Scholia as an interface to grant information

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Scholia is a webservice from https://tools.wmflabs.org/scholia/ and a Python package from https://github.com/fnielsen/scholia.

The webservice generates overview of science with Wikidata Query Service and is built with the Flask web framework, HTML, Bootstrap, Javascript and templated SPARQL.

For researcher profiles, scientometrics, bibliographic reference management, information discovery (find relevant papers, scientific meetings, researchers, funding opportunities, ...).
Scholia and grants

Scholia project aspect

Egon Willighagen branch from April 2018 for a project aspect.

Slightly extended and now available at https://tools.wmflabs.org/scholia/project/

Map of participants, project timeline, published works associated with the project, topics, authors, publications per year.
Scholia and grants

Scholia timeline in project aspect

Project timeline for eNanoMapper at https://tools.wmflabs.org/scholia/project/Q27990087.
Scholia and grants

Scholia sponsor aspect

For some time, Scholia has had a sponsor aspect relying mostly on the P859 (sponsor) Wikidata property.

It allows us to make a co-sponsor list for each sponsor: which other funders also funded the research behind research papers (or other items).

Here for the **Lundbeck Foundation**
**Wikidata data model**

What data model have we used or could we use?
**Wikidata properties from projects**

<table>
<thead>
<tr>
<th>CORDIS</th>
<th>Wikidata property</th>
</tr>
</thead>
<tbody>
<tr>
<td>(project number)</td>
<td>P3400 (CORDIS Project ID)</td>
</tr>
<tr>
<td>Participants (organization)</td>
<td>P527 (has part), P710 (participant),</td>
</tr>
<tr>
<td>(people involved)</td>
<td>(not sure anyone has used that)</td>
</tr>
<tr>
<td>(Principal Investigator)</td>
<td>P1037 (manager/director)</td>
</tr>
<tr>
<td>From, to</td>
<td>start time, end time or P571 (inception), P576 (dissolved)</td>
</tr>
<tr>
<td>Total cost</td>
<td>P2769 (budget)</td>
</tr>
<tr>
<td>EU contribution</td>
<td>P2769 (budget) with qualifier?</td>
</tr>
<tr>
<td>Topics</td>
<td>P921 (main subject) or P101 (field of work), “interested in” or “studies”?</td>
</tr>
</tbody>
</table>
Further issues

“Funding scheme” and “Funded under”

Label: Should it be the long title or the short name

“objective of project or mission” P3712.

CORDIS: Coordinator (organization), Administrative contact, “coordinated in” country. Headquarter location?

Wikidata “classes”: Project, Research project, ERC Starting grant?

Further properties for projects on Wikidata can be explore with SQID: https://tools.wmflabs.org/sqid/#/view?id=Q170584

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Springer has defined a Grant class in their SciGraph ontology available at GitHub. The part of the ontology file for Grant is:

```
@prefix sg: <http://scigraph.springernature.com/ontologies/core/> .
...
sg:Grant
    sg:namespace "grants" ;
    a owl:Class ;
    rdfs:comment "The :Grant class represents a funding award for ... a research project as a contract."@en ;
    rdfs:isDefinedBy
        <http://scigraph.springernature.com/ontologies/core/> ;
    rdfs:label "Class: Grant"@en ;
rdfs:subClassOf sg:Contract .
```

This class is supported by the ontology classes: fundingAmount, fundingCurrency, hasFundedPublication, hasFundingOrganization, hasPrincipalInvestigator, hasRecipientOrganization.
Scholia and grants

DBpedia’s Research project

http://mappings.dbpedia.org/server/ontology/classes/ResearchProject

fundedBy, projectBudgetFunding, projectBudgetTotal, projectCoordinator (range is Organization), projectEndDate, projectKeyword, projectObjective, ProjectParticipant (range is Organization), projectReferenceID, projectStartDate, projectType (e.g., STREP, NoE, ...).

DBpedia apparently has a limited number of projects:

SELECT ?project WHERE {
  ?project a / rdfs:subClassOf* <http://dbpedia.org/ontology/Project>
}

does not return many results, e.g., http://dbpedia.org/page/ECOTool.
Questions

We have no grants but projects in Scholia. Should we have grants (instead)? And what is the difference between a grant and a project (a grant is a contract according to SciGraph)

Can and should we link to Springer’s SciGraph instances?

Should “Sponsor” property be transitive? Is a paper funded by a project that is funded by a funder?

Are we abusing the sponsor Wikidata property. It seems it originally targeted at athletes and it is set as equivalent with http://schema.org/sponsor.