assay

replicate
assay_id [PK][FK]
sample_composition
sample_type
molecule_type
sample_purification
markers
isolation_protocol
cell_count
protocol
pretreatment
fragmentation_method
reagent
reagent_source
reagent_catalog_number
reagent_batch_number
selection
tracks_id [FK]
library_id [FK]
allignment_id [FK]

file
id [PK: serial]
accession_number [UNIQUE: text]
assay_id [FK]
uri [UNIQUE: text]
doi [UNIQUE: text]
ark [UNIQUE: text]
description [text]
source_filename [text]
size_in_bytes [int]
checksum_type [V:TBD]
checksum [text?]
file_format [V:TBD]
creation_date [date]
submission_date [date]

enhancer
assay_id [PK][FK]
original_species_assembly [text]
original_species_chromosome [text]
original_species_start [int]
original_species_end [int]
visualization_assembly [text]
visualization_assembly_chromosome [text]
visualization_assembly_start [int]
visualization_assembly_end [int]
other_assembly [text]
other_assembly_chromosome [text]
other_assembly_start [int]
other_assembly_end [int]
tested_sequence [text]
tested_sequence_flag [text]
list_of_closest_genes [V]
external_database_name [text]
external_id [text]
list_of_anatomical_structures [V]
lab_internal_reference [text]

imaging
assay_id [PK][FK]
modality (V)
equipment_model (V)
intent (V)
caption
dimensionality
voxel_x
voxel_y
voxel_z
image_size_x
image_size_y
image_size_z

library
id [PK]
library_type
single_paired_end_sequencing
library_adapters
pcr_cycles
library_yield
size_selection
platform

alignment
id [PK]
aligner
aligner_version
aligner_flags
reference_genome
transcriptome_model
sequence_trimming
trimmed_seqs
trimming_method
duplicate_removal
prealign_seq_removal

tracks
id [PK]
format
software
version
settings

study

publication
id [PK: serial]
investigation_id [FK]
study_id [FK]
pubmed_id [UNIQUE: text]
doi [UNIQUE: text]
title [text]
status [FK]

assay
id [PK:serial]
accession_number [UNIQUE: text]
study_id [FK]
name
description
measurement_type (V:OBI)
technology_type (V:OBI)
technology_platform (V:OBI)

study
id [PK: serial]
accession_number [PK: text]
title [text]
description [text]
project [FK]
experiment_type [V]
data_type [V]
submission_date [date]
public_release_date [date]
local_identifier [text]

project
id [PK: serial]
name [text]
principal_investigator [FK]
funding [text]

person
id [PK: serial]
//orcid [UNIQUE: text]
last_name [text]
first_name [text]
mid_initials [text]
email [text]
phone [text]
fax [text]
address [text]
affiliation [FK]

sample

zebrafish_sample
assay_id [PK][FK]
local_identifier
gene (V)
genotype (V)
specimen (V)
phenotype (V)
anatomy (V)
stage (V)
strain (V)
gender (V)
origin (V)
mutation (V)
collection_date

mouse_sample
assay_id [PK][FK]
local_identifier
gene (V)
genotype (V)
specimen (V)
phenotype (V)
anatomy (V)
stage (V)
strain (V)
gender (V)
litter (V)
origin (V)
mutation (V)
collection_date

human_sample
assay_id [PK][FK]
local_identifier
gene (V)
genotype
specimen (V)
phenotype (V)
anatomy (V)
strain
gender
mutation
embryonic_stage (V)
collection_date
clinical [FK]

clinical
id [PK: serial]
age
height
weight
head_circumference
OMIM_diagnosis (V:OMIM)
OMIM_code (V:OMIM)
ICD10_diagnosis (V:ICD10)
ICD10_code (V:ICD10)
molecular_cytogenetic_diagnosis (V)
diagnostic_evidence_notes