



Media Release
Cornwall, ON
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Local Scientist Tackles Cutting Edge Nuclear Research

Cole MacDonald is a young research scientist with a passion for physics, who calls Cornwall his hometown. Recently hired to work at the Advanced Research Complex (ARC) with the University of Ottawa, Cole's passion explores the complex and fascinating world of isotopes that are connected to medicine and radioactivity. He will be the next guest speaker at Science and Nature on Tap on **Wednesday, February 4th at 7 pm** at **Schnitzels**.

Just what are isotopes? Cole explains, "Isotopes have the same number of atoms of the same element but have different mass numbers. Calcium (Ca) isotopes can be used to track bone loss and metabolism for the detection of osteoporosis but Caesium (Cs) isotopes are made by means of nuclear fission via bombs or nuclear reactors."

This Science on Tap session will highlight Cole's evolving interest in science from his beginnings as a student with the St. Lawrence River Institute of Environmental Sciences to his recent graduation from the University of Ottawa where he received a Master's Degree in Accelerator Mass Spectrometry. Cole's unique expertise focusses on a machine called an accelerator mass spectrometer that is housed in the U. of Ottawa's new André E. Lalonde Accelerator Mass Spectrometry (AMS) Laboratory. This instrument is the only one of its kind in Canada and is utilized to measure trace radioactive isotopes. As a Research Physicist, Cole will offer novices in physics a basic explanation of atoms and isotopes and describe the practical applications of their research such as diagnostic medicine, radiation protection, ecology, and forensics.

The Session is held at Schnitzels European Flavours and is free but space is limited. If you would like more information or to reserve a seat please call (613) 936-6620 or e-mail: kcooper@riverinstitute.ca

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