

Note: PK: Primary key, FK: Foreign Key

Entity	Attributes	Relationships	Constraint	Note
Research Grant Council		<ul style="list-style-type: none"> - Provide grants to researchers for research projects - Run Grant Competition - Grant Application - Grant Reviewers - Awarded Application - Schedule Meeting 		
Researcher	<ul style="list-style-type: none"> - First name - Last name - Email address (PK)(FK) - Organization/University - Reviewer 	<ul style="list-style-type: none"> - Submits Grant Proposal to Research Grant Council - Participate in Meetings - Reviewing to Reviewer Assignment 	<ul style="list-style-type: none"> -Reviewing conflict: +Researchers in the same department cannot review the same Grant Proposal +Researchers who have co-authored a paper in the past 2 years cannot review the same Grant Proposal 	-Reviewing has a deadline, submission status
Reviewing table	<ul style="list-style-type: none"> -Deadline - CallForGrantProposalNumber -SubmissionStatus - Reviewer_email 	-Is a weak entity of the Researcher entity	<ul style="list-style-type: none"> - Reviewers are chosen from the non- 	-Constraints: Max number of CallForGrantProposalNumber for each Reviewer_email is 3

			conflict of reviewer s	
Co- authored	-Conflict_id (PK) -Reviewer/Researcher email (PK)	- Researcher's email is from Researcher entity		
Conflict		-When researchers are in the same department -In the Co- author table		
Call for Grant Proposal (FK)	- Number (PK) - Title - Application deadline - Short description - Area - Current status of competition	- Part of Grant Competition - Associated with Researcher - Is discussed in Meetings		-Status of the competition: (open/closed)
Submitted Grant Proposal	- Number (PK) - Requested amount - Call For Grant Proposal Number(FK) - Principal investigator - Collaborators/researchers - Application status	- Is Submitted to call for Grant Proposal - Can be Awarded	-Number of principal researcher: 1	- Application status (submitted, awarded, not awarded)
Award (weak entity of Grant Proposal)	-Date -Amount			

Meeting (weak entity of Call for Grant Proposal)	-Date	- Discusses Grant Proposals - Reviewers participate in		
---	-------	--	--	--

BCNF:

Researcher (In BCNF)

Email → First and last names BCNF: yes, email is a key

Email → Organization/University BCNF: yes, email is a key

Email → Reviewer | Is BCNF: yes, email is a key BCNF: yes, email is a key

First and last name, Organization/University → Email BCNF: yes, F&L name + ORG is a key

Reviewer assignment:

Number (FK), Grant competition number → Reviewer number

Number (FK), Grant competition number → Submission status

Call for grant proposal

Number → Title

BCNF: yes, Number is a key

Number → Application deadline

BCNF: yes, Number is a key

Number → Current status of competition

BCNF: yes, Number is a key

Number → Area of interest

BCNF: yes, Number is a key

Number → Short description

BCNF: yes, Number is a key

Grant Proposal

Number → Application status

BCNF: yes, Number is a key

Number → Request Amount

BCNF: yes, Number is a key

Number → Principal investigator

BCNF: yes, Number is a key

Award

Number, Date → Amount

Meeting

Number, Date → Date

