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## Reducing turnaround time for cancer treatments

## by Daniel McCabe

Patients locked in a desperate struggle against cancer take little comfort from news headlines about promising treatments that are still years away from being available in hospitals or clinics. When cancer is your opponent, patience is a virtue you often can't afford.

Oncology professor Gerald Batist understands the frustration such patients experience. And while he isn't promising miracles, a new McGill research centre he directs will be doing its part to ensure that novel anti-cancer therapies and drugs make their way to patients in a speedier fashion.

In fact, that's the whole idea behind the McGill Centre for Translational Research in Cancer. "The primary goal is to take fundamental research discoveries from the lab in the quickest way we can and put them through the clinical trials process so that these discoveries can start having an impact on patient care," says Batist.

The centre aims to knit together cancer specialists from across the University--the scientists who first uncover new facts about the disease in their labs, as well as the researchers who put drug treatments and other therapies to the test in clinical trials.

> "We want talented people involved in all the different stages of cancer research working together," says Batist. "I want lab scientists



Dr. Gerald Batist, director of the McGill Centre for Translational Research in Cancer.

[ PHOTO: OWEN EGAN ]

to tell us all about the new and exciting work that they're doing and I want to be able to take that research and put it into the hands of some of our top clinical people who'll help us find out what those initial results might lead to."

Batist is betting that having a centre devoted to creating those kinds of alliances will foster better teamwork and communication among cancer specialists throughout the University.

"I've been at conferences halfway around the world and met people doing interesting work. When I suggest we ought to collaborate on something, I'll discover that we're both from McGill--it's not an uncommon experience," says Batist.

"There is excellent research going on in little pockets throughout the University. We need a mechanism for bringing all that expertise together."

The centre's membership already boasts researchers from eight different McGill departments as well as scientists from the National Research Council, Université de Montréal and Phoenix International Life Sciences. "This is a living work of art," explains Batist. "We're adding new people to the team all the time."

The centre is the first of its kind in Canada and one of only four--all just starting out--in North America. "This is attracting a lot of attention from the research community," says Batist. "I'm getting phone calls from colleagues at other institutions asking me for the blueprints."

Oncology professor David Melnychuk heads the centre's clinical research unit. He says that while the centre is committed to moving the cancer research process along as quickly as it can, it will never jettison safe research practices in the name of speed.

"Clinical trials exist for a purpose. Even when you think you have an excellent theoretical grasp of how a new drug is going to operate at the molecular level, the actual effects of that drug can be surprising sometimes. When you start talking about the potential for side effects or for unexpected reactions, it pays to be careful."

The centre, based at the Jewish General Hospital, is in the process of building up an extensive tissue bank that will furnish researchers with tissue specimens containing a wide range of cancerous tumours for their studies. The bank is being put together by pathology professor Lesley Alpert. "This is an important resource," says Batist. "There are a lot of McGill researchers who each have their own small tissue collections. I'm hoping that the centre will be able to catalogue all those collections so that we'll have some sort of 'virtual tissue bank.' If a researcher needs a certain type of sample, we'll know where they can find it."

Pooling research resources should benefit all of McGill's cancer specialists, says Batist. For instance, he and two of his colleagues from the Department of Oncology, Dr. Moulay Alaoui-Jamali and Dr. Stephen Karp, recently attracted over \$1 million in research funds from the Natural Sciences and Engineering Research Council for a gene therapy project. That NSERC money will be used to purchase research resources that will benefit not only their studies, but several other McGill initiatives involving gene therapy.

Batist is also hoping that the centre will foster links with partners outside the University--most notably pharmaceutical firms. "Frankly, we need their economic power. This kind of research--if we're going to be able to use the best techniques and technologies--costs money." Batist says that outside support--from the Goldfarb and Alexander Family Foundations--was crucial for getting the centre off the ground.

Drug companies are already expressing interest in possible joint ventures. "We're putting together some of our best people from every area of cancer research. It's quite a magnet. Industry clicked onto this right away."

While that sort of interest is welcome, Batist also hopes the centre will

enable McGill's researchers to be in a better position to profit from their own discoveries.

"Some major McGill discoveries have been developed elsewhere, and some of the important clinical work done here has been on drugs or therapies that began somewhere else. This kind of centre could help all of us keep better track of the potential of the research that goes on here. We've already had discussions with the Office of Technology Transfer about contracts and patents applications."

So far the centre has gotten involved in several different areas. For instance, oncology professor Wilson Miller is experimenting with a promising technique that stops the growth of breast cancer cells in cultures. Some of the centre's clinical experts are examining a vitamin A compound discovered by an American chemist that seems to make certain kinds of tumours less malignant.

"That's an example of the kind of interesting partnerships we might have," says Batist. "Ordinarily, (the chemist) wouldn't have access to the kind of research support our centre can provide. And if he does decide to license his compound, there is the potential for royalties for us."

Batist says he's had discussions with Associate Vice-Principal (Research) Bernard Robaire about expanding the scope of the Centre for Translational Research. Research on AIDS or heart disease might well profit from the type of approach that Batist's centre hopes to encourage.

"It's an intriguing possibility," says Batist. "But I want to see if we can make this work first."

