# 1.10.2 Ontology Release Notes

#### Introduction

This document contains the release notes for eagle-i Resource Ontology (ERO) version 1.10.2, released in conjunction with eagle-i application version 3.1.1.

#### General

- Label changes
- New resource types
- New properties
- Obsoleted properties

#### Term Requests

- New instrument types
- New techniques
- New disease terms
- New organism types
- New programming language terms
- New data type
- New algorithm terms
- New data format terms

#### General

#### Label changes

- Genome-corrected induced pluripotent stem cell line' class is now 'Genome-modified induced pluripotent stem cell line'. Definition has been broadened to encompass any iPS cell line having a genome that has been modified from its native state.
- o 'Related NCBI Record' field is now called 'Related Dataset'. Definition has been broadened to encompass datasets from any source.
- o 'Induction by genomically integrated transformant' technique is now 'Genomic integration/retroviral induction'.
- 'Induction by episomal transformant' technique is now 'Episomal plasmid induction'.
- o 'Induction by labile transformant' technique is now 'Induction by mRNA and inhibitory RNAs'.
- o 'Induction by chemical transformant' technique is now 'Chemical induction'.
- o 'Study Type' field is now 'Type of QC Performed'.
- Orrected typo in 'Fourier transform infrared spectrometer'.
- Correct typo in 'Impedance analyzer'.

## New resource types

 Added 'Resource Collection' class as a new secondary resource type. Can only be added from within a primary resource record, via the 'Part of Collection' field. Collections can consist of any number or combination of resource types from the same or multiple owning organizations.

# New properties

- Added the 'ClinVar ID' field to Genetic alteration records. Use to link specific alterations to the corresponding record in the NCBI ClinVar database.
- Added the 'Part of Collection' field to all primary resource types (reagents, instruments, biological specimens, research opportunities, databases, software, documents, human studies, organisms, and services) to connect to the corresponding Resource Collection record.
- Added inverse 'Included Resource' (has\_collection\_member) field to link Resource Collection records to related resources in search display panels. Note that this field is hidden in the SWEET and only visible in the ontology browser.
- Added inverse 'Derived Biological Material' (derived\_into\_biological\_material) field to link Human Subjects to related biospecimens, primary cell lines, and stem cell lines in search display panels. Note that this field is hidden in the SWEET and only visible in the ontology browser.
- Removed data model exclude from inverse 'Family Member' (has\_family\_member) field to link Family records to human subjects in search display panels. Note that this field is hidden in the SWEET and only visible in the ontology browser.

### · Obsoleted properties

- Removed the 'Inventory System Format' field from laboratory records.
- The production\_funded\_by (ERO\_0002096) property has been merged and replaced by 'funded\_by (ERO\_0000597). Change should be largely invisible to users, as both properties displayed with the same 'Funded by' field name. Requires data migration.

### **Term Requests**

### New instrument types

- Optical tweezers
- Body fat meter
- Plethysmograph
- O Bone densitometer

### · New techniques

- · Text mining technique
- Sendai virus induction
- TMT quantitation
- SILAC labeling
- Mass spectrometry labeling
- o Isobaric labeling
- o Luciferase assay

- Data security technique
- Functional Magnetic Resonance Imaging
- Recombinase-mediated cassette exchange
- o body composition measurement
- o bioelectrical impedance analysis
- o air displacement plethysmography
- o meal preparation

### · New disease terms

- Male Urogenital Diseases
- Genital Diseases, Male
- o Prostatic Diseases
- o Prostatic Hyperplasia
- Testicular diseases
- o Proteinuria
- Angina Pectoris
- Anxiety Disorders
- Child Development Disorders, Pervasive
- Autistic Disorder
- o Bipolar Disorder
- Mood Disorders
- o Heroin Dependence
- Obsessive-Compulsive Disorder
- o Panic Disorder
- o Seizures
- Deafness
- o Eating Disorders
- Diplopia
- Dyslexia
- Gastrointestinal Hemorrhage
- Gastroparesis
- Heart Block
- Intervertebral Disc Displacement
- Hyperinsulinism
- Kidney Calculi
- Tachycardia
- O Delirium, Dementia, Amnestic, Cognitive Disorders
- o Amnesia
- o Amnesia, Transient Global
- Neuralgia, Postherpetic
- Sleep Apnea Syndromes
- Sleep Disorders
- Vertigo
- o Purpura, Thrombocytopenic
- O Purpura, Thrombocytopenic, Idiopathic
- Deaf-Blind Disorders
- O Vision Disorders
- o Blindness
- Wolfram Syndrome
- Hearing Disorders
- Hearing Loss
- Trimethylaminuria
- Depressive disorder
- Cysts
- Ovarian Cysts
- Polycystic Ovary Syndrome
- o Prader-Willi Syndrome
- Neurobehavioral Manifestations
- o Intellectual Disability
- Mental Retardation, X-Linked
- o Rubinstein-Taybi Syndrome
- Cri-du-Chat SyndromeDe Lange Syndrome

# New organism types

- Neisseria meningitidis
- Natronomonas
- o Nematostella vectensis

# New programming language terms

- S language
- Excel programming language

### New data type

- Failure time data
- o Reference genome data

### New algorithm terms

Random forest algorithm

### New data format terms

- Alignment format
- ° BAM
- VCF