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## **Laurier researcher receives \$50,000 to study neurological effects of drug abuse**

WATERLOO – Laurier psychology professor Dr. Bruce McKay can really get inside your head. With the help of a patch clamp electrophysiology setup, that is. The Canada Foundation for Innovation (CFI) awarded \$50,422 to Wilfrid Laurier University to purchase equipment that will allow McKay to study neurons and synapses in acute brain slices.

McKay is researching how the brain changes with drug abuse, specifically when children abuse “under the sink” solvents and inhalants.

“It’s a bigger issue than you would think, about four to five percent of kids will abuse these types of substances and the damage to the brain is devastating,” said McKay. “By understanding exactly how these substances affect the brain we can find out what kinds of drugs we can use to effectively treat and potentially reverse the damage.”

The patch clamp electrophysiology setup – a collection of equipment that essentially adds up to a “very expensive microscope” – is powerful enough to show neurons and synapses at the cellular/molecular level.

“Not only can we now ask the really cutting-edge questions and gain tremendous insight into how the brain works, we can also give talented students a chance to train on world-class equipment,” said McKay.

The equipment was awarded through the CFI’s Leaders Opportunity Fund, which provides infrastructure support to Canadian institutions. McKay’s grant was part of a general funding announcement from CFI this week. A total of \$26,712,283 in new funds was awarded to support 117 projects at 29 institutions across Canada.

“The investments being announced today at Laurier will further enhance our country’s reputation as a destination of choice for outstanding researchers,” said Dr. Eliot Phillipson, president and CEO of the CFI. “They will make our universities even more competitive when it comes to attracting the best and brightest researchers from around the world.”

### **About the Canada Foundation for Innovation**

The CFI is an independent corporation created by the Government of Canada to fund research infrastructure. The CFI’s mandate is to strengthen the capacity of Canadian universities, colleges, research hospitals, and non-profit research institutions to carry out world-class research and technology development that benefits Canadians. Since its creation in 1997, the CFI has committed almost \$4.5 billion in support of more than 6,000 projects at 129 institutions in 64 municipalities across Canada.