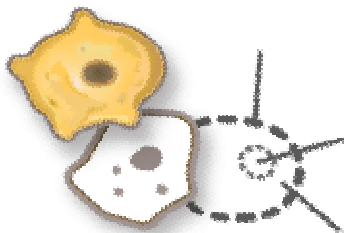# Big Data and Semantic Web meet Applied Ontology

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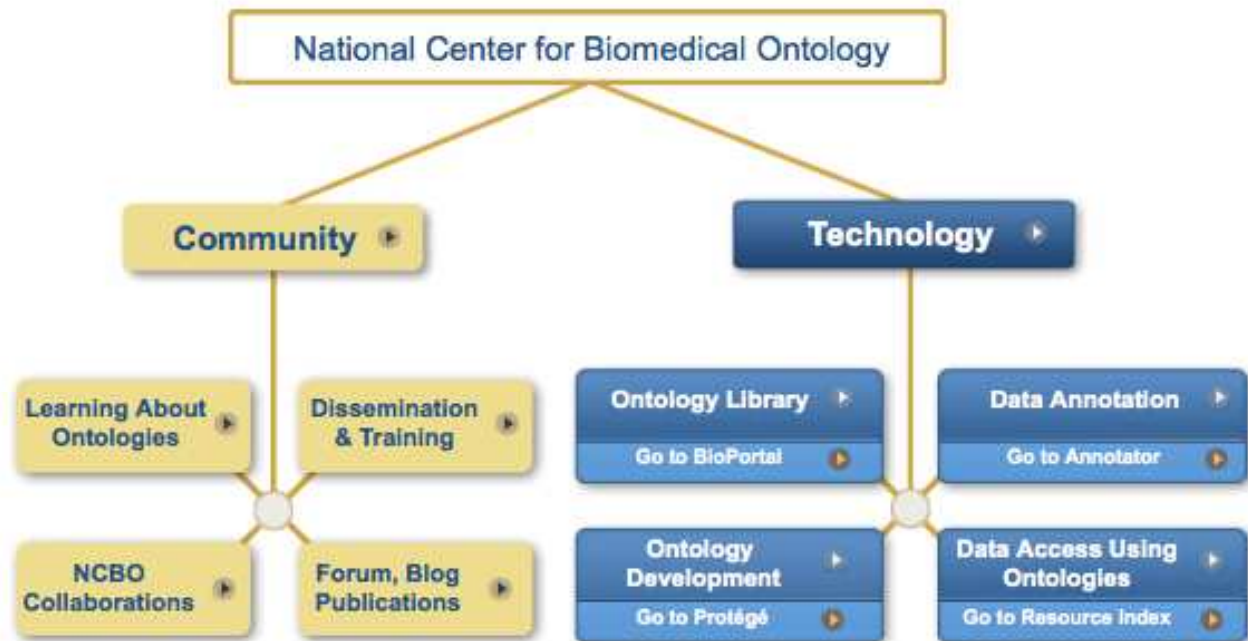
THE NATIONAL CENTER FOR
BIOMEDICAL ONTOLOGY

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Of Current Interest

▸ **News**: NCBO has issued a call for new DBPs

▸ **News**: NCBO wins 2nd place in the Health Data Platform Metadata Challenge

▸ **Webinar**: May 15, 10am PDT, James Malone, European Bioinformatics Institute

▸ **Recent Publication**: LePendu P, et al. (2013): Pharmacovigilance Using Clinical Notes

▸ **NCBO Webinar Announcements - Subscribe**

▸ **NCBO Software Support - Mailing List Archive**

▸ More News & Events

National Center for Biomedical Ontology

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Technology ▸

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Dissemination & Training ▸

NCBO Collaborations ▸

Forum, Blog Publications ▸

Ontology Library ▸
Go to BioPortal ▸

Data Annotation ▸
Go to Annotator ▸

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NCBO User Profile
Andrew Buckler
BBMSC

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Video
Learn about Biomedical Ontologies. Watch a series of introductory videos.

Browse ontologies in BioPortal!
BioPortal allows users to browse, search and visualize ontologies.

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Were we serious about the Semantic Web?

- Personalized agents that could
  - Book flights
  - Shop for clothes
  - Manage our "smart homes"
  - Update our medical records
- A technology, like the Web itself, that would grow from the grassroots

NIH Big Data to Knowledge (BD2K)

Advancing Health and Discovery through Big Data

FUNDING OPPORTUNITIES & NOTICES   WORKSHOPS   NEWS   ABOUT BD2K   FAQs

The NIH Big Data to Knowledge (BD2K) announces funding opportunity for

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WORKSHOPS

Frameworks for Community-Based Standards Efforts
September 25 - 26, 2013

More Workshops >

NEWS HIGHLIGHT

- **NIH Names Dr. Philip E. Bourne First Associate Director for Data Science**
  December 9, 2013

- **NIH commits $24 million annually for Big Data Centers of Excellence**
  July 22, 2013

- **NIH to recruit Associate Director for Data Science**
  January 10, 2013

- **NIH proposes critical initiatives to sustain future of U.S. biomedical research**
  December 7, 2012

More News >

The mission of the NIH Big Data to Knowledge (BD2K) initiative is to enable biomedical scientists to capitalize more fully on the Big Data being generated by those research communities. With advances in technologies, these investigators are increasingly generating and using large, complex, and diverse datasets. Consequently, the biomedical research enterprise is increasingly becoming data-intensive and data-driven. However, the ability of researchers to locate, analyze, and use Big Data (and more generally all biomedical and behavioral data) is often limited for reasons related to access to relevant software and tools, expertise, and other factors. BD2K aims to develop the new approaches, standards, methods, tools, software, and competencies that will enhance the use of biomedical Big Data by supporting research, implementation, and training in data science and other relevant fields that will lead to: Read more

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"Bigness" Needs Semantic Technology

- Ontologies help us to search Big Data
- Ontologies help us to create useful *metadata* for annotating Big Data
- Ontologies make Linked-Open Data linkable
- Ontologies offer the opportunity to drive the original vision of the Semantic Web