

# Thirty-Five-Million Dollar Boost for 'Barcode of Life'

By [Paul Webster](#) Apr. 23, 2010

*Science*

The **International Barcode of Life Project** (iBOL) got a major boost from Canadian agencies today with \$35 million in new funding for a 26-nation effort to collect specimens, sequence their DNA, and build an informatics platform using digital bar codes to store and share information for species identification and discovery. The new funds, part available now and part spread over 5 years, bring Canadian commitments to the world's largest biodiversity genomics project to \$80 million. This will secure "an initiative that will transform humanity's relationship with other living organisms," says iBOL's director, Paul Hebert.

By 2015, iBOL aims to gather DNA barcode records for 5 million specimens representing 500,000 species, "laying the foundation for subsequent progress towards a barcode reference library for all life," says Hebert. "What we're building, really, is a sort of global positioning system for plant and animal research. And we're doing it at exactly the time when humanity is threatening to provoke the sixth mass extinction."

The Canadian commitments come from the province of Ontario's Ministry of Research and Innovation and four federal bodies including the Canada Foundation for Innovation, Genome Canada, the Natural Sciences and Engineering Research Council of Canada, and the International Development Research Centre. C. Thomas Caskey, chair of Genome Canada's board of directors, says iBOL "will be of immense value not only to scientists but also in applications such as maintaining the integrity of our food supply, battling invasive alien species, and forensic sciences."

Much of the new money will be devoted to construction of a **new Centre for Biodiversity Genomics** at the University of Guelph, near Toronto.

The \$18 million facility will house the iBOL Secretariat and a new lab capable of sequencing and bar coding an estimated 200,000 species samples annually. The center will also serve as the scientific hub for iBOL, which Hebert says will be officially activated in Nagoya, Japan, next October during the 10th Conference of Parties to the United Nations Convention on Biological Diversity (CBD).

"DNA bar coding is an innovative approach that will enable nontaxonomists to use taxonomic knowledge and skills to more easily identify species in the field," says Ahmed Djoghlaif, executive secretary of the CBD Secretariat in Montreal, Canada. "Ready identification of species is critical for implementing the CBD, particularly when it comes to monitoring the status of biodiversity and controlling the misuses of biodiversity."

Although Canadian investments have made Hebert's lab, which he established in 2003, the global powerhouse for biodiversity genomics research, Hebert says international collaboration is its core mission. To speed this imperative, Canada's International Development Research Centre has provided \$2.2 million to enable researchers in five

developing countries—Argentina, Costa Rica, Kenya, Peru, and South Africa—to play key roles in iBOL.

The funding from Canada "will provide a major incentive for South African institutions to meet the requirements of regional node participation in iBOL while giving organizations and researchers from a wide range of African nations the opportunity to contribute to and benefit from iBOL," says Paul Skelton, director of the South African Institute for Aquatic Biodiversity in Grahamstown.