it, it stays with you-like learning to ride a bicycle." To a patient, however, whose hand has been restored to usefulness through a toe-to-thumb replant or his body to wholeness following removal of a cancerous tumor, the microsurgeon is nothing short of a miracle worker.

Research at McGill: A responsibility — and a joy

by Charlotte Hussey, Heather Kirkwood and Carol Stairs

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The seventies was a decade of anxiety for university researchers across Canada. Erratic and fluctuating government funding turned many a silent researcher into a vocal lobbyist as universities sought a larger slice of the fiscal pie.

Their efforts did not go unrewarded. On January 31, 1980, just weeks before the Conservative government fell, the Minister of State for Science and Technology Heward Grafftey unveiled unprecedented boosts in funding for 16,000 university scientists, scholars, and graduate students. The Natural Sciences and Engineering Research Council (NSERC) received an increase of \$41.8 million to a total of \$162.6 million, while the budget of the Social Sciences and Humanities Research Council (SSHRC) was raised \$5.8 million to a high of \$41.7 million. In addition, the Medical Research Council (MRC) now has \$82.2 million at its disposal, an increase of \$12.2 million over last year.

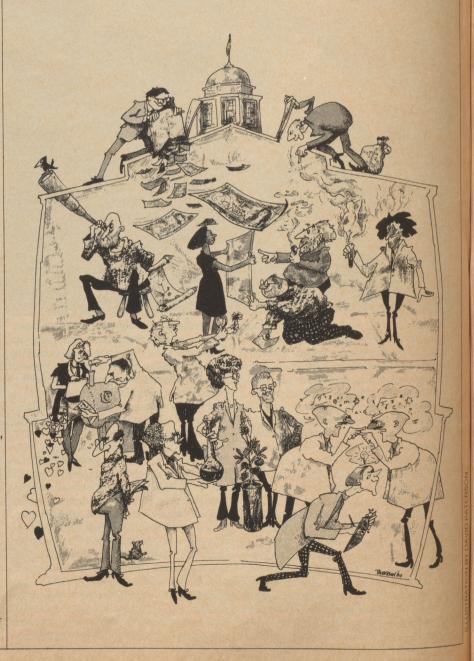
These substantial increases for the Councils will reverse the downward trend in federal support of university research over the last decade," Grafftey announced. "Research and development [R & D] is the cornerstone of Canada's economic development and the increased funding, in addition to promoting excellence in university research and encouraging more of our outstanding students into research, will stimulate the creation of a larger number of interesting and better paying jobs. The increased funding will also add significantly to the scientific manpower over the 1980s needed to achieve the government's target of R & D expenditures of 2.5 per cent of the GNP [Gross National Product] .

Dean of Graduate Studies and Research Dr. Walter Hitschfeld welcomes the government's intention to link research funding to the GNP. ''It doesn't sound like much, but it is an enormous change. It involves *billions* of dollars—though most of this money will be spent in the industrial and applied areas, not in, the universities. ''

Research grants and industrial contracts brought into McGill coffers a total of \$24,238,000 in 1978-79 (the most recent year for which figures are available). Faculty representatives interviewed by the *News* agreed, without exception, that though research is a very expensive undertaking, it is vital to a balanced and healthy university life. "Teaching and research are absolutely equal requirements and challenges for the university," maintains Hitschfeld. "No other institutions have this joint mission—the *dissemination* of knowledge and the *creation* of knowledge." While most research funds come to the university as direct grants—from governments, foundations, associations, and societies, as well as private endowments about 10 per cent of the \$24.2 million total takes the form of industrial contracts, which last anywhere from three months to three years. For the first eight months of 1979-80, the university undertook sixty-three such projects, up from forty-one for the same period last year. "Expertise is the whole purpose of this exercise," states the director of McGill's nine-year-old Industrial Research office, Adolph Monsaroff. "We're only interested in research projects that have some intellectual and scientific value, that will be of interest to one of our principal investigators or to a PhD student for his thesis. The skills available at McGill, particularly when you get into multidisciplinary areas, are greater than the average company would have."

In dollar terms, about 50 per cent of all McGill's industrial contracts are with the Faculty of Engineering, while 25 per cent are with Science, 15 per cent with Agriculture, and the remaining 10 per cent with non-scientific areas like sociology, psychology, management, and law, explains Monsaroff. "The real credit for the success of this office goes to the investigator who is willing to write the proposal, meet the people, and have his students work on the project."

Hitschfeld points out that, while grants and contracts make large-scale research financially viable, "for some, the only tools they need are pencils and paper and a quiet room."



Whether a project costs \$100 or \$100,000, however, the frustrations—and the joys—are somehow similar. "You set yourself a goal, but nothing ever works out the way you expect it to. Your student gets sick or is distracted by other courses; the books you need are out of the library; the manufacturer delivers slowly or the instrument doesn't work when it does come. For everything you want to do you have to find alternatives.

"Research isn't only Einstein writing hieroglyphics on the blackboard," says the dean, "though that is how the media have always shown research. It's nice to be a genius, but there's usually only one Einstein in the world at a time. Research is mostly made up of people taking little steps. Putting these little steps together to make one big step is the greatest of all achievements."

Note: On the following pages, the News presents an overview of the research activities of McGill's twelve Faculties. The research figures quoted for each section are 1978-79 statistics as recently reported by the Faculty of Graduate Studies and Research. C.S.

Agriculture \$1,385,000

While the number of Canadians actively involved in primary agriculture has dropped dramatically since the Second World War, the demand for food—both nationally and internationally—has grown relentlessly. Agricultural research, it seems, holds the key to improved farm technology and increased food productivity.

"The projections to the year 2000 are that the world's population will be somewhere between 6.5 and 7 billion," says Howard Steppler, MSc'48, PhD'55, chairman of the plant science department and associate dean of research at McGill's Macdonald Campus. "Projections are that the rate of food production will have to grow at least 3 per cent per annum—some even suggest 4.4 per cent—in order to meet the requirements of an everincreasing population. But no developed country has *ever* reached a level of 4.4 per cent! The challenge is tremendous; there's only one group that can meet it, and that's within agriculture."

In attempting to answer this challenge, Macdonald sees training research scientists as one of its primary objectives. "We're a consumer of research people in our teaching roles, and other Canadian institutions are also consumers of researchers," notes Steppler. "But there is only one producer, and that's the university. We have to have a research capacity to provide an environment in which researchers can be trained." Both Steppler and Dean of Agriculture Lewis Lloyd, BSc(Agr)'48, MSc'50, PhD'52, agree that the 'training' aspect of the Faculty's research programs is of paramount importance.

Ninety-nine per cent of the Faculty's 80 full-time teaching staff—and 100 per cent of their 190 graduate students—are involved in research activities, notes Steppler. "We have no university-budgeted staff who are here solely for research, though we do have some auxiliary professors who do not teach but work on specific contract research." One such professor, funded by the federal government, is studying means of controlling the destructive blackbird populations that threaten corn and other valuable crops.

"Agricultural research is different from other research in that it has a very practical role," continues Steppler. "Instead of 'pure' and 'applied,' I prefer to use the words 'discipline' and 'problem.' Discipline involves pushing back the frontiers of knowledge as opposed to trying to solve a problem. Most of our contract research is very definitely problem-oriented, as is the funding we receive from the Quebec Agricultural Research Council. This is quite appropriate, since their priorities are the current problems that exist in Quebec agriculture."

Like all university researchers, Macdonald scientists have been hard hit by inflation—not only have research grants not kept pace with the cost of equipment, supplies, and labour, but any cutback in requested funding can result in considerable upheaval for the professors involved. "If the project is approved but the money is reduced," says Steppler, "then they've got to redesign their whole research program. A very good example of this is large-animal research—in no way can they afford to use the original number of animals."

It is a fact of life that staff members generally receive less than the amount requested from funding agencies. In 1978-79 federal awards—from Agriculture Canada, the Natural Sciences and Engineering Research Council, Environment Canada, and other departments—totalled almost \$725,000; the Quebec government accounted for \$480,000 in grants and contracts to faculty members. Notes Lloyd, "There's no question that Quebec is very supportive of agriculture."

Financial setbacks notwithstanding, research projects are almost as numerous as acres at Macdonald. Tile-drainage studies, improved dairy cattle production and efficiency, classification of the world's cassava germplasm collection, and new vegetable and grain varieties are but a sampling of oncampus research activities. Many projects are necessarily interdepartmental in scope, adds Steppler. "The major researcher may be from agricultural engineering, while the people cooperating with him may be from microbiology and plant science."

Macdonald researchers have also initiated projects in cooperation with developing nations, where agricultural production and technology lags far behind that of the industrialized world. An animal science project in Trinidad is currently studying the feasibility of diverting sugar cane to animal feed stock, thereby encouraging the production of meat and milk in a country presently possessing no native feed for cattle. In addition, the plant science department is assisting Kenyan agriculturalists in their search for a cure for mosaic disease, a serious threat to the valuable tropical crop, cassava. "We have not been able to crack it yet, " notes Steppler, "but neither has anyone else."

Agriculture shares with other Faculties the combined problems of an aging staff and an acute shortage of young scientists entering the research field. Given the high salaries offered to today's BSc graduates, not to mention the ongoing debate on the relative value of a postgraduate education, few students are pursuing master's and doctoral degrees. "Large stipends for graduate students don't seem to be the answer," Lloyd emphasizes. "The University of Guelph offers a number of very high-value fellowships and they cannot fill them." Undergraduate enrolment at Macdonald, however, is still growing-an 8.6 per cent increase was registered this yearthough administrators estimate that this will stabilize by 1985. "If job opportunities maintain themselves, people who have never thought of agriculture before will turn to us,"says Lloyd.

The pattern of North American agriculture has undergone tremendous change since the early nineteenth century, when "about 90 per cent of the labour force was engaged in primary agriculture," Steppler points out. "It is now about 4 per cent, though if you take into account the whole infrastructure—processing, marketing, transportation, the production of agricultural machinery—then you're up to nearly 40 per cent.

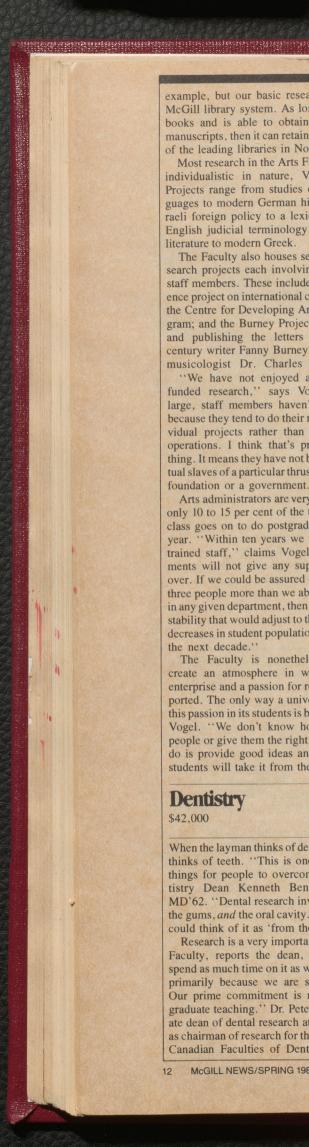
"The only way you can get increased productivity from natural resources is through improved technology—and you can only get improved technology through research. Canadian agricultural research is going to increase in importance; it *must* if we are going to meet our responsibilities." C.S. \Box

Arts \$448,000

The very word 'research' has become a cliché, maintains Robert Vogel, MA'54, PhD'59, dean of the Faculty of Arts. ''It has become such a hackneyed term that it has lost much of its passion. Real research has to do with staff members who are *obsessed* with finding out something, or with trying to create a theoretical framework, or with making a major contribution. This sometimes results in new knowledge; in the humanities, however, it often results in a new point of view, a new integration of facts that are already fairly well-established.''

This passionate curiosity, so essential to university research and teaching, is deeper than an intellectual quality and cannot be regulated, says Vogel. "The idea that you can separate research and teaching is very attractive to authoritarian types of government. It presupposes that you can set up a big operation or fund a laboratory and get something out at the other end, as though it were an assembly-line operation. This concept is quite inapplicable to the kind of research one does in the Faculty of Arts.

"The major research funding necessary for laboratories and highly sophisticated equipment is *not* our problem. We do need computer facilities for the more quantitative departments like economics and sociology, for



example, but our basic research tool is the McGill library system. As long as it has the books and is able to obtain collections of manuscripts, then it can retain its place as one of the leading libraries in North America."

Most research in the Arts Faculty is highly individualistic in nature, Vogel explains. Projects range from studies of Eskimo languages to modern German history, from Israeli foreign policy to a lexicon of French-English judicial terminology, from Yiddish literature to modern Greek.

The Faculty also houses several major research projects each involving a number of staff members. These include a political science project on international crisis behaviour; the Centre for Developing Area Studies program; and the Burney Project that is editing and publishing the letters of eighteenthcentury writer Fanny Burney and her father, musicologist Dr. Charles Burney.

"We have not enjoyed a great deal of funded research," says Vogel. "By and large, staff members haven't looked for it because they tend to do their research as individual projects rather than as institutional operations. I think that's probably a good thing. It means they have not become intellectual slaves of a particular thrust on the part of a foundation or a government.'

Arts administrators are very concerned that only 10 to 15 per cent of the total graduating class goes on to do postgraduate work each year. "Within ten years we will be short of trained staff," claims Vogel, "but governments will not give any support to tide us over. If we could be assured of hiring two or three people more than we absolutely needed in any given department, then we could have a stability that would adjust to the increases and decreases in student population expected over the next decade.'

The Faculty is nonetheless striving to create an atmosphere in which individual enterprise and a passion for research are supported. The only way a university can foster this passion in its students is by example, says Vogel. "We don't know how to inoculate people or give them the right pill. All we can do is provide good ideas and hope that our students will take it from there." C.H.

Dentistry

\$42,000

When the layman thinks of dental research, he thinks of teeth. "This is one of the biggest things for people to overcome," says Dentistry Dean Kenneth Bentley, DDS'58, MD'62. "Dental research involves the teeth, the gums, and the oral cavity. In essence, you could think of it as 'from the eyes down.'

Research is a very important activity in the Faculty, reports the dean, "but we don't spend as much time on it as we would like to, primarily because we are so short-staffed. Our prime commitment is really to undergraduate teaching." Dr. Peter Noble, associate dean of dental research at McGill as well as chairman of research for the Association of Canadian Faculties of Dentistry, is in full

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agreement. "I don't think that anyone can be an effective teacher unless he is doing some research," asserts Noble. "If you don't do research, your lectures just pass on what the book says, without any personal feeling about the strength of this result or the weakness of that technique.'

The trend in modern dental research is towards teamwork, continues Noble. "Research has become so specialized in terms of techniques and capabilities that no one individual can conduct a research project; it's

could offset the predicted shortage of dental specialists. "It is not uncommon for a dentist to go into practice for three, four, or five years, and then take specialty training." Adds Bentley, "There is certainly a movement afoot to give preference to candidates who have already had experience in the practice of general dentistry.

Predicted bites in the budgets of Canadian dental faculties, however, could precipitate an even more serious situation-an exodus of practising Canadian professionals and spe-



Deal research has to do with staff members who are obsessed with K finding out something, or with trying to create a theoretical framework, or with making a major contribution." Dr. Robert Vogel, Faculty of Arts

more a group effort that pools the talents of many disciplines. All the granting agencies favour this approach.'

Despite the demands of teaching, practice, and administration, staff members have several ongoing research interests. One group is investigating leucocytes and their potential to kill oral malignancies; another is examining the interaction of microorganisms in the pathogenesis of periodontal disease. In addition, the Faculties of Dentistry and Medicine are collaborating on a study of rat incisors as a model system of tooth development, while teams at McGill and the University of Western Ontario are jointly investigating the epidemiology of root surface caries (decay) in fluoridated and non-fluoridated communities.

Though undergraduate enrolment in Dentistry has remained constant, Bentley and his colleagues express concern over the diminishing numbers of students entering graduate programs. Financial considerations do not seem to be the problem: American dental graduate students must pay astronomical tuition fees, but their Canadian peers receive generous financial support in the form of Quebec bursaries, stipends for hospital residencies, and grants from the Canadian Fund for Dentistry.

Noble points to an emerging trend that

cialists. "If the decreases come through," says Bentley, "some people may become a little apprehensive about what the future holds for them and seek positions elsewhere." Inflation, too, is taking its toll. "The increased level of funding for research has not kept pace with inflation," notes the dean. "In my own case," adds Noble, "the cost of a technician must have gone up at least 100 per cent over the last five years. The cost of equipment is also phenomenal-several years ago I bought a \$300 camera for a time-lapse experiment; the same camera now costs \$1,600!

Unlike Medicine, Dentistry has limited funding sources; presently supporting Faculty research projects are the Medical Research Council, the National Cancer Institute, the National Institute of Health, and the American National Institute for Dental Research. An even more serious problem, however, is the fluctuating nature of grants. "There is no consistent policy towards funding," Noble points out. "It seems to start, stop, start, stop; it's like a political game. You just cannot do research under such conditions.

Bentley remains philosophical about the future. "Funding for dental research is better now than it was, but it is not being supported to the degree that it should be," he maintains. "The incidence of dental caries and periodontal disease is higher than any other disease process—but it is not critical or lifethreatening." There may be a kidney foundation, a heart foundation, and even a tooth fairy—but, laments Bentley, "There's no tooth foundation." $C.H. \square$

Education

\$243,000

"In the past there has been reason to think of the Faculty of Education as not being research-oriented, but it becomes less reasonable with each passing year." says Dean Dr. George Flower, BA'40, MA'49. "Originally, the Faculty's prime job was the initial preparation of teachers for the anglophone schools of Quebec, but its role has been changing in recent years. One reason for the merger with St. Joseph's Teachers' College and the move of the Faculty from Macdonald College to the main campus in 1970 was to place greater emphasis on graduate studies and on continuing education for practising professionals in the field."

Enrolment in the full-time bachelor's and diploma programs has declined by 43 per cent since 1975, Flower points out. "This has left greater opportunity for staff members to become involved in other activities." A number of staff members originally involved in these programs were experienced, master teachers. With the passage of time, they have learned skills and approaches that have enabled them to take on research projects as well.

With the proliferation of research activities in the Faculty, funding has increased from \$77,000 in 1975-76 to \$243,000 in 1978-79. Says Dr. David Smith, BEd'58, MA'61, director of graduate studies in Education, "The overwhelming proportion of research money comes from the Quebec Ministry of Education, while \$14,000 comes from the federal government and \$37,000 from small internal grants. Four departments out of the thirteen in the Faculty of Education account for the bulk of these research grants. They are educational psychology, our largest department with twenty-five members; social foundations, which includes the history and philosophy of education as well as comparative education; educational administration; and elementary education, which is well funded due to the efforts of one individual." Most of these departments are primarily involved in the study of education rather than in school field work or student-teacher supervision.

Additional funding from local school boards and provincial contracts does not appear in university research figures, explains Flower. "A lot of activity in our Faculty does not result in direct grants administered by the university. These projects tend to be developmental or mission-oriented, rather than "pure' research. One example is the project to develop a geography curriculum for the Kativik Board of Education in northern Quebec." Studies of enrolment decline, student retention, and the teaching of French as a second language receive research funding from local school boards. It has been traditional to have some fulltime staff members supported entirely on outside funds. One such contract with the Quebec Ministry of Education involved the preparation of technical and vocational teachers. At its peak, contract money amounted to \$500,000 a year for staff salaries. This year, \$100,000 from the Ministry is earmarked to finance ten research projects in vocational teacher training—the university now underwrites all staff salaries for the program.



"For some, the only research tools they need are pencils and paper and a quiet room." Dr. Walter Hitschfeld, Faculty of Graduate Studies and Research

Trends to look for in the near future are the return of practising teachers to courses of advanced study, and the further development of graduate programs in education that will help offset falling undergraduate enrolment. "We may eventually find ourselves in a flap, as we did in the sixties when there were not enough teachers," cautions Flower. "But that's not our immediate concern. Instead, we have to find ways to make use of the very good staff members we have in the Faculty. People are not educational spare parts that can simply be shunted about. We have a long way to go to catch up with Faculties that have long histories of teaching and research, but I don't think we need to be apologetic about it.' C.H.

Engineering

\$2,930,000

In the Faculty of Engineering, research is a must. By revising facts, developing theories, and studying applications, staff members remain in the vanguard of a field where daily advances are the norm. "Technology is changing so fast that you have to have people actively involved in research," maintains Engineering Dean Gerald Farnell, PhD'57. "In our reply to the Quebec government's Green Paper, the university as a whole, and the Engineering Faculty in particular, found it impossible to separate teaching professors from research professors. It just wouldn't work."

There is a wide spectrum of both basic and applied research in the Faculty, he reports. 'Several of our people I would consider applied mathematicians; then there are people working at various levels, right up to what are almost production problems." A number of researchers are engaged in large industrial contracts involving Alberta's oil sands development or the dispersion of explosive mixtures; others are working in association with Hydro-Québec on an energy study of large, "egg-beater" windmills. "Ithink it is important that we have a number of these research contracts so staff members become involved with current technology in industry," says Farnell. "It is a good way of forming the bridge.'

While most research is conducted individually or interdepartmentally, there are a number of inter-Faculty collaborations as well. The mechanical engineering department and the Medical Faculty's department of physiology, for example, are involved not only in studying the human skeleton as a mechanical structure, but also in examining the dynamics and obstructions of liquids, such as blood, flowing through tubes. The computer science department is collaborating with the pathology department on a pattern recognition project, where computers are used to evaluate the lungs for emphysema. International cooperation is also part of Engineering research-several joint projects are underway with the Universities of Montpellier and Grenoble under the auspices of a France-Québec exchange agreement.

While the Faculty's thirty-one industrial research contracts added over \$1.3 million to the 1978-79 total, the prime source of funding remains the Natural Sciences and Engineering Research Council (NSERC). Grants to individual researchers tend to be small, but they are very flexible, Farnell points out. "The individual may do more or less what he wants with the money. He has a certain amount of choice in deciding what problems he will tackle, the direction his work will take, and how he will split the money between research assistants and supplies."

Despite recent increases in NSERC grants, Farnell feels that the present level of research funding in the Engineering Faculty is inadequate. "NSERC is our largest source, but it has not really been keeping pace with inflation. There is also a sophistication factor built into research—you cannot afford to use yesterday's measuring equipment to make today's measurements, because the customer wants results that are not attainable with yesterday's instruments. Even if the prices of instruments weren't inflated, you would need more-sophisticated instruments just to keep pace with technology." *continued page 16*

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SOCIETY ACTIVITIES

McGill alumni move an average of seven times in the first ten years following graduation! Keeping track of current addresses is the major preoccupation of the Graduates' Society Records Office. by *Gary Richards*

A ccurate records are the heart of any alumni society operation. If they are well kept, the organization and its purposes flourish; if not, a great deal of time and energy is expended with very little to show for the effort.

The challenge of keeping track of graduates starts the moment they leave the Roddick Gates. As they move, marry, change jobs, and otherwise become inaccessible, the Society's records director Joyce Newton, BA'58, valiantly struggles to keep the files up-to-date. As well as helping graduates maintain contact with their classmates and with their alma mater, these records play a vital role in the recruitment of voluntary graduate leadership for the university community, for McGill branches throughout the world, and for other purposes, such as seminars, conferences, and special events.

Graduates may neglect to inform us of address or name changes, but our Sherlock Holmes and her staff, Maria Jurkus and Nance (McMartin) Common, BA'28, have ways and means of tracking them down. (They need them, too, considering that the average graduate changes addresses as often as *seven* times in the first ten years following graduation!) One of the most important is a regular check of newspapers and magazines. Both the business and obituary sections of the Montreal *Gazette* and the Toronto *Globe and Mail* are checked daily, and this is supplemented by an examination of the national press clippings forwarded by the university's Public Relations Office.

This process is not without its surprises. Graduates, never thinking there might be more than *one* person having a certain name with a certain spelling, will from time to time inadvertently give the Records Office staff a false lead regarding a job promotion, obituary notice, or other change of status. But experience has taught Newton to make every possible verification before telling the computer. "Six-hundred address changes a week is experience enough," she smiles.

Twice yearly, the addresses of all new graduates are verified and entered into the Society's computer system. Not only is the accuracy of names and degrees checked and rechecked, but a comparison is also made with other departmental lists. In recent years, over 5,000 students have been capped at the annual spring and fall convocations. The staff must process these names within a few weeks, for the entire alumni operation depends on it. Accuracy and speed are basic to the successful distribution of the *McGill News* and Fund Office mailings, not to mention the three-hundred class newsletters and other alumni material sent out each year.

The process of updating information absorbs the bulk of the Records Office's time. In the weeks following a general, first-class mailing, for example, an avalanche of mail marked "undeliverable" descends on the

staff. The ensuing search for "lost" graduates might include letters to their parents' addresses, verification with a university department or with professional associates, the consultation of telephone directories, or correspondence with branch officers and former classmates. The mailing of each issue of the *McGill News* also results in a barrage of change-of-address cards, both from the post office and from graduates themselves. This contact is greatly appreciated and all new information is entered weekly into the Society's computer terminal.

Additional sources for updating graduate lists include the network of seventy alumni branches around the world as well as mailings in the form of class letters, questionnaires, and notices of meetings. The Alma Mater Fund, through its pledge cards and through activities such as alumni phonathons in major cities, regularly supplies information to the record data bank. Records Office reference sources are almost limitless—almanacs, Lovell's Directory, Canadian and American professional directories, not to mention a library of three hundred telephone books for cities in Canada and the United States.

As readers will note on the detachable page opposite, the Graduates' Society will soon publish an alumni directory to celebrate its hundredth anniversary of incorporation. The directory will be the seventh in the Society's history, and the first since 1965. You are urged to examine the mailing label on this issue of the News: should any corrections be necessary, please forward them to the Records Office using the attached ''self-mailer'' form. The other information you supply will also be of great assistance to us. With your help, we will be able to make this directory—and our ongoing graduate records—as up-to-date as possible. Let's keep in touch. \Box

Records Office staffers Maria Jurkus, left, and Joyce Newton.



Gentlemen and scholars: Matthew, Marc, and John

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Manly virtue, moral fibre, leadership, aca-demic and athletic prowess—these were qualities that diamond magnate Cecil Rhodes (1853-1902) hoped to nurture in the gentlemen and scholars who would win the Rhodes Scholarships awarded annually after his death. Today, not only has the image of the Rhodes Scholar as a Victorian paragon of brains and brawn been transformed, but in 1977 for the first time, the prestigious, maleonly scholarships were extended to women. "Many of the early Rhodes Scholars happened to be involved in sports, but now extracurricular activities other than sports have developed in universities," explains McGill Students' Society President and 1980 Rhodes Scholar John MacBain. "They are looking for a well-rounded person.'

An honours economics student from Niagara Falls, Ontario, MacBain is but one of three Rhodes Scholars who will leave McGill next fall to study at Oxford University. The second, Marc Tessier-Lavigne, from Trenton, Ontario, received his secondary education in Belgium, but came to McGill to study honours physics "because I wanted to resume my studies in English and, at the same time, live in a French-speaking city."

The third is actor-director-linguist Matthew Jocelyn from Toronto, a master's student in McGill's French department. Jocelyn, who obtained his BA in 1979 from Mount Allison University in Sackville, New Brunswick, won one of the two Rhodes Scholarships awarded in the Maritimes. (Only two of Canada's yearly allotment of eleven Rhodes Scholarships may be won by Quebec students.) Jocelyn explains with a chuckle that both McGill and Mount Allison have claimed him as *their* Rhodes Scholar!

The trio shares many qualities intelligence, self-discipline, wit, energy, and unquenchable enthusiasm. But there the similarities end—MacBain plans to take law while Tessier-Lavigne will further his studies in physics and Jocelyn in theatre.

A swimmer and former wrestler, MacBain hopes to enter the business world after obtaining his BA in jurisprudence at Oxford. "I have a more positive view of business than some people do today," he says. "I'm very interested in the innovations that have taken place and in the opportunities that are there, not only to make society more productive and efficient, but also to make people and things work together." MacBain has already gained some valuable, real-life experience in this area. In 1977 he founded the Swim School for Niagara-region children under five years of age. The ongoing summer program utilizes



A trio of Rhodes Scholars: left to right, Matthew Jocelyn, Marc Tessier-Lavigne, and John MacBain.

private backyard pools and employs about fifteen instructors. "By linking all the pools to one central telephone, by hiring really good instructors, and by having small classes and warm water which small children like, I have used the community's resources without having to build a big pool," explains MacBain. "Also, about \$20,000 a year is given out in student wages."

Former chairman of both Welcome Week and Winter Carnival, the aggressive young Students' Society president has also made his mark as a university Senator and Governor-he was recently honoured by the Board as the first McGill Governor in office to receive a Rhodes Scholarship. And, as if running a swim school for a thousand children and preparing for Oxford University were not enough excitement for one summer, the energetic student plans to fly to South America. "I'm hoping to get a single-engine plane and put extra fuel tanks on board and am looking around for companies that might want to sponsor and send somebody with me." Even if he can't find a partner, MacBain, who earned his commercial pilot's licence two years ago, has no qualms about "flying solo.

Tessier-Lavigne, tall and slender with classic features and dark eyes, is a Renaissance man who enjoys playing duets on his flute. In Belgium he worked with children in the Fédération des scouts catholiques and was a research assistant at the University of Brussels; at McGill he has played soccer for the Douglas Hall team and instructed rockclimbers in the Outing Club. Science, however, is his main preoccupation. "I hope to graduate with a doctorate in physics and then go into theoretical research," says the young scholar. "I'd like to teach as well, because I have a different way of looking at science that I would like to communicate. I would like to get involved in the interface between science and society."

As current science editor of the McGill Daily, Tessier-Lavigne has begun to formulate and express his views on this important subject. "I've always felt that people like to lock scientists in ivory towers, or that scientists like to lock themselves in ivory towers and not feel concerned with anything that is going on around them," he notes. "In fact, some of the greatest problems now facing mankind—like nuclear energy, pollution, genetic engineering—show very clearly that science cannot be disassociated from society."

Willowy, bearded Jocelyn, every inch the medieval thespian, enjoys "being exposed to a myriad of things." At Mount Allison he acted in both English and French plays, performed with a jazz ensemble, and promoted a glass recycling program. During 1977-78, while a student at France's Université d'Aix-Marseille, he lead hikes and rockclimbs, enjoyed long-distance cycling trips, and took fencing lessons. Jocelyn looks forward to being "at the centre of things" at Oxford, where he will study for his doctorate in comparative theatre, act, write, and direct. He hopes eventually to form a communal, politically oriented theatre group in Canada through which he can "express something new.

Jocelyn readily admits to being a devil's advocate. "During my last couple of years at Mount Allison, I wrote a number of articles in university papers about sexist practices on the campus and about the general anachronistic attitude of men towards women." Arching his eyebrows and using his trained voice to full advantage, he confides: "I have also been involved in guerrilla theatre activities. It was my year in France that turned me 100 per cent towards thinking of the theatre as a social force, as a medium not only of communication but of change." Involvement in the theatre has not been a "normal" direction for past Rhodes Scholars, Jocelyn notes. Theatre was my extracurricular activity; it took the place of sports. In some ways, I guess I was a bit of an unorthodox applicant!'

Orthodox or not, Jocelyn, MacBain, and Tessier-Lavigne firmly believe that their scholarships to Oxford will broaden their already-diverse academic and extracurricular interests. None sees the award as the key to an élite "old boys" club. "There is altogether too much prestige attached to the Rhodes," concludes Jocelyn. "It is *not* a ticket to an open door for the rest of our lives. What it *is* is an opportunity to study with some of the most exciting professors in one of the world's greatest institutions."

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Research continued from page 13

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A second threat to research, Farnell claims, is the "huge dip" in the number of staff members that will occur fifteen years down the road. "This is because most of our students do not go on to do graduate work," he notes. "There is quite a demand for master's degrees in industry, but their starting pay is not enough to compensate for the loss in salary they take to get their master's degree."

Incentives for students to do postgraduate degrees are helping to remedy this situation. NSERC research associateships and summer bursary programs have been created and, this summer, the Faculty itself will finance a number of undergraduates to work as research assistants to NSERC grantees.

"I am reasonably optimistic that the research component of this Faculty will continue to be as important as it is now," adds the dean. "We will probably have higher teaching loads that will cut into non-allocated research time, but we can make a very conscious effort not to overload our good research people."

The most important factor in fostering research, however, is creating a climate of excitement and enthusiasm, Farnell maintains. "If you were to lose that excitement, the research effort would collapse very quickly," he says. "People tend to do research because they want to do it; if they find it exciting, they will spend a lot of time on it. And research is indispensable if we are going to keep the quality that we have—and the people that we want to have." *C.H.* \Box

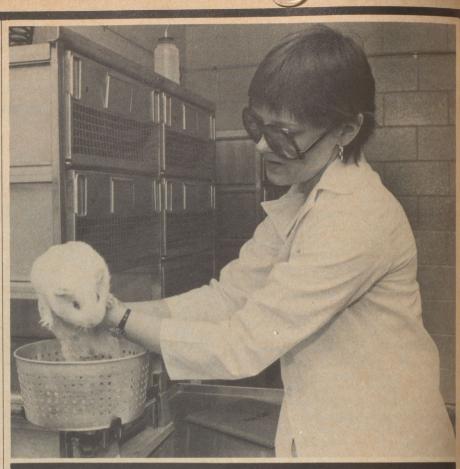
Graduate Studies and Research

\$573,000

The resident expert on university research is Walter Hitschfeld, PhD'50, outgoing dean of the Faculty of Graduate Studies and Research. "We coordinate a large number of graduate programs—140 or so—as well as the courses and research activities of 3,000 students," he explains. "We watch the flow of new programs and try to ensure that standards are acceptable."

The Faculty also oversees funding applications for over a thousand research projects annually and administers "a not insignificant flow of funds that goes for the stimulation of research in the university," says the dean. "We have a committee that disperses a half-million dollars or more each year. We cannot handsomely support ongoing programs, but we *can* put money in where stimulation is required—a change in a professor's research direction that the councils are not yet ready to recognize, help in emergency situations, help with travel expenses, and so on."

The majority of the faculty's twenty-four staff members work in the "graduate studies" area, processing student records and assisting students in various and sundry ways. Seven staffers tend the bulging files of research applications and meet the deadlines set by funding agencies.



"The observations of the people treating patients are very useful to the laboratory researcher. At the same time, we want to bring the latest laboratory discoveries to the bedside as quickly as possible." Dr. Samuel Freedman, Faculty of Medicine

Hitschfeld's \$573,000 research budget is shared by members of the Graduate School of Library Science, the Industrial Relations Centre, the School of Social Work, the School of Urban Planning, the Centre for Northern Studies and Research, the Centre for the Study of Regulated Industries, and the Bellairs Research Institute in Barbados. (Actual administrative costs for the Faculty absorb only \$32,000 of the total.)

Given the diversity of the Faculty's Schools, Centres, and Institutes, it is wellnigh impossible to single out individual research projects. In his Fall 1979 newsletter to graduates, however, Hitschfeld highlighted the activities of one such team: "The Centre for Northern Studies and Research has since 1974 been a rallying point for some forty professors and their ninety graduate students from ten departments who share interest in the north. These concerns include geology, exploration, transport, ice physics, inuktitut language, teaching in isolated communities, arctic parasites, and the health problems of northern people; and major analyses of human and political problems in the north have led to some quite tangible improvements in land claim settlements and in legislation. The Centre...also has direct responsibility for our subarctic field station at Schefferville, Quebec, and watches over three longestablished stations on Axel Heiberg, Coburg, and Carey Islands.

A major concern for most North American university administrators is the "employment stagnation" that exists in academe and its effect on graduate enrolment, notes Hitschfeld. "Students and professors alike know that there really are only very few academic vacancies, and there will only be few till the nineties. We have no place for young people to join us to leaven, even to upset, the departments and this is a very great loss indeed."

During the 1968-78 decade, the number of research (PhD, MA, and MSc) degrees granted each year by McGill remained at about 420; meanwhile, the annual number of professional degrees and graduate diplomas lept from 748 to 1236, thus reflecting the increasing number of students taking MBA and other professional programs. Says Hitschfeld, "These relative shifts in the popularity of programs are quite a natural response of our young people to the job opportunities as they perceived them."

Hitschfeld is justly proud of McGill's research record and paints an optimistic picture for the future. "Considering our manyfold difficulties, which are natural in any large and multipurpose, public and private, conservative and progressive undertaking, we are a going concern," he told the Faculty's graduates in his newsletter. "Write, or visit us sometime; and most of all, send us your children!" C.S. \Box

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Law \$203,000

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"Until recently, Law was considered one of the practical Faculties and was essentially concerned with the practice of law and with the preparation of students for the Bar of Quebec," says Professor Paul-A. Crépeau, director of McGill's Institute and Centre of Comparative Law.

It is really only in the past twenty years that Law Faculties have developed a research component, and postgraduate research in Law is even more recent: McGill's Comparative Law Institute is only a decade old, while the Faculty's postgraduate Law program is celebrating its fourth birthday this year. A turning point came in 1965 when the Quebec government invited the Faculty of Law "to contribute to the reform of the civil code," notes Crépeau, who chaired the university's civil code revision office until the project was completed in 1977.

The research-oriented spin-offs of this undertaking have been many and varied. One is a legislative history of Quebec's civil code—and its 2,715 articles—from its

enactment in 1866 to the present. Chuckles Crépeau, "It's a mammoth task that only Benedictine monks would be crazy enough to undertake! But it is about finished and will be released in the early fall." An English-French vocabulary and dictionary of civil law terminology is also being developed. "It's another monkish operation," quips Crépeau. 'We're in the middle of the letter 'C' at the moment; when we're finished, we'll have about 6,500 words in the jurists' vocabulary and 4,500 words in the dictionary." An example of interdisciplinary team research is the exhaustive study being made of Ouebec medical law in cooperation with the Faculty of Medicine. Once their report is released in 1982, the dauntless researchers will "do the other provinces." Members of all Quebec Law Schools, meanwhile, are collaborating in the preparation of a multi-volume treatise for "students, lawyers, and justices in the application and interpretation of the new civil code," explains Crépeau.

Funding for such "mammoth" works comes primarily from outside sources. The legislative history of the civil code, for example, has been financed by La Chambre des Notaires du Québec, while the lexicon and dictionary are being supported by Quebec's Office de la langue française. The examination of Quebec medical law is being funded by the Department of Social Affairs, a number of professional colleges, and insurers. Despite these expressions of support, however, it is often difficult to balance the research budget. "These various sources do not come up for renewal at the same time," Crépeau points out, "so you're always on a hinge. You don't know what will happen tomorrow."

For Crépeau's colleague Dr. Nicolas Matte, director of the Institute and Centre of Air and Space Law, research funding has resulted in an *embarras de richesses*. "We don't have money problems," says Matte unabashedly. "The only problem we have is finding the needed researchers to continue our work and to maintain the family spirit which prevails here."

The air and space law facility is unique in the world, says Matte, in that it not only conducts research into air transportation and space-related problems, but also has a teaching capacity. This year, twenty-six graduate students from around the world are actively doing research as part of their master's or

Towards a scientific research policy for Quebec: McGill and the government's Green Paper

Last March, after more than two years at the drawing board, the Quebec government released its important Green Paper on research. Entitled "Towards a Scientific Research Policy for Québec," the 383-page document detailed projected policy as it relates to university, industrial, and government research, and discussed the changes in the present structure it wished to effect.

Quebec organizations and institutes involved in research—including universities, learned societies, CEGEPs, teachers' federations, and community groups—were invited to examine and respond to the Green Paper but were given only a matter of weeks in which to prepare their briefs. McGill's 17page submission, presented in both French and English, was one of almost 150 such documents received by the government before the June deadline.

As an institution deeply committed to all aspects of research, McGill rallied its forces to study the tome. Principal David Johnston requested that the Faculty of Graduate Studies and Research, which directs university research policy, assume the task of coordinating the Green Paper response. Faculty Dean Dr. Walter Hitschfeld, also Vice-Principal (Research), immediately organized an eightmember executive committee. In addition to Hitschfeld, who served as chairman, committee members were: Dean of Engineering Dr. Gerald Farnell, Professor of Mining and Metallurgical Engineering Dr. John Jonas, Professor of Biology Dr. Gordon Mac-Lachlan, Dean of Science Dr. Svenn Orvig, Professor of Biology Dr. Frank Rigler,

Associate Professor of Philosophy Dr. William Shea, and Professor of Pediatrics and Biology Dr. Charles Scriver.

The committee circulated copies of the Green Paper to thirty-four active and experienced McGill scientists representing thirty disciplines. Their purpose was, as the brief's preface states, "to inject the hard-won experience of the person active at the bench and his views, which are often not identical to those of administrator or planner."

What was McGill's reaction to the Green Paper? "Our community in general was opposed to it," says Hitschfeld. "The Green Paper seemed to suggest it would be convenient, for administrative or financial purposes, to separate research from teaching. We find this unconstructive—and it would be an expensive operation. Nor would it lead to more research or better teaching. The evaluation of a professor's performance as a teacher and researcher is *not* something easily done by means of gross criteria. It must be done in the departmental family through existing structures—by the chairman in particular.

"One of the good things about any such inquiry is that it brings the community together," stresses the dean. "The Green Paper made the university think about research people in all levels of McGill are now a little more conscious of the question than they used to be." Not unexpectedly, there was also a high level of unanimity among the province's universities, all of whom submitted briefs to the Quebec government. "There was no collusion," smiles Hitschfeld, "though there were several public workshops and symposia held at the time we were writing the responses; obviously, there were informal exchanges of ideas. But universities like Montréal, Laval, and McGill have similar traditions and philosophies. We have different internal procedures and structures, but I think those are much less important than the general congruence in philosophy."

What happens now? No one in the university community is quite certain. The government's original intention was to produce a White Paper leading to new legislation, but the latest rumblings out of Quebec are that "there might not be legislation," explains Hitschfeld. "Rather, there may be a declaration by the government of certain choices they will make. This was promised for January but it's not here yet. With elections and the referendum, it is doubtful that the Green Paper is a high priority at the moment. Our brief, and others, tended to say that the government already has considerable powers; it doesn't need more.

"There's no doubt that nearly every other province has worried about science policy and has made statements about it. But Quebec's Green Paper is a first because it is so coherent. One can easily challenge the Paper on a number of statements, and we have done so; but I have no quarrel with its basic philosophy—that scientific research is a priority for the province, for our society, and for mankind."H.K.

Editor's Note: Graduates wishing to obtain copies of the government's Green Paper ("Towards a Scientific Research Policy for Québec") or McGill's response ("A Brief by McGill University on the Green Paper") are invited to contact the Faculty of Graduate Studies and Research, Dawson Hall, 853 Sherbrooke Street West, Montreal, Quebec H3A 2T6, telephone (514) 392-5092. doctoral thesis requirement; in addition, says Matte, "the Russians sent a lady here for six months last year, and the Japanese have sent several professors and paid us \$2,000 each to train them to do research."

While the academic centre is almost thirty years old, the research institute is a youthful three. The importance of its research efforts has already been recognized through ongoing governmental support. À \$120,000, threeyear contract from the federal Department of Transport and the Canadian Transport ComThis international element is, in fact, reflected across the board in postgraduate law studies. Explains Crépeau, "We have students from Europe, Asia, Africa, Latin America, and just a few Canadians and Americans." Why is this so? The existence of cultural exchange scholarships, the colonial tradition of studying in the West, and the European emphasis on postgraduate studies are some of the reasons. Of special import, however, is McGill's position as "a meeting point between the civil law and the common



GERALD BELBER

"We have to have a research capacity to provide an environment in which researchers can be trained. The objective of a plant breeding program is not really to produce new cultivars—but when you make a discovery, it's an added bonus!"

Dr. Howard Steppler, Faculty of Agriculture

mission has concentrated on all aspects of air | transportation-"regulation, bilateral and international treaties, consumer problems, airports, taxation, and so on," explains Matte. The comprehensive project involved eight students and four faculty members and will soon result in a 1,000-page treatise for the use of government officials. The Quebec government, too, has lent generous support-a recent \$50,000 grant will enable the centre to study legal, economic, and technical problems at Mirabel Airport; assess the role of regional and provincial airlines in the development of Canadian aviation; and examine the implications of remote sensing and broadcasting by space objects. Such research efforts generally result in the publication of monographs; the institute also produces a yearbook, The Annals of Air and Space Law.

With the headquarters of the International Civil Aviation Organization and the International Air Transport Association nearby, McGill's air and space law facility is ideally situated. "Montreal is indirectly the mecca of air activities." observes Matte. "This is why an institute is needed here. We have all the facilities—and we have the best specialized library in the world. This is one of the privileges students find when they come here."

8 McGILL NEWS/SPRING 1980

law, between the French and the English legal systems," Crépeau notes. "It is indeed a unique place, a living laboratory for comparative studies between the two main legal systems in the world." $C.S. \square$

Management \$168,000

"The Faculty of Management is growing tremendously and we feel research is vital to our teaching," says Rabindra Kanungo, PhD'62, a professor of Management and chairman of research in the Faculty. "We must be involved in research to keep up-todate. Our staff recruitment program emphasizes research-oriented individuals—we look for people who are innovative."

This emphasis on research has led to the formation of a Faculty research committee that coordinates the distribution of information to other Canadian business schools, supports staff research projects, and organizes not only weekly research seminars but also a major annual conference to which top North American lecturers are invited. "We don't yet have a separate research budget, but we're planning to develop one," notes Kanungo. "At present, our operation is not funded by

any external source—if the dean has the money, we get it. Otherwise, we do with out "

In 1978-79, however, individual faculty members secured \$168,000 in grants and contracts to pursue their research activities. Explains Kanungo, "Most of our research is interdisciplinary because our problems are interdisciplinary. One study, on the effects of television advertising and programming on consumers, requires a knowledge of markeing, economics, and psychology; another, on corporate morality, involves behavioural scence, accounting, and finance."

About 80 per cent of the Faculty's research is industrially-related, while the remainder's basic, theoretical work, the research chaiman points out. In most cases, however, it's virtually impossible to isolate the 'pure' from the 'applied'—one professor's basic research into understanding different personalities, for instance, has resulted in stress research that s highly applicable to industry.

Inflation has not yet directly affected indvidual research funding in the Management Faculty but "if the government doesn't increase funding to keep pace, we will suffer." warns Kanungo. "Right now we have a vey good research climate at McGill. Each indvidual on staff contributes. In terms of output, we're the top research Faculty among Candian business schools." $H.K. \square$

Medicine

\$12,510,000

"Research is a major preoccupation of he Faculty of Medicine," says Dean Samuel Freedman, BSc'49, MD'53, GDipMed's, himself a distinguished cancer researcher. "About half [51.6 per cent] of the total dolar value of research grants in the university are held by members of the Faculty. In addition, there are substantial research grants and contracts directed to the teaching hospitals."

The majority of the Faculty's sevuhundred full-time staff members are closdy involved in both research *and* teaching. Freedman stresses. "The most efficient way to provide up-to-date teaching at the undrgraduate level is to have teachers who ire involved with research. And when one taks about postgraduate teaching, the majority is done in research-oriented programs." In addition to its 640 medical students and 900 residents, interns, and clinical and reseach fellows, the Faculty has responsibility or teaching 300 master's and doctoral students from McGill's basic science departments

While the university underwrites he salaries of most full-time staff members about fifty physicians, called career mvestigators, are funded by the federal Medial Research Council (MRC), the Conseil derecherche en santé du Québec (CRSQ), or private research organizations like the National Cancer Institute. "These career investigators spend 75 per cent of their time in research and the spin-off is of great benefit to students, research fellows, and other faculty members," notes Freedman. The Canadian medical research community recently received a much-welcomed shot in the arm when Health and Welfare Canada announced a 17.4 per cent increase in the MRC's 1980-81 budget—a 12.2-milliondollar boost to a total of \$82.2 million. "This is something the medical community has been pushing for for a long time," Freedman points out. "The cost of research equipment has been particularly hard hit by double-digit inflation and the devaluation of the Canadian and American dollar."

One area of ongoing concern to Faculty administrators, however, is a perceived decline in the number of medical undergraduates choosing research careers. reason for this," Freedman explains, "is that in the lay press there has been an increased downgrading of science, of technology, of intellectuality, of professionalism. Second, when we make public campaigns to increase the level of medical research funding, it's a double-edged sword-we may be effective in convincing legislators to increase their research budget, but at the same time our medcal students are reading this material and saying, 'Why should I trade a safe career in he practice of medicine for the uncertainties of a career in medical research?' And, of course, we can always use more research felowships to support our students.

The Medical Faculty has already taken positive steps to stimulate an interest in research amongst its undergraduates. In addiion to a regular research forum and summer esearch bursaries, every effort is being made o "get students in contact with some of the putstanding people in the Faculty who are role nodels in the research field," says Freednan. And since last June, master's and docoral students from the biological and medical sciences have been permitted to apply for leferred admission, thus allowing them time o complete their postgraduate degrees before entering Medicine.

Unlike many of its sister Faculties, Medicine has very little applied research. Generally, it is centred in the School of Human Communication Disorders, the School of Nursing, and the department of pidemiology and health.) "The balance about 90 per cent, if you can make that rather artificial distinction—is basic laboratory reearch at the bench," Freedman notes.

"The Shriners Hospital for Crippled Chilcren, for example, has laboratories for the investigation of childhood arthritis." explains the dean. "The Kellogg Centre at the Montreal General Hospital is conducting applied research on the training of faculty and saff for the health care delivery system; the McGill Cancer Centre, which resulted from a tvo-million-dollar bequest from Sir Mortimer Davis, coordinates the cancer-related work of McGill's researchers, physicians, epidemiologists, and teachers; the recently established Centre for Human Genetics brings laboratory knowledge in genetics to the teaching hospitals; and the Montreal General Hospital Restarch Institute has an immunology project to sudy why some people are genetically resistant to disease

In addition, the Faculties of Medicine and Agriculture are presently developing a nutrition centre. "You can't talk about nutrition without talking about food," smiles Freedman. "Therefore the only realistic way this can work is to have a collaborative effort. It will be the coordinating body for both basic and applied research in areas of joint interest."

Cooperative Faculty projects are not limited to Montreal but include ongoing contacts with such countries as Ethiopia, Kenya, Pakistan, China, Costa Rica, and Venezuela. "Our international involvement is mainly educational, though there is some research element," explains Freedman. "Many of these projects are not the result of coordinated efforts on our part but rather the result of individual faculty contacts."

Combined careers in teaching, practice, and research are the rule, not the exception, in the Faculty of Medicine. Freedman, too, insists on maintaining personal contact with patients despite his administrative, teaching, and research commitments. He can be found on the hospital wards at least half a day each week, come rain or shine. "The observations of the people treating patients are very useful to the laboratory researchers," he stresses. "At the same time, whether in cancer or genetics or nutrition, we want to bring the latest laboratory discoveries to the bedside as quickly as possible." $C.S. \square$

Music

\$11,000

Research is essential to the study of school music, theory, and musicology, explains Dean of Music Dr. Paul Pedersen. "Within these areas we have been hiring people deliberately for research, with the expectation that they will consider it a normal part of their work. Consequently, our staff's research productivity has been growing rapidly in the last few years."

Research in music, as in most of the humanities, tends to be highly individual and, as a result, grants are generally small. Notes the dean, "Our demands for research grants have always been relatively modest, and they have always been met."

Approximately half of the Faculty's musicologists and theorists receive research grants each year, most of them from the federal Social Sciences and Humanities Research Council. Projects range from a research laboratory for school music to a computer analysis of music, and from the identification of unsigned baroque compositions to modern recording techniques.

Finding qualified Canadians to fill staff vacancies, however, is an ongoing problem in the Faculty of Music—two Americans and a Swede were recently hired when no Canadians applied for the positions. "This shortage may be caused by the fact that doctorallevel music studies are relatively new in Canada," says Pedersen. "When I received my PhD from the University of Toronto in 1970, I was their second graduate. And there are still no doctoral theory programs in the country, though we are submitting a request to start one."

Another area of great concern is the poor climate that exists in Canada for music researchers. The absence of scholarly journals is a major drawback, Pedersen admits. "The most important publications are American and European—there is only one Canadian journal. Thus Canadian research is scattered, with our best work being published in foreign journals."

Pedersen is nevertheless optimistic that McGill's music research will continue to increase. "We are actively promoting it by our hiring policy." he notes, "and by the research interest and activity of our current staff members." H.K.

Religious Studies

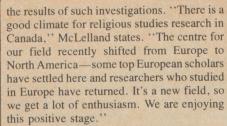
"Research in the humanities differs from scientific research in that it is almost completely individual," says Dean of Religious Studies Dr. Joseph McLelland. "A researcher investigates a question and then tests his theory by consulting with scholars in the field and with research libraries. His work results in an article or book, generally completed in the summer or during a sabbatical leave. Because research is so individual, funding tends to be low."

Actual "religious studies" grants account for only \$2,000 of the 1978-79 total of \$216,000. The hefty balance belongs to the Institute of Islamic Studies, a research institute that comes under the wing of the Faculty of Religious Studies. Says McLelland, "This makes our research budget look good, but it is *not* indicative of how things really are!"

Despite the modest budget for religious studies research, McLelland feels that funding is "adequate." Money for short study leaves and teaching assistantships could be increased, however: "Our biggest worry is graduate students—if we can't afford to keep a good group of doctoral students, then research suffers," he emphasizes. "This is a priority." Two or three doctoral students do receive substantial Leeds Fellowships from the Social Sciences and Humanities Research Council, and further government funding (about \$4,000 annually) is provided to assist faculty members with book publication.

The Faculty continues to attract good researchers. Given the scarcity of available teaching positions, only top applicants are considered, and their interest in research is an important qualification. "A teacher must research to keep up in his field," notes McLelland, "but we don't necessarily look for the kind of research that results in publishing. I hope we don't force young teachers to 'publish or perish."

Research in religious studies covers the spectrum, from Canadian theology to the ethics of privacy, from modern atheism to Old and New Testament studies, from comparative religion to reformed religion. A number of books, articles, and research papers record



Research is the primary preoccupation of the Faculty's Institute of Islamic Studies, housed in the Leacock Building. "We try to coordinate research and teaching," says Institute Director Dr. Charles Adams. "Staff members teach seminars in areas related to their research interests."

The Institute presently has 9 faculty members and 60 students, of whom 36 are from foreign climes. Most return to their homelands after graduation and readily find work as university teachers or administrators. A considerable number of the western students are clergymen, particularly Roman Catholic priests; some graduates go on to serve in government posts, but the majority pursue academic careers.

In addition to the \$214,000 raised through individual research grants in 1978-79, the Islamic Institute attracted over \$420,000 from such private sources as the University of Kuwait, Hartford Seminary, and Saudi grants for graduate fellowships. Next year, however, the withdrawal of some funding will necessitate the reduction of the staff to seven professors, and will eliminate foreign student fellowships and money for library purchases.

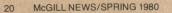
Staff members are nonetheless continuing to pursue research in such areas as mysticism, modern Arabic literature, and the history of Kuwait, and their scholarly articles have appeared in a number of North American, European, and Oriental journals. The director, however, is concerned about the future of the Institute. "McGill is very research-oriented, but lately funding has become harder and harder to procure and that is discouraging. With upcoming budget cuts, I estimate that in five years we will have less than half the funding we'll get next year, not counting inflation. We could not suffer that. Unless outside funds are found, we are in danger of not having enough substance to continue." H.K.

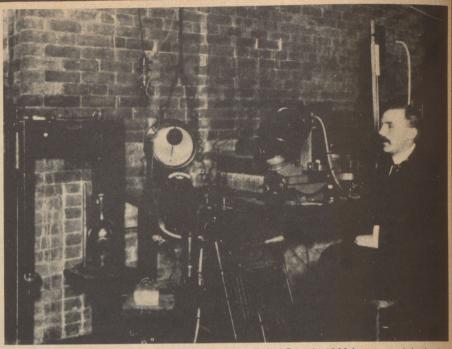
Science

\$5,463,000

"The purpose of the university is the advancement of knowledge, the preservation of knowledge, and the teaching of our knowledge," states Dean of Science and Professor of Meteorology Svenn Orvig, MSc'51, PhD'54. "Teaching and research go hand in hand."

Research is a vital element in all ten Faculty departments—geography, psychology, biology, meteorology, physics, chemistry, geological science, mathematics, marine sciences, and parasitology. The departments of physics, biology, and chemistry each received over a million research dollars in 1978-79, explains Orvig, while the tiny,





Physicist Ernest Rutherford (1871-1937) won a Nobel Prize in 1908 for research he began while a professor at McGill. The above photograph, taken in his Macdonald Physics Building laboratory in 1905, is rare indeed—according to Dr. F.R. Terroux, curator of the Rutherford Museum, the brilliant young researcher was almost always too busy to be bothered posing for photographers.

"This was a vitally important experiment," notes Terroux. "It was one in which he confirmed his ideas about the nature of alpha particles, an integral part of the radioactivity story. Rutherford loved alpha particles—they became kind of mascots of his.

"Government research grants were not available in Rutherford's day," continues the curator. "The only help he would have had was from Sir William Macdonald who built and endowed the laboratory. Rutherford had to devise all his own equipment and his mechanic would make it—there were no catalogues to order from as scientists have today!"

five-member Institute of Parasitology at Macdonald College obtained \$341,000 in grants and contracts. "That leads the whole Faculty in terms of individual funding—it isn't always size that makes for quality!"

The lion's share of Science's research funding comes from the federal government's Natural Sciences and Engineering Research Council (NSERC), whose 1980-81 budget recently received a 35 per cent increase to \$162.6 million. "The amount is very handsome," notes Orvig, "but one should remember that it comes after a number of rather dry years."

The training of university researchers and the need for young academics are a dual concern for Orvig and his administrative colleagues. This year's enrolment figures show a slight drop in the number of students taking graduate programs in Science. "In almost all departments we have people, facilities, space, and work for more graduate students than we have," the dean points out. "But today's students are in a 'buyer's market' they don't automatically say, 'I'll go to McGill.' They start comparing the financial assistance available at various universities, so there is also that kind of competition."

A second hurdle is that new research and teaching talent is "not coming in or moving up" the academic ladder. Orvig quotes revealing statistics for his Faculty: There are 103 full professors with an average age of 52 years, 85 associate professors with an average age of 43 years, and 28 assistant professors with an average age of 34 years. "It's top heavy and every year it gets worse," he claims. "It will be several years before significant numbers reach retirement age; until that happens, we can't get them in at the bottom rung."

Another chronic problem, particularly for Faculties like Science which often require expensive equipment and laboratory facilities for research projects, is that nine-letter word, inflation. "Both NSERC and the Quebec government give us capital funds, but prices are up and grants are becoming more difficult to get," notes Orvig. "There is such an evolution in Science that there are always new instruments you have to buy."

With over \$5 million in grants and contracts, however, staff researchers have numerous projects underway—everything from meteorology's weather radar observatory at Macdonald College to biology's study of lake pollution in northern Quebec. The marine sciences department's study of the St. Lawrence River, like physics' nuclear highenergy facility, is being run in collaboration with members of other universities.

The very nature of university research places staff members in a "privileged position," according to Orvig. "You receive support, even if it is not as much as you feel you should have. And you are given the opportunity to do research in the hope of advancing our knowledge—and for the sheer joy of it!" $C.S. \square$

WHERE THEY ARE AND WHAT THEY'RE DOING

'32

SEN.H. CARL GOLDENBERG, BA'28, MA'29, BCL'32, a long-time member of McGill's Board of Governors, has been appointed Governor Emeritus.

'33

ROBERT F. SHAW, BEng'33, a special adviser to the Newfoundland government, has been awarded the 1979 gold medal of the Canadian Council of Professional Engineers.

'35

PETER M.LAING, BA'35, who served on McGill's Board of Governors for many years, has been made Governor Emeritus.

'37

EILEEN (CRUTCHLOW) BLOOMING-DALE, BA'37, in private practice in Scarsdale, N.Y., has been appointed an assistant professor of clinical psychiatry at New York Medical College.

'39

J. PRESTON ROBB, BSc'36, MD'39, MSc'46, a McGill professor of neurology who recently won the William Lennox Award of the American Epilepsy Society, is engaged in developing a World Health Organization program for epilepsy control in Kenya.

'40

G. DRUMMOND BIRKS, BCom'40, president of Henry Birks Ltd., has been appointed to McGill's Board of Governors for a fiveyear term.

GEORGE K. GRANDE, BA'40, former Canadian Ambassador to South Africa, has been made vice-president, international operations, of Later Chemicals Ltd., Richmond, B.C.

EDWIN L. LOVELL, PhD'40, has retired after twenty years as director of the Olympic Research Division of ITT Rayonier Inc., Shelton, Wash.

'42

H.J. MICHAEL WATSON, BSc'42, BCom'47, has been elected vice-president, finance, of the Steel Co. of Canada, Ltd., Toronto, Ont.

'43

ERNEST A. GRANT, BSc(Agr)'43, a research scientist with Agriculture Canada in Fredericton, N.B., has been made a Fellow of the Agricultural Institute of Canada in recognition of his outstanding work with forage crops.

'45

NORMAN EPSTEIN, BEng'45, MEng'46, professor of chemical engineering at the University of British Columbia, Vancouver, has been elected president of the Canadian Society for Chemical Engineering.

'46

J. MORRISON PRYDE, BEng'46, has been made president and chief executive officer of Chancellor Energy Resources Inc., Calgary, Alta.

'48

ANDRES AGUILAR-MAWDSLEY, MCL'48, chief counsel for Venezuela's state oil company, is co-chairman of the United Nations commission investigating alleged crimes of the deposed Iranian Shah.

JAMES H. DARRAGH, BSc'46, MD'48, GDipMed'56, MSc'59, a senior lecturer in the department of medicine at the University of Ottawa and honorary attending physician at the Ottawa General Hospital, has been named executive director of the Royal College of Physicians and Surgeons of Canada.

'49

DOUGLAS T. BOURKE, BEng'49, president of Drummond McCall Ltd., has been named to McGill's Board of Governors for a five-year term. SAMUEL F. GHOURALAL, MD'49, has received the Trinidad and Tobago Medical Association's scroll of honour for twenty-four years of outstanding service to the community.

CARL A.R.LEE, BSc'47, MD'49, has been awarded a scroll of honour by the Trinidad and Tobago Medical Association.

'50

HAROLD CORRIGAN, BCom'50, has been appointed vice-president, corporate relations, of Alcan Aluminium Ltd., Montreal.

ROBERT A. JOSS, BEng'50, a group director, production services, of the Canadian Pulp and Paper Assoc., Montreal, has been made a Fellow of the Technical Association of the Pulp and Paper Industry.

W. PERCY McKINLEY, BSc(Agr)'50, MSc'51, PhD'54, first director-general of the Food Directorate of Canada's Health Protection Branch, has received the 1979 Wiley Award of the Association of Official Analytical Chemists.

'51

RITA (BROWNSTEIN) KOPIN, BSc'51, has received a master's degree in museum education from George Washington University, Washington, D.C.

'52

HERBERT E. GRAY, BCom'52, has been named Minister of Industry, Trade and Commerce in the new federal cabinet, Ottawa.

'54

PAUL PETER HELLER, LLM'54, is an honorary lecturer in aviation law at Auckland University, New Zealand.

H. ARNOLD STEINBERG, BCom'54, executive vice-president of Steinberg Inc., has been made a McGill Governor.

THE WAY WE WERE..



Canada was a mere six years old when these intent young men graduated as McGill's first engineers in 1873.



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Britannica 3

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'55

PATRICK R. JUDGE, BD'55, has been named development manager of the Banff Centre for Continuing Education, Alberta.

'56

DOREEN (HOGG) KIMURA, BA'56, MA'57, PhD'61, a psychology professor at the University of Western Ontario, London, appeared in the Canadian Broadcasting Corp.'s television series *The Nature of Things*, on the program "Left Brain-Right Brain."

PETER MACKLEM, MD'56, has become physician-in-chief of the Royal Victoria Hospital, Montreal.

BERNARD J. WOLOSHEN, BA'53, BCL'56, has been made a Governor of Concordia University, Montreal.

'57

BARRY A. CULHAM, BEng'57, has been appointed senior vice-president and corporate controller of the Export Development Corp., Ottawa, Ont.

'58

DONALD JOHNSTON, BCL'58, BA'60, has become president of the federal Treasury Board, Ottawa, Ont.

ROBERT C. NEAPOLE, BEng'58, has been made vice-president of BG Checo International Ltd., Montreal.

BRUCE H. SELLS, PhD'58, a professor of molecular biology, has been appointed associate dean of basic sciences in the Faculty of Medicine at Memorial University of Newfoundland, St. John's.

'59

MARINUS FRANK BOODE, BSc'59, has been appointed marketing manager, organic intermediates product group, in the Dow Chemical U.S.A. Organic Chemicals Department, Midland, Mich.

ALLAN CURRIE, PhD'59, a professor at Ryerson Polytechnical Institute, Toronto, Ont., is spending a sabbatical year in the department of environmental biology at the University of Guelph.

JOHN HOWSE, BSc'59, has joined Southam News as their first full-time energy specialist.

Attention Commerce graduates!

Yesterday: Graduates of McGill's original School of Commerce are invited to contribute to the preparation of a history of the School by sending reminiscences and memorabilia to: Prof. Earl Beach, Economics Department, Leacock Building, 855 Sherbrooke St. W., Montreal, Que. H3A 2T7.

Today: Editors of the Faculty of Management yearbook announce that copies of the 1977, 1978, and 1979 *Widget* may be picked up at the Management Undergraduate Society office, Bronfman Building, 1001 Sherbrooke St. W., Montreal, Que. H3A 1G5, or ordered (at a cost of \$3 to cover postage).

MICHAEL E. DIXON, BSc'58, MD'60, MSc'63, has been appointed registrar of the College of Physicians and Surgeons of Ontario.

ROGER PHILLIPS, BSc'60, has become vice-president, research and engineering, of Alcan Aluminium Ltd., Montreal.

MARGO (FREIMAN) ROSTON, BA'60, writes a daily social column in the Ottawa *Journal*.

'61

DONALD J.A. MacSWEEN, BA'56, BCL'61, director-general of the National Arts Centre in Ottawa, Ont., has been named a McGill Governor.

'62

ALFRED G. WIRTH, BA'62, DipM'70, has become chief securities investment officer, Canada, for the Sun Life Assurance Co. of Canada.

'63

MARGARET HAGERMAN, BN'63, has been named executive director of West Park Hospital, Toronto, Ont.

GEORGE T. NEEDLER, PhD'63, has been named director of the Atlantic Oceanographic Laboratory of the Bedford Institute of Oceanography, Dartmouth, N.S.

COSTAS S. NICOLAIDIS, BArch'63, is a partner in the new Montreal firm of Stahl & Nicolaidis, Architects.

'64

PETER KATADOTIS, MSW'64, has been appointed director of English productions at the National Film Board of Canada, Montreal.

'65

NORMAN PEARL, BCom'65, has been appointed president and chief executive officer of the Sherwin-Williams Co. of Canada Ltd., Montreal.

GEORGE B. PENDLEBURY, BSc'65, is a senior geologist at Quasar Petroleum Ltd., Calgary, Alta.

'66

CLAUDE P. DUPUIS, MBA'66, has become director, agreements and licensing, of Rhône-Poulenc Santé, Paris, France.

DR. ALBERT RABINOVITCH, BSc'66, MSc'69, an assistant professor of pathology at Case Western Reserve University School of Medicine, has been appointed director of clinical pathology at University Hospitals of Cleveland, Ohio.

'67

W.R. ("DICK") COWAN, MSc'67, has become a senior terrain scientist with Northern Pipeline Agency, Calgary, Alta. IAN G. MACINTYRE, PhD'67, is chairman

of the committee overseeing the construction of Paleontology Hall, a new home for the Smithsonian Institute's dinosaur collection, Washington, D.C. *continued page 25*

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25

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26

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27

R.V.C. Alumnae Reception Graduates' Pre-Game Luncheon Football Game McGill vs Queen's Graduates' Rendez-Vous

28

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McGILL NEWS/SPRING 1980 24

'68

HOWARD ALPER, PhD'68, has won a 1980 Steacie Fellowship from the Natural Sciences and Engineering Research Council of Canada to continue his research on methods for removing sulphur from crude oil. KENNETH WIGHTMAN, BCom'68, has

been appointed comptroller of Zellers Ltd., Montreal.

'69

RALPH ENGEL, BCom'69, has been appointed vice-president, finance, of Majestic Industries (Canada) Ltd., Montreal.

JOHN HIGGINBOTHAM, MA'69, is a Fellow at the Center for International Affairs at Harvard University, Cambridge, Mass., and a member of the policy planning staff in the Department of External Affairs, Ottawa, Ont. GRAHAM McFARLANE, BEng'69, has been named a partner of Western Management Consultants, Calgary, Alta.

'70

GEOFFREY W. GOSS, BEng'70, has become director of marketing support for Northern Telecom's Network Systems Division in Richardson, Tex.

'71

MOHAMAD A. FARIS, PhD'71, has become a forage legume breeder, alfalfa, at the Ottawa Research Station of Agriculture Canada.

CAROLE (SPENCER) MASK, BA'71, who recently graduated from the University of Georgia's College of Veterinary Medicine, is practising at Fort Hill Animal Hospital in Huntington, N.Y.

ANDRÉ L. POTVIN, BCom'71, is second secretary, Canadian International Development Agency, at the Canadian Embassy in Lima, Peru.

MEREDITH SIMON, BA'71, completed her MD degree at the University of Calgary last summer and is now doing her residency in Calgary, Alta.

JAMES A. TILLEY, BSc'71, has won the American Society of Actuaries' Triennial Prize for his paper entitled "The Pricing of Nonparticipating Single Premium Immediate Annuities."

'72

MIRON U. SAVICH, MEng'72, is in charge of noise control studies in the Elliot Lake Laboratory, Mining Research Centre, of Energy, Mines and Resources Canada.

DALIA SINIUS, MEd'72, is a consultant in curriculum development at the American International School in Katmandu, Nepal.

'73

LU ELLEN ABRAHAM, LLB'73, has become administrative law judge for the Texas Health Facilities Commission in Austin. PETER JONES, PhD'73, has been appointed director of the Alumni Association at the University of British Columbia, Vancouver. GABRIEL ZAINO, BEng'73, has become chief plant metallurgist at Canadian Steel Foundries Ltd., Montreal.

'74

LARRY J. BEHAR, BA'74, has opened a private law practice in Fort Lauderdale, Fla.

'75

EZZAT ABDEL ALIM DESSOUKI, BSc(Agr)'75, has received his Master of Science degree from the University of Saskatchewan, Saskatoon.

PIER GIORGIO FONTANA, PhD'75, has been appointed to the Alberta Department of Economic Development, Edmonton.

GORDON A. IRONS, MSc'75, PhD'78, has been named an assistant professor of mining and metallurgical engineering at McMaster University, Hamilton, Ont.

VICTOR J.E. JONES, BSc'71, MBA'75, has been appointed president of International Mobile Data, Inc., Vancouver, B.C.

PAMELA MAHER, BSc'75, who recently received her PhD in biochemistry from the University of British Columbia, Vancouver, has won a two-year Anna Fuller Fund fellowship to pursue postdoctoral work at the University of California, San Diego.

ROSS H. MANELLA, BA'72, BCL'75, LLB'77, has opened a law practice in Hollywood, Fla.

'76

JUDY POLUMBAUM, BA'76, is currently assistant to the director of the English Language program of the Institute of Journalism, Beijing, China.

WALTER SOKYRKO, BEng'76, is on staff at Bell Northern Research in Ottawa, Ont. ALAIN K. SUTTON, BEng'73, MBA'76, has become director of the international division of the Toro Co., Toronto, Ont.

'77

BEVERLY (HALLETT) BRESEE, BEd'77, is a teacher at John Adam Memorial School in Delson, Que.

LINDA CEKAL, BCom'77, has become a product manager at General Foods Ltd., Toronto, Ont.

JANET DOREY, BSc'75, DDS'77, has joined the staff of the oral medicine department at the University of British Columbia, Vancouver.

THOMAS A. McKEE, BA'77, who recently received his LLB from Osgoode Hall Law School, is articling with the Toronto law firm of Blake, Cassels and Graydon.

LEILA GAY MITCHELL, BA'77, is presently completing her doctorate in Canadian history at York University, Downsview, Ont.

'78

PETER S. BIRKBECK, BSc'78, is a chemist with C-I-L Inc., Mississauga, Ont. LINO DiLULLO, BSc'74, DDS'78, is specializing in oral and maxillo-facial surgery at

the State University of New York at Buffalo.

'79

KENNETH ARMBRUSTER, BEng'79, has been appointed a drilling engineer by Guthrie McLaren Drilling Ltd., Edmonton, Alta.

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McGILL NEWS/SPRING 1980 2

DEATHS

'05

SOPHIA MAY IDLER, BA'05, at Montreal, on Feb. 6, 1980.

'07 WILLIAM D. LITTLE, BSc'07, on Dec. 20, 1079

10

MARGARET (TAYLOR) MOORE, BA'10, on Nov. 25, 1979.

111 ALLAN GRANT LOCHHEAD, BA'll, PhD'19, at Ottawa, Ont., on Jan. 5, 1980.

'12

KATE (LAWRENCE) CASSELS, BA'12, in late 1979. DANIEL MARSHALL GORDON, BA'12, at Victoria, B.C., on Nov. 19, 1979. EDWARD CARRINGTON MacDERMOT, BSc'12, at Croydon, England, on Feb. 15, 1980.

'15 DOROTHY (CAULDWELL) CORRIGAN, DipPE'15, at Toronto, Ont., on Dec. 27 1979 LAURA MAE (WHITE) COX, BA'15, at Mesa, Ariz., on Jan. 6, 1980.

'18

FLORENCE (WALKER) LAUBER, BA'18, on Jan. 1, 1980.

20

JOHN D. KEARNEY, BCL'20, at Ottawa, Ont., on Feb. 22, 1980.

21 JAMES E. GILL, BSc'21, at Kitchener, Ont., on Jan. 26, 1980.

1979. '29 JEAN MURIEL AULD, MA'29, on Aug. 23, 1979 ALLAN A. GROSSMAN, BA'29, on Jan.

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DOV JOSEPH, BA'19, BCL'21, at Beersheba, Israel, on Jan. 5, 1980.

22

'23

ADRIAN LESLIE GNAEDINGER, Eng'22, at Belleville, Ont., on Feb. 10, 1980. DOUGLAS GORDON MARTIN, Arts'22, at Nanaimo, B.C., on Feb. 11, 1980.

T. ARMSTRONG, BSA'23, MSc'25, in August 1978.

CHARLES SCOTT HANNEN, BSc'23, at Geneva, N.Y., on Dec. 31, 1979. CHESTER PETER MacLEAN, MD'23, at St. Catharines, Ont., on Oct. 23, 1979. CHARLES HILL SPIRO, MD'23, at Ottawa, Ont., on Jan. 16, 1980.

'24 MAUD (DOBBIE) GREIG, BA'24, at Lachute, Que., on Jan. 24, 1980.

25

JAMES G. DAVIDSON, MSA'25, at Vancouver, B.C., on July 8, 1979 LAWRENCE W. FITZMAURICE, MD'25. GDipMed'40, on Aug. 8, 1978.

26 HARVEY C. MacNABB, DDS'26, at Ottawa, Ont., on Feb. 18, 1980. LEILA (ARGUE) RAY, BSc(Arts)'26, at Vancouver, B.C., on Feb. 3, 1980.

'27 LEYLAND JOHN ADAMS, MD'27, at Magog, Que., on Jan. 1, 1980.

'28 HARRY A. SINCLAIR, MD'28, on Dec. 30,

21, 1980.

VICTOR B. PHELPS, DDS'29, at Montreal. on Jan. 12, 1980. HAROLD MILES WILLIAMS, BSc'29, at Sidney, B.C., on Jan. 12, 1980. AYLESWORTH R. WRIGHT, BCom'29, at Fort Lauderdale, Fla., on Dec. 18, 1979.

130

JAMES L. DOWD, DipPharm'30, on Oct. 31, 1979.

ANTOINE LANGLOIS, BCom'30, at Quebec City, on Jan. 11, 1980.

'31

GEORGE E. ERLICK, BA'31, on Jan. 14, 1980

STEWART JAMES HUNGERFORD, BSc'31, at Victoria, B.C., on Dec. 22, 1979.

'32

FLORENCE MARY BRENNAN, BA'32, on Jan. 1, 1980.

CLAUDE JOSEPH FOURNIER, BA'28, MD'32, at Exeter, England, on Jan. 3, 1980. SAUL HAYES, BA'27, MA'28, BCL'32, at Ste-Adèle, Que., on Jan. 12, 1980. GEORGE N. KELLY, DDS'32, at Pawling, N.Y., on Feb. 7, 1980.

'33 HERBERT A. DUNNING, BA'29, MD'33, on Nov. 21, 1979.

'34 PETER C. STOBBE, MSc'34, PhD'50, on July 27, 1979.

'36 PHILIP S. BAZAR, BA'33, MD'36, in June 1979.

'37 SAMUEL RODGER STOVEL, BSc'37, at Montreal, on Dec. 12, 1979.

'38

LORNE C. CALLBECK, BSc(Agr)'38, at Summerside, P.E.I., on Dec. 28, 1979.



uncle James Wants You to Hire a McOill Oraduate '39 JOHN ROSS FERGUSON, BCom'39, at Montreal, on Jan. 12, 1980. EDWARD A. HART, MSc'39, at Willowdale, Ont., on Nov. 18, 1979. CAROLYN (CLARKE) ROGERS, BA'39, at Toronto, Ont., on Jan. 26, 1980.

'40

ELIZABETH (CARR) JONES, BHS'40, at Chelsworth, England, on Feb. 5, 1980. CLIVE J. PHILLIPS-WOLLEY, MD'40, at Vancouver, B.C., on Jan. 6, 1980.

'41

HOWARD M. BROWNRIGG, BEng'41, at Joliette, Que. on Feb. 28, 1980. JOHN CHARLES LYONS, BEng'41, at Montreal, on Feb. 11, 1980. R. WALLACE WRIGHT, BEng'41, at Hudson, Que., on Dec. 19, 1979.

'42

ALFRED E. CARTER, MA'42, in May 1979.

'44

FRANCOIS LACHANCE, BSc(Agr)'44, MSc'46, at Niagara-on-the-Lake, Ont., on Oct. 24, 1979.

'47

ANDREW G. ESFAKIS, BSc'45, MD'47, in 1978.

'48 WILLIAM P. DAGGER, BLS'48, at Ottawa, Ont., on Sept. 12, 1979. WILLIAM ARTHUR MAGILL, BA'48, on Feb. 25, 1980. PHILIP UREN, BA'48, MA'49, at Ottawa, Ont., in early 1980.

'49

ERIC WILLIAM LARKING, MD'49, GDipMed'55, at Kitchener, Ont., on Feb. 19, 1980. WALTER C NANCARROW BEng'49, at

WALTER C. NANCARROW, BEng'49, at Sydney, Australia, on Jan. 13, 1980.

'50

ENID (BETCHERMAN) ABRAHAMS, BA'50, in 1978. LEWIS J. MIEDEMA, BEng'50, at Ottawa, Ont., on Feb. 9, 1980. MURRAY M. OUTHET, BSc(Agr)'50, at Ottawa, Ont., on Dec. 26, 1979.

'51

JAMES J. KASMAR, MD'51, on July 26, 1978. DANIEL KEENAN, BSc(Agr)'51, MSc'55,

'54

in November 1979.

LOIS (BURKE) DEAN, DipHEc'54, at Pointe Claire, Que., on Feb. 7, 1980. ALLAN LOUIS GROSSBERG, PhD'54, on Nov. 2, 1979. JULIA KAREN FINDLAY, BA'56, at Lanark, Ont., on Jan. 3, 1980.

'57

'56

DAVID RUBINSTEIN, PhD'53, MD'57, on Feb. 5, 1980.

'58

KENNETH W. TRICKEY, BD'58, MA'63, at Montreal, on Dec. 27, 1979.

'59

F. DAINTRY DAVISON, MSW'59, at Toronto, Ont., on Dec. 11, 1979.

'66

JANET (McDIARMID) PROULX, MA'66, on March 29, 1979.

'67

MARK DEGNAN, MD'67, at Delmar, N.Y., on July 24, 1979.

WENDY (RAWES) McKEE, BSc'67, at Toronto, Ont., on Dec. 14, 1979. D. DOUGLAS MUNROE, BSc(Agr)'67, in

New Zealand, on June 12, 1979.

'68

JEFFREY MARVIN, BSc'68, in Ecuador, in early 1980.

'72

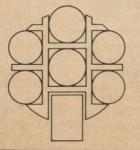
JEANIE ELIZABETH (MACDONALD) FULLER, BSc'72, at Fredericton, N.B., on Sept. 22, 1979.

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It is hard for me to believe that 1934 is now forty-six years ago. Yet, in everyone's life, certain years gleam down the long corridor of time and, for me, 1934 was one of those shining beacons. It was hardly so for most, as we were then stuck in the midst of the Depression. But it marked a great departure for a very green, very shy, seventeen-year-old country boy from Duncan, Vancouver Island. This was the year I was sent to McGill.

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By signing on for Chinese guard duty, I was able to travel free to Montreal in the Canadian Pacific Railway's colonist car; I got a free first-class ticket home, too. (The CPR used to hire students and others to guard groups of Chinese as they travelled across Canada in bond-my group of five was heading for a ship on the east coast.) Four days after leaving Vancouver, I arrived in huge, awesome, frightening Montreal, feeling totally lost and knowing no one. Little did I know that after three years this same Montreal would become, and would always remain for me, not a city but an emotion. That emotion was love.

But right then I was ignorant of both Montreal and McGill. All I knew was that McGill had a figure of world renown, the celebrated Canadian humorist Stephen Leacock. To my good fortune, I enrolled in Leacock's introductory course in political science and, the next year, in his British Empire course

I found it hard to picture Leacock, the humorist, as Dr. Leacock, the professor and head of the department of economics and

David Savage, a former writer for CBC radio, is a lecturer in English at Simon Fraser University, Burnaby, B.C.

political science. I did not know what to expect as I sat in his lecture room in the Arts Building that first Monday at 2:00 p.m. I imagined that some tall, elegant, richly attired wit would enter; when a small, loosely dressed, friendly looking old man came in, I was surprised. His ruddy, outdoorsy face was crowned by a thick crop of iron-grey hair that reminded me of a newly opened package of steel wool.

Leacock was always completely prepared for his lectures and he worked us very hard. For the first two or three weeks I kept wondering, "When is he going to start being witty? Where's all the funny stuff?" It finally dawned on me that Leacock, the professor, and Leacock, the writer, were two different entities and that, in the event of conflict, the humorist was ruthlessly sacrificed to the economist. Not once during my two years with him-and, for all I know, not once in his thirty-three years at McGill-was Leacock absent, or a minute late, or the slightest bit unprepared. With the enormous pressure of writing at least a book a year-he wrote about sixty in all-not to mention his speaking tours and guest lectures, he had every excuse. But no, his job and his students came first. I learned from Leacock the meaning of that old-fashioned word, dedication.

Nonetheless, every week or two, Leacock would, like one of those unpredictable Hawaiian volcanoes, erupt: there was the warning twinkle in his eye, the chuckle, and then the helpless laughter. One afternoon, he was discussing honesty in government-a problem then, as now-and this led to honesty in the everyday citizen. "Would he cheat his wife? No! Would he cheat his butcher?

Never! Would he cheat the paper boy? Unthinkable! Would he cheat the government on his income tax? Ah, that's quite different!" By the time he had finished, Leacock was bubbling and shaking with laughter, and so was the entire class.

Montreal was a great town in those days. At Murray's Restaurant, you could drink coffee all day for the price of the first cup-ten cents. At a student hangout, the Peel Tavern opposite the Mount Royal Hotel, you could get a huge stein of strong beer, plus all the chips and pretzels you could eat, for ten cents. And at that little French restaurant on Mountain Street, you could order an excellent, full-course dinner for thirty cents. Night life, too, was cheap, and the nightclubs had a verve and sparkle that even the Depression could not still.

My first two years with Leacock passed all too quickly. I was happily anticipating a third when I heard the incredible news: McGill's new principal, Dr. A.E. Morgan from Hull, England, had informed Leacock that he had reached retirement age and was to leave. His final lecture to us could have been a sad occasion, filled with memories and goodbyes. Instead, he crisply summarized the course in preparation for the final exam and quickly left the room to our heartfelt applause. When we gathered the following week for the exam, Leacock was nowhere to be seen, but his secretary came in carrying a box filled with copies of his latest book, Hellements of Hickenomics. They were for us, his students; in typical Leacock style, he had individually inscribed each copy on the flyleaf.

Several days later, McGill's Economics Club gave a farewell dinner for Leacock at the Dorchester Hotel. What we all thought would be a sorrowful occasion was turned, by Leacock alone, into a happy one. After the gloom occasioned by all the emotional tributes, Leacock got up and soon had us all laughing at the humorous poem he had written as his reply. (It was a poem about retiring people because of age-he prefaced it by saying that it was all in fun and that he left with the greatest good will.") Just before I left, I noticed a newspaper reporter approach Leacock. He said he had missed a line or two of the poem because of all the laughter and could Dr. Leacock please tell him what they were. "Here," said the professor, giving him the hand-written verse, "but don't lose it before you print it --- it's the only copy I have!"

I recall this incident every time I read that some university has paid dearly for some second- or third-rate poet's manuscripts. Yes, Leacock wore his honours lightly and that was another thing I learned from him: success makes people better, not worse. As Somerset Maugham put it, "The common idea that success spoils people by making them vain, egotistic, and self-complacent is erroneous; on the contrary it makes them, for the most part, humble, tolerant, and kind. Failure makes people bitter and cruel." When Leacock died eight years later, on March 28, 1944, his students everywhere knew they had lost a great teacher and a humble, tolerant, and kind man.

This graduate remembered McGill in her will.

The daughter of an **English-speaking father** who died early in her life and a mother of Huguenot extraction, Mabel King was raised in a quiet, scholarly family on Ste-Famille Street. Among their friends at nearby McGill University were a number of professors from France, and Mabel's penchant for languages led to a Bachelor's degree in 1907 and a Master's in 1910. As well as lecturing at the university and tutoring privately in her home, the young scholar became a lively member of the Mount Royal Tennis Club. She also served as president of the Women's Canadian Club of Montreal and, during World War II, was a translator for the International Labour Organization.

A former pupil and close friend left Mabel King a handsome bequest which enabled her to live in simple luxury and travel extensively. When it came time to make her own will, Mabel King remembered McGill and provided a most generous scholarship fund for the



L. Mabel King, BA'07, MA'10 1887-1977 Alumnae Society – a living legacy for future generations of McGill women students.

McGill continues to receive generous support from the private sector through bequests and trusts. In 1978-9, graduates and friends of the university dedicated over \$1,300,000 to research, scholarships, bursaries, libraries, and other needs. The nine bequests already received this year have added more than \$500,000 to these worthy areas of support. A booklet entitled **Opportunities** will soon be available for those considering making such bequests and gifts to McGill.

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