

Supplementary Document: Ontologies Referenced in '*A Fourfold Pathogen Reference Ontology Suite*'

Pathogen Reference Ontology Suite

Namespace	Name	Description	Link
IDO	Infectious Disease Ontology	Core ontology for representing infectious disease-related entities and processes.	https://bioportal.bioontology.org/ontologies/IDO
VIDO	Virus Infectious Disease Ontology	Reference ontology for viral infectious diseases (extends IDO).	https://github.com/infectious-disease-ontology-extensions/VIDO
BIDO	Bacteria Infectious Disease Ontology	Reference ontology for bacterial infectious diseases.	https://github.com/infectious-disease-ontology-extensions/BIDO
MIDO	Mycosis Infectious Disease Ontology	Reference ontology for fungal infectious diseases.	https://github.com/infectious-disease-ontology-extensions/MIDO
PIDO	Parasite Infectious Disease Ontology	Reference ontology for parasitic infectious diseases.	https://github.com/infectious-disease-ontology-extensions/PIDO

IDO Extensions

Namespace	Name	Description	Link
CIDO	Coronavirus Infectious Disease Ontology	Community-driven extension of IDO focused on COVID-19.	https://bioportal.bioontology.org/ontologies/CIDO
IDOFLU	Influenza Infectious Disease Ontology	Extension of IDO for influenza-specific disease modeling.	https://bioportal.bioontology.org/projects/IO
IDOHIV	HIV Ontology	Extension of IDO for HIV-related representations.	https://bioportal.bioontology.org/ontologies/HIV
IDODEN	Dengue Fever Ontology	Extension of IDO for dengue fever.	https://bioportal.bioontology.org/ontologies/IDODEN
COID	Combined Ontology for Inflammatory Diseases	Multi-disease inflammatory disease ontology.	https://bioportal.bioontology.org/ontologies/COID
CODO	COVID-19 Ontology	Ontology developed for COVID-19 research.	https://bioportal.bioontology.org/ontologies/CODO
IDO-Staph	Staphylococcus	Extension for staph	N/A

	aureus Infectious Disease Ontology	infections.	
IDOBRO	Brucellosis Infectious Disease Ontology	Extension for brucellosis.	https://bioportal.bioontology.org/ontologies/IDOBRO
IDOMEN	Meningitis Infectious Disease Ontology	Extension for meningitis.	https://github.com/cedricicere/IDOMEN
BCIDO	Bacterial Clinical Infectious Disease Ontology	Clinical extension of bacterial disease ontology.	https://pmc.ncbi.nlm.nih.gov/articles/PMC4961784/
IDOMAL	Malaria Infectious Disease Ontology	Ontology for malaria.	https://bioportal.bioontology.org/ontologies/IDOMAL
IDOSCHISTO	Schistosomiasis Ontology	Ontology for schistosomiasis.	https://pubmed.ncbi.nlm.nih.gov/23920598/

Imported Ontologies

Namespace	Name	Description	Link
BFO	Basic Formal Ontology	Top-level ontology for organizing all entities in reality.	https://bioportal.bioontology.org/ontologies/BFO
OBO	Open Biological and Biomedical Ontology	Consortium promoting shared principles for ontology development.	http://obofoundry.org/
RO	Relations Ontology	Ontology of commonly used relations across OBO ontologies.	https://obofoundry.org/ontology/ro.html
OGMS	Ontology for General Medical Science	Foundational ontology for clinical entities.	https://bioportal.bioontology.org/ontologies/OGMS
GO	Gene Ontology	Ontology for biological processes, molecular functions, and cellular components.	https://bioportal.bioontology.org/ontologies/GO
PRO	Protein Ontology	Ontology describing protein-related entities.	https://bioportal.bioontology.org/ontologies/PRO
OBI	Ontology for Biomedical Investigations	Models biomedical investigations including protocols, instruments, etc.	https://bioportal.bioontology.org/ontologies/OBI
ChEBI	Chemical Entities of Biological Interest	Ontology of molecular entities focused on 'small' chemical compounds.	https://www.ebi.ac.uk/chebi/
NCIT	NCI Thesaurus	Ontology by the National Cancer Institute for biomedical terms.	https://ncithesaurus.nci.nih.gov/ncitbrowser/
MONDO	Mondo Disease Ontology	Unification of multiple disease ontologies.	https://bioportal.bioontology.org/ontologies/MONDO
FAO	Fungal Gross	Ontology for anatomical	https://bioportal.bioontology.org/ontologies/FAO

	Anatomy Ontology	structures of fungi.	ogy.org/ontologies/FAO
OPL	Ontology for Parasite Lifecycle	Ontology describing the life stages and processes of parasites.	https://bioportal.bioontology.org/ontologies/OPL
CLO	Cell Line Ontology	Ontology for cell lines used in biomedical research.	https://bioportal.bioontology.org/ontologies/CLO
FOODON	Food Ontology	Ontology covering food products, sources, and processes.	https://foodon.org/
VO	Vaccine Ontology	Ontology for vaccines and vaccination processes.	https://www.violinet.org/vaccineontology/
OMP	Ontology of Microbial Phenotypes	Ontology representing phenotypes of microbes.	https://bioportal.bioontology.org/ontologies/OMP
CMO	Clinical Measurement Ontology	Ontology describing clinical measurement data.	https://bioportal.bioontology.org/ontologies/CMO
COB	Core Ontology for Biology and Biomedicine	OBO effort to coordinate foundational terms across domain ontologies.	https://obofoundry.org/COB/
ENVO	Environment Ontology	Ontology for environmental entities and systems.	https://bioportal.bioontology.org/ontologies/ENVO
APOLLO-SV	Apollo Structured Vocabulary	OWL-based ontology for epidemic simulations and public health applications.	https://bioportal.bioontology.org/ontologies/APOLLO-SV