Worked ontology example using Person, Role, and Project instead of Grant

A question has come up in the VIVO community about using Project instead of Grants – when a VIVO institution may not receive grants but does want to track projects.

In the VIVO-ISF ontology, a Grant is a subclass of vivo:Relationship, since it represents the agreement between a funding organization and a receiving organization, with the investigator roles usually also specified.

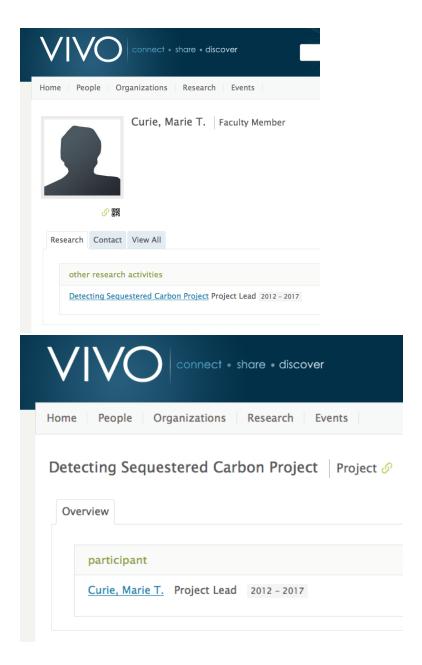
A Project, however, is a subclass of Project, which in turn is a subclass of bfo:Process. The project is the activity undertaken or the investigation, not just the agreement.

The properties used are therefore slightly different to connect a Person, Role, and Project vs. a Person, Role, and Grant, as indicated on the VIVO-ISF 1.6 relationship diagrams: Grant page.

Example

We have a researcher, Marie Curie, who has the Project Lead role on a Project. In the VIVO front end display, there appears to be a direct relationship between the person and the project, and an inverse relationship in return. The role and date information appear as modifiers to the direct relationship, but are maintained through the ontology as an intermediate Role object bearing the title of the role ("Project Lead") and the date range.

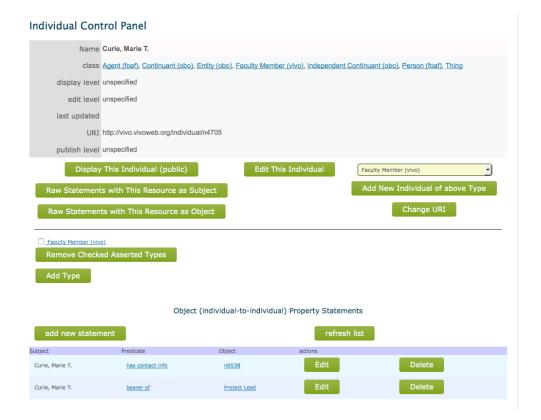
Public display view



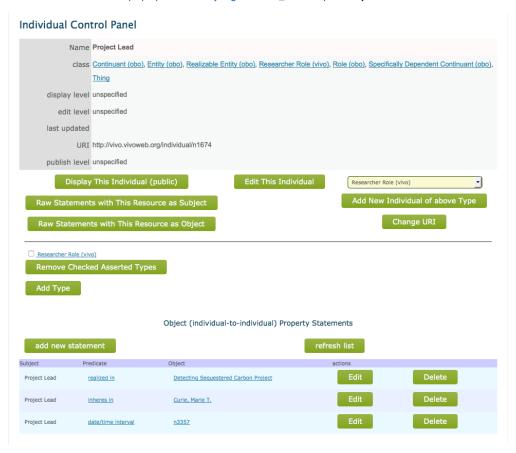
Site admin view

This can be seen more clearly in the back-end editors view (when logged in with Site Admin privileges):

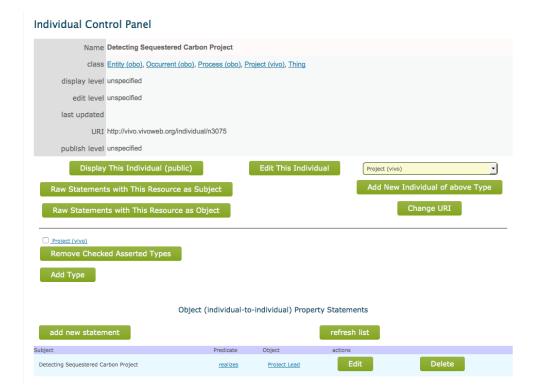
Note in the listing of object property statements at the bottom of the image that the Person has a "bearer of" relationship (http://purl.obolibrary.org/obo/RO_0000053) to the Role – and no direct relationship to the Project.



On the intermediate Role page, the relationships in both directions may be seen: the Role "inheres in" (http://purl.obolibrary.org/obo/RO_0000052) the Person and is "realized in" (http://purl.obolibrary.org/obo/BFO_0000054) the Project.



Finally, from the Project perspective, only the return (inverse) relationship to the Role is seen: the Project "realizes" (http://purl.obolibrary.org/obo/BFO_0000055) the Role.



The triples underneath

For the Person (http://vivo.vivoweb.org/individual/n4705):

pred	obj	graph
<pre> <a href="http://www.us.org/199</td><td><pre>http://vivo.vivoweb.org/individual/nf6538">http://vivo.vivoweb.org/individual/nf6748 http://vivoweb.org/indiology/coref#eaultykmeber> http://wivoweb.org/indiology/coref#eaultykmeber> http://wivoweb.org/indiology/coref#eaultykmeber>http://wivoweb.org/indiology/coref#eaultykmeber http://wivoweb.org/indiology/coref#eaultykmeber </pre>		

For the Role (http://vivo.vivoweb.org/individual/n1674):

pred	obj	graph
<pre></pre>	http://vivo.vivoweb.org/individual/n3075> http://vivo.vivoweb.org/individual/n3075> http://vivo.vivoweb.org/individual/n3705> http://vivo.vivoweb.org/individual/n3705> http://vivoweb.org/ontology/coref/Researcherlole> http://vivoweb.org/ontology/coref/Researcherlole> http://purl.obolibrary.org/obb/RFO_0000001> http://purl.obolibrary.org/obb/RFO_000001> http://purl.obolibrary.org/obb/RFO_000001> http://purl.obolibrary.org/obb/RFO_000001> http://purl.obolibrary.org/obb/RFO_000002> http://purl.obolibrary.org/obb/RFO_000002> http://purl.obolibrary.org/obb/RFO_000002> http://purl.obolibrary.org/obb/RFO_000002> http://purl.obolibrary.org/obb/RFO_000002> http://purl.obolibrary.org/obb/RFO_000002>	<pre></pre>

And finally, for the Project (http://vivo.vivoweb.org/individual/n3075):

pred	obj	graph
<pre>chtp://purl.obolibrary.org/obo/BRO_0000055 chttp://www.w3.org/199/00/22-rdf-ayntax-na#type> chttp://www.w3.org/1999/00/22-rdf-ayntax-na#type> chttp://www.w3.org/1999/00/22-rdf-ayntax-na#type> chttp://www.w3.org/1999/00/22-rdf-ayntax-na#type> chttp://www.w3.org/1999/00/22-rdf-ayntax-na#type> chttp://www.w3.org/1999/00/22-rdf-ayntax-na#type> chttp://www.w3.org/1999/00/22-rdf-ayntax-na#type> chttp://www.w3.org/1999/00/22-rdf-ayntax-na#type></pre>	<pre>chttp://vivo.vivoeeb.org/individual/n1674> chttp://vivoeb.org/ontology/core8Project></pre>	<pre>chttp://witro.mannlib.cornell.ddu/default/vitro-kb-2> chttp://witro.manlib.cornell.ddu/default/vitro-kb-2> chttp://witro.manlib.cornell.ddu/default/vitro-kb-2> chttp://witro.mannlib.cornell.ddu/default/vitro-kb-inf> chttp://witro.mannlib.cornell.ddu/default/vitro-kb-inf> chttp://witro.mannlib.cornell.ddu/default/vitro-kb-inf> chttp://witro.mannlib.cornell.ddu/default/vitro-kb-inf> chttp://witro.mannlib.cornell.ddu/default/vitro-kb-inf> chttp://witro.mannlib.cornell.ddu/default/vitro-kb-inf></pre>