BCNF Relational Schema

Researcher

Researcher(
 ResearcherID,
 name,
 email_address,
 ORCID_identifier,
 institution,
 department,
 academic_title,
 lab_name
)

Primary Key: ResearcherID
 Alternate Keys: email_address, ORCID_identifier

Publication

Publication(
 PublicationID,
 title,
 abstract,
 publication_year,
 publication_date,
 digital_object_identifier,
 venue_name,
 publication_type,
 status
)

Primary Key: PublicationID
 Alternate Key: digital_object_identifier

Role

Role(
 RoleID,
 role_name,
 role_description,
 role_category,
 status
)

Primary Key: RoleID
Alternate Key: role_name

Topic

Topic(
 TopicID,
 topic_name,
 topic_description,
 topic_category
)

Primary Key: TopicID
Alternate Key: topic_name

Contribution

Contribution(
 ResearcherID,
 PublicationID,
 RoleID,
 contribution_notes,
 date_recorded,
 verification_status
)

Primary Key: (ResearcherID, PublicationID, RoleID)

Foreign Keys:
 ResearcherID references Researcher(ResearcherID)
 PublicationID references Publication(PublicationID)
 RoleID references Role(RoleID)

PublicationTopic

PublicationTopic(
 PublicationID,
 TopicID,
 date_associated
)

Primary Key: (PublicationID, TopicID)

Foreign Keys:
 PublicationID references Publication(PublicationID)
 TopicID references Topic(TopicID)

Administrator

Administrator(
 AdminID,
 name,
 email_address,
 system_role,
 account_status
)

Primary Key: AdminID
 Alternate Key: email_address

Audit

Audit(
 AdminID,
 PublicationID,
 audit_timestamp,
 audit_notes
)

Primary Key: (AdminID, PublicationID, audit_timestamp)

Foreign Keys:
 AdminID references Administrator(AdminID)
 PublicationID references Publication(PublicationID)