# THE EDITOR NTERVIEWS...

When the appointment of the first Chief Scientist was announced by the federal government to launch the new year, news reports suggested the appointment was structured as a morale booster for the research community and an image-enhancer for Health Canada and Minister of Health Allan Rock. However, we welcome this new role in the health community, since the appointment came with the commitment of a \$5 million fund for research and the selection of a



**KEVIN KEOUGH** CHIEF SCIENTIST Health Canada

respected researcher. In this interview, Dr. Peggy Leatt, Editor-in-Chief of Hospital Quarterly, discusses Dr. Kevin Keough's new role with him.

#### Congratulations. Was your appointment a surprise?

There was a search process, so I was contacted about the position and interviewed by the Search Committee. I was subsequently contacted by the Deputy Minister and met with him for further discussions. After these discussions, I decided to accept the position. The science advisory board, which Dr. Roberta Bondar chairs, was the instigator in recommending the position be created, and they gave parameters as to what it may want to accomplish. I think with my leadership and scientific credibility, I can help the department and the research community. Notably, the role reports to the Deputy Minister.

#### What will be the role of Chief Scientist?

There are probably three or four main things we want to try to accomplish—first, that the position be a "champion" for scientists with Health Canada and other institutions around the country. Specifically, we want to ensure Health Canada does what they're able to do in science and research, [i.e.,] conduct the best science at the frontier level. Part of that means that scientists have to undergo the sorts of planning, evaluation, due diligence and review that all good scientists are doing. [Second,] we need to make sure the science we chose to do is positioned so we have both the capacities and abilities, hand in hand. I will also ensure a high quality of health science research by fostering links among scientists. Part of my role will be to promote new partnerships nationally and some internationally . . . there are networks out there to get really good science advice. Things are changing and expanding so much that we have to find new ways of doing this. At the same time, we can't compromise Health Canada's role as policy maker and regulator. Health Canada will have to

say what are the kinds of sciences we'll be able to do in house, what we'll need to do with others or what we need to develop capacity in house with others. The other important thing is to ensure the integrity of science advice weaves into policy and process.

# One thing I puzzle about, being a social scientist, is the absolute breadth of the sciences. Have you thought of particular priorities yet?

I'm not the person who will make the regulatory or policy decisions. The people who are expert will be doing that. What I'll be most concerned with is how we get to those things that are right to do. I have my own expertise and am not without some knowledge, as I've been on many peer reviews, science councils, and am VP research here, so I have a broad understanding. But, I don't claim to be an expert. My job is to get advice from those who know the fields and to bring the process of science and quality to decisions. For example, I'm not an expert in population health or health services research, but I can bring another view. I'll be seeking advice internally and externally on such things as methodology and appraisal. I'm not going to be designing, but as a scientist, I should be able to recognize if the science is fundamentally flawed or seek advice on direction.

# What about knowledge transfer and implementation? It takes so long to get from a discovery in a lab to something concrete. Will you have a role in that?

I haven't fully defined that, but I assume I will to some extent. As I describe it, it's knowledge translation, which is a bit more than just the transfer . . . As we move out to dealing with the population more generally and activities in collaboration between the provinces and Health Canada, any function I would have would likely be indirect.

# Will your role be limited to activities between the public sector and government?

Most of the interaction with the private sector will be indirect, mostly talking to and being aware of who are the contacts, to know what they are doing and not be surprised by new developments. I want to make sure where evolving science is and where the pressures are, but I will not be in a position where my office will be doing evaluations of proposals from the private sector.

# Will you work with established research bodies, such as the Canadian Institutes of Health Research?

This is absolutely crucial, as CIHR is the key funder for health research . . . we'll find ways for additional opportunities. To work together in mutual areas of concern, perhaps for them to involve other partners in the equation in supporting health research, would be exciting. I'm pleased to have been involved in CIHR, as there are a lot of really committed people, and it's quite a remarkable thing.

# Dr. Bondar made a compelling statement on your appointment, that Canadians are now living in a disturbing world in an evolving society with many diseases coming, so we need some kind of preparation. How will your role provide this?

One other role my office will do is to make sure Health Canada is well equipped in foresight. It's very difficult to anticipate all that will come at you, with some events having the potential of being very good and some bad, so we have to make sure we're equipped to handle it. We'll be working with the Deputy Minister and providing some nudging and investment funds, but I won't be the key individual. Health Canada has a very good capacity in this area, with a new director, and I look forward to working with him to look at questions and threats. For example, we certainly need to look at the risk of infectious disease and the risk in which way things might move. Some are a lot easier than others, and some are not easy at all. We want to ensure that federal and provincial governments are getting the best advice and the best response we can develop in anticipation.

# Are you expecting to regularly make it on the front pages of newspapers?

I'm hoping that's not a major function of the job, despite the fact I've had a fair amount within the first days of the announcement. I'm not an individual who seeks out that exposure, but I'm sure I will be asked to comment. I hope it's not one of these matters of always being in the media in a crisis or confrontation. I hope it's more like Andy Warhol predicted, with 15 minutes of fame.

### Can you give us some details on the \$5-million fund to spark new health science initiatives?

When I'm actually in the role and can speak with others to determine what's needed, I can determine where the funds can be most effective. The Deputy Minister and I hope the fund will grow substantially, but I will use it strategically to boost activities in certain areas. This might be bringing in fellowship and postdoctoral fellows to Health Canada, bringing in a few visiting scientists or we might want to explore a new program with CIHR.

# As we know from university and hospital settings, students can make good contributions, and I can see exciting opportunities in real issues in health policy and research management within Health Canada.

That's certainly a possibility . . . if it relates to science, then I'm interested. There's a limited amount of funds, some really interesting things going on and interesting policy studies being conducted.

#### You're also active in marine biotechnology?

Yes, and I was involved in making the approach that helped to secure Canada as host of the International Marine Biotechnology Conference in St. John's, Newfoundland, in 2005. I hope to keep involved and will keep my lab going. A big challenge in aquaculture is disease prevention, which affects food safety. Fish are like a lot of other animals—you put them together and they pass disease around. Only in the past decade have vaccines been available in aquaculture, as previously the only method of prevention was antibiotics, which isn't a great method. We're looking at lipid particles called liposomes as carriers and adjuvants for new vaccines and have had modest success in using this modification in vaccine formulations.

#### You might not have much time, but what do you do for fun?

I used to like to play squash and want to get back to it. I do a little running and jogging, and I like golf. I play it poorly, but I enjoy it. I read a lot at work so I like reading light fiction, a bit of fishing, skiing and often just enjoying the relaxing company of good friends.

### We're pleased to have been able to speak with youany final words?

I'm honoured to be selected. It's an honour for me and for my institution. I expect it to be a significant challenge and am not put off by that. I'm looking forward to it and I fully intend to make a difference.

At the time of the announcement on January 4, 2001, Dr. Kevin Keough was Vice President of Research and International Relations at Memorial University of Newfoundland and professor of biochemistry. His research laboratory has been active for 28 years and he will maintain his research group there. His current research interests include molecular organisation and function in lung surfactant and membranes, and liposomes as carriers for vaccines and drugs. He received his doctoral degree from the University of Toronto in 1971. He is Deputy Chair of an expert advisory panel providing guidance on federal science and technology issues and a former executive member of the Medical Research Council, and was instrumental in the creation of the Canadian Institutes of Health Research, where he is now a member of its governing council. He is the founder of Nova Lipids Incorporated, a founding member of the Board of Directors of Genome Canada, a member of the boards of the Genesis Group Inc., Canadian Centre for Fisheries Innovation, Canadian Centre for Marine Communications, Centre for Cold Ocean Resources Engineering, Operation ONLINE Incorporated and the Newfoundland and Labrador Science Centre. Dr. Keough is a Past-President of the Canadian Federation of Biological Societies, Canadian Society of Biochemistry and Molecular and Cellular Biology and Canadian Association of University Research Administrators. He assumes the role of Chief Scientist on April 2, 2001.