Creating a new vision of life

In a world beset with pandemics and pest infestations, the potential of DNA bar-coding is profound, writes Kathryn May.

BY KATHRYN MAY, THE OTTAWA CITIZEN MAY 25, 2010

Scientists aim to have the DNA of all plants and animals, including the exotic giant leaf-tailed gecko from Madagascar, included in a world DNA library. They then aim to create a handheld device to analyze DNA like a scanner reads bar codes at a grocery check-out.

Photograph by: Piotr Naskrecki, Reuters, The Ottawa Citizen

Scientists around the world are teaming up to build a world DNA library, housed at the University of Guelph, that could instantly identify any plant, animal and fungus anywhere on the planet.

Led by Canadians, the project is called the International Bar Code of Life, and is quite literally changing the way we look at life.

For a world beset with pandemics, pest infestations, climate change and bio-security threats, the potential for a handheld device to analyze DNA like a scanner reads bar codes at a grocery check-out is profound.

The project grew out of University of Guelph biologist Paul Hebert's 2003 discovery of the DNA bar code, and scientists believe the technology that would allow DNA to be read and scanned in the field is not that far behind. One leading ecologist called DNA bar-coding "Canada's gift to the world."

With Canadian firms closely eyeing the project -- including BlackBerry maker Research in Motion -- Canada seems ideally poised to become the world's epicentre of DNA bar-coding.

But the big hurdle for this team of researchers is the lack of long-term funding to keep Canada's leadership and get the library up and running. So far, they have just raised enough money to get the project going.

This is a project that is Canada's to lose, said Bob Hanner, associate director of Canadian Bar Code of