

Integrating the UMLS Ontology into VIVO for Linking Biomedical Scientists

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The NIH-sponsored VIVO platform is gaining increasing participation at academic centers. Semantic data triples yield higher-quality results than traditional relational datasets when mining faculty profiles and conducting searches of research interests. The exponential increase in power afforded by RDF is fueling the growth in this field, and there are ever-increasing semantic ontology options into which traditional-format data can be converted.

The wealth of source-specific ontologies, however, has created at least two limiting factors:

1. Research interests are not currently normalized to a common ontology across VIVO installations;
2. There is no universal ontology for knowledge across all domains of science.

The tools we develop in this project will leverage VIVO by allowing sites to normalize research interests. This will provide a more complete and coherent array of results during keyword searches, boosting the effectiveness of the VIVO profile and search functions.