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# FAUW FORUM

FACULTY ASSOCIATION OF THE UNIVERSITY OF WATERLOO  
NEWSLETTER

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## *President's Message*

*by Fred McCourt*

Since I last reported to you we've had our FAUW annual general meeting on April 8, salary negotiations have been settled, a new FAUW Board of Directors has taken office, the new dues rate (slightly lower than previously, at 4.75 mils) and new salary levels (increased by 1.5% scale, plus individual merit-driven PTR increases) have taken effect, the Winter '99 Term has ended, the annual CAUT Council meeting has been held in Ottawa, and the Spring '99 Term has already gotten well under way. Moreover, we are in the midst of a Provincial Election Campaign!

During this same period CAUT became aware of a draft report dealing with the way in which the federal government should treat issues of intellectual property rights of faculty members, amongst others. The report was tabled by what for want of better words I will call a blue-ribbon panel referred to as "The Expert Panel on the Commercialization of University Research". Their draft report, dated March 26, 1999, was prepared for the Prime Minister's Advisory Council on Science and Technology. I have prepared a short commentary on this report which spells out some of my own concerns about the potential ramifications of this report, and John Wilson and I have each written a letter to the Prime Minister to let him know of our concerns. My commentary appears on p. 7 of this issue of the *Forum*, and Professor Wilson's and my letters appear on pp.10 and 12. I urge those of you who feel similarly to write to your MP and to the Prime Minister and other members of the federal Cabinet.

I believe that the recommendations made by this panel, if adopted and implemented by the federal government, could effectively nullify the protection provided by UW Policy 73 to all UW stakeholders with regard to the ownership of intellectual property (IP) by its inventor(s). As many of you will know, once I became aware of the report I sent out an email message addressed to all faculty members to bring it, together with my concerns, to their attention. I received a number of responses which have proven to be quite helpful, and I am grateful to those of you who took the time to respond to my email message. It turns out that several of my concerns were shared by a significant number of other faculty association presidents who were attending the CAUT Council meeting that I mentioned earlier. Indeed, a fairly lengthy discussion of the potential ramifications of the report's recommendations ensued at the CAUT

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council meeting. A number of other association presidents planned to raise their concerns with their own administrations and colleagues at their home campuses.

What else has been happening recently? Well, we are about to start the third set of Memorandum of Agreement negotiations on two new articles, one on “Member Evaluation and Selective Career Development Increments”, Article 13, the other on “Fraud and Misconduct in Academic Research”, Article 14. Our negotiators for both articles are: Professors John Wilson (Political Science, FAUW Chief Negotiator), Gordon Andrews (Mechanical Engineering), and Bill Power (Chemistry). The Board of Governors negotiators for Article 13 are: Professors Sujeet Chaudhuri (Dean of Engineering, BoG Chief Negotiator), Geoffrey McBoyle (Dean of Environmental Studies), and Harry Panjer (Statistics and Actuarial Science). The Board of Governors negotiators for Article 14 are: Professors Alan George (Dean of Mathematics, BoG Chief Negotiator), Carolyn Hansson (Vice President, University Research), and Michael Ross (Psychology). Negotiations should be under way by the time you read this report, with meetings to be held at least weekly through the latter part of May and all of June; if necessary, they will be resumed in September, following a break for July and August.

The Federation of Students has raised the issue of the use of teaching evaluations at UW. You may recall that FAUW requested volunteers to form a group of faculty members who would also look into such matters at UW. During the intervening several weeks we have found four individuals who are willing to serve in this capacity. They are: Professors Len Guelke (Geography), Wing-Ki Liu (Physics), and Cathy Schryer (English). They will be meeting shortly to begin their study of how we survey our students, what we learn from these surveys, and the use of the statistical data generated from them. Our team plans to interact with the team set up by the Federation of Students, and who have already made a number of recommendations to Senate related to these issues, and with the Administration.

### **Exit, President, stage left**

The month of May is Dr. Jim Downey’s last month as President of the University of Waterloo,

and as he is now wrapping up a six year term of service as the UW chief administrator, I’d like to take a few lines to thank him for the quiet leadership that he has provided to UW during a particularly turbulent period. Since accepting the helm at Waterloo Dr. Downey has seen the university through the NDP government’s infamous “Social Contract” as well as the Conservative government’s draconian 15% instantaneous cut in Ontario university operating budgets. It is a credit to him that during these difficult times he has both retained his elegant composure and maintained his eloquence, even while protesting the treatment of higher education in this province. He has made several clear public statements about the plight of higher education in Ontario, including a number of representations to the Ministry of Education and Training itself with regard to the future of higher education not only at Waterloo but also at other Ontario universities. He has risen to the defense of faculty members when generalized attacks have been made either by some members of the local press or by other unthinking individuals. For this we owe him our thanks. Although it is tempting to think that neither he nor his counterparts at other Ontario universities have been particularly effective with our governments of the day, I believe that Jim Downey has served us effectively both directly in his communications with the Ministry of Education and Training and indirectly through his role within COU. It is certain that no one will doubt the difficulties to be encountered while serving as a university president during tumultuous times, for which these past six years certainly qualify. It is easy not to give credit where credit is due. Let us give President Downey the credit that is his due. Finally, while I have no doubt that the Department of English and the Faculty of Arts are looking forward to welcoming Dr. Downey to their folds, I can also assure him that the FAUW looks forward to welcoming him into the professorial front line.

### **Enter, President, stage right**

UW’s fifth President, Dr. David Johnston, takes office in June. We all extend to him a warm welcome to this campus, and look forward to interacting with him as the University of Waterloo moves into the twenty-first century. No doubt there will be many challenges ahead both for Dr. Johnston and for us.

# Report on the 1999/2000 Faculty Salary Settlement

by Ian Macdonald

FAUW Compensation Committee Chair and Chief Negotiator

Let me start by expressing my appreciation for the hard work on your behalf by the other members of the FAUW negotiating team, Sandra Burt and Steve Furino throughout, and Frank Reynolds who served as Chief Negotiator for most of Stage 1 negotiations prior to mediation and arbitration. All faculty owe them a vote of thanks.

The formal mediation stage was unsuccessful, but, to the surprise of both parties when we went to Final Offer Arbitration, the arbitrator proposed to start by mediating for the first day followed by arbitration if the mediation was unsuccessful. As you all know by now, a settlement was reached for a one-year deal.

The components of the one-year Memorandum of Settlement are:

- a) a scale increase of 1.5% effective May 1, 1999
- b) an additional increase in the maximum annual amount of the Faculty Professional Expense Reimbursement (FPER) to \$1300, effective May 1, 1999. This is equivalent to a 0.1% scale increase. As at present, this amount will be indexed annually by the Canada CPI increase and expenditures above this value should be claimed as they can be carried forward for future reimbursement for up to three years.
- c) an extra one-quarter Progress through the Ranks (PTR) selective increment in addition to the regular selective increment, effective May 1, 1999.
- d) a one year extension in the right to exchange a week of vacation for a 2% salary increase when within three years of retirement to April 30, 2005. Therefore, this right is now available for all faculty retiring prior to May 1, 2008.

This is an acceptable settlement in that it does not result in further erosion of faculty salaries at Waterloo, but not a good one as it does nothing to redress our loss of position relative to other faculty in Ontario or other Ontario groups. The Canada CPI for this year (our agreed measure of inflation) is

1.0%, so items a) and b) represent a modest catch-up increase to offset a small amount of the 8.4% erosion in faculty salaries since 1991/92. Scale plus scale-equivalent benefit increases for faculty at the other Ontario universities over that same period have been about 2.6% greater on average than at Waterloo. The average settlement for 1999/2000 for the ten Ontario universities which have reached agreements so far is about 1.7%, so our 1999/2000 settlement does nothing to compensate for our losses relative to our peers elsewhere in Ontario. Note that the 8.4% erosion does not include the temporary scale cuts (in the form of Rae days) of 3.1% in 1993/94, 2.3% in 1994/95, and 1.9% in 1995/96, or the one-time loss of one-third of Progress through the Ranks (PTR) selective increments in 1993/94.

It also does not include the ongoing loss of 0.5 PTR in each of 1994/95 and 1995/96 which faculty were entitled to by Policy 11 and failed to receive in those years as a consequence of the Social Contract and University administrative fiat. Failure to receive those entitled PTR increments moved individual faculty away from their proper positions within the faculty salary structure. The Faculty Association has made Restoration PTR to restore faculty to their proper positions within the faculty salary structure a high priority in its negotiation positions since 1996. The last agreement included an additional 0.5 PTR paid effective May 1, 1998 which the Faculty Association argued for as Restoration PTR. In our view, this recovered the lost PTR from 1994/95 say, and moved faculty half way back to their proper salary positions. The Faculty Association considers the extra 0.25 PTR in item b) of this year's settlement to be Restoration PTR which continues the move of faculty members towards their proper positions in the faculty salary structure. Faculty members remain short of full restoration to their correct positions by an additional 0.25 PTR. The FAUW Board regrets that the University was not willing to agree to the additional 0.25 PTR this year which the Association team wanted instead of the FPER increase and remains convinced was affordable. Recovering the remaining 0.25

Restoration PTR will be a high priority for the Faculty Association again in next year's negotiations.

The reason for the awkward wording in the preceding paragraph is that, regrettably, the University Administration does not recognize or consider the extra PTR increases this year or last year to be Restoration PTR, despite the fact that the Association only asked for it instead of larger scale increases because individual faculty had been differentially disadvantaged by the failure to receive entitled PTR. Their position is that individual faculty salaries are not displaced from their proper positions and that faculty do not have, and did not have, any entitlement to Restoration PTR. Other Ontario universities have awarded and acknowledged Restoration PTR. Faculty at Toronto, McMaster and Queen's all are now at their proper positions within their salary structures and, by the end of their 1999/2000 salary year, faculty at

Guelph will have been restored to their proper positions.

A more significant concern (of sufficient importance that it shall be the subject of a future *Forum* article) is that this does nothing at all to redress the fact that over the two year period to 1998, the portion of the resources of the University going to faculty salaries in total has decreased significantly relative to that for all other major components of University expenditures, and is now substantially below the roughly constant proportion committed for the past 25 or 30 years. Given the central role of the faculty in the communication and development of knowledge – the primary objectives of the University – this reduction in the resources committed to faculty bodes ill for the future. Regardless of what you might hear elsewhere, the reduction in resources committed to faculty is not due to the average age of faculty decreasing as a consequence of SERP.

## *Letters to the Editor*

Dear Editor:

Now that the salaries of UW's "\$100K and above" club for the past four calendar years are publicly available, it may be an opportune time to begin an examination of the data. With some additional information on average faculty salaries provided by the FAUW, one may be able to form a picture of general salary structures and their evolution in time as well as how various salary groups – "normal" faculty members and administrators alike – have been affected by perturbations such as the Ontario NDP "Social Contract" (1993-96) and the SERP (1996).

It is not my intent to provide a rigorous analysis but rather to present some data along with a few observations in the hope of stimulating future analysis and discussion. The accompanying figure includes plots of the following sets of salary data:

- (a) The salaries (over calendar years indicated) of the following senior administrators:
  - (i) President (P) and Vice President Academic and Provost (VPAP) for 1995-1998,
  - (ii) Vice President, University Relations (VPRel) for 1998,
  - (iii) Associate Provost, Academic and Student Affairs (APASA) for 1997 and 1998,
  - (iv) Vice President, University Research (VPRes) for 1996-1998.
- (b) The average salaries of Assistant, Associate and Full Professors at UW. The year at which these values are plotted refers to the fiscal year, i.e. May 1, Y to April 30, Y+1. (I thank the FAUW very much for these data. Averages over calendar years are not available.)

In addition, the following regions are identified:

- (c) The "Decanal Management Zone" (DMZ), a region in which are found the salaries of most Faculty Deans as well as of the Dean of Graduate Studies.

(d) The administrative “Other Zone”(OZ), a region including the salaries of various Associate Provosts, the University Librarian and the Directors of TRACE and Health Services.

With the exception of (b), all salaries used in the above plots were retrieved from UW’s website.

It is also convenient to consider the following classification of salary subregions on the plot:

Troposphere: \$0K - \$100K  
Stratosphere: \$100K - \$150K  
Ionosphere: \$150K - \$200K  
Deep Space: \$200K and beyond.

Individual (stratospheric) faculty salaries have not been plotted, as they would produce an almost meaningless continuum of (piecewise linear) curves that populate the region extending from \$100K upward into the Land of OZ. This continuum “thins out” to a few salaries as one reaches the DMZ. However, there are also a few “anomalous” salaries to be found in the Stratosphere and Ionosphere.

Apart from the quite noticeable jump in salaries from the DMZ to those of P and VPAP, there also appears to be a marked difference between the annual rates of increase of the P and VPAP salaries and those of others – administrators and regular faculty members alike. In order to save the reader some time and effort, I list the annual percentage changes of the P and VPAP salaries for 1995-96, 96-97 and 97-98 below:

P: 3.8, 6.4, 6.2  
VPAP: 4.4, 6.7, 3.8

By way of comparison, for the group of 27 professors with reported salaries exceeding \$100K over the entire four calendar year period 1995-98, the average yearly percentage increases are 2.1, 3.0 and 0.9. These figures,

as well as the graph of average salaries of Full Professors, illustrate clearly how annual increments of upper level non-administrative faculty salaries, i.e those above 2.5F, have been and continue to be severely curtailed by the way in which the UW salary policy has been applied. Some might conveniently argue that the discussion should stop here since, by university guidelines, P's salary is determined directly by UW's Board of Governors. Nevertheless, sensors indicate that salaries in the outer atmospheric and deep space regions appear to suffer from "CDS," i.e., Curtailment Deficiency Syndrome.

Of course, an argument for such "negative curtailment" is that it is necessary to keep the salaries of our senior administrators in line with those of other comparable Canadian universities. However, shouldn't UW be just as keen, indeed even more so, to attract and maintain excellence in its research and teaching ranks? After all, who has really been responsible for UW's "reputation?" From where do the "innovation" and "ideas for tomorrow" come?

Even though a claim might be made that UW faculty salaries are competitive within Canada, the sobering reality is that they are far from being competitive in the much more important global market. From data reported in the University of Toronto Faculty Association News Bulletin (April 9, 1999, available from the UTFA website (<http://www.utfa.utoronto.ca>) one finds that the average salaries of UW Full and Associate Professors for the 1997-98 fiscal year were well below the 30th percentile relative to salaries at all US doctoral institutions. The UW 1997-98 average for Assistant Professor salaries lay below the 10th percentile. Can we not conclude, as the UTFA does regarding its members' salaries, that our own salaries are not competitive with salaries at US institutions? However, dear colleagues, take heart in knowing that our salaries are almost competitive with those at US two-year junior colleges!

With these facts in mind, do we expect to be able to recruit the best young faculty members, especially in the highly competitive and marketable fields designated as "information technology" (IT) where UW has planned to significantly expand its curriculum? Does the severe curtailment of salaries in the lower Stratosphere hinder our efforts to attract highly qualified academic leaders, e.g. Faculty Deans, from outside when the need arises? (Recall UW's inability to hire an exceptional external candidate for the Dean of Mathematics position less than two years ago.) Perhaps it is time to drag these and other important issues out of the secretive closet of "Administration" and address them publicly.

Finally, it should be pointed out that the decreases in the three average faculty salaries during 1995-96 are largely due to SERP rather than to decreases in individual salaries. Note, however, that this period also represents the final phase of the Ontario NDP "Social Contract," the effects of which might be detected in the top two salary graphs by a careful eye.

*Ed Vrscay*  
*Applied Mathematics*

Dear Editor:



Ken Westhues has summarized some of the issues relating to Dr. Ewa Lipczynska's lawsuits against Drs. Robert Gillham, James Kalbfleisch and UW (<http://www.math.uwaterloo.ca/~shallit/lip.html>). These suits will, if nothing changes, eventually be settled in the courts but they raise other issues that are not of a legal character. A requirement that our administrators should act legally sets a very low bar for acceptable management. Concepts of good management usually include the idea that people will be treated fairly, will be consulted about the decisions affecting them and, hopefully do things by mutual agreement.

I am troubled about fairness when I see the outcome of a dispute, however it came about, leading to the least powerful party of the dispute taking all the blame and punishment. This state of affairs applies in the Ewa Lipczynska case. Ewa lost her job and a promising career has been damaged possibly beyond repair. As of now

her professional life lies in ruins. The other parties of this dispute continue their professional lives in positions of power and responsibility. The dispute has neither damaged their current careers or clouded their future prospects, and they have the full support of this institution (if needed) in defending themselves in the legal arena.

When Ewa Lipczynska's dispute came to a head, she appealed for an impartial investigation of her case by a qualified arbitrator independent of the University of Waterloo. This kind of investigation could still take place. Surely UW wants to be seen as a fair place in which to work, not one in which the bottom line of decision making relies on the perceived ability of UW, with its considerable legal resources, to defend itself in the courts against an individual representing herself.

*Len Guelke*  
*Geography*

## ***A Commentary on the Draft Report of the Expert Panel on the Commercialization of University Research***

*by Fred McCourt*

The expert panel consists of six senior Canadian industrial executives, two senior university administrators who are responsible for technology transfer, and the President of NSERC. The draft report itself, with the title "Public Investments in University Research: Reaping the Benefits", contains five basic recommendations. Specifically, they are that:

1. Canadian universities should explicitly adopt innovation as their fourth mission, in addition to teaching, research, and community service.
2. For a university to be eligible for research funding and commercialization support from any federal source, it will have to adopt a policy on innovation that will include the following elements:
  - (a) All intellectual property (IP) created from research supported in whole or in part by federal funding must be disclosed to the university;
  - (b) all IP created from research supported in whole or in part by federal funding will be owned by the university, subject to possible disposition by assignment, or by reversion to the creator(s) under defined conditions.
3. Because the assurance of a benefit to Canada is to be given priority over the creation of university revenues in the management of IP arising from research funded from federal sources, it is appropriate that new public funds be provided to universities to help them manage the innovation function:
  - (a) the amount of incremental funding provided for the innovation function of a university shall be 5% of the total research grants secured by the university from federal sources;
  - (b) these funds are to support: (i) expert staff in the innovation function, trained to be effective both in the reconnaissance of research in the university and in managing the innovation process, and (ii) investments in protecting and improving IP;
  - (c) to receive the funds in the first instance, universities will have to submit an innovation strategy to the federal Granting Councils, explicitly describing how the university will seek to assure benefits to Canada;
  - (d) to receive future annual allocations, universities will have to provide annual updates to their innovation strategies and submit performance reports that explicitly describe how benefits to Canada are being assured.
4. To realize the economic benefits for Canada

from innovation based on university research, it is essential to create a supportive set of business conditions. These conditions largely involve the tax treatment of the investors, entrepreneurs, employees and managers involved in newly created spin-off companies and established companies which undertake collaborative research with universities. They include reduced rates of personal taxation and proposed amendments to the tax treatment of employee share options.

5. Governments should consider increasing public investments in university research. They should also resolve, on an urgent basis, situations where universities have difficulties conducting research when federal funding is provided, but when limited provincial support is available for the indirect costs.

One has to realize that the draft report defines innovation as “the process of turning discoveries and inventions into new goods and “ is, of course, fine as far as it goes, but then, given their definition of innovation, there is no room within discovery for innovation! The writers of the report note that “nowhere has innovation been treated as a mainstream university function”; this appears to be the source of their recommendation #1. Interestingly, if one turns to what they call “annex 1”, which defines a number of terms used in the report, there are nine (count them!) different types of innovation listed, ranging from “market innovation” through “incremental innovation”, “disruptive innovation” to “incidental or complementary innovation”. Now we’re cooking.

One may be excused if one gets the impression that this draft report was driven by a sense of frustration on the part of Canadian industrial concerns that valuable technology is slipping through their hands because Canadian researchers in university settings are taking their ideas out of the country and making them available to non-Canadian corporations and investors. Such an impression is reinforced by the comment in the report that “vesting IP ownership with university researchers is one of the single biggest factors accounting for lost commercialization opportunities in Canada”. This statement is followed directly by the quote that CAUT focussed upon, namely, “This policy is

tantamount to providing a vehicle to transfer significant amounts of valuable technology out of the country”. Their conclusion appears to be based mainly upon anecdotal evidence, and does not address the fact that a Canadian inventor who wants to develop or commercialize his or her research will have a great deal of trouble finding Canadian venture capitalists who are willing to take the risk that the research may not lead to tidy profits in the short run, and indeed, the IP creator will have precious little chance of finding a Canadian corporation willing to make the investment necessary to develop the idea into a marketable product. In many cases a short discussion with American or European venture capitalists will often give rise to an offer of funding to develop the concept to the point of determining whether commercialization is likely or not. I could personally give several examples of people at UW who have encountered just such a situation and, in frustration, have gone to the US or Europe with their ideas. Of course, this too is anecdotal evidence and is, like the anecdotal evidence cited in the draft report, insufficient to allow a proper conclusion to be drawn with regard to commercialization in Canada.

The recommendation that has me most concerned is recommendation #2 coupled with recommendations 3(c) and 3(d). Recommendation #2 requires that IP arising out of any research that is supported in whole or in part by federal funds must be transferred by the inventor to the university at which the research was carried out; this must be assured by the university concerned, in the sense specified in recommendations 3(c) and 3(d). It is not difficult to imagine a bureaucrat at NSERC, SSHRC or MRC, for example, feeling able to decree that unless a given university can officially ensure that appropriate mechanisms are in place to guarantee compliance with these directives, no one at that institution would be eligible to apply for federal funding of his or her research. Notwithstanding the content of recommendation 2(b), which would appear to allow a university to assign ownership to its creator(s), it would be relatively easy for a bureaucrat to declare that indeed, a university has that right, but at the same time that the funding agency itself has the right not to consider applications for federal funding from individuals at an institution that has chosen this



route of dealing with its IP. If you have more faith in federal bureaucracy than I do, you may not be quite as suspicious as I tend to be.

FAUW sponsored a panel discussion of the draft report on Tuesday, May 4. The panel members were Vice President, University Research, Carolyn Hansson, Director, Technology Transfer Licensing Office, Jerry Gray, John Thompson, Dean of Science, Nick Cercone, Chair of Computer Science, John Hepburn, Chair of Chemistry, Ralph Haas, Civil Engineering, and Jim Brox, Chair of Economics. The discussion moderator was John Wilson, Vice President of FAUW, Political Science. About thirty faculty members came to the discussion and participated in the question and answer session that followed introductory comments by the panel members. I am grateful to all those who agreed to participate on the panel. As the discussion session was written up both in the *Daily Bulletin* and the *UW Gazette*, it doesn't seem necessary to say too much more here about what was said there.

Prior to the above-mentioned panel discussion I received a number of highly pertinent comments from Jerry Gray, Director of the UW Technology Transfer Licensing Office (TTLO). He has given me permission to share some of his remarks with you. He sees that "... there is more than a mere possibility that inherent in this report and its recommendations, whether by design or misadventure, is an underlying potential to permit industry to develop a significant element of control over federally funded university research", and goes on to say that "It is my experience that the private sector on the whole demonstrates a decided lack of interest in sharing the market rewards resulting from such research with universities (and their researchers) despite the fact that it is the recipient of many benefits associated with university research", such as tax credits, low overheads, leveraged funding, and so forth. "To permit industry to play a role, albeit perhaps indirect at the outset, two things are required. The first is control over the intellectual property created by universities, which can perhaps most easily be achieved via mandated 'institutional' ownership. The second is a

requirement that universities prepare an 'innovation strategic plan' and report against it on a regular basis. The requirement for a plan and report will open the possibility that federal funds to researchers will become dependent on the plan, and eventually on government approval of the quality, focus, and success of the plan." He believes further that ultimately this will "put the TTLO in conflict with researchers, since federal funds may be delayed until the university's 'innovation strategic plan' is submitted/approved or because the researcher believes/demands that his or her research should be part of, or highlighted, in the plan." He goes on to say that there is, in his view, a "distinct possibility" that the university's 'innovation plan' might "ultimately result in subtle pressures to alter the direction of university basic research to ensure that the innovation plan is likely to or will demonstrate successful results".

Surprisingly, no one had provided a copy of the draft report to our administration or, so far as I could discern, to most other university administrations across Canada. Further, it turns out that a series of public meetings that had originally been scheduled to be held across the country in order to obtain feedback on the report was summarily cancelled (by whom I have not been able to learn), and was replaced by a group of between 120 and 160 individuals selected (by what process I know not) from across Canada. These individuals were sent copies of the draft report and asked to respond with their comments to the panel. Our Vice President, University Research, has since heard from NSERC President Tom Brzustowski that the version of the report that was sent on to the Prime Minister's Advisory Council on Science and Technology for their comments is completely different from the draft report that we have seen. However, no copy of the new document seems to be available, at least until after it has gone to the Federal Cabinet this coming May 27. One really has to wonder why there is so much secrecy about this document.

A copy of the Draft Report has been sent to each departmental office.

## *Letters of Concern Written in Response to the Draft Report of the Expert Panel on the Commercialization of University Research*

April 12, 1999

Rt. Hon. Jean Chrétien,  
Prime Minister of Canada,  
House of Commons,  
Ottawa, Ontario, K1A 0A6

Dear Prime Minister,

I understand that a report from your government's Expert Panel on the Commercialization of University Research is about to be presented to Cabinet. I understand as well that this report recommends changes in the rules which have for years governed the way in which research is conducted in the Canadian university system.

I am writing to tell you how very offensive these suggestions are to me and to my colleagues throughout the system, and to ask you to reflect very carefully on the certain destructive consequences which the changes being proposed are likely to have.

Those of us who are engaged in serious academic research designed to extend our understanding of the character, purpose, and opportunity of Canadian social, economic, and political life ought to be entirely free of the kind of encumbrance the report's proposals would impose. To tie our work to the corporate and commercial world – or, indeed, to any special interest world in Canada or elsewhere – is simply inimical to the idea of free intellectual inquiry.

It is a direct assault on the principle of academic freedom which the Canadian university system – in common with all free university systems in the world – has always cherished. Taking that protection away will almost certainly lead to a substantial reduction in the amount of such research, simply because it cannot be done effectively in an environment inhibited by the kind of interference the proposals of the report would encourage.

As if this is not enough, I understand as well that the report expresses the conviction that commercialization, as a goal which should be central to our academic purpose, ought to rank equally with teaching, research, and community service. This is a point of view which is simply obscene, and which would not receive even fleeting approval in any responsible university quarter. Nor should it. It is the very antithesis of what our purpose as university researchers must always be.

No doubt there will be those who will say that these proposals are meant only to lay down conditions for research conducted with the aid of financial support provided by the federal government. In a country where, as I am sure you know, there is very little opportunity to draw on non-governmental sources for research support – especially in the social sciences – it is simply destructive to impose these kinds of conditions.

It is beyond my understanding why a government such as yours, which is heir to such an extraordinary tradition of support for the idea of free intellectual inquiry established by your predecessors, would give any kind of serious consideration to the proposals which the Expert Panel report makes.

I profoundly hope you will have the courage to reject the Panel's recommendations out of hand.

Yours very sincerely,

John Wilson  
Professor and Director of the Centre for Election Studies

Copies to Industry Minister John Manley and others

April 29, 1999

The Hon. John Manley

Minister of Industry Canada  
235 Queen Street  
Ottawa, Ontario  
K1A 0H5

Dear Mr. Manley:

We are deeply concerned about the contents of the Draft Report prepared by the Expert Panel on the Commercialization of University Research. In our view, the Report is fundamentally flawed.

It relies on partial and inadequate research. For example, in making its case about the inadequacy of universities' record in commercialization, it relies on Association of University Technology Managers' data that cannot withstand any close scrutiny. Much of it is simply wrong.

As well, the Report is unnecessarily provocative. It argues that ownership of intellectual property is a central problem of public policy and recommends one of two equally odious ways of wresting control out of the hands of researchers – either through legislation that would rightly raise the ire of provinces or through heavy-handed actions by granting councils that would alienate most of the research community. To require faculty and students to cooperate under the threat of loss of funding is not an effective way to promote innovation. To require the social sciences and humanities to conform to policies designed for larger departments of science and engineering is inappropriate and likely to create hostility.

The Report attacks university researchers and, in the only bold-faced and italicized sentence in the document (p.18), implies that their behaviour is anti-Canadian – arguing that leaving ownership in their hands "is tantamount to providing a vehicle to transfer significant amounts of valuable technology out of the country." The criticism is misplaced. It ignores the long history of high-tech Canadian corporations actively courting foreign owners as the best route to expand. Moreover, most patentable inventions, if of any value, are minor improvements to existing products or manufacturing processes and will be primarily of interest to those already operating in the field – many of them foreign companies. Protecting Canadian interests is hardly easy, but blaming university researchers for the problem is unfair and misleading.

Likewise, in laying the blame for Canada's slow productivity performance in recent years at the feet of university researchers, the Report conveniently ignores the responsibility of the private sector. The dismal record of investments in research, development, and training by corporations operating in Canada is a critical factor explaining much of the underlying weakness in the Canadian economy. Ironically, if the recommendations of the Report are enacted, there will be even less incentive for corporations to invest in research and development.

The Report seems unaware of the history of scientific development. The Report's single-minded interest in commercialization blinds it to the fact that most discoveries of ultimate commercial importance came from basic research in which no commercial outcome seemed likely at the outset. Had the policies recommended by the Panel been in place over the last 100 years, there would have been little support for most of the research that has been of greatest commercial importance.

Furthermore, this Report reflects an insensitivity to the importance of social and cultural values that underlie much research that benefits Canadians without generating products with commercial value.

Finally, the Report shows little understanding of universities and the conditions that make them valuable to society. We are deeply troubled by the call for commercialization to become a key mission of the university – alongside teaching, research, and community service. Our public educational system is vital to sustaining the character and purpose of Canadian social, economic and political life. To accomplish that goal, our public educational institutions must be free of encumbrances resulting from compulsory ties to the corporate and commercial world – or to any other special interest.

Our strong criticism of the Report should not be understood as expressing opposition to the Advisory Council on Science and Technology's desire to get advice on the important issue of the commercialization of university research. Universities have an important role to play in helping assure Canada's economic viability. But policies

that support such an objective must show a broad understanding of the importance of basic and applied research -- both that which may lead to commercial gains and that which serves other vital Canadian social and cultural needs. The policies must also respect the conditions essential for universities to fulfill their broader societal role -- autonomy and academic freedom. Both would be compromised by the Expert Panel's Report.

We think it unfortunate that development of recommendations on such difficult and important issues was entrusted to a panel that excluded the diversity of constituencies with a vital stake in the matter.

We urge the Advisory Council on Science and Technology either to augment the membership of the current Panel or to convene a second Panel with a more representative membership. The Report should then be referred to this new body to review the matter and to bring a new report back to the Advisory Council. We are confident that this would assure a broader consideration of the questions at issue, and would help lead to a consensus that would be in the interests of Canada.

Yours sincerely,

William Graham  
University of Toronto  
President, CAUT

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May 19, 1999

Rt. Hon. Jean Chrétien  
Prime Minister of Canada  
House of Commons  
Ottawa ON K1A 0A6

Dear Prime Minister,

Recently a draft report titled "Public Investments in University Research: Reaping the Benefits", prepared by an Expert Panel on the commercialization of university research for the Prime Minister's Advisory Council on Science and Technology, was brought to my attention. This report has five recommendations that, if put into practice, threaten to have serious ramifications for the way in which basic research is carried out in Canada. I am writing to you, both as President of the Faculty Association of the University of Waterloo (FAUW) and as an individual faculty member who is engaged in basic research, to express my grave concerns about the direction in which the draft report appears to wish to steer the deployment of federal funding for research. Further, I am also concerned about a threat to academic freedom implicit in the recommendations put forward by the panel.

The University of Waterloo has for many years had a practice, now enshrined under a University Policy, of vesting the ownership of intellectual property (IP) with its creator(s). This practice cannot be said to have had a negative influence on the commercialization of intellectual property developed at this university. The number of spin-off companies that have evolved from ideas developed by faculty members and others at the University of Waterloo and the contributions that these companies make to the local economy provides clear evidence that one of the key assumptions of the panel report, namely that leaving the ownership of IP with the inventors is tantamount to providing a means by which significant amounts of valuable technology will be transferred out of Canada, is flawed.

The transfer of new technology out of Canada is more often the result of creators of the IP being unable to find Canadian venture capitalists who are willing to take the risk of investing in ideas that are only potentially profitable. Moreover, as Canadian corporations are often branch plants of American, Japanese, or European parent corporations, it should be no surprise when a Canadian subsidiary seems to prefer to have the parent corporation do the investing, assume the ownership, and carry out the ultimate commercialization. What we do need to help resolve this problem is to stimulate the creation of a pool of venture capital, perhaps involving matching funds

provided by the federal government. This pool might then be disbursed by a federal agency in much the same way that the federal granting councils now operate, but specifically dealing with the development and commercialization of IP arising out of federally funded university research.

The report does draw attention to a number of serious problems involving new technology and IP, and as such it should be welcomed. However, the solution of transferring ownership in all cases to the universities, as proposed in the draft report is draconian, and it ultimately threatens to place Canadian universities into noncompetitive positions relative to non-Canadian universities in being able to attract the top-notch researchers that are needed to carry out both world-class basic and applied research. Indeed, it is highly likely that the adoption of the report's recommendations, in whole or in part, will lead to universities in which the atmosphere will no longer be conducive to the performance of high quality basic research. It is in the conduct of basic research that Canadian universities currently excel: any properly normalized statistical comparison between the basic research output of Canadian universities and that of universities in other countries shows that Canadian university researchers do extremely well. The real surprise is that we do as well as we do, given that the level of research support that is accessible to Canadian researchers is considerably lower than that accessible to researchers in other major industrial countries (especially those in the G7 nations).

There is absolutely no doubt in my mind that Canada would be making a serious error if it attempted to enshrine the commercialization of intellectual property as a cornerstone of Canadian universities. Teaching, research and community service should remain the only cornerstones required of our Canadian universities.

Finally, I wish to point out that I have been informed that the final report of the Expert Panel that has actually been submitted to your Advisory Council on Science and Technology is substantially different from the draft report. However, I am also told that it is not possible to obtain a copy of the final report. Mr. Prime Minister, such a level of secrecy is surely not needed. I urge you to allow release of the final report to concerned Canadians prior to your Cabinet having discussed it. Such secrecy, it seems to me, is inherently un-Canadian.

Yours sincerely,

Fred McCourt  
Professor of Chemistry and Physics

Copies to Industry Minister John Manley and others

#### ***FAUW Forum***

***THE FAUW FORUM IS A SERVICE FOR THE UW FACULTY SPONSORED BY THE ASSOCIATION. IT SEEKS TO PROMOTE EXCHANGE OF IDEAS, FOSTER OPEN DEBATE ON ISSUES, PUBLISH A WIDE AND BALANCED SPECTRUM OF VIEWS, AND INFORM MEMBERS ABOUT CURRENT ASSOCIATION MATTERS. OPINIONS EXPRESSED IN THE FORUM ARE THOSE OF THE AUTHORS, AND OUGHT NOT TO BE PERCEIVED AS REPRESENTING THE VIEWS OF THE ASSOCIATION, ITS BOARD OF DIRECTORS, OR OF THE EDITORIAL BOARD OF THE FORUM, UNLESS SO SPECIFIED. MEMBERS ARE INVITED TO SUBMIT LETTERS, NEWS ITEMS AND BRIEF ARTICLES. PLEASE SEND ITEMS TO THE MEMBERS OF THE EDITORIAL BOARD, OR TO THE EDITOR. CURRENT AND PAST ISSUES OF THE FORUM ARE POSTED ON THE FAUW WEBSITE. IF YOU DO NOT WISH TO RECEIVE THE FORUM, PLEASE CONTACT THE FACULTY ASSOCIATION OFFICE AND YOUR NAME WILL BE REMOVED FROM THE MAILING LIST.***

*from TRACE. . . .*

## ***The Teaching Professor***

In the Instructional Development at Waterloo newsletter, TRACE periodically refers to articles that appear in *The Teaching Professor*. That newsletter provides techniques and strategies for post-secondary teaching. It also runs articles on dealing with various types of students, from international students to students with learning disabilities. Generally, the newsletter provides very practical advice on a number of issues that affect the classroom and the instructor in various teaching situations.

TRACE manages an institutional subscription of this newsletter. This subscription allows UW to obtain multiple copies which are then forwarded to faculty members who are part of the institutional subscription. There is a charge for this. Currently it runs about \$50 Canadian and is simply a division of our costs among the subscribers at Waterloo. The cost of an individual subscription is about \$50 U.S. plus a fee for Canadian orders. If you are interested, the institutional subscription is a good deal.

If you would like to join the institutional subscription to *The Teaching Professor*, contact Verna Keller in TRACE at [vkeller@watserv1.uwaterloo.ca](mailto:vkeller@watserv1.uwaterloo.ca) or at Ext. 3132.

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*An item that got through the firewall. . . .*

## ***Hell Theory***

Actual question given on a University of Washington chemistry midterm:

“Is Hell Exothermic (gives off heat) or Endothermic (absorbs heat)? Support your answer with a proof.”

Most of the students wrote proofs of their beliefs using Boyle’s Law (gas cools off when it expands and heats up when it is compressed) or some variant. One student, however, wrote the following:

First, we need to know how the mass of Hell is changing in time. So, we need to know the rate that souls are moving into Hell and the rate they are leaving. I think that we can safely assume that once a soul gets to Hell, it will not leave. Therefore, no souls are leaving. As for how many souls are entering Hell, let’s look at the different religions that exist in the world today. Some of these religions state that if you are not a member of their religion, you will go to Hell.

Since there are more than one of these religions and since people do not belong to more than one religion, we can project that all people and all souls go to Hell.

With birth and death rates as they are, we can expect the number of souls in Hell to increase exponentially. Now, we look at the rate of change of the volume in Hell because Boyle’s Law states that in order for the temperature and pressure in Hell to stay the same, the volume of Hell has to expand as souls are added.

This gives two possibilities.

- #1 If Hell is expanding at a slower rate than the rate at which souls enter Hell, then the temperature and pressure in Hell will increase until all Hell breaks loose.
- #2 Of course, if Hell is expanding at a rate faster than the increase of souls in Hell, then the temperature and pressure will drop until Hell freezes over.

So which is it? If we accept the postulate given to me by Ms. Therese Banyan during my Freshman year, “That it will be a cold night in Hell before I sleep with you,” and take into account the fact that I still have not succeeded in having sexual relations with her, then #2 cannot be true, and so Hell is exothermic.

The student got the only A grade.

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