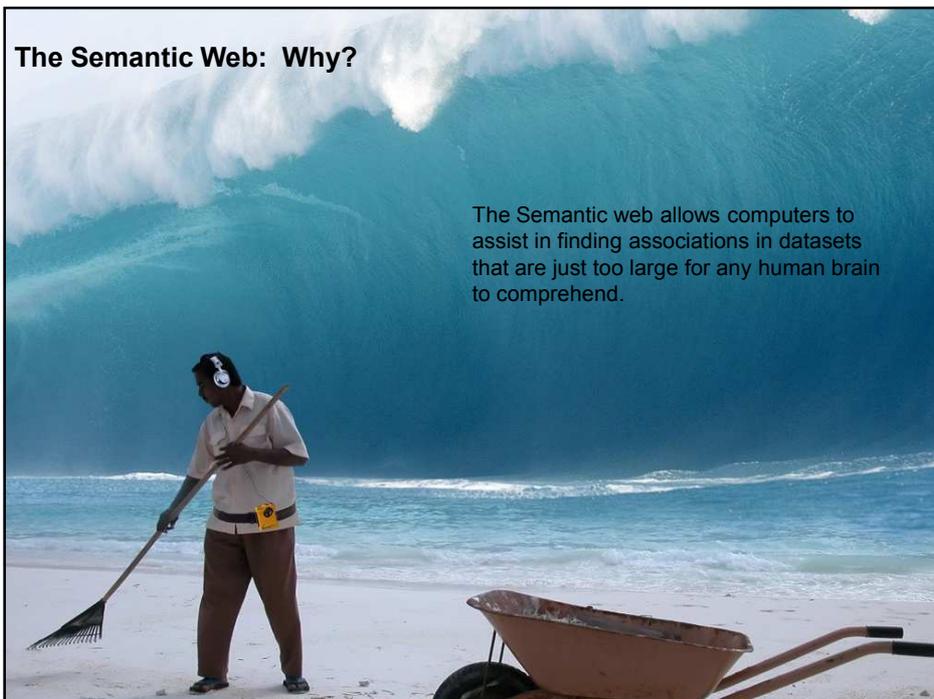


The Semantic Web & the Emerging Role of Nanopublications

London,  Workshop, April 2012,
Open PHACTS
OpenPharmacologicalSpace

The Semantic Web: Why?

The Semantic web allows computers to assist in finding associations in datasets that are just too large for any human brain to comprehend.



The Purpose of Nanopublication:

- (1) Publishing machine-readable assertions
- (2) bottom up standard setting/multiple standards
- (3) Fine grained attribution to authors
- (4) Rapid dissemination and sharing of data

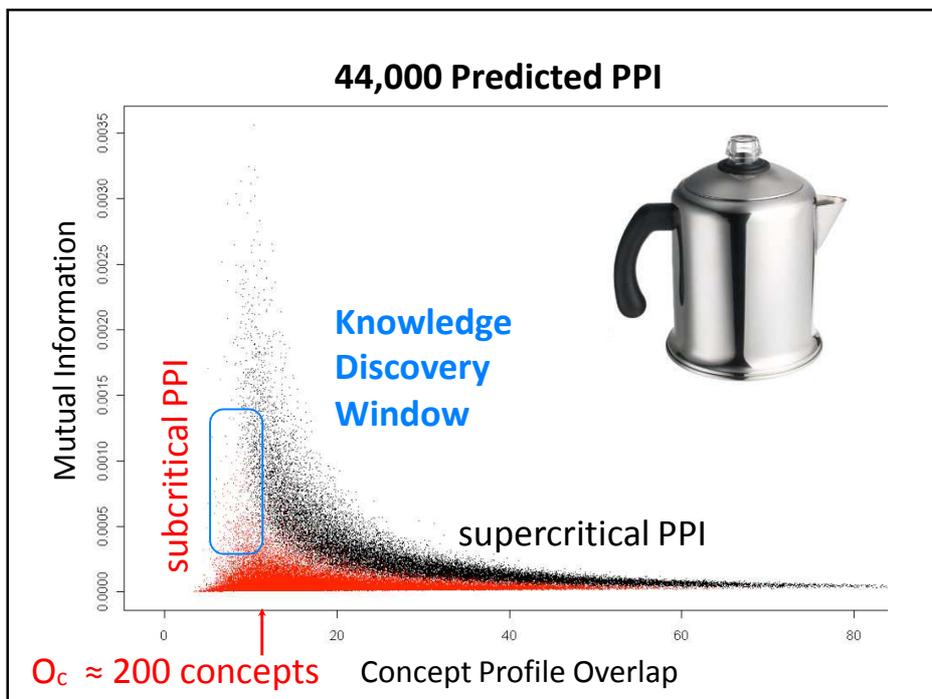
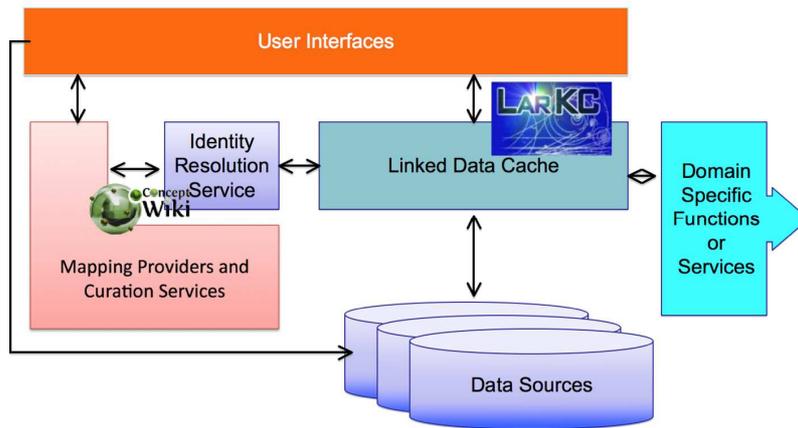
<HDAC1> <interacts with> <PARVB>

<http://purl.uniprot.org/uniprot/Q13547>
<http://conceptwiki.org/index.php/Concept:e6559...>
<http://bio2rdf.org/geneid:29780>

The image displays three overlapping web browser screenshots illustrating the integration of biological data through nanopublication. The top-left screenshot shows the UniProtKB entry for HDAC1 (Q13547), including its name, gene names, and protein attributes. The top-right screenshot shows the Bio2RDF entry for PARVB (geneid:29780), displaying its identifier and various RDF predicates. The bottom-center screenshot shows a ConceptWiki page for the 'interacts with' concept, featuring a definition, navigation tools, and a ChemSpider chemical structure for beta-D-glucopyranose.

Open PHACTS

- Find all oxidoreductase inhibitors active < 100nM in both human and mouse
- Find all drugs active against that target.-- Find all active compounds on a given target with the relevant assay data



The Anatomy of Nanopublication:

