

Province gives \$15M to Ottawa researchers

BY JOANNE LAUCIUS , THE OTTAWA CITIZEN NOVEMBER 20, 2009

OTTAWA — The University of Ottawa and Carleton University have been awarded a total of more than \$15 million in provincial research funding.

The money will go to 28 projects at the two universities involving more than 150 researchers. The funds announced Friday are Ottawa's portion of \$268 million announced through the Ontario research Fund-Research Infrastructure program last month. More than \$12 million out of Ottawa's \$15 million will go to projects led by two researchers from the University of Ottawa.

Earth scientist Ian Clark was awarded just over \$8 million for his work that looks at the movement and contamination of water deep under the surface of the earth using a specialized technology called an accelerator mass spectrometer used to analyze isotopes.

"We have researchers all across Canada who want one of those," said Clark.

The spectrometer itself is about 30 metres long, said Clark. The equipment, to be assembled housed in a new lab still to be constructed, will help research safe disposal of radioactive waste.

The lab will help provide invaluable insight into how liquids move deep under the earth's crust, said Clark.

"It's of particular interest to Ontario because we're on the verge of a nuclear renaissance. Before we go forward, we want to resolve the issue of the waste legacy," he said.

Meanwhile, University of Ottawa physicist Paul Corkum will be receiving almost \$4.3 million to push the boundaries of knowledge in attosecond science using a laser pulse that has already allowed him to capture an image of an electron orbiting a molecule. The funding will help him draw a molecular map of the cell using light.

Among the other projects:

- University of Ottawa scientist Andrew Pelling was awarded \$250,000 for his work in nanomedicine, which focuses on tiny structure, devices and particles to treat and prevent disease. Pelling's research will improve knowledge of cell mechanics.
- Richard Yu at Carleton University received \$150,000 for his research on allowing wired and wireless networks to work together, developments that are expected to lower business costs and improve productivity.
- Carleton University's Shawn Hayley was awarded \$100,000 to investigate the interplay of the immune

system and environmental toxins and stressors in the development of neurodegenerative diseases like Parkinson's and psychiatric illnesses like depression.

- University of Ottawa geneticist and cardiac researcher Mona Nemer won almost \$390,000 for research that will help develop therapies to repair and regenerate the heart.

Nemer, who is also vice-president of research at the university of Ottawa, said research generates knowledge and trickles down into teaching.

"It's the only way to create tomorrow's leaders."

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