

VIII GOVERNANCE & MANAGEMENT

The **iBOL Organizational Chart (Figure VIII-1)** represents the Project's current governance and management structure, reflecting progress made during the period under review, as well as actions taken to address challenges encountered in implementing the original governance and management plan. Progress and actions are discussed below.

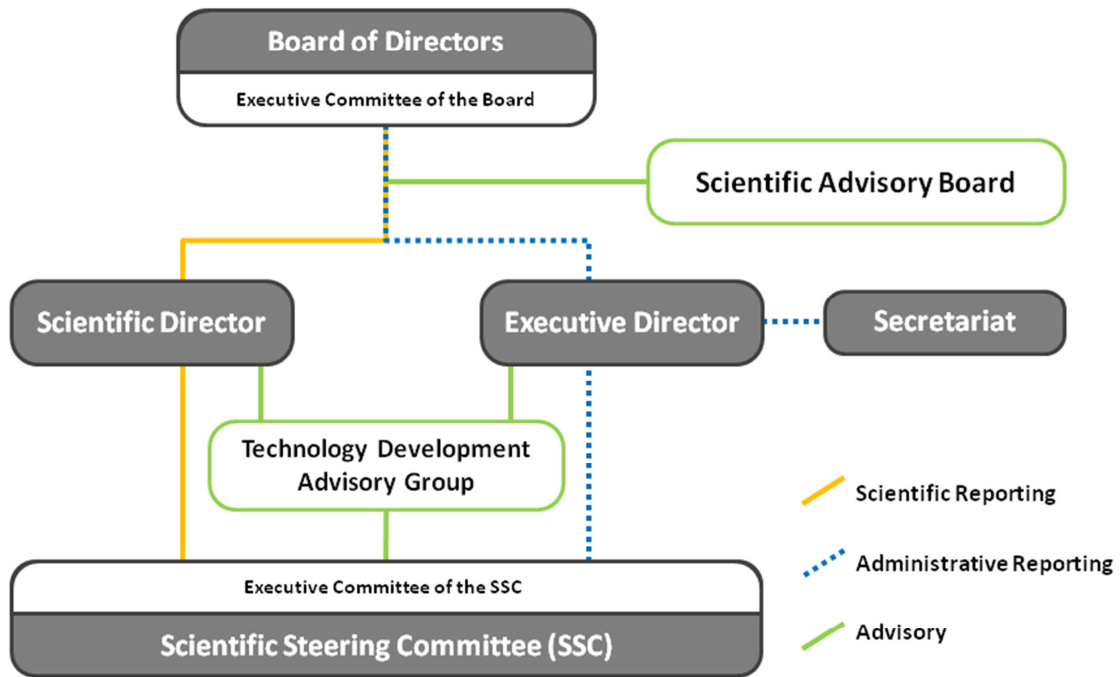


Figure VIII-1:iBOL Organizational Chart

1 GOVERNANCE

1.1 Board of Directors

As planned, The International Barcode of Life Project (iBOL) has been established as a not-for-profit Corporation governed by a Board of Directors which provides strategic direction and oversight to the Project. The By-Laws of the corporation, including terms of reference of the Board of Directors and Committees, have been developed, and are presented in **Appendix VII**. A list of Board members is presented in **Table VIII-1**, and biographies of Board members are included in **Appendix III**. The Board has met on ten occasions (twice in 2008, four times in 2009 and four times in 2010).

TABLE VIII-1 iBOL Board of Directors

Name	Institution	Country	Term of appointment expires
Christian Burks (Chair)*	Former President and CEO, Ontario Genomics Institute	CANADA	2012
Jesse Ausubel*	The Rockefeller University	USA	2011
José Antonio De la Peña	Autonomous University of Mexico (UNAM)	MEXICO	2011
Paul Hebert (Scientific Director)*	Biodiversity Institute of Ontario, University of Guelph	CANADA	2012
Ivar Myklebust	Norwegian Biodiversity Information Centre	NORWAY	2012
Faustino Siñeriz	National Council of Scientific and Technical Research	ARGENTINA	2011
Rocky Skeef	National Research Foundation	SOUTH AFRICA	2012
Karl Tibelius*	Genome Canada	CANADA	2012
Xian-En Zhang	Ministry of Science and Technology	CHINA	2011
Suzanne Fortier (ex officio) Advisor to the Board of Directors	Natural Sciences and Engineering Research Council of Canada (NSERC)	CANADA	2011
Jean Brunet (ex officio)* Legal Counsel and Secretary to the Corporation	Stein Monast LLP	CANADA	N/A

* Member of Executive Committee of the Board

1.2 Executive Committee of the Board

As provided for in the By-Laws of the Project, an Executive Committee of the Board has been established.

The Executive Committee is chaired by the Board Chair and is empowered to exercise the full authority of the Board of Directors in governance of the Project between meetings of the Board of Directors. Members of the Executive Committee are indicated by an asterisk in **Table VIII-1**.

2 MANAGEMENT

2.1 Scientific Director

As Scientific Director, Dr. Paul Hebert is a member of the Board of Directors, and also reports to the Board as President and Chief Executive Officer of the iBOL Project. The Scientific Director has responsibility for scientific oversight of the Project, and chairs meetings of the Scientific Steering Committee

2.2 Executive Director

The Executive Director, assisted by a small Secretariat staff, is responsible for the overall operations of iBOL, providing strategic planning and administrative support to the Board of Directors and advisory committees, keeping stakeholders apprised of progress and building the participation of key international funders, research institutions and other strategic partners in iBOL.

Peter Freeman joined iBOL as Executive director on July 01, 2010. Prior to his appointment, the duties of the Executive Director and Secretariat were discharged by the Scientific Director and by the scientific and administrative team that supports the operations of the Canadian Centre for DNA Barcoding in Guelph.

2.3 Secretariat

2.3.1 Director of Media and Communications

John Chenery joined the iBOL Project as Director of Media and Communications in September 2009. Reporting to the Executive Director, he is responsible for delivering iBOL's key messages to internal and external audiences – participating countries (nodes) and working groups, potential new scientific collaborators, government and private sector funding organizations, policy makers, media and the general public - building the project's public profile and ensuring that it receives credit for achievements at local, national and international levels.

2.3.2 Administrator

The Administrator (to be appointed) will support the Executive Director and Director of Media and Communications in meeting the planning, communications and reporting requirements of the Project. In the period under review these duties have been discharged by the administrative team that supports the overall operations of the Canadian Centre for DNA Barcoding in Guelph.

3 ADVISORY COMMITTEES

3.1 Scientific Advisory Board

In September 2009 the Board of Directors approved the appointment of a Scientific Advisory Board (SAB) consisting of scientists and other experts knowledgeable in the program areas but independent of the project (**Table VIII-2**). The SAB is appointed for the duration of the project. Additional SAB members may be added over the course of the project. The Chair and two other members of the SAB attended the iBOL Scientific Steering Committee meeting in September 2010, and the SAB Chair attended the meeting of the Board of Directors held on September 26, 2010.

TABLE VIII-2 iBOL Scientific Advisory Board

Name	Institution	Country
Stephen O'Brien (Chair)	National Cancer Institute Laboratory of Genomic Diversity, Maryland	USA
Gary Borisy	Marine Biological Laboratory , Massachusetts,	USA
William Gelbart	Harvard University, Massachusetts	USA
David Haussler	University of California, Santa Cruz	USA
Paul Thompson	Michigan State University, Michigan	USA

3.2 Technology Development Advisory Group

The Technology Development Advisory Group (TDAG) was formed in September 2009, with a mandate to provide guidance to the iBOL project in the following categories:

1. An optimized use of cutting edge tools, technologies, and best practices in the field of genomics
2. Solving any challenging technological problems in iBOL's work plans
3. Reviewing technology development and implementation plans within iBOL-associated labs
4. Providing strategic direction with regards to technology development projects and plans

Membership of the TDAG is listed in **Table VIII-3**

TABLE VIII-3 iBOL Technology Development Advisory Group

Name	Institution	Country
John McPherson (Chair)	Ontario Institute for Cancer Research	Canada
Matthew Bainbridge	Baylor College of Medicine, Texas	USA
Jay Shendure	University of Washington	USA
Barton Slatko	New England Biolabs	USA
Baoli Zhu	Chinese Academy of Sciences	China

The TDAG held its first meeting in December 2009 (report, **Appendix III**). Three members of the TDAG attended the iBOL Scientific Steering Committee meeting in September 2010, and the TDAG Chair provided an update at the meeting of the Board of Directors held on September 26, 2010.

3.3 SCIENTIFIC STEERING COMMITTEE (SSC)

3.3.1 SSC Mandate and Membership

The Scientific Steering Committee (SSC) was envisioned as the principal mechanism for making critical decisions about the research direction of iBOL. As such, the SSC assists and advises project participants, the Scientific Director and Executive Director in achieving the objectives of the Project. The SSC currently represents two stakeholder constituencies within iBOL, its 'Nodes' and its 'Working Groups'

Membership of the SSC (Figure VIII-4) is composed of up to two representatives from each iBOL node, and the Chairs and Vice-Chairs of each of iBOL's 26 working groups.

3.3.2 SSC Meetings

The SSC held two major meetings in the period covered by this review. These were held in Mexico City, Mexico (November 9, 2009) and in Guelph, Canada (September 23-25, 2010). The first SSC meeting (Appendix III) was focused on communicating the Project's governance and management structure, establishing policies and procedures for the production pipeline (specimen sourcing, sequencing, informatics and data release) and reviewing the status of funding for barcoding in participating countries. The 2010 Guelph meeting of the SSC (Appendix III) was designed as a two-way consultation between the Scientific Steering Committee and the iBOL governance and management team with a view to charting the future direction of the project. Key strategic imperatives identified at the meeting were to:

- Develop a **vision and mission** that shifts the focus from establishing the barcode library to its areas of application, harnessing and linking biodiversity science for the benefit of humanity
- Establish an effective matrix of iBOL nodes and working groups, where nodes represent **capacity** (e.g., institutions, funding, facilities) and working groups represent **competency** (e.g., participating scientists and professionals applying their skills to the thematic priorities of the Project)
- Ensure that there is free movement and exchange of ideas between nodes and working groups, with all nodes being able to address their priorities within working groups, and working groups being able to draw on the capacity of nodes in achieving their collaborative goals.

iBOL Nodes

iBOL nodes are the networks of leading researchers and key organizations which oversee capacity building, direction, deliverables and financial accountability for their nation's or region's participation in iBOL. iBOL Nodes whose activities are confined to a single country are designated as **National Nodes**, while **Regional Nodes** are those with the additional capacity to expand partnerships, establish a funding base and develop infrastructure for DNA barcoding and related research on a regional basis that extends beyond their national boundaries. **Central Nodes** are National or Regional Nodes that can and will barcode samples from diverse sources and geographies, and act as leaders in knowledge and technology transfer across (other) Central, Regional and National nodes.

iBOL Working Groups

The purpose of iBOL's working groups (WGs) is to advance iBOL's scientific and administrative agenda, which is organized under six themes:

- » Theme 1 DNA Barcode Library (WG 1.1 – 1.10)
- » Theme 2 Methods (WG 2.1 – 2.4)
- » Theme 3 Informatics (WG 3.1- 3.2)
- » Theme 4 Applications (WG 4.1 – 4.2)
- » Theme 5 Administration (WG 5.1-5.2)
- » Theme 6 GE3LS (WG 6.1-6.6)

SCIENTIFIC STEERING COMMITTEE

		<i>Participating Nations</i>		<i>Working Groups</i>	
CENTRAL NODES		CANADA — (Saunders, Packer)		1.1 Vertebrates <i>Bermingham, Amato</i>	DNA BARCODE LIBRARY
		CHINA — (Zhang, Huang)		1.2 Land Plants <i>Hollingsworth, Li</i>	
		EUROPEAN UNION — (To be determined)		1.3 Fungi <i>Crous, Seifert</i>	
REGIONAL NODES		UNITED STATES — (Amato, Crandall)		1.4 Animal Parasites, Pathogens and Vectors <i>Masiga,</i>	
		ARGENTINA — (Tubaro, Diaz de Astarloa)		1.5 Agriculture/Forestry Pests and Parasitoids <i>Foottit, Rasplus</i>	
		AUSTRALIA — (Mitchell, Lowe)		1.6 Pollinators <i>Packer, Silveira</i>	
		BRAZIL — (Eizirik, Santos)		1.7 Freshwater Bio-surveillance <i>Sweeney, Hogg</i>	
		INDIA — (Lakra, Khedkar)		1.8 Marine Bio-surveillance <i>Saunders, Bouchet</i>	
		MEXICO — (Elias-Gutierrez, Escalante)		1.9 Terrestrial Bio-surveillance <i>Janzen, Fisher</i>	
		NEW ZEALAND — (Hogg, Smith)		1.10 Polar Life <i>Ekrem, Smith</i>	
		NORWAY — (Lifjeld, Ekrem)		2.1 Barcoding Biotas <i>Meyer, Adamowicz</i>	METHODS
		RUSSIA — (Abramson, Kalyakin)		2.2 Museum Life <i>Bakker, Miller</i>	
		SAUDI ARABIA — (Al-Hafedh)		2.3 Methodological Innovation <i>Ivanova, Evans</i>	
	SOUTH AFRICA — (Skelton, Bartels)		2.4 Paleobarcoding <i>Poinar, Brochmann</i>		
NATIONAL NODES		COLOMBIA — (Linares, Madrinan)		3.1 Informatics: Core Functionality <i>Hebert, Rathasingham</i>	INFORMATICS
		COSTA RICA — (Janzen, Ugalde)		3.2 Informatics: Mirrors <i>Ma, Robert</i>	
		FRANCE — (Rasplus, Le Gall)		4.1 Environmental Barcoding <i>Hajibabaei, Pfenninger</i>	APPLICATIONS
		FINLAND — (Mutanen)		4.2 Mobile Barcoding <i>Ronaghi, Krull</i>	
		GERMANY — (Waegele, Hausmann)		5.1 Project Management <i>Singer, Hanner</i>	ADMIN
		KENYA — (Masiga, Oyiyeke)		5.2 Communications <i>Schindel, Stoeckle</i>	
		KOREA — (Won Kim, Chang-Bae Kim)		6.1 Equitable use of Genetic Resources <i>Bubela</i>	GE ³ LS
		MADAGASCAR — (Fisher, Balsama)		6.2 Regulation of International Trade <i>Phillips</i>	
		NETHERLANDS — (Crous, Bakker)		6.3 IP and Knowledge Management <i>Gold</i>	
		PANAMA — (Bermingham, Sanjur)		6.4 Education Initiatives for Schools/Media <i>Secko</i>	
		PAPUA NEW GUINEA — (Miller, Novotny)		6.5 Governance of Knowledge Mobilization <i>Castle</i>	
		PERU — (Valqui, Orjeda)		6.6 Barcoding and Biological Classification (proposed) <i>Castle</i>	
		PORTUGAL — (Costa, Bastos-Silveira)			
		SPAIN — (Arnedo, Carranza)			
	UNITED KINGDOM — (Hollingsworth, Vogler)				

Figure VIII-4: The Scientific Steering Committee. As the EU Central Node is not yet formally established, we have left its leadership open, and continue to work with EU member states as national nodes.

3.3.3 Executive Sub-Committee of the SSC

At its meeting in September 2010, the SSC recommended the formation of an executive sub-committee (ESC) to act on its behalf in identifying and initiating action on priorities that arise between annual meetings of the full SSC. In December 2010 a nomination process was initiated with a view to appointing six (6) members of the SSC to the sub-committee, with responsibilities for the six (6) Project Themes of *DNA Barcode Library, Methods, Informatics, Applications, Administration and GE³LS*. Five of these 6 Theme Leaders were appointed in January 2011. The Scientific Director and Executive Director will participate in the ESC as Chair and Vice-chair respectively. Terms of reference for the ESC will be established at its first meeting, to be held in March, 2011. Current membership of the ESC is shown in **Table VIII-5**

Table VIII–5 Executive Sub-Committee (ESC) of the SSC

Name	ESC Role	SSC Role(s)
Paul Hebert	Chair	iBOL Scientific Director
Peter Freeman	Vice Chair	iBOL Executive Director
Pete Hollingsworth	Theme 1: Barcode Library	Chair, WG1.2; UK Node Representative
tbd	Theme 2: Methods	-
Vincent Robert	Theme 3: Informatics	Vice-Chair, WG 1.3
Mark Stoeckle	Theme 4: Applications	Vice Chair, WG 5.2
David Schindel	Theme 5: Administration	Chair, WG 5.2
David Castle	Theme 6: GE ³ LS	Leader of GE ³ LS Research Team