

AN iBOL UPDATE FROM CANADA (JUNE 1, 2012)

Canadian funders have played a critical role in both enabling iBOL's activation and its progress. The Canada Foundation for Innovation, the Ontario Ministry of Economic Development and Innovation, and Genome Canada have provided nearly \$30M to build the Biodiversity Institute of Ontario (BIO) and to obtain required sequencing and computational hardware. The Ontario government also supports BOLD, while Genome Canada supports iBOL's governance and the costs of sequence analysis at BIO. Genome Canada considers iBOL as one of its signature initiatives, but due to recent reductions in funding for science linked to the global economic crisis, Genome Canada will be unable to sustain its support at the level originally intended. iBOL's core mission of assembling barcode records for 500K species by December 2015 remains unaltered, but the reduced funding envelope has required the need for two major adjustments. Firstly, to maximize the funding available for research, iBOL's governance has been streamlined. Secondly, the sequencing facility at BIO will need to adopt partial cost recovery.

iBOL GOVERNANCE

iBOL remains an international research program, coordinated by the project team at the University of Guelph. Although now operating under reduced funding, iBOL will sustain the broadest possible international involvements in DNA barcoding. The iBOL website will remain active and the Barcode Bulletin will continue to provide the community with quarterly updates on progress and achievements.

The governance of iBOL has now been streamlined to a compact **Board** consisting of senior staff from Genome Canada, a **Science Advisory Committee**, and an **International Scientific Collaboration Committee** with members drawn from nations with funded barcoding projects linked to iBOL.

INFORMATICS SUPPORT

BOLD (www.boldsystems.org) provides critical informatics support to iBOL researchers and to the DNA barcoding community at large. The Ontario Ministry of Economic Development and Innovation has committed \$1M a year to support BOLD's ongoing operation and development through 2016. Beyond 2016, BOLD is well positioned to gain long-term support from provincial and federal agencies in Canada that have been charged with developing a national strategy for the preservation and stabilization of access to large-scale data sets. Such action will be reinforced by the rise of BOLD mirror sites in other nations.

SEQUENCING SUPPORT

BIO has generated 450K of the 600K records generated by iBOL researchers since September 2010. Nearly three quarters of BIO's sequencing effort has been directed toward specimens collected outside Canada, but analytical costs have been heavily subsidized. The increasing demand from the community for barcoding services from BIO, coupled with the reduction in Canadian funding, means that BIO will need to recover a larger fraction of its costs. Because sequencing infrastructure is in place and because of ongoing support for staff salaries and equipment maintenance from Canadian funders, BIO can offer subsidized sequencing to iBOL research programs. Details on the cost structure are available on the BIO website at www.biodiversity.ca/services.html