

OBI, The Ontology for Biomedical Investigations (<http://purl.obofoundry.org/obo/obi>), is being developed by a large collaborative group of domain experts and developers encompassing a wide array of biomedical science disciplines and technologies. The work aims to provide a set of 'universal' terms, applicable across biological and technological domains, as well as domain-specific terms to support the consistent annotation of biomedical investigations. The ontology models experimental design, protocols, instrumentation, biological material, data and types of analysis performed on it. Developed under the OBO Foundry initiative, OBI endorses the foundry principles. Those guidelines have positively impacted the work. First, by

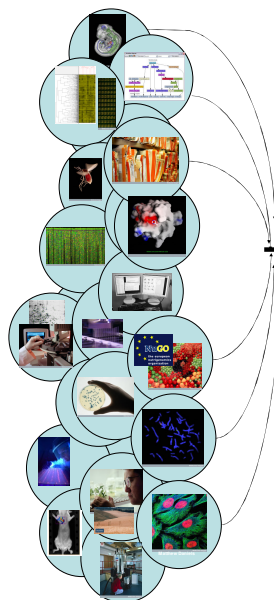
encouraging an open and inclusive approach, OBI proactively seeks partners and may act as an accretion point, avoiding work duplication. Second, by insisting on documentation, OBI makes explicit its working practices for a decentralized yet consistent development. OBI selected and has used BFO as its top level ontology. As a result, OBI is being developed following 3 main axes: process (subclass of bfo:occurent) covering protocol application with 240 classes, material (subclass of bfo: independent continuant) encompassing instrument and material entities holding 223 classes, and finally bfo:dependent continuant, (with subclasses such as quality, role and disposition) which holds 266 classes used to possibly qualify elements of the

first two dimensions. OBI is being developed in OWL-DL using Protégé Editor and a series of working groups tackle specific sub-domains. Procedures have been devised to ensure consistent work across branches. Thus, OBI developers have agreed on a naming convention for representational artifacts, a minimal set of metadata to supply when submitting terms or creating classes and methods both for merging branch outputs and for cross referencing other OBO foundry ontologies (e.g. CHEBI, CL, SO, GO). OBI is currently being evaluated against competency questions collected from its members.

Join our mailing list: obi-users@googlegroups.com

A diverse set communities

From nutrition to metabolomics, from environmental biology to genomics, from immunology to imaging and data analysis and many more.



Iterative process

Terms are collected from the communities, reviewed and dispatched to branches; the communities assess the results providing feedback.

PROPERTY

Digital entity branch*

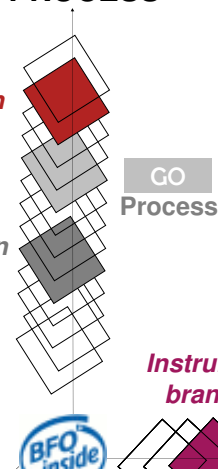
Function branch*

Role branch*

Data transformation branch*

Protocol application branch*

PROCESS



Branch development

The work is divided among seven branches(*) and along three BFO axes.

Instrument branch*

Biomaterial branch*

MATERIAL

CHEBI Molecule

CL Cell

Working as part of the OBO Foundry

Designed to be interoperable with other OBO Foundry ontologies, OBI contributes experience with e.g. metadata minimal set, curation, naming conventions, import (mireot) and semantic web interoperability.



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In Memoriam: This poster is dedicated to our dear colleague Bill Bug, whose knowledge and friendly presence we all miss.

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