

automated study of YER152C function

has text representation:

automated study: automated study of yer152c function
has domain of study: functional genomics
has investigator = robot scientist Adam

has goal: 'To test the function of an enzyme with enzymology'
has organism of study: *Escherichia coli*
has ncbi taxonomy ID: 562
has hypotheses-set: a set of hypotheses
has research hypothesis: 'The enzyme YER152C encodes a protein that is involved in the regulation of gene expression'
has negative hypothesis: 'The enzyme YER152C does not encode a protein that is involved in the regulation of gene expression'
encodes(yer152c, enzyme)
has cycle 1 of study: 'To test the function of an enzyme with enzymology'
has study result: the enzyme YER152C encodes a protein that is involved in the regulation of gene expression
highest accuracy: 0.95
proportion of correct results: 0.95
has study conclusion: 'The enzyme YER152C encodes a protein that is involved in the regulation of gene expression'

has datalog representation:

```
a:automated_study(automated_study_of_yer152c_function).  
a:hypotheses-set(X) :- a:research_hypothesis(X).  
a:cycle_of_study(X) :- a:cycle_1_of_study_(X).  
a:hypotheses-set(X) :- a:negative_hypothesis(X).  
a:domain_of_study(Y) :-  
domain_of_study(X,Y).  
a:investigator(Y) :- a:automated_study_of_yer152c_function  
investigator(X,Y).  
a:goal(Y) :- a:automated_study_of_yer152c_function  
goal(X,Y).  
a:organism_of_study(Y) :-  
organism_of_study(X,Y).  
a:has_organism_of_study(X,Y) :-  
has_organism_of_study(X,Y).  
a:hypotheses-set(Y) :- a:research_hypothesis(Y).  
a:has_hypotheses-set(X,Y) :-  
has_hypotheses-set(X,Y).  
a:cycle_of_study(Y) :- a:cycle_1_of_study_(Y).  
a:has_cycle_of_study(X,Y) :-  
has_cycle_of_study(X,Y).  
a:study_result(Y) :- a:automated_study_of_yer152c_function  
study_result(X,Y).  
a:has_study_result(X,Y) :-  
has_study_result(X,Y).  
a:study_conclusion(Y) :-  
study_conclusion(X,Y).  
a:has_study_conclusion(X,Y) :-  
has_study_conclusion(X,Y).  
a:domain_of_study(X) :-  
domain_of_study(X).  
a:investigator(X) :- a:automated_study_of_yer152c_function  
investigator(X).  
a:goal(X) :- a:to_test_the_function_of_an_enzyme_with_enzymology  
goal(X).  
a:organism_of_study(X) :-  
organism_of_study(X).  
a:study_result(X) :-  
study_result(X).  
a:the_strength_of_evidence(X) :-  
the_strength_of_evidence(X).  
a:study_conclusion(X) :-  
study_conclusion(X).
```

has OWL representation:

```
<?xml version="1.0"?>  
<rdf:RDF xmlns="http://www.owl-  
ontologies.com/Ontology1204198571.owl#">  
  <owl:Class rdf:ID="goal"/>  
  <owl:Class rdf:ID="study_result"/>  
  <owl:Class rdf:ID="ncbi_taxonomy_ID"/>  
  <owl:Class rdf:ID="cycle_of_study"/>  
  <owl:Class rdf:ID="negative_hypothesis">  
    <rdfs:subClassOf>  
      <owl:Class rdf:ID="hypotheses-set"/>  
    </rdfs:subClassOf>  
  </owl:Class>  
  <owl:Class rdf:ID="domain_of_study"/>  
  <owl:Class rdf:ID="organism_of_study"/>  
  <owl:Class rdf:ID="cycle_1_of_study_">  
    <rdfs:subClassOf rdf:resource="#cycle_of_study"/>  
  </owl:Class>  
  <owl:Class rdf:ID="automated_study">  
    <rdfs:subClassOf>  
      <owl:Restriction>  
        <owl:someValuesFrom rdf:resource="#goal"/>  
        <owl:onProperty>  
          <owl:ObjectProperty rdf:ID="has_goal"/>  
        </owl:onProperty>  
      </owl:Restriction>  
    </rdfs:subClassOf>  
    <rdfs:subClassOf>  
      <owl:Restriction>  
        <owl:someValuesFrom rdf:resource=  
"#organism_of_study"/>  
        <owl:onProperty>  
          <owl:ObjectProperty  
rdf:ID="has_organism_of_study"/>  
        </owl:onProperty>  
      </owl:Restriction>  
    </rdfs:subClassOf>  
  </owl:Class>  
  .....  
</rdf:RDF>
```