OTTAWA CITIZEN
Reprinted From February 16, 2005

Gift Helps Ottawa Team Test Promising Anti-Cancer Viruses

$500,000 Donation Will Help Group Prepare For Human Testing

BY TOM SPEARS

A half-million-dollar gift from a Mississauga executive will equip the Ottawa Regional Cancer Centre to test a wave of Canadian discoveries – viruses that infect and destroy cancer cells while leaving healthy cells alive.

"We plan to make this *the* place in Canada to make small batches of viruses and test them in people," says John Bell, a senior researcher at the centre and discoverer of one anti-cancer virus that is nearing human tests.

He plans to bring together at least five sets of Canadian researchers experimenting with cancer-killing viruses.

"The idea is to work together so we don't duplicate, but also to compare and contrast these viruses so we see which works best under which conditions.

"The reality is that we don't care which one it is. We just want to get something out there."

Today, the Bell lab in Ottawa has engineered its own virus, VSV, or vesicular stomatitis virus, which causes minor infections in cattle but not humans. It has drawn attention from scientists but it has no place to transform a successful lab experiment into an experimental drug.

The new grant will allow the researchers to set up a "GMP facility" in Ottawa – short for "good manufacturing practices," an industry term that means any test-version of a drug it produces is of pharmaceutical quality.

"What we've decided to do is go it alone, and see if we can't make some virus in clinical grade ourselves – a little suite where we can make pharmaceutical-grade virus," Mr. Bell said yesterday.

The University of Ottawa faculty of medicine is trying to find space for it now.

While the Bell lab has a virus that has worked well in lab experiments, that's not enough for drugmakers. Bring us one product, they said, and we'll take it from there.

Enter Brennan Mulcahy, president of a Mississauga company, the Energy Savings Group. His donation to the Ottawa Regional Cancer Centre Foundation is a first step; the foundation is hoping more donors will keep supporting the new drug research lab.

Mr. Mulcahy's brother, Bill, is receiving cancer treatment in Ottawa.

"The reason I'm excited about this is that we got a grant from the Terry Fox Foundation to set up a consortium of guys across Canada, all with different viruses," Mr. Bell said yesterday.

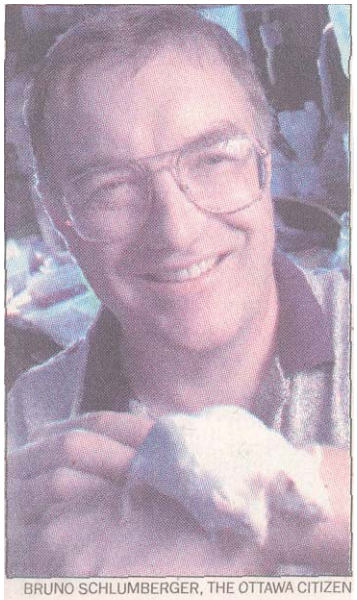
The "virus guys" are more formally the Canadian Oncolytic Virus Consortium. So far this includes groups at the Tom Baker Cancer Centre in Calgary, Lady Davis Research Centre at McGill University in Montreal, the Robarts Research Institute at the University of Western Ontario, and the Hamilton Regional Cancer Centre. All are engineering different viruses to enter a person's body and kill only cancer cells.

The VSV bug enters cells, and in cancer cells it hijacks the cell's internal machinery to manufacture thousands of new viruses, kill that cell, and move on to nearby cancer cells. But it can't infect healthy cells.

So far it kills about 80 per cent of tumours of a very wide range of types.

And the past year has shown that the virus not only kills cancer cells today, but stimulates the immune system to recognize that a tumour has formed, so that mice reject future tumours.

The first phase of human testing, designed to see whether the virus is safe, would start in about a year. Patient volunteers will be chosen after the Ottawa cancer centre sends word to doctors on how to enroll.



BRUNO SCHLUMBERGER, THE OTTAWA CITIZEN

Team leader John Bell says the anti-cancer viruses work well on mice. The next step is human testing.