

Standing Committee on the Alberta Heritage Savings Trust Fund Act

2:02 p.m.

[Chairman: Mr. Dunford]

MR. CHAIRMAN: Okay. I'd like to call the meeting to order at 2:02. Before we proceed with the introduction of guests, I have been notified of a couple of recommendations which should be read into the record. Don Massey, would you like to read yours into the record, please.

DR. MASSEY: Thank you, Mr. Chairman. As you know, we have argued that the fund should be over a period of time disposed of, but given the present context of the fund and that it will continue at least for the foreseeable future, I'd like to present the following resolution:

Be it resolved that an independent advisory committee be appointed by the standing committee on the Alberta heritage savings trust fund to determine how the Alberta heritage savings trust fund could best be used to stimulate job growth in areas of high unemployment in Alberta.

Thank you.

MR. CHAIRMAN: Thank you very much.
Denis Herard.

MR. HERARD: Thank you, Mr. Chairman. I have a couple of recommendations.

That all government departments responsible for heritage fund loans of all types consider using commercial lenders as the loan vehicle and strive to get out of the direct loan business.

The second recommendation is

that the Provincial Treasurer negotiate early repayment by Vencap of its outstanding loans.

Thank you, Mr. Chairman.

MR. CHAIRMAN: Okay. Thank you.
Any other committee members wish to read in? Mike.

DR. PERCY: Well, not a recommendation. I just wanted it on record that the Provincial Treasurer has responded to the questions I had raised regarding the loan of securities and that the letter was sent to me, and I passed on the original copy to you. I would just recommend that in the future, then, the chairman of the committee be the individual that receives all of the correspondence related to the answering of questions.

MR. CHAIRMAN: All right. Yes, I appreciate that because while it was crucial, I guess, that you received the answers you needed, certainly there are others that would have the same concerns, and it's probably through the chair that we can best disseminate the information.

Okay. Any other members wishing to read any recommendations at this time?

I might point out that tomorrow morning between 8 and 10 we will have Pat Black as the Minister of Energy. Based on the current schedule we have, that will be the extent of the ministers and officials that we will be able to bring forward.

MR. MITCHELL: Mr. Chairman, what about Mr. Kowalski?

MR. CHAIRMAN: I'm still trying to arrange that. We've had two or three appointments that have been set up that, as you know, have been canceled, but I continue to work on that. I just can't guarantee that at this point.

MR. MITCHELL: What if they all say that they're busy?

SOME HON. MEMBERS: We just wouldn't meet.

MR. MITCHELL: Right.

MR. CHAIRMAN: Okay. Well, I'd like to welcome our guests Dr. Matthew Spence and Al Libin. Am I saying that correctly? Okay. What I would invite you to do is perhaps similar to the procedure that you're experienced in. Where we might be different than in past is that we would like any opening statements limited to 15 minutes so that we can then get on to the questions. The question format: we'll start with a member of the Liberal opposition, and they in effect have three questions each time it is their turn, and we'll then go to a government member, and then we'll go back and forth until questions cease or until we reach the hour of 4:02, in which case then we will have completed our task.

So either Matthew or Al, whoever would like to start, please proceed.

MR. LIBIN: I'll start. Mr. Chairman, members of the committee, thank you for inviting Dr. Spence and me here today to meet with the standing committee. We appreciate the opportunity to share the successes of the foundation, to describe our new directions, and to answer any questions you may have about how the foundation advances both the health of Albertans and the economy of our province.

As you may remember, this fall we celebrated our excellent report from the 1993 International Board of Review. The Act of the Legislature that established the foundation requires that we have such a review every six years. The 1993 board of review, a panel of top scientists drawn from around the world, ranked Alberta as one of the top 10 medical research centres in North America.

Before I summarize the reasons for this high ranking, I will give you some background information about the foundation, because most of the hon. members are new to this standing committee. The Alberta Heritage Foundation for Medical Research was established in 1979 by the government of Alberta under the leadership of Peter Lougheed to support a long-term program of medical research in Alberta. The foundation was started with an endowment of \$300 million from the heritage savings trust fund from which we may spend the income. Recognizing that building research is a long-term investment, the government placed the foundation at arm's length so that this medical research thrust would not be influenced by the hills and valleys of ever changing politics. The wisdom and foresight of government in setting up an independent foundation in this way has been frequently praised by representatives of other provincial governments, federal officials, industry, and international visitors.

The HFMR is governed by a nine-member board of trustees appointed by the Lieutenant Governor in Council. Half are public members, and half are nominated by the universities of Alberta and Calgary, the College of Physicians and Surgeons, and the MSI foundation. Dr. Matthew Spence is the president and chief executive officer of the foundation. The business office is in Edmonton and houses a staff of 19. The science we support is spread between Edmonton and Calgary and impacts all over our province. The board of trustees and the president are advised by an international Scientific Advisory Council and other groups including committees of researchers from across North America who assess applications for awards.

Our funds primarily support a personal program; that is, we support people. In co-operation with the universities of Alberta and Calgary we recruit researchers to work at the universities and teaching hospitals with salaries paid by HFMR and with establish-

ment grants to start up their research. We also support student researchers in training who work with established scientists. In the last 13 years we have provided research training for more than 3,000 young people. Since 1980 the foundation has contributed more than \$450 million directly to the scientific community in Alberta, universities, and their affiliated institutions.

What has been accomplished? We have recruited more than 155 researchers from Alberta, Canada, and around the world. Many of them are internationally recognized for their advances in infectious disease, diabetes, and neurosciences, to name a few areas. Ground-breaking discoveries include the first long-term successful transplant of insulin producing islets for diabetes, a promising drug for hepatitis B, pioneer electrical therapy for heart attack patients, and new information on the genetics of cancer. You'll find these and other success stories in our triennial report, *The Power and the Promise*. I commend the report to you for reading. It has received rave reviews from government and industry leaders, scientists, school teachers, students, and others, not only in Alberta but throughout Canada.

Heritage researchers have improved patient care directly by establishing new specialty clinics and sharing their expertise with Alberta physicians and indirectly by upgrading medical education. One of the means of measuring the quality of research is to look at how heritage researchers compete in national and international competitions for outside grant funds. Remember that the foundation provides start-up funds, but we expect the researchers we support to bring in the dollars they need to continue their research from the outside, and they do. Our scientists are among the top in North America. In 1992 they brought in over two research dollars for every AHFMR dollar invested. Largely due to HFMR the ranking of the U of A medical school, measured in research dollars attracted, has gone from 11th to fourth and the U of C medical school ranking from 15th to eighth. Over two-thirds of the medical research dollars are spent on jobs in Alberta. Over 2,000 people are supported directly, and at least an equal number may be supported indirectly.

This influx of outside research dollars is not the only way HFMR impacts upon the economy of Alberta. Innovations coming out of the labs have become the basis for new companies in some cases, and in other cases the researchers have formed joint ventures with existing companies to license or market new technology or products. For example, an engineer at the U of A is working with several small Alberta companies and a German medical device company to market an innovative artificial leg. Heritage medical scientist Dr. John Remmers' face mask to treat a life threatening disease called sleep apnea is the number one remedy for this condition in North America and has brought hundreds of thousands of dollars in royalties to the University of Calgary. We have a technology commercialization program to encourage this process. Funding is also available to innovators throughout the community, and we help them find a medical research partner to test the innovations in early stages.

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For all these reasons, the International Board of Review concluded that HFMR has put Alberta on the world map for research and that our scientists can hold their own with the best in the world. The IBR in the triennial report cover activities until 1992.

Now I'd like to very briefly refer to some of the 1993 highlights. Among the people recruited for their outstanding promise, we have a new, talented AIDS molecular biologist at the University of Alberta and a neuroscientist at the University of Calgary. His discovery about nerve cells suggests that we might be able to replace or heal damaged brain cells in Alzheimer's and other diseases. Two 1993 projects demonstrate how we strive to respond to the needs of the community. We have funded a young researcher to study injury

prevention at Johns Hopkins University, the pre-eminent school of public health in the U.S. He plans to apply his new expertise to accident and injury prevention in the Alberta native communities. Secondly, we are a major funding partner in the new ecoresearch chair in environmental risk management at the University of Alberta. The foundation's also begun important new initiatives in health-related research, which Dr. Spence will discuss in more detail.

Lastly, on behalf of the trustees I'd like to focus on the subject which is constantly on everyone's mind: control of spending. Our expenditures come from the income of the endowment and therefore do not contribute to general government spending or the deficit. We are committed to maintaining the purchasing power of the endowment for future generations of Albertans so each year return a portion of our income to the endowment to maintain its value. I think we have done well. On March 31, 1993, the market value of the endowment was \$626 million. Its purchasing power is \$313 million in 1980 dollars. We have maintained its value. However, this has meant very careful planning. For the last several years, long before others were intent on cutting expenditures, we adjusted our programs and cut back in some areas. For example, we slowed recruiting of senior scientists, we cut back on a number of training positions, and we reduced our infrastructure grants to the universities. At the same time, however, we have invested heavily in research, successfully, too, as judged by the report the International Board of Review.

We believe that research is a fundamental pillar of the future health and well-being of Alberta, yet the investment is very small. A comparison may help you put this into perspective. Our annual budget of approximately \$30 million is less than three days of Alberta Health expenditures.

We continue to husband our resources carefully and require our researchers to meet international standards of excellence every time their funding from HFMR is renewed. This fall we were gratified to have the Premier recognize the HFMR's outstanding contribution to Albertans when he publicly said that HFMR is a deemed asset and a sacred trust and that both our endowment and our autonomy would be preserved because we have proven our successes. HFMR has put Alberta on the world map for medical research, bringing us all tremendous health and economic benefits, and we are grateful for the farsighted, continuing support we receive from your government.

I now call on Dr. Spence to review some of the most recent events which demonstrate what HFMR is doing in Alberta and discuss some of our new directions.

DR. SPENCE: Mr. Chairman, is it okay to go ahead?

MR. CHAIRMAN: Please.

DR. SPENCE: Okay. Fine. Thanks, Al. I'd just like to take a couple minutes to talk about the activities of the foundation in relationship to the current changes in the health system and the goal of all of us, which is really healthy Albertans and a healthy Alberta.

It's interesting that surveys across Canada and in Alberta point out that two of the most important goals to our fellow citizens are good family life and good physical health, and to my knowledge there is no political debate over the desirability of being and staying healthy or its priority for all of us. The debate has really been about the cost. The importance that people in Alberta attach to sustaining good health is reflected in the millions of dollars we spend each year directly on health care and even more that we spend indirectly and individually on things like vitamins, health food, exercise, guides to health, and all of the other things that are part of our national preoccupation with health. Indeed, the estimates are that the amount

we spend out of our own pockets is probably greater than the amount we spend officially.

There's a lot of debate now over the question of how people, provinces, and nations can best achieve the health they so highly desire and at what cost. Now we're in the midst of a downsizing in health care financing and funding. The payer, in this case the government, is limiting the resources flowing to the health care system. We have a system that we cannot afford. Parts of the system are going to have to go, hopefully those that we do not need. Other things may take their place, but this will have to be very cost effective if the budget is to remain balanced. Such decisions -- what stays, what goes, what preventive practices we put in place, what life-style changes we all adopt, how do we promote healthy behaviour, what drugs do we use, what operations do we have, what machinery do we buy -- all must be based on reliable information, and there is no other source of this information but research.

We also have disease burdens that reduce our quality of life and the productivity of our work force. Colds, flu, backaches, arthritis, headaches: where are the cures? Again, I think the answer only comes from research. Thus the path to our highest priority, health, is being blazed by research. There is no other route. That is why the foundation has developed and maintains a strong medical research base in our province: to realize your and my highest priority.

Let me give you some examples of problems that our medical researchers are addressing at the present time on widespread health problems that affect you and me. I'll bet most of you know somebody with diabetes. It's interesting, you know, that diabetes is the leading cause of failing eyesight and blindness, of kidney disease, and a major contributor to heart attacks in this province. Insulin, which we thought was the answer, controls the symptoms of diabetes, but it does not control the disease itself. The blood sugar fluctuates very widely between injections of insulin, and these fluctuations continue to damage the body, so the result is eventually premature death.

Now, heritage-funded researchers in Alberta are world leaders in the attack on diabetes, and I can say this because we brought teams in from around the world, and they say that this is truly international-class activity. They're attacking in at least three ways. Some are trying to develop vaccines to prevent diabetes, because there are forms of diabetes that may very well be caused by viruses. Others are looking at transplanting the defective cells that are knocked out in this disease so that the body has a new insulin supply that it controls by itself and cures the disease. Others are looking at putting little sensors under the skin and hooking them up to pumps so that insulin can be metered into your body continuously, controlling the level of blood glucose and preventing complications of the disease. If any or all of these are successful, the burden and cost of diabetes will shrink to a fraction of what it is today.

It's very similar to the polio story. Most of you in this room are much too young to remember polio, but I remember the polio epidemic of the '50s. We closed schools, swimming pools, and theatres in Alberta every fall because we were afraid our children might meet with other children in these places, would become affected with polio and die. The cost of the treatment was staggering. We had whole hospitals that were full of iron lungs. Medical research provided the poliomyelitis vaccines, and now polio is a thing of the past, and its prevention costs pennies a day. Smallpox almost wiped out the aboriginal population of North America, and it is now a disease of the history books. The medical and health research of today is the prevention and cure of tomorrow.

2:22

Now, the film *Jurassic Park* has highlighted the wonder and the danger of new genetic technology. Canada's most recent Nobel

laureate, Mike Smith, works very closely with people in Alberta, so we have a lot of that genetic technology being used and coming on line in Alberta.

These technologies and their related discoveries also raise ethical issues such as eugenics, sex selection, and births to 60-year-old mothers, to name only a few. What is being done in Alberta about these? Well, the foundation has funded what I think is a very exciting Alberta development in which we have encouraged the return of one of our Albertans back to this province to carry out research in medical ethics, genetics, and the law. Dr. Bartha Knoppers, who is a professor at the University of Montreal, will be a visiting professor in Alberta. She is internationally known for her work in the ethical area of genetics. She was also a commissioner on the royal commission on reproductive technologies. Her activities in this province are going to give our caregivers an ethical infrastructure that allows us to decide collectively as Albertans the best use of some of these technologies in our province.

Now, what about cost containment, and equally important what about cost containment across the whole spectrum of the health care system, not simply in the hospitals but in the community? Let me describe a couple of examples of how medical research has led or will lead to cost containment in Alberta. The foundation is one of the principal funders of what is called the Alberta primary care research unit. This is a collection of family physicians who answer questions that come up in doctors' offices, the questions that concern you and I and our families, relatives, and friends in Rimbey, in High River, and in Bashaw. We are helping family physicians to answer questions of immediate importance to all of our fellow citizens.

One of the things they've looked at is the routine use of ultrasound in pregnancy. Do we need to do an ultrasound scan on every pregnant woman? The preliminary results of these studies seem to indicate that we do not. If fewer ultrasound examinations were done, the savings to the health care system could be millions per year.

We have other examples. I think many of us snore, and those that don't, ask your partners. For some snoring is dangerous, because we stop breathing. We call this sleep apnea. It can actually be life threatening, not only because you may stop breathing but, even more important, you don't sleep well. You become drowsy during the day. People with sleep apnea are seven to 10 times more likely to have a car accident because of this. As many as one in 20 women and one in 10 men may be affected and have drowsiness caused by this. When you think of the number of car accidents, this isn't a trivial problem.

How do we know this? Well, 10 years ago a physician joined the staff of one of our hospitals in the south, recruited here through the foundation. He described and studied sleep apnea. He started one of the first sleep clinics, and now they dot North America. He developed one of the first cures with the help of the foundation's technology commercialization program. It's a sleep mask that you wear at night. He was able to sell a commercial company on developing the mask, and in the first six months of sales it topped the market. It's now one of the chief royalty earners for the University of Calgary. He kept researching, and now he's come up with a magic box that you can use to diagnose the condition at home. Instead of taking two or three days hospitalization to make the diagnosis, we can do it at home, and the savings are \$3,000 per patient. Equally interesting is that such a diagnostic device can be sold to others throughout the world generating an Alberta company, an Alberta business, and a return to our province in terms of jobs.

As I said at the beginning, to my knowledge there has really never been any serious political debate over the desirability and priority of staying healthy. We all want to do that. Our present activities and future plans support this priority. As our society moves towards

optimum health, it's a little like a wagon train of early settlers. The researchers are the scouts. They test the possible routes over which the wagon train might pass, pointing the way for the future. Without the scouts our forward motion is a blind thrust which we'll surely come to grieve.

In closing, we've had the pleasure of hosting members of the previous standing committee at some of our universities and hospitals to see the foundation-supported research community firsthand and to learn something about the excitement of what they're doing and see something of what they're doing. Many of you may not have had this opportunity. I would invite you individually and collectively to visit us and share some of the excitement of this wonderful story in our province firsthand.

Thank you very much, Mr. Chairman.

MR. CHAIRMAN: Thank you very much. I'm pleased that you raised the point about the visit. As chair of this committee I'm trying to show some fiscal restraint by keeping these folks stuck here in Edmonton, but maybe we'll find an opportunity at some point to take you up on your invitation collectively.

All right. We'll begin with Mike Percy.

DR. PERCY: Thank you, Mr. Chairman. Dr. Spence, Dr. Libin, I've read the report of the international review committee, and it is certainly laudatory. There's no question that the research undertaken is of a world-class nature. So my questions are not going to focus on what I think is obviously meritorious. Instead, I want to address a couple other issues. The first deals with the issue of commercialization, which you alluded to in the discussion. My question: is this done in-house, or do you farm it out using the firms that are out there to try and make the transition from the lab to the marketplace?

DR. SPENCE: It's a combination of both. It's basically tailored to the situation. In general, however, we find that the technology commercialization skills at the business level are perhaps best done in the private sector, in the community. So what we try to do is form a liaison between the investigator in the institution and the private sector. If there isn't such a liaison, then what we may try to do is craft the development of a small business or small company or something to take it forward here in the province, because sometimes there simply isn't a receptor arm for this. In some cases it may end up with licensing the technology to a major multinational, and in other cases it may end up with developing the technology locally in-house. So it's a combination of them.

DR. PERCY: Thank you.

A complete change of pace. My second question and my supplementary will relate to administration expenses. I'm looking at the schedule of administration expenses for the year ended March 31, 1992, the most recent annual report of the Alberta Heritage Foundation for Medical Research. My question in this regard really relates to the use of the money for administrative purposes, so it's germane to the mandate of the committee. I note from looking at schedule 1 -- and I don't have the page number for that, I'm sorry; it seems it didn't come out in the photocopying -- that between 1991 and 1992 reimbursement for the trustees, for example, increased from \$98,500 in 1991 to \$139,000 in 1992, and there are 10 trustees on the board. I was wondering if you could then tell us what the nature of that expenditure is and why it increased.

DR. SPENCE: Okay. The expenditures that show in the line under trustees refer to all expenses concerned with the trustees themselves, which would be the travel to meetings, meeting expenses, the meeting fee of the trustees, and all other items. In the period referred to the foundation went through a strategic planning process

in which we developed a strategic plan for the foundation. This was largely trustee driven. It was the responsibility of the trustees to put forward this strategic plan, and this almost doubled the number of meetings over that time frame. So I think this is the major explanation for the change in costs. It will settle down again.

DR. PERCY: My final question relates to public relations and advertising. You know, when you're giving money out, I don't think you have to advertise extensively. They will find you. I note when I look at this schedule that public relations and advertising increased from \$102,000 in 1991 to \$111,580 in 1992, which is a significant expenditure since you're a granting agency and one thinks that people would know that you have the money.

DR. SPENCE: I think you're quite right, Dr. Percy, and were this the only thing that was under that rubric you would be entirely right in pointing out that increase in the budget, but in point of fact our public relations involves a much wider area. We are trying to popularize science and science education in this province. So our increasing activity is really based at trying to attract young people into careers in science, not only at the undergraduate level in the universities but also at the high school and public school levels. For example, we are participating with Jim Gray and the Science Alberta Foundation in creating modules to attract people into science; for example, DNA in a box, this sort of thing, imaginative things to try to attract young people into careers in science or at least to get an interest in science. We are also putting out media fellowships. We're trying to increase the science sophistication of the media. The media, of course, is always sophisticated in its reporting, as I'm sure everybody here knows, but we're trying to increase this a little more. Therefore, we have two media fellowships that we put out a year in which we put scientists in with the media, trying to increase their awareness of what's going on and improve that.

So in point of fact, I think this budget will continue to increase for a period of time because we feel very strongly that this is a very important part of the overall activity of the foundation. There will not be medical research or even research in the future without getting the young into it, and this is a real, if you like, increasing effort on our part. It's still a very modest part of the overall expenditures of the foundation.

MR. CHAIRMAN: Okay. Thank you.

Victor Doerksen.

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MR. DOERKSEN: Thank you, Mr. Chairman. I want to go back to your comments on medical ethics, Dr. Spence. I'd like to examine that just a little bit, because there have been some new developments that happened, as you alluded to in your comments, that I think opened up once again this very important area. What are the parameters that are used now to decide medical ethics? The gentleman I heard from Great Britain, I believe -- they had in place some kind of a committee or something that looked at the ethical decisions and made a ruling. Is there such a thing in place in Alberta? How do we decide?

DR. SPENCE: Any project which is supported by the foundation is reviewed by what we call the ethics committees of the institutions; all right? These will be committees which are composed not only of investigators who understand the science but also representatives of the community, of the clergy, ethicists, perhaps legal; in other words, it takes a spectrum of the community. The proposal is taken to them in language that they can understand -- in other words, it must be put in language that everybody can understand -- and they will decide whether this is ethical by their viewpoint in terms of the

community's ethic as well as the wider viewpoint which has been sort of formulated by debate and discussion right across the country. So you have sort of a Canada-wide view on this, and then you may have a local view which reflects the local or institutional ethic as well,

so anything that comes to us that has anything to do with research involving human subjects, for example, must have passed the ethical review process of the local institution. One of the things we're trying to do with this wider thing that I was talking about with respect to Professor Knoppers is to provide those people making those local decisions with more information on which to base these, because some of these are going to be very tough decisions in the future. We hope this will serve as an infrastructure, if you like, also for small community hospitals and other health centres, individuals who may have to make some very difficult choices as time goes on.

MR. DOERKSEN: One of the comments that the gentleman from Great Britain mentioned that disturbed me a little bit was that he said that the ethics of the day were subject to change, that they were variable. Is that a danger we're looking at perhaps in terms of deciding what the community standards are? Is that the basis for deciding what's ethical and what's not ethical?

DR. SPENCE: Well, I've hardly got the expertise to get into a major debate on ethics. Certain of our ethical principles are part of our fundamental societal structure that has come down from the ages, and I think that it has been, if you like, refined by our wise people through the ages. There's a certain amount that continues down in our province and in others, and what may be appropriate for, you know -- the modification I think he is referring to, though, refers to the increase in knowledge. As we learn more about certain things, it may become obvious that these have ethical complications that we perhaps never even considered at the very beginning when we turned that corner, and we may have to take that into account in terms of our thinking. So what may have been considered okay, you know, a number of years ago is no longer okay because we appreciate its dangers. You know, when Madame Curie discovered radium, she thought it was okay to leave it sitting on the bench. We now know that's deadly, deathly, terrible, so now it's behind lead walls and everything else. As your knowledge changes, so will your approach to the ethic.

MR. DOERKSEN: Just more specifically on the doctor you're going to have involved in this kind of research. This is funded out of this organization then? Is there a budget figure you've given over to that particular area, and this is something brand new?

DR. SPENCE: Yes. What it is is a category we have that we call special initiative, where if something doesn't quite fit some of the conventional programs -- when there is a real opportunity to foster and further research in Alberta, we will fund it under such an initiative. In this particular case, what we're doing is funding a portion of her time to come into Alberta and study here and the infrastructure that will be necessary to support her, and she'd be working. It's a happy example of a collaborative agreement. I suppose members of the committee are aware there's occasionally rivalry between our two major universities in the province, but this is an example of friendly collaboration in which both universities will host her activities. It's a help that she comes from out of the province. I think it will be a very exciting development.

MR. CHAIRMAN: Okay. Thank you.
Grant Mitchell.

MR. MITCHELL: Thanks, Mr. Chairman. I'd like to welcome our guests. I had the pleasure of meeting with Dr. Spence several months ago, and as always it was an interesting discussion, very good.

I'd just like to pursue a little bit of the administrative expenses. Question: could you please tell the committee what your per diem fees are for committee work and trustee work? How are these fees structured?

DR. SPENCE: The fees are structured to reflect, I suppose, in a sense a recognition of the valuable time of the individuals who serve on the foundation committees. What we've done is consulted with other agencies across the country and other venues in the private and in the public sectors to determine what might be a reasonable fee. So if a member is serving on one of the foundation's committees for a full day, the fee for that day will be somewhere between \$400 and \$600, depending on the sophistication of the committee itself. At the lower amount we will usually pay the expenses of the individual. For some committees in which we give a higher amount, they're expected to recover some of the expenses for their accommodation and so on from that money.

MR. MITCHELL: Okay. Maybe I'm just asking for an opinion on this, but I'm very interested in this idea that royalties are going to the University of Calgary for the sale of this sleep apnea product. What does that do to the University of Calgary's budget? Is that somehow reflected in the kind of support they get from the government, or is it used in addition to that? Is it extra? How does that work?

DR. SPENCE: I'm sorry, Mr. Chairman. I can't comment on that knowledgeably because I honestly don't know where it goes. I can express an opinion. I think it goes to a system with their technology commercialization activities. In other words, it plows back. Perhaps AI would want to comment on that, but I think it plows back into the technology commercialization.

MR. LIBIN: Yeah, that's just recycled, Grant. Where they do have success -- and you know that success doesn't happen too often in this early stage of commercialization -- it's just a recycling back in to help fund additional tech transfer opportunities.

MR. MITCHELL: Okay. Other committees' budget went from \$140,000 to \$172,000, '91-92. I think that hasn't been asked after. Could you just tell us, one, what that's used for, and two, why the increase?

DR. SPENCE: Okay. You see the committees that are listed there are the Scientific Advisory Council and then they list other committees. These are our peer review committees. They're the ones who actually vet the applications for the various awards. We added an extra committee, which is called the clinical committee, because of our concern that some of the people working in clinical and health areas -- we might not have the appropriate expertise. So we actually constituted a new committee for that purpose. That contributed in part, and the rest is additional committee meetings for the purposes of review of applications.

MR. MITCHELL: Thanks.

DR. SPENCE: We really froze the per diems on these committees for a long time. They haven't been increased for some time.

MR. CHAIRMAN: Okay. Thank you.
Denis Herard.

MR. HERARD: Thank you, Mr. Chairman.

I think you're to be commended for the great work that has happened here in Alberta.

To what extent does the Alberta Heritage Foundation for Medical Research collaborate with other medical research funding agencies across Canada or even North America or even internationally?

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DR. SPENCE: We collaborate a lot both directly and indirectly. In the first place, we view our funding as being sort of seed and start funding. We fund the investigator's salary, and we'll fund them to start them going, but we don't fund them ongoing. We expect them to attract those dollars from the outside. This is where I get that 2 to 1 dollar figure, because what happens is that we may put an investment of \$100,000 in an investigator; within a few years I expect him to be returning \$300,000 to \$400,000 back to the province, which will be spent here in jobs, services, and so on in connection with his or her research. That's a direct partnership in the sense that if we didn't have the investigators here to access those funds, the other agencies wouldn't get the research done that they want in cancer or in heart disease or in stroke and so on. So there's a direct partnership there.

The second thing that we do is that on large-ticket items that are fairly expensive, we will frequently agree that the science is very good -- we need this in Alberta, but we simply cannot afford to pay the whole bill -- and we will suggest to them that they apply to another agency. The fact that we've looked at it and we're prepared to put in so many dollars, the other agency would put in so many dollars, and we'd get a two- or three-way partnership in this.

We also communicate right away on who's funding what, so there's no double funding. If, for example, we say that we will pick up the front end, then, for example, the Medical Research Council of Canada won't fund until year 2 or year 3, and vice versa. If they're funding, then we will not.

The other place that's been very effective has been with industry. Industry is interested. They know that the foundation is funding a very high quality research, and they will say, "Well, if you continue to maintain the funding for these individuals, we know they're going to be high quality; we will invest in their research or we will give them a contract to do certain studies on certain drugs or certain procedures, et cetera."

So there's quite a degree of partnership. We're aware of funding right across North America. There's cross-talk between ourselves, for example, and national institutes of health, which Al and I visited a year ago, and also to a certain extent with Britain. So we do try to cover the ballpark as much as possible and always look for something that we can bring to the province, attract to the province of Alberta.

MR. HERARD: Thank you. You've anticipated all my supplementaries on that question.

MR. CHAIRMAN: Okay. Lance White.

MR. WHITE: Yes. Dr. Spence, the age-old question I'm sure you've answered a number of times, and if you could just help me to put it in a nutshell and in layman's language so as to tell those people that ask me, as well as understanding it myself of course. It's a simple question of cost benefit, particularly in light of the government's recent actions and reactions in an area that you know well, the deliverance of medical care. We've got all of these cuts, and how do I explain the benefits of your service and your agency's service to the citizens of Alberta in light of the drastic cuts they're seeing to their primary health care?

DR. SPENCE: Well, I think the first point I would make is that the health care that we have today -- you know, the sorts of antibiotics or drugs or procedures that may get you around a problem which even 20 years ago was a major problem. I can remember when people were dying of pneumonia and other diseases which really you rarely see a death from now, or childhood leukemia. When I started in pediatrics, they all died very quickly. Now most children with leukemia in point of fact live. We're talking about cures for leukemia. That type of very dramatic and very positive impact is a result of investment and research. Now, you can turn around and say: "Well, okay; let them do the research in Boston or New York. We'll import it." But you don't know what to import, and you won't get it applied here unless you've got an Albertan here who can sort of filter that through and directly apply it. People are too busy in their own backyards, if you like. One of the reasons I can assure you that you can get first-class care here that is second to none is the fact that we do have people who are as bright and as able as people anywhere else, who can import stuff or develop it here and export it and ensure that we're among the top 20 institutions in the world.

The second thing is that cost containment for the future. In other words, what should we be doing and what shouldn't we be doing in the system? We already know that there are a certain number of things that we probably should continue at all costs. There are other things that we don't know whether we should continue. You'll only find out about that by testing it out, by looking at it, examining it, and weighing the evidence one way or the other, and it's the research that provides the evidence for it. Otherwise, you're making blind decisions and you really don't know what to do.

We're funding investigators now, for example. I'll give you one example which I think is a very good one. It occurred here at the U of A hospital. It could have just as easily occurred anywhere else. We're funding a young investigator there who happens to be interested in skin. He's a burn specialist. He looked at the treatment of burns at the U of A hospital, and he suddenly discovered that the way that we've been using throughout North America actually increases the length of hospitalization due to infection. He changed the method. They're applying it at the U of A hospital. The estimate at the moment is that it will save half a million dollars a year. Now, that's just one of the investigations that he's done. So once you've picked up the knowledge base in order to make these decisions, you can move something out of the main medical stream. You can take it out of there; okay? You've got a cost saving there, and you can look at how you can deliver your stuff more effectively.

The other big area is prevention. How do you prevent some of the unhealthy life-style practices that most of us have -- okay? -- which lead to increased accidents or injury or ill health? How do you motivate people? How do you change behaviour? These are major research questions, and if we can become more effective in answering these questions and applying them in Alberta, we can end up with a healthier population that stays employed longer, that pays more taxes. The economy cranks up, and that again has an effect on health.

I think it's the smartest investment we can make, quite frankly. Obviously, I'm hopelessly biased.

MR. WHITE: As you should be. This leads to the other question, and that is: how much is enough and what is our share? Recognizing that -- and it's been said many times. Last year's review pointed out very carefully how much we Albertans contribute worldwide in this knowledge base, in fundamental knowledge, in prevention, and all of the areas that you have mentioned. Are we in the first world overcontributing to the world in this?

DR. SPENCE: No, I don't think so. In the first place, if I look at the places where I would go to recruit people to the Alberta system or where I'm sending some of the young Albertans away to study and then bringing them back to Alberta and applying that knowledge and looking at what is being invested there, I would say that I think we can be proud of our investment, but I don't think we're overinvesting. I think there are other areas, other countries, and other jurisdictions that are investing more than we are, and you can see the results of that.

The second thing: that type of investment. If we could become a world leader in these areas -- and we are in some and we will be in many more -- that's an industry in itself in our province. Our diabetes researchers, for example, attract people from around the world who spend money here in order to study. They want to come here and look at what's going on here, and some of those things are exportable in terms of technologies and so on. I think we have an opportunity almost for an industrial base in this area as well. So I think it can return to us on a number of accounts.

The third thing I would point out -- and I mentioned it when I was talking -- is that I think you also have to look at the priorities. I suspect that if you went out and talked to your constituency -- and I do this too; I mean going around and talking to people around me -- and asked them what their highest priority is and got them to talk about it seriously, they will tell you health. They would almost sooner lose anything else but health, because if they've got health, they've still got a fighting chance.

So because it's such a high priority, because it has so much payoff for our province, I think it's well worth the investment.

MR. WHITE: The third question in the series here is -- you just touched briefly on prevention. There are those that say of our deliverance system that it delivers after the fact and that prevention is really where the focus should be. The area of difficulty that always seems to come to the fore -- this is being said by others -- is that we as individuals in society have abdicated our responsibility for our own health care to a health care system; in effect saying, "I'll deliver my body at noon, and I'll pick it up at 4 p.m.," sort of like you do with your automobile, and then just, as if to a mechanic, "Do what you have to do," as opposed to knowing and making some fundamental diagnoses in one's own body. How do you get to that? I mean, it's a very broad scope and it's a broad brush, but we're told that it could have the biggest single payoff in any area of endeavour in medical research. Are you able to deal with that? I mean, it's pretty broad.

2:52

DR. SPENCE: I could take a crack at it. I think it's a very important activity. I think the whole area of prevention is, if you like, another revolution in medicine and in health. Perhaps not in medicine. I should say in health, because it's much broader than just medicine; it takes in all of society. I think some of our studies in this are in their infancy. In other words, we're slowly learning a little bit about why people behave the way they do and why they do the things they do. In part we as a society are responsible, though, for part of this reliance in the health system, because we've built up a health system and said, you know, "It's there to take care of you; don't you worry about it," and now we sort of have to turn it around and say, "Okay; you know, there are lots of things that you as an individual can do to stay away from this system." I mean, if I do my job right, hopefully there would be no hospitals and no need for a health system in the utopia miles down the line.

We're trying to deal with that now. Al alluded to the fact. We've sent some people away from here looking at accident and injury prevention. It's one of the major causes of death and disability in the

young age group, you know, from about five or six on to 30. Among our native people it's a major cause of death and disability. That's partly attitudinal and behavioural: helmets, seat belts, all these sorts of things. How do you turn this behaviour around? Only part of it is legislative, and possibly that's a very small part. In other words, where does private initiative take the place of, you know, government prescription on something like that?

So it's an area we're all enormously interested in. The foundation is certainly interested in funding initiatives in this area. We're making a start, but we may have to train our own for this sort of thing. That's what we're trying to do right now: send Albertans away to learn.

MR. CHAIRMAN: All right. Thank you.
Heather Forsyth.

MRS. FORSYTH: Thank you, Mr. Chairman. The first question I'd like to ask you is: what are the criteria for your funding decisions?

DR. SPENCE: Okay. People apply for the funding. There's a set of guidelines, if you like, and application forms that are put out which tell people what it is we want to hear from them; all right? So they will provide this information in these application forms. They're generally fairly voluminous. It stimulates the forest industry I think. Then these are sent out by us to peers in the field. In other words, if we get an application from a diabetes researcher, we'll send it out to a lot of diabetes researchers both in the U.S., in Britain, and in Canada to try to get an international opinion on how good or how poor this is. Their opinions will come back to us, and then we'll have a committee look at the opinions and look at the applications. That committee is where that cost for other committees comes from. One of them just met this morning, for example. They sit down and they look at this. They weigh the opinion of the externals. We have experts on that committee as well, and they will tell us: we think this is excellent; we think this is very good; we think this is good. We will have already made a budget allocation to that. We'll have said: in this year in order to maintain fiscal balance we will spend so much on that program. So we will spend as much as there is excellent science for. If there isn't enough excellent science, we simply will not spend the money on that, and we will move it to another allocation.

So the decision is made by the experts in the field. The final decision, obviously, is made by the trustees as to whether to spend the money or not, but the opinions come from these experts. So we get the best expertise we can. In terms of, as I say, a diabetes researcher, it would be other diabetes researchers who would tell us. We have to be a little careful with it. Sometimes there's proprietary information. Sometimes somebody could do an end-run around an Alberta investigator, and we won't send it to him or her. We'll send it somewhere else. We get the best opinion we can, and quite frankly, if it's not up to scratch, we will not fund. As I'm sure you well know, when you say no, you're far less popular than when you say yes, but the foundation bites the bullet on this, and we do say no quite frequently.

MRS. FORSYTH: My second question. I'm sure that many foundation projects are far reaching and may take a long time to produce tangible results. What I'd like to know is: how do you make your researchers accountable for their product . . . I'm sorry. You know what I mean.

DR. SPENCE: Productivity. I know what you mean. I have the same trouble with the same word.

How do we make sure of that? Well, we review them regularly. We have a series of annual reports that come from them, and if they signal any major problems, then we'll institute some inquiries. Then every five years they're thoroughly reviewed. This is zero-based budgeting. It goes right through the whole thing. Absolutely everything is looked at again, and if they're still doing first-rate investigation, then we would continue to fund. If they're not doing first-rate investigation, we would give them what we call a terminal award, which is an opportunity to regroup: either apply again and be successful or move on to something else.

MRS. FORSYTH: So can I ask you: when you're looking at something that's long reaching, when sometimes it takes years and years and years to get the results you want -- like, five years from now -- how do you determine if that's long enough for the research?

DR. SPENCE: It's generally long enough to get an idea of whether the thing is on track and moving. The other thing is: there are always little spin-offs along the way, you know. In other words, it may take five years to see the effect, but along the way you can see that the project was started right. Let's say that they're studying, you know, a disease in 10,000 Albertans and it's going to take five or six years to see what happened. Well, at the end of year 2 you can see that, yeah, they've got 10,000 Albertans registered, and at the end of year 3 they haven't lost too many of them from migration out of the province; the study's still on track. So you see, it's like performance milestones for a company. You know, they're hitting their goal in terms of commercialization. It's the same thing for the project. You can see them hitting their milestones, and so then you can say, "Yeah, it's okay." On the other hand, if you looked at it and you said, "Listen, they haven't even approached an Albertan yet to enroll them; there's something terribly wrong here," then you can investigate right away.

MR. CHAIRMAN: Okay. Thank you.
Don Massey.

DR. MASSEY: Thanks, Mr. Chairman. Dr. Spence and Mr. Libin, it's nice to visit a research fund that is well funded and does the kind of quality work that this one does. Coming out of a field where those research dollars are not nearly as available as these, it's really nice to examine it.

There was the establishment of a clinical investigator, \$170,000. I read something on a page here. Can you tell me what the money buys when you approve a position like that? Where does the money go?

DR. SPENCE: Part of the money goes to the salary of the individual; all right? The idea of that is to protect the time to do research. We expect a clinical investigator to see patients, otherwise they're not a clinical investigator. So we expect them to see patients and deliver care within that specialty area. If they're an ulcer expert, we expect them to see ulcer patients, if you like. If they're not a clinical investigator, we expect them to teach and take part in other institutional activities up to 25 percent of their time. Don't ask me what time frame I'm putting that on, but you follow what I'm driving at. Then if it's a laboratory-based operation or even a clinical-based operation, part of the money would be used to start the project going so they can get enough results and enough information to convince either a major national granting council or a voluntary agency or private industry to fund further. In other words, they've got to get some preliminary results. It's easier to track money, you know, if you can go and say, "Look, I can do this, and here are my first results, first paper," or something like that.

So that would be our expectation. If they continue to be successful, we will continue to fund the salary, but we will no longer fund those materials and supplies or any of the operating costs. That we expect them to roll back, and that's where a multiplier effect comes in our heritage dollar, because we basically are spending a bit and they're attracting the money from the outside, which frankly wouldn't be here if we weren't spending the money.

DR. MASSEY: Thank you.

Can I ask, then, in terms of the operating costs: is that money paid back to the university, for instance, to the hospital for space? What's involved in those operating costs? Are there administrative costs in that?

DR. SPENCE: Yeah. Most of the operating costs that we pay on a grant -- you know, say a start-up grant of some sort -- are generally spent in salary. It would be either a technician or a research associate or a nurse or something like that, a little bit in secretarial support costs perhaps, and then there is a very small overhead that goes to the institution for heat, light, water, space, et cetera, et cetera, to defray the indirect costs, if you like, of the research activity.

3:02

DR. MASSEY: Are you bound by the 40 percent on grants that -- what is it when they . . .

DR. SPENCE: No. Oh, no. Ours are between 8 and 15 percent.

DR. MASSEY: For the fund as a whole 6 percent is for the administrative costs, about 6 percent. I remember reading that.

DR. SPENCE: Yeah, it's somewhere around 5 to 6 percent. You have to be a little careful with that because the public relations costs that I referred to, which really are almost an education program within the community, are part of that. Our costs, I would say, in general run somewhere around 5 percent, which is very comparable to most of the national granting agencies. Some of them are much higher than that.

MR. CHAIRMAN: Okay. Thank you.
Bonnie Laing.

MRS. LAING: Thank you, Mr. Chairman, and good afternoon, gentlemen. A nice snowy day for one of us to come up, I know. I had a couple of unrelated questions. One of the coming issues in today's health care is the question and the focus on women's health. Is there currently a research project ongoing for women's health right now?

DR. SPENCE: Yes. There are actually a few of them at the present time that are going on in the foundation. We have a very strong program in perinatology and reproductive health -- all right? -- which I'm actually quite excited about. It looks very good. We are also trying to encourage more interest and activity in Alberta. We have looked at the federal government announcements -- can I use the term "the red book" here? -- and have seen what's been talked about. Women's health has been signaled by the feds as being an area that they would be interested in. I would very much like to see a significant activity in Alberta, and this would be an opportunity to partner between federal funding and provincial funding. We could get something even more significant going in the area. I think we already have it, but it's chiefly concentrated in reproductive health and in areas related to osteoporosis, bone disease, and arthritis.

Some of the broader social issues -- battering, violence, some of these things -- have less activity there, but I would be interested in trying to get some more going.

MRS. LAING: Thank you.

You mentioned the implantation of islet cells in diabetes. What has been the longer term results from that experiment?

DR. SPENCE: This one is still in clinical trials in terms of monitoring the patients whom they've done. The one very successful one which I think sticks out in everybody's memories -- this is for the benefit of members of the committee -- was somebody who received an islet transplant and actually has been maintained off insulin for longer than any adult diabetic of which we are aware anywhere in the world. She is really a remarkable story. Those islet cells apparently are being attacked to a mild extent by the rejection phenomena, so she is mildly insulin sensitive at the present time. When I'm saying "mildly," I mean whereas before she would require massive doses of insulin frequently to control her diabetes. She is on almost minuscule doses that you'd use, you know, in a much milder diabetic. It's still successful from that point of view, but she is not insulin free.

So we have not yet licked the problem of rejection in these individuals with the islet cells transplants, but I'm very hopeful that the Alberta group will be able to beat that, and as I say, they're not putting all their eggs in one basket. They're looking at vaccines, and they're also looking at the mechanical pump sort of arrangements to infuse insulin. If they do that, we may have the second Banting and Best in this province, because that will be the next giant jump forward in diabetes.

MRS. LAING: Right. It sounds good.

I've also toured the facilities at the U of C and Foothills hospital, and I'd like to commend you for the work that's being done there. I think it's very encouraging the way the corporate sector is beginning to match funds. I think that's a real achievement, and it certainly bodes well for all of us for the future.

The Kool-Aid tests -- I know a person who was involved in that -- to detect stomach ulcers certainly is a very cost-effective method of diagnoses if it proves out to be as wonderful as the promises. What's the current status of that testing?

DR. SPENCE: I neglected to mention that one, actually, when Mr. White was asking me about the cost effectiveness of things. That's a beautiful example. Mr. Chairman, I would commend the Calgary facility to anybody in the standing committee. I do hope your budget will permit you to come down at one time because I do think it is worth seeing. The Edmonton facility is also equally interesting to look at, but the thing about the Calgary one is the way the corporate sector has come to the support of an entire research group that the heritage is funding in arthritis and joint disease. They have literally funded a floor of the Bud McCaig Centre there, which Al and others were busy in the fund-raising for. It's an example of the power of the private sector, if you like, in partnership with the foundation. It's really put in a world-beating arthritis research unit, and I would hope to have the opportunity to be able to show that to members of the committee.

Coming back to the Kool-Aid test. For the benefit of members of the committee, again when you've got pain, you take aspirin and what are called nonsteroidal anti-inflammatory drugs, NSAIDs. You know, aspirin is the classic example, but there's a bunch of others. They chew holes in your stomach, and they do give you ulcers, not all of them. Not everybody will get ulcers, and you can't unfortunately tell. I mean, even as I look at Mr. Mitchell -- and I think he's uptight -- I can't tell whether he's going to get an ulcer

from taking aspirin. The only way you used to be able to do it was to put a scope down and look to see the ulcer. It's very expensive, scoping people. What these researchers in Calgary have done is invented a test in which you take basically Kool-Aid. You swallow it, and then you look for this stuff in the urine. If there's a hole in the stomach, something in the Kool-Aid gets through, and you can pick that up in the urine when the person goes to the bathroom. That's in clinical trials now. They're trying it out in larger populations to look at it. It looks like it will cut down on the number of times you have to scope people. You can say, "Why scope them at all?" Well, the problem is that if you do develop an ulcer and bleed, you can go out like that because bleeding ulcers are very, very, very traumatic; you hemorrhage so fast.

This is an example of three guys who are gastroenterologists and gastric researchers in Calgary working with quite different things. They got involved in this one, and it looks like they're going to make a real winner of it. It will attract significant drug company money to the province. It already has, a couple of million, and I can see more coming.

MRS. LAING: Thank you very much.

MR. CHAIRMAN: Okay. Thank you.
Mike Percy.

DR. PERCY: Thank you, Mr. Chairman. Again, it goes without saying that the research is outstanding, but I'd like to focus on these other areas. Certainly I know in the university community, for example, being a referee numerous times for SHHRC and NSERC grants, that there is not in fact a fee associated with that type of refereeing. The requirements are relatively modest: going through the crowd, just making sure the project makes sense, that the write-up is adequate, and that it's not duplicating ongoing research. It seems that the medical community being part of the discipline is different in that regard, that there is an explicit fee structure for doing what other disciplines do. Could you explain to me why that's the case? Because everybody does have a value for time, not just physicians.

DR. SPENCE: I couldn't agree more, but one of the things we are trying to do is apply national and international standards to the Alberta activity. The community beyond Alberta is not eligible for heritage funding. We do not fund outside the province. So therefore if I ask -- and I do -- the professor of surgery at Oxford to review an application for surgery, he is unlikely to accept it. Now, I agree. We don't pay him anywhere near what his time is worth, quite frankly, but we get the highest rate of return on our reviews of any group I have ever met, and they are first-class reviews. When I have to make a very difficult decision about a researcher, I'm confident that I have the best information I can. If you're eligible for NSERC or SHHRC funding, then you feel it's part of the -- you know, you've received largess from them, so it's important that you contribute. If you have no hope of getting any money from the foundation or it's at least very unlikely, then they simply will not review for us. So we basically went to a process of reward to do this, because we're trying not to inbreed our province. Get the opinion from outside.

DR. PERCY: That's an excellent explanation.

My first supplementary. It relates, in fact, to the steady rise in salaries and benefits. If you look at the schedule of administration expenses, in 1991 it was \$585,000; 1992, \$642,000; and in 1993 it's \$756,000. Could you explain why it has risen at a period of time when the actual expenditures haven't risen, certainly not at the same percentage rate for the fund as a whole?

DR. SPENCE: This reflects increased activity in at least two areas of the foundation portfolio for which we've basically added more people. One of these has been the area of technology commercialization, which we are trying to make a real thrust on in terms of the activity. This is, if you like, labour intensive in the sense that the interaction between the foundation and the people trying to prepare the technology -- it's not a simple grant anymore. What we have to do is put in milestones, work with them, get them into the various sectors in the community. Part of our activity of course appears in the technology commercialization, the phase 3 funding, but part of it is also endowment funding as well.

3:12

The second area is the health research area, which we are trying to move up in importance and in activity within the foundation. We've been funding basically in the biomedical area. We're trying to get it into the broader determinants of health -- prevention, these sorts of things -- and that has required an increased activity. Both of these have been reflected in the increased cost of the foundation. We're basically moving it from being reactive, simply receiving applications, to being proactive and trying to stimulate certain areas of research in the community.

DR. PERCY: My final question relates to, again, administration expenses. I note that the foundation has its headquarters in Manulife and that the rent bill, which probably includes other things, comes to around \$140,000, which is a lot of money, you know, in terms of the research that could fund. It's pretty clear there's going to be lots of space available at the university hospital or the Mis given the number of beds that are being shut down. Are there not other lower cost ways of in fact housing the foundation that draws on the resources so that those resources could be allocated to the front end, to research?

DR. SPENCE: The lease for the present quarters was negotiated some time before I arrived. There was some free time, if you like, or at least there was a rebate offered in the early days so that the overall cost of their lease over the life of the lease is not going to be as high as it would look right there.

The second thing is that of course there is a cost, if you like, to terminating these prematurely. When this lease does come up, I can assure you we will look at the possibilities of other accommodation, but we do have to be sensitive to the sensitivities of the province; that is, we not sort of be identified with one particular group or another within the province. I think it's important for us to be perceived to be arm's length, as in fact we are, from both the institutions and others.

The third thing is bus lines and transportation. Some of these things become major considerations. There were a number of places, as I was looking at this and trying to cost it out, that were perhaps less advantageous in terms of attracting staff and having the appropriate backup for it.

Your point's well taken, and it's something we certainly will look at as the lease approaches its termination.

DR. PERCY: Thank you.

MR. CHAIRMAN: Okay. Thanks. Good question.
Denis Herard.

MR. HERARD: Thank you, Mr. Chairman. I make the assumption that other provinces also have foundations for medical research. Could you indicate where Alberta ranks with respect to the value of

the fund that they use for funding this research being somewhere around \$600 million?

DR. SPENCE: All right. No other province has set up an endowment of this type. This is Alberta's unique contribution, if you like. In terms, though, of ongoing investment in the provincial research activity, the one that would be closest perhaps to the foundation would be the province of Quebec, and there they spend somewhat more than we do in what is a fairly similar program. They support people with the idea of attracting funds back to the province. The province of Ontario has a number of programs which in aggregate probably fund the same number, but they're separate, small ones: one in mental health and one in occupational health and so on. The next largest, then, probably would be British Columbia, followed by, I think, probably Manitoba, Saskatchewan, and then finally the maritimes.

MR. HERARD: My supplementary is along a little bit different vein, but can you comment on the process for setting long-term goals and objectives for the foundation? It must be kind of difficult because you don't know how long these things are going to take. Can you comment on the process for the long term?

DR. SPENCE: Yeah. The trustees are advised by a scientific advisory council and also by other experts that we'll bring in. What we basically do is try to assemble the best people in the business and ask them to blue sky, if you like, and advise us on directions. Then we look at how we can enable those directions and those specific thrusts for the future, but we try to stay quite broad in the sense that because we can't be absolutely certain that this is the direction the field is going to be in 15 or 20 years from now because that's the sort of build we're putting in place, we put an infrastructure of people and skills in place that will meet these challenges of the future.

For example, we didn't know 10 or maybe 12 years ago that AIDS was going to be the problem that it obviously is starting to surface with, or hepatitis, yet we knew that infectious disease was going to be a problem. Therefore, we started building in infectious disease at both universities. Now, for example, Lorne Tyrrell's operation at the University of Alberta is world class, because Glaxo is going to put \$15 million into it over the next, you know, 10 years or so for research in hepatitis B. How he set it up was basic skills in infectious disease research. We knew that area was going to move. I couldn't have told you which one was going to break, but we know that area is going to move. Behavioural research and health: we know that's going to move. We'll put expertise in place. Exactly which part will break, I don't know. Genetics we know is going to go that way, and that's why we have cadres of expertise already.

MR. HERARD: My last question is a bit of a hypothetical, but I would like your reaction to it. What would happen with respect to research in Alberta if the original \$300 million were returned to the Treasury and you would operate on the balance?

DR. SPENCE: It would be halved, basically. It would be halved.

MR. HERARD: So you are using most of the revenue today?

DR. SPENCE: Yes.

MR. HERARD: And your funding, pretty much?

DR. SPENCE: Yeah. The only thing we're returning to the endowment is the inflation factor, because that's what we have done. We've treated it -- is "treated" the right word? -- like an endowment,

so we've been returning money so that the original \$300 million is now sitting at \$626 million. In terms of purchasing power, though, of the money that we're taking from it, it's the same as it was in 1980. We're still sitting with 300 million 1980 dollars. If we continue that process, my expectation is that we will be able to have the same impact in terms of jobs in Alberta, et cetera, et cetera, another 20 years down the line, and that's the target we're trying to steer the foundation towards at the present time.

MR. CHAIRMAN: Okay. Thank you.
Grant Mitchell.

MR. MITCHELL: I'm interested in your work on asthma. I visited the Asthma Centre, and I know you fund at least one medical researcher who was part of the presentation. I wonder whether you could tell us what your total financial annual commitment is to this Asthma Centre or generally to asthma research.

DR. SPENCE: I can't give you a figure off the top of my head. I'm sorry, Grant; it slips. I think we have probably put about \$250,000 to \$300,000 into that Asthma Centre in the last year or so, maybe a year, year and a half, but certainly in the last while. The recruitment of the chair and some of the events around that and some of the other investigators in connection with it: we put a fairly heavy investment into that. Again, we're seeing the return of money in terms of the investment by the drug companies like Astra and others. I regard it as a very effective partnership. Don't quote me on that figure. That's coming right off the top of my head, and I could be totally wrong on that.

MR. MITCHELL: One of the things that came out of that meeting is the lack of a prevalence study of asthma, prevalence geographically in Alberta, and I wonder whether the foundation would consider funding such a study.

DR. SPENCE: Well, as you know, we're certainly interested in it, but what we try to do is fund the people who will do the studies. We're interested in building up a cadre of expertise in this province in areas like epidemiology, biology, biostatistics, population studies, these sorts of things, people who would carry out that type of study, to develop a critical mass within the province of these types of people, who incidentally are also the types of people who would do outcomes research in the hospitals and in the health system, looking at various treatments to see that the outcome is. We're interested in the people because to us without the people nothing flows forward. We might have to fund some of those studies, but our expectation would be that they would find support from other agencies or other jurisdictions for that type of research.

3:22

MR. MITCHELL: I really encourage that in areas like this, although much of what you do looks to preventative or sort of a structural look at our health care status. Asthma costs people a great deal of anguish, and it also costs our system a great deal of money. We have some of the highest rates of asthma in the country and death in young people from asthma, and it's certainly a worthy pursuit.

I wonder whether you can address my consistent interest in SIDS, whether you might just give us an update on whether you see potential in some of the research that you're doing or funding having an impact on SIDS research more generally.

DR. SPENCE: I don't think there's any question that there will be impact. There are at least three groups of investigators within the province that are doing work that is directly related to the whole

SIDS question. We do have, as I think you already know, a very strong group who are interested in respiratory rhythms and the problems of respiration and the set of nerves in the brain stem which either turn on or turn off respiration. That group is working very actively in this area and I think making very fundamental contributions.

The second area with respect to SIDS, which is sudden infant death, is that for some children we know it's their metabolism. Their biochemistry's upset. We have two investigators as part of a group at the U of A who are working in this direct area. They're actually interested in cardiac metabolism, but it happens to work over into the whole area that is involved in SIDS and some of the switches that are turned there.

So I think there are areas in that one which we are certainly interested in, and it continues to be an interest as far as the foundation and of course as far as the Alberta constituency is concerned.

MR. CHAIRMAN: Okay. Thank you.
Lance White.

MR. WHITE: I'll pass.

MR. CHAIRMAN: Okay. Don Massey.

DR. MASSEY: Thanks, Mr. Chairman. May I ask about the scientific advisory committee? The committee members listed at the back of the report: are they that committee or are just some of these people?

DR. SPENCE: No. The scientific advisory committee is a committee.

DR. MASSEY: A number of those people are from the University of Alberta and the University of Calgary.

DR. SPENCE: Oh, yeah. Some of the committees are made up of people from the U of A and the U of C, yes.

DR. MASSEY: Are they, then, paid an honorarium or a fee for sitting on the committees on top of the salaries that they're drawing?

DR. SPENCE: Yes, they get a very small honorarium. It's much smaller than the ones that are coming from out of the province.

DR. MASSEY: How small?

DR. SPENCE: It's \$200 a day.

DR. MASSEY: A day for a meeting.

DR. SPENCE: Yeah. Now, that involves substantial preparation time. I mean, most of these people are reviewing, you know, a large number of applications, so I expect them to come with their homework prepared, if you like. This supposedly recompenses them for their time at home or in the office or wherever.

DR. MASSEY: As you said, much of that money would be paid to people outside the borders of the province.

DR. SPENCE: Yes, because we have a small number of committees which have Alberta content. Most of the committees are from outside Alberta, particularly the ones for the personnel support

programs, but ones that look at students and fellows, the trainees, are Alberta committees.

DR. MASSEY: Just the last one. It's the committee on the committee selection, so there's sort of a constant review of the people that are serving, in terms of advice. Are they limited terms?

DR. SPENCE: Yes. The initial term is one year so that you can move them off if you're unhappy with their performance, and normally about three years is as long as somebody will serve unless they become a chair. If you have a particularly able individual, make them longer as chair, but normally every three years they're rotated. So we're constantly looking for new members for the committee to try to avoid, you know, inbreeding, I guess you would call it for lack of a better word.

DR. MASSEY: Incest.

DR. SPENCE: Yes.

DR. MASSEY: Thank you, Mr. Chairman.

MR. CHAIRMAN: Michael.

DR. PERCY: Thank you, Mr. Chairman. I'd like to return to the issue of commercialization. In response to my question concerning the sharp increase in administrative fees between '92 and '93, you spoke in part of the need, then, within the foundation to try and promote the commercialization of some of the research that's ongoing. This, then, is asking you for an opinion. In light of an example such as UniCare and others that sometimes try to do these things themselves rather than bringing the expertise in on contract as opposed to hiring in place, it seems to make a lot more sense. Is this an increase, then, in salaries and benefits related to commercialization? Is that just a short-term expenditure, or is it part of a permanent administrative superstructure of the administration now?

DR. SPENCE: I would say that it's both. We do a lot of term work and contracting to people for term activity, and as we build up our stable and as Alberta builds up its stable of expertise, we may be able to do more contracting out. I would agree with you. Because the requirements of commercialization are so different, depending on what you may want to look at, we would also like to look at partnerships with other sectors who may be able to do this far better than we can. We will simply enable them. For example, we've looked at the possibility of using the business schools at both the U of A and the U of C. If we can get them to look at it from a very practical point of view as opposed to -- I'm not knocking the academic side of it. I'm simply saying that we're looking at a very practical part, but we need to get that turn.

The other thing is with respect to legal and patent help. There are a number of firms that now are starting to move into that area that we can identify. As the university and hospital technology commercialization operations become more sophisticated themselves and better able to deliver a service that their clientele likes and respects and will use, then I would see that as being a place where we might provide some support or some help and take it out from within the foundation. I don't particularly want to run the whole thing. Sometimes when there isn't anything there, you've got to move into it for a period of time and then get out of it.

DR. PERCY: A final question related to commercialization. In terms of setting out or funding research or the grants to individuals,

many granting agencies have a commercialization clause that allows a claw-back of any of the profits. In one sense you would want them, I would think, to go to the endowment fund so they could be allocated according to highest priority, not just in the niche where they're generated. My question would be: as you design these contracts and proceed down the road of greater commercialization, what are your thoughts on the split? Are you going to have it go to the fund, or are you going to have it stay with the researcher and earmarked for their research or go to an institution that they're located at or try a three-way split?

DR. SPENCE: I think that's going to be something in evolution. At the moment, at least in some cases where it's very clear there will be an advantage to the Alberta institution -- they have a stake in it and so on, and we can anticipate a return. As an example I gave the royalty stream coming back to the U of C. We don't take an interest in that one.

In other cases we have payback arrangements. We expect that there will be a payback. We would see that returning to the foundation and then being used again in the technologies commercialization sector. So we would see some self-sustainment of that activity. I don't think it's ever going to get to the stage that that would become entirely self-sustaining, unless we got some major hits along the way. It's certainly in some of the agreements that there will be a payment back, because our anticipation is that, you know, if they are successful, then they should help commercialization in the future. Probably it would not be spent with that because it would be too far out and the venture capitalist or a major company would be into it. We would use that to seed another Alberta technology.

DR. PERCY: Okay. Thank you.

MR. CHAIRMAN: You've got another sup; don't you?

DR. PERCY: I'll hold. Thanks.

MR. CHAIRMAN: Okay.

All right. Bonnie Laing.

MRS. LAING: Thank you, Mr. Chairman. In the criteria which determine the funding of the research projects, I was wondering if the approval of the Alberta Medical Association is a requirement. So it could be something brand new and wouldn't have to have that . . .

MR. CHAIRMAN: Would you answer verbally, so we have . . .

DR. SPENCE: I'm sorry. No. If the project involved the AMA directly, you know, as an organization, yes, then we would want their approval, but if it involves an individual physician who happens to be a member of the AMA, the institutional sponsorship and so on is more likely to come via a hospital or the university or a health district or something of that sort. So that's where it would come from. Where we have seen examples, though, of official sponsorship has been with the Alberta college of family practice, which has officially sponsored this Alberta primary care research unit that the foundation has partially funded. So that is an example of a partnership between the professional organization, the Alberta college of family practice, the family practice units at the U of A and the U of C, and then the family practitioners in a number of Alberta communities in a network. We're providing some support to that, and it looks quite exciting. It's rather a rare example, because there's not much research done in primary physicians' offices, yet that's

where most people go for their health. So that's what we're looking at: getting some good research going in that area.

3:32

MRS. LAING: Is there a lot of collaboration going on at this point between, say, the different universities and practitioners and researchers in the current projects?

DR. SPENCE: It's steadily improving; all right? It is getting better all the time. We encourage as much as possible the cross talk, and we try to facilitate that with programs that would encourage them to exchange information. It's unfortunately a feature of human endeavour that sometimes, not just in medicine but in everything else, people are more aware of what's going on, you know, halfway across the world than they are in their own backyard. So it's just making them aware of this and trying to encourage and foster the interaction.

MRS. LAING: Thank you.

MR. CHAIRMAN: Thank you.
Grant Mitchell.

MR. MITCHELL: Yes. There's one question that I know both I and Mr. Hierath have got to have an answer to, and that's whether your two major buildings in Edmonton and Calgary are nonsmoking.

AN HON. MEMBER: For the record, he meant Herard.

MR. MITCHELL: But I'm not asking that question here.

One issue comes up. As you're probably aware, the Liberals are very interested in selling the assets of the heritage trust fund. It's often, when evaluated, criticized by using examples like, "Well, that would mean selling the Rutherford scholarships and selling the Heritage Foundation for Medical Research." Could you please clarify for the committee that in fact the government of Alberta doesn't, nor does the heritage savings trust fund, own your foundation but that it is independent and it couldn't be sold by any government agency?

DR. SPENCE: Well, the Act establishing the endowment and the foundation separates that out as a separate body of funds. Our management has been to take the charge of the Alberta government that we were to do this in perpetuity. This was to be a long-term program, and therefore we have treated this as an endowment. It is still worth what it was when it was given to us, and we feel that this has been very responsible on our part. My understanding would be that if the large fund was to be dissolved for whatever reasons, this would not affect our fund, but I would welcome having that in writing from some source of unimpeachable authority. We were set up by government after all, and as one of my colleagues once observed: "The government giveth, and the government taketh away. Blessed is the name of the government."

MR. MITCHELL: Well, he probably really captured the essence of the Conservative government, unwittingly no doubt, but I'd like to say that it wouldn't be our intention at all to be doing away with this foundation, for which we have a great deal of respect.

You mentioned or maybe Mr. Libin mentioned the progress you've made with the drug for hepatitis B. I wonder if you could sort of specify what stage that's at and what the commercialization of a drug like that will involve.

DR. SPENCE: Those compounds have been tested in quite a famous duck model of hepatitis B and show that it eradicates, I think, the carrier status in the duck. It's also been tested in primates. That has involved collaborative studies with our colleagues in the southern United States where the major primate colonies are. Since it has been able to work both in the duck and in the primate, my expectation is that it will move to human trials in the not too distant future, but I can't give you a timetable on that one. So that means that it's a ways yet in terms of full commercialization, but they're certainly moving on it very actively because of the concern with the spread of hepatitis B.

MR. MITCHELL: When Mrs. Laing asked about the input of doctors, the college -- or I guess she was saying the Alberta Medical Association -- it immediately came to our mind here that chelation therapy is an issue where the College of Physicians and Surgeons hasn't endorsed it. There's a real societal interest in it and some real conviction, at least anecdotally, on the part of certain people. I wonder whether the foundation has considered pursuing research in that area or evaluation.

DR. SPENCE: First of all, I should point out that the college does have representation on the board of trustees of the foundation. They nominate a member who then is appointed by the Lieutenant Governor in Council, so there is a mechanism of input from the college to the board of trustees.

The foundation. I think I mentioned before that our interest is in building the cadres of expertise in the province, the people who can carry out the clinical trial that would be necessary to establish whether chelation therapy itself works or doesn't work. With many treatments of this type and others it's necessary to mount a trial in which basically, you know, half of the individuals are treated with the treatment and the other half are getting something else. They don't know what it is, because the mind works marvelous effects in terms of biology. They don't know what it is. At the end you break the code. You look at it and you say, "Yes, it works," or "No, it doesn't work." That's the type of information that one really needs to look at treatments like chelation therapy and others.

There's an example at the moment, multiple sclerosis, which happens to be also a disease which has a high incidence in North America generally, but Alberta particularly gets hit with it. There's just been a recent trial using beta interferon in multiple sclerosis. It had to involve a lot of patients, and that shows that there's a marginal improvement on beta interferon. If you don't do this sort of thing, you won't know whether in point of fact the treatment works. The trouble is that you can spend a lot of money on a treatment and it may not work and of course it costs the health care system. I'm not saying that people have not felt enormously better with treatments of that type, but one of the things that I think we have all seen is the power of the mind. You know, if a person believes in something, it's amazing what they can do. I have watched elderly gentlemen who have gone through every illness in the book and survived it. Their wives died, and they turned their back to the wall and died themselves. When you lose the will to live, you know, it sort of goes, and it's the same thing with the will to push on. So if you really believe in something, it can make a difference, and that's why you have to do this sort of blind study in something like chelation therapy.

Our role in this, I would see, is to try to develop the cadres of expertise within the province and carry out this study, because it's not just chelation therapy; there's a whole host of other things we should be looking at as well and evaluating the study.

MR. MITCHELL: Thank you.

MR. CHAIRMAN: Thank you.
Denis Herard.

MR. HERARD: Thank you, Mr. Chairman. I just want to go back a little bit to your answer to a previous question with respect to clinical research and that you want, of course, someone in that position to be seeing patients in whatever field they're studying. Does that represent a saving to the Alberta health care system, or would that doctor be also charging Alberta health care for those visits?

DR. SPENCE: It would depend on the nature of the service the physician was providing; okay? If it was a clinical trial directly related to the research, then, no, he would not be charging Alberta health care for that. If on the other hand he was seeing it and delivering patient care -- it may be in an area related to his research, but he's delivering patient care; it's been a referral to him -- then, yes, he would be charging Alberta health care for that. That would be expected to be part of his salary. We wouldn't be paying his full salary. We'd be paying a part of it, and that fee income would also be part of his salary.

MR. CHAIRMAN: Thank you.
Don.

DR. MASSEY: Yes. You administer the medical innovation program for Economic Development and Tourism. Can you explain what that is?

DR. SPENCE: In I think it was the late '80s the federal government passed Bill C-22, which is the initial patent protection legislation. As a result of that, the drug companies made some money available federally, and the feds passed it on to the provinces. These funds were used in the province of Alberta to establish what they call the medical innovation fund. The foundation was asked to administer it. There's actually a signed agreement with government for us to administer this fund. We're to use it for technology commercialization. We fund part of the technology commercialization from the endowment income, and then certain technology commercialization projects, at a certain phase of them we will fund them from this so-called medical innovation fund. The original agreement I think was for just a little over \$9 million that we were to administer for this purpose.

3:42

DR. MASSEY: There's a considerable amount of money unexpended. What's the reason for that?

DR. SPENCE: We're simply not seeing projects that we think would be a wise investment for that money. It would not be appropriate to invest in the technologies that are being presented to it. It's a slow build of this activity. We've been funding with small amounts of money, using the endowment to get these things started down the commercialization pathway, but many of them are not mature enough yet to use those types of dollars. Rather than fund something that we regard -- when I say "we," I'm talking about the people who advise us -- as not being a commercially viable entity, we will not fund it. So it's basically on the advice. We're using this for Alberta activities. I mean, if you were setting me up with an investment fund and I could go all over North America, I'd find lots of things to invest in, but we're looking specifically at Alberta investment.

DR. MASSEY: Is that money vulnerable in terms of being lost in Economic Development and Tourism as they cut back?

DR. SPENCE: There's an agreement between the previous department, TRT, and the foundation as to the allocation of these funds and how long we're to hold them and what we're to do with them, et cetera, et cetera. There is an agreement there. I guess I would maybe toss it back to you and ask you: what happens to agreements? There is an agreement that those funds should be there for the purposes of tech commercialization. No, we have not invested them all, boom, right off the bat simply because we felt that the staged funding of things that were at the appropriate level of maturity was the way to go.

DR. MASSEY: So in your mind they are untouchable.

DR. SPENCE: Oh, no, I didn't say they were untouchable. I simply said that there was an agreement. I didn't say they were untouchable.

MR. CHAIRMAN: Bonnie Laing.

MRS. LAING: Just one. I wanted to ask about the report of the '93 International Board of Review.

Recommendation 9

The IBR recommends the appointment of a Senior Administrative Officer to manage many of the day-to-day activities of the Foundation, freeing the President to undertake an exploration of new initiatives.

Has the foundation done anything about that recommendation or discussed it, thought about it?

DR. SPENCE: Yes. The board of trustees has considered that recommendation and has approved the idea that there should be somebody present in the foundation to assist. With the questions I've been getting about steadily rising salary costs, I would point out that what I expect to do is to actually combine a previously existing position with this position to give us the type of seniority and experience within the foundation that will allow us to do this. It's just that there are so many things happening on the health horizon at the moment. I would like the opportunity to be able to try to create and craft some exciting partnerships in the Alberta community, and that takes time.

MRS. LAING: Yes, I agree with you. It sounds very interesting. Thank you.

MR. CHAIRMAN: Mike?

DR. PERCY: There was one question related to the board of trustees that was just mentioned. Certainly if you look at many universities and postsecondary institutions, there are boards and senates, and in fact the members are not paid an honorarium. It's clear, then, looking at the expenses, that to serve on the board of trustees, there is a fee that goes with it. Why would you perceive that there would be such a distinction between, say, running the University of Alberta through the board of governors as opposed to the foundation?

DR. SPENCE: I don't know whether I should duck that one and hand it to Al as chairman of the board.

Do you want to take that?

MR. LIBIN: Well, in the early years when the foundation was first put together, in 1979 -- it really started to function in 1980 -- the trustees at the time, I think from the advice that they had, working closely with Treasury and with Health, attempting to build what I think we actually have put in place over these 12 or 14 years, saw that the trustees were going to have to pay attention to this. This

wasn't a normal kind of a job. You needed to make a commitment; you needed to be prepared to put time in. In the best wisdom of the trustees in the early days, they thought that to create a structure where they paid people some kind of a reasonable fee to attend meetings and a retainer, they would have their interest and have them working on this issue. It's proven successful. That's really basically where it came from. I took over as chairman in 1990, and of course we have just carried on in the same system that was originally put together here with the trustees. Talking with the people in the Hughes Foundation, which is a very major foundation in the United States, the NIH, the Medical Research Council, this is typical. Our arrangements aren't much different really than anybody else's in the medical research business in North America.

DR. PERCY: A supplemental on that. In terms of the appointment process to the board of trustees, is it done on recommendations by the board, or is it done externally by the members appointed to the board?

MR. LIBIN: The makeup of our board at the present time is -- and this is set up in the Act to create the Alberta Heritage Foundation for Medical Research -- the University of Calgary has one appointment; the University of Alberta has an appointment; the MSI foundation has an appointment; the College of Physicians and Surgeons has one appointment; four are appointed by the government at large through order in council. The trustees then have the ability to appoint one trustee, which is a recommendation being made to government through the order in council set up.

DR. PERCY: Would you envisage, then, since you've suggested that this is a significant administrative position, that subsequent appointments to the board would then go through the new review process that was announced by the Premier?

MR. LIBIN: I believe that. I think that we have made recommendations to the minister. There's a minister that the foundation reports through. It right now is Ken Kowalski. We have made recommendations through to him. I'm sure they have gone through their process. He has a number of recommendations, and hopefully they will select the party best suited to do the job.

DR. PERCY: Thank you.

MR. CHAIRMAN: Okay. Thank you.
Grant.

MR. MITCHELL: Thanks. I know that you do ethical work consideration. One issue that I keep coming across is the fact that doctors can be vulnerable to drug companies sending them on trips and so on, and then they come back and prescribe in our hospitals drugs that may be produced by the company that's hosted them. I wonder whether that's the kind of ethical question that your groups would consider.

DR. SPENCE: The general principles behind it might be something that would be debated. Our expectation would be, though, that the information that would be arriving out of research, say, that was carried out by foundation-funded investigators or supported by the foundation would provide the basic building blocks, the principles on which a decision might be made about that type of activity. The decision would be made by a group, you know, like the AMA or the college or one of the groups which provides the guidelines to the profession as to what is ethical, what is ethical conduct, what is appropriate. I think the professions -- and I use this in the broadest

sense -- are very sensitive to the ethical issues surrounding support of that type and not only in the medical profession but in many others. I think that's something that will come under increasing scrutiny as time goes on.

I notice that with many major companies what they're now looking at is some form of indirect support to the activity. They want to be able to support this -- you know, either continuing medical education or something else -- not anonymously, but if they funnel it via an arm's-length organization or an educational institution or something like that where there's no direct inducement, once you've got the arm's-length relationship and the clear understanding of responsibilities and what the individual's responsibility is in accepting these funds, the ethical concerns then are more resolved. We would see ourselves as providing the forward thinking for this sort of process, not the immediate nuts and bolts of it.

3:52

MR. MITCHELL: How would you determine that that type of a question, for which there needs to be forward thinking, would come up for discussion?

DR. SPENCE: It's a combination. Sometimes it's the agency or the organization itself. I mean, sometimes it might be something like the foundation indicating an interest in that area. In other cases it may be the college, the university, the hospital. You know, they're being deluged with this one; it's been an ongoing problem. "Let's try to work this one through." Where we would become involved and have in the past, for example, is if they proposed to attack a broad area of, let's say, ethical issues related to a certain spectrum of the activity. We might become involved in it in funding a conference or workshop with the idea of stimulating research in the province of Alberta in this area by bringing in international or national experts, so therefore we can get others involved in it. We might be able to get the college involved or the drug companies or somebody else in terms of putting together a conference to look at this. Then there would be some research arising out of this that would carry on.

MR. MITCHELL: If this committee asked you to look at a question of that nature, would you look at it?

DR. SPENCE: We would certainly consider it. But as I point out, we don't fund projects directly, Grant; we fund the people. I mean, when I'm talking to investigators, I always tell them about things that people have expressed interest in. Sometimes you can see their ears prick up and they will move in a direction; other times it may not be something that they can research. You know: "We don't have the horsepower or the people with the ability to look at these areas in the province, so we just can't go that route."

MR. MITCHELL: That followed from the point you made that if an issue started to crop up in a hospital or in the university, they might come to you. You said that you might put together a meeting or a convention or some kind of a process.

DR. SPENCE: We always try to get the community -- well, not to do the work. We want it community driven. We want it driven by the researchers. I mean, you can't push a rope from the centre; you've got to have somebody pull it from outside. So if there were people with a burning issue in a certain area and there was going to be a research development from it, because we are a research funding agency then I think we could certainly look at ways to try to encourage it -- either visiting speakers, visiting professorships; you

know, many of these things are communication and dialogue -- and get that going.

MR. CHAIRMAN: All right. Thank you.
Don.

DR. MASSEY: Just one last question. There's \$140,000 in the statement for computer and library. Is it of concern to you, the deterioration of the libraries at the university? They have been underfunded over the last number of years. How is that affecting research, the ability for your fellows and people that you appoint to do the task that they've received awards to do?

DR. SPENCE: The infrastructure for research is always a concern as far as the foundation is concerned. We try to ensure that they have as much as is necessary to support the research. However, the reasons why decisions may be made at the institutional level to fund or not fund something is obviously a matter of the institution and not of the foundation.

Our funding to the libraries has been very much directed at the idea of collaboration and co-operation between the major institutions in Alberta in terms of rationalization of collections, putting in place those things which will enable fast retrieval of information back and forth. We are currently in the final stages of considering an electronic network between the health setups in Edmonton and Calgary which will service the entire province. So you'll be able to dial up from a public health unit somewhere and get information. Now, this is mainly a research support device, and we will only fund part of it. We will fund the research support, but we see the broader issue of supporting it. Our hope there is that the substitution of the electronic technology and the electronic data base searching may compensate in part for, unfortunately, some of the changes in the collections at both the U of A and the U of C.

DR. MASSEY: Would that be linked into worldwide similar networks?

DR. SPENCE: Yes. Internet and Worknet and the rest of these, yeah. We would want to see this interface. We would want Alberta to be right on the top of this sort of thing. You know, I think we should. We've got a history of being able to do this because of the push the electronic technology to the oil industry has been able to give the province, and I would hope that we would be able to capitalize on this in the medical and health informatics area.

DR. MASSEY: Thanks.

MR. CHAIRMAN: All right. Questions seem to have come to an end. I would invite you just to wait for a couple of minutes while we do a little bit of business, because we'd like to say goodbye to you in an appropriate manner.

I want to make the committee aware, and also for the purposes of *Hansard*, that I've received a letter from Stephen West. It was regarding a question by Sine Chadi at the meeting that Dr. West was with us. We will circulate this to committee members but also to *Hansard*.

In the same vein, Michael Percy has provided me with a copy of a letter that he has received from the Provincial Treasurer, which again references questions that were raised at the time the Treasurer was in front of us. So once again we will circulate copies to the committee members and also to *Hansard* so that it can then become part of our record.

Any recommendations to be read into the record at this point? All right; I'd just advise then that we will be meeting at 8 in the morning,

which is a time that's a little unusual for this group, but we'll all be fresh. Could we have a motion for adjournment?

MR. DOERKSEN: I so move.

MR. CHAIRMAN: We have a motion for adjournment. All in favour? Carried. Thank you.

[The committee adjourned at 3:59 p.m.]