

Investment in Canada's Future

The Executive and education committees of the CIM and the Canadian Mining and Metallurgical Foundation believe that the National Curriculum Project more than fulfills Council's mandate as it unites educators and industry in creating teaching materials related to mining.

In today's mining, the costs of exploration for a promising property are considered to be logical and necessary investments. Educators along with the Executive and numerous members of The Canadian Institute of Mining and Metallurgy and the Foundation believe the funds for the National Curriculum Project to be not only logical and necessary but essential investments, because only the knowledge and positive attitudes of tomorrow's generation can guarantee the future which our country and its mineral industry deserve.

MS received July 5, 1978



Pyroclasts

Ward Neale

Another Prize to a Senior Citizen

We cleaned up three Canadian young-scientist-of-the-year awards a few years ago (Steacie Prizes to Dave Strong, Fab Aumento and Chris Garrett) as geoscience finally began to feel its oats and make a notch in the established pecking order. Now some old-timers (40 plus) are beginning to reap their rewards for staying with the trade and resisting the lush life in administration. We salute *Ray Price* of Queens who is the latest to cop a prestigious senior Killam Fellowship, following Hank Williams (M.U.N.) and Len Hills (Calgary) who scored earlier. These gigantic awards (40 plus) enable the recipients to buy themselves a term or two away from teaching and still have enough left over to supply boot grease and axe handles for the field season. It's good to have finally drilled deep into this zone of high honours and large grants after over a half century on a crustal diet. Congratulations Ray.

The Rich Get Richer

Now that university geoscience is moving into the big leagues it must avoid the problems that excessive wealth has caused some chemists, physicists and engineers. I was reminded of this the other day when the recipient of a large award told me that when another agency had heard about it they had cut the amount they intended giving to him. I could not weep because I am beginning to doubt the efficacy of double, triple and quadruple grants to the same person for essentially the same set of projects. There is a good case to be made for heavily backing known

winners – people producing first-rate science can sometimes produce more of it if they have more money for graduate students, technicians and equipment. But there is a point of diminishing returns which varies from person to person depending on his or her temperament, life style and related factors. Large grants usually come just as the distinguished scientist is becoming increasingly enmeshed in the affairs of men, with much less time for field and lab. The big grant holders then apportion out their moneys to less fortunate colleagues to pursue the grant holder's (but not necessarily their own) pet projects. Awards committees are really abrogating their responsibilities when they allow such (sometimes faded) superstars the financial muscle to tailor colleagues' creativity to fit unlikely molds.

Now that our science is receiving more support from several sources we must ensure proper distribution to achieve maximum research results. Most awards committees consist of two factions: those who believe in sharing the pie as equitably as possible; and those who believe in supporting those they identify as the best scientists to the maximum with a few crusts cast to a handful of the common herd. For many years the decision-makers in geoscience belonged chiefly to the first school. They gave something to everyone but no one received enough to do anything worthwhile except those who were only seeking a little extra vacation travel money. Then the pendulum began to swing slowly the other way and we may have already passed the optimum point for there is growing evidence that the second school of thought now dominates the decisions. One of its failings can be the equating of big science with good science and the tendency to neglect those good people whose material needs are small. This may tempt well-published scientists to apply for money beyond their needs, a temptation enhanced by the tendency in university circles to equate size of grants to quality of research and potential for promotion. Another pitfall of the big grant syndrome is the reluctance, having identified research leaders, to admit that some of the chosen elite haven't performed up to expectations. It is

easy for a committee to agree to cut off a newcomer or an average worker who hasn't produced much for a year or two. It seems much harder to admit that a research leader they identified four or five years ago had actually peaked just about that time and that there isn't much hope of expecting anything significant from him. They might agree to freeze the grant at its present level for the next three years but that still leaves this person as an economic czar in his or her research unit. With large grants so closely linked to status in the community, it demands a great deal of courage to ask for less because you are doing less. I know of only one person, a leader in his field, who upon his appointment as chairman of a large department requested a large cut in his grant until his term of administrative duties was completed. Oh that there were more such!

The Martins and McCoys

When Jack Armstrong's Geoscience Council special committee gets around to looking at our university geology department I hope it is bold enough to look at the effects of excessively large grants. If it can probe gently and delicately enough maybe it should also look at little feuds.

Scientific rivalries are not necessarily bad, they often spur the protagonists on to greater efforts. It is unfortunate but inevitable that some such rivalries lead to personal vendettas. But how about clan feuds? Incredible, you say, since our various societies have succeeded in breaking down the silly lack of understanding that once existed between government, industrial and university geoscientists. Not so. Just the other day I learned that a rivalry between a university group and a government group which started many years ago was still flourishing to the disadvantage of each. Many of the original combatants have now disappeared from the scene or even (bless us) changed sides but the war goes on. Both groups are interested in the geology of the same region – the opportunities for cooperation are prodigious but, alas, there is none. Sad.

Oh to be in Thunder Bay Now That GSC is Almost There

I am absolutely the only person I know who is very pleased that some of the Survey scientists are moving to Thunder Bay to form a Precambrian Institute. Despite implications in Ingo Ermanovic's letter (v. 5, no. 2, p. 101-102), all senior administrators that I know opposed the move to Thunder Bay. Although academics and company people favour Survey decentralization most would have preferred that the move be to Toronto, Winnipeg or some such large centre.

I sympathize with Ingo and his colleagues who don't wish to leave Ottawa with its parks, canals, Art Centres, broad streets paved with taxpayers' gold and ½ million right-thinking, like-thinking, beautifully buttoned-down minds. Ottawans naturally resist moves to lesser places such as water-soaked Halifax, parched Calgary or polluted, crime-ridden Vancouver. However, once forced into one or other of these outposts the displaced persons suddenly discover Canada and Canadians and a whole new way of life opens up to them. They then seem to resist all efforts to lure them back to the gilt-edged rabbit warrens on the Rideau River. Also they become remarkably productive scientists. Ask any casual bystander where you will find the GSC's happiest and most active units.

When I left our national capital 10 years ago for small, isolated St. John's, Newfoundland, many colleagues told me I'd be cut off from direct contacts with the world of geoscience. Fact is that we saw about five times as many scientists as we ever did in Ottawa. And Mike Keen (who is admittedly prone to exaggerate) claims his group in Halifax had five times as many encounters as we did in St. John's. If the Precambrian Institute does its thing properly in Thunder Bay it won't have to worry about contacts and interaction with other scientists. Thunder Bay is virtually surrounded by nests of U.S. Precambrian workers who will flock to the new Institute if it is doing exciting things. My bet is that a lot of small, active exploration companies will move their headquarters there and

satellite industries will build up just as they have around B.I.O. in Halifax.

A move to a small center is always good for the 40 plus group, it helps blow the mind, flatten the ruts and stir up the creative juices. Some, for good personal reasons won't be able to make this move but they too might benefit from job changes or transfers. This will leave gaps for younger people which is good, for a new Institute certainly needs a generous injection of brash youth. If Lakehead University is alert to this great opportunity it will immediately call upon many of the newcomers to be sessional lecturers and, most important, it will invite the whole crew of them to join the Faculty Club so that they can drink beer daily with chemists, physicists, engineers, poets and all the queer hands one finds in Faculty Clubs. Great things might come from this.

As a minority of one I didn't feel right about expressing my viewpoints on this sensitive issue. I thank Ingo for his letter which gave me this opportunity to tell the reading world that Thunder Bay is an absolutely ideal place for the Precambrian Institute. May it flourish!

MS received September 6, 1978