

Ideas on the Edge

Light at the Interface

AROUND THE ATRIUM OF THE QUEEN'S CANCER RESEARCH INSTITUTE, SCIENTISTS FROM DIFFERENT DISCIPLINES ARE SHEDDING LIGHT ON EACH OTHER'S WORK.

"The one thing that strikes people when they pass through the building is the way natural light gets into almost every area." Dr. Roger Deeley is talking about the new home of the Cancer Research Institute at Queen's University.

A key feature of the building is a central atrium that illuminates the core of the 5,500-square-metre facility. The space is visually appealing, but it's also a striking reminder of the Institute's cross-disciplinary approach to cancer research.

"One of the objectives in the design," explains Dr. Deeley, the Institute's director, "was to promote integration between the floors. The atrium opens up the building visually and reminds you that there are other divisions working here. Because of the physical integration, researchers from those divisions have the ability to interact informally on a daily basis, which wasn't possible

RESEARCH THAT MATTERS
REAL-WORLD BENEFITS FOR ONTARIANS:
• new insights into the treatment and prevention of cancer

before." The Institute brings together three key strands of cancer research: biology and genetics; epidemiology and cancer care; and clinical trials. "Our focus is really on trying to develop insights that lie at the interface between those three areas."

As soon as the building opened, Dr. Deeley initiated a Translational Cancer Research Group that meets once a month. Composed of basic scientists, oncologists, surgeons and pathologists, the group discusses opportunities for translating insights from one sphere of cancer research to another. The results of an epidemiological



ROGER DEELEY

Canadian Cancer Research: Second to none in the world.

"In terms of dollars expended," says Dr. Roger Deeley of the Queen's Cancer Research Institute, "the quality of cancer research in Canada is second to none in the world."

The claim may seem surprising, given the relatively small size of Canada's cancer research community compared with the U.S. or Great Britain. But Dr. Deeley argues that those small numbers are actually an asset. "Over time, you get groupings that develop. The cancer research community in Canada over the last 25 years has been very interactive, and as a result, it's probably one of the most highly organized research communities in Canada...It's a community whose members know each other very well. The clinical trials group here at Queen's, for instance, has several hundred investigators across the country, all involved in trials they coordinate."

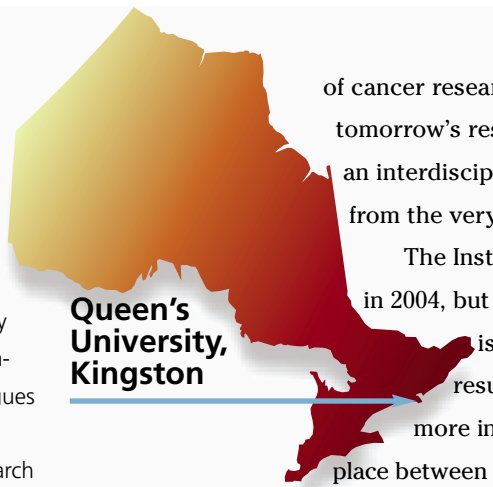
study of environmental carcinogens, for example, might suggest a strategy for cancer prevention. Or a basic piece of cancer biology research might identify a new potential drug target. "It's proved to be a very useful vehicle," says Dr. Deeley. "We just get together in an informal manner and bat around ideas." Several projects have already emerged from the forum.

Training is another way in which the Institute takes a unique approach to cross-pollination of research. The Institute operates a transdisciplinary cancer research training program, funded by the Canadian Institutes of Health Research, in which every trainee works under at least two supervisors, each representing a different facet

Project: Queen's University Cancer Research Institute Building
Institution: Queen's University
Research Sector: Health Sciences
Principal Investigator: Roger Deeley
Trust Investment: \$4,743,600
ORF Investment: \$853,296
Total research investment from all sources: \$14,000,000



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**Queen's
University,
Kingston**

of cancer research. The result, tomorrow's researchers develop an interdisciplinary perspective from the very beginning.

The Institute only opened in 2004, but already Dr. Deeley is pleased with the results. "There's a lot more interaction taking place between the clinical trials group, the population people and the wet lab scientists than ever happened before."

It looks like the concerted effort to bring disciplines together—both through programming and architecture—is working.



Infrastructure for Innovation About the Ontario Innovation Trust

The Ontario Innovation Trust was created in 1999 by the Government of Ontario to invest in research equipment and facilities at Ontario's universities, colleges, hospitals and other non-profit research institutions. The Trust is governed by a volunteer Board of Directors, according to the terms of a Trust agreement established by the Ontario government. A small permanent staff looks after day-to-day operations.

Since its inception, the Trust has committed almost \$843 million to strengthen Ontario's position in the global marketplace of ideas. This represents more than a third of the \$2.44 billion in total funding that has been invested in Trust-supported projects.