#### QueryMed

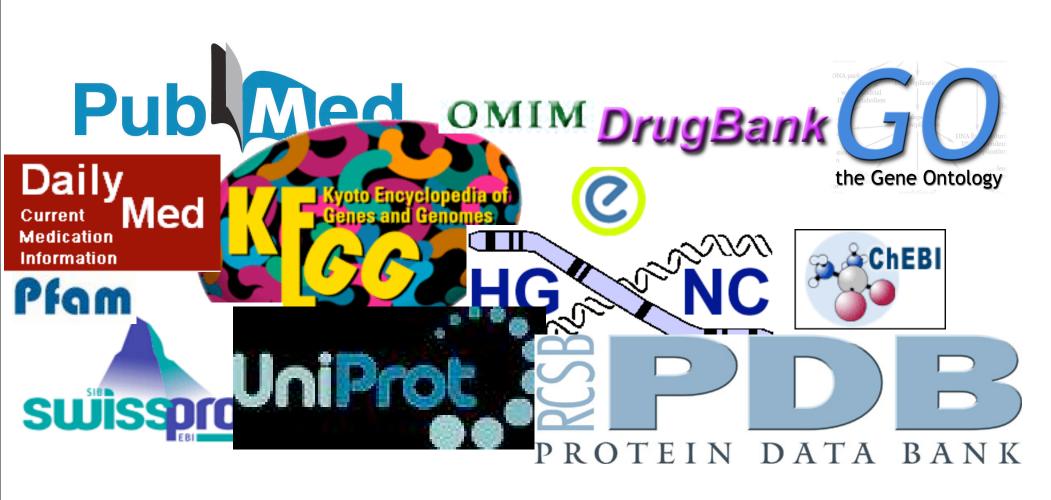
### An Intuitive Federated SPARQL Query Builder for Biomedical RDF Data

Oshani Seneviratne and Rachel Sealfon

## Semantic Web: a global DB system

Relational Databases	Semantic Web
record	RDF node
field (column name)	RDF property type
record field (table cell)	value
SQL	SPARQL

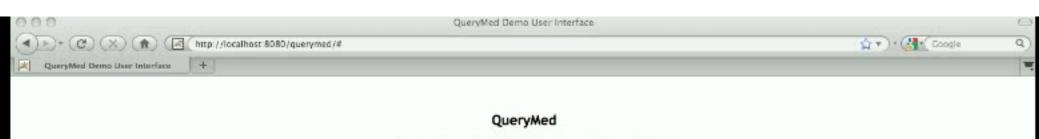
# The biomedical domain: an early semantic web success



#### SPARQL query syntax: nonintuitive for physicians/ biologists

```
SELECT distinct ?disease WHERE {
{?x < http://www.w3.org/2000/01/rdf-
schema#label> ?disease
FILTER regex(?disease, "coronary artery
disease", "i"). ?x < <a href="http://www4.wiwiss.fu-">http://www4.wiwiss.fu-</a>
berlin.de/diseasome/resource/diseasome/class>
<http://www4.wiwiss.fu-berlin.de/diseasome/
resource/diseaseClass/Cardiovascular>}
UNION { ?x < < http://www4.wiwiss.fu-berlin.de/
diseasome/resource/diseasome/associatedGene>
< http://www4.wiwiss.fu-berlin.de/diseasome/
resource/genes/ABCA1>.}
```

### Solution: QueryMed!



Query Constructor and RDF Data Visualizer for Biomedical Data

Enter a term to query bio-medical data sources for structured information: (For e.g. You can enter dieseases like: coronary artery disease, fever OR drugs like: Tylenol, isosorbide, etc.)



