



## World's first centre for rapid DNA species identification opens in Guelph

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**An Ontario university on Wednesday launched the world's first large-scale centre for identifying species through a process known as DNA barcoding.**

The technique, conceived at the University of Guelph four years ago, involves using a short sequence of DNA from a standard segment found in all animals to quickly identify a species.

Paul Hebert, the university's Canada research chair in molecular biodiversity, proposed the method four years ago, comparing it to the barcodes found on most products to enable millions of items to be identified quickly. Similarly, DNA barcoding has made it possible to cut the time it takes to identify a species from days to minutes.

The \$4.2 million Biodiversity Institute of Ontario (BIO) at the university will attempt to create a complete catalogue of the world's species by analyzing tissue samples.

"We are building a master key to life that will represent a major advance in accessibility to biological identifications," said Paul Hebert, director of BIO.

"What it effectively means is that researchers will find a barcode linked to just about anything they encountered anywhere on the planet."

The DNA barcoding has already found new bird, butterfly and fish species.

Within 20 years, DNA barcoding could be used to catalogue all of the estimated 10 million species of animals in the world, Hebert said. In the last 250 years, just 1.2 million species have been identified.

Hebert said that DNA barcoding technology could eventually be applied to broader uses such as border control, food safety, pest management and environmental monitoring.

BIO's launch occurred a day ahead of the opening of the Canadian Barcode of Life Science Symposium scheduled to run through Friday.

The conference aims to foster discussion and learning among some researchers involved in the Barcode of Life Network, a national organization that is working on ways to developing and using DNA barcoding technology.