
VIVO
2013
Introduction to VIVO
VIVO 2013 Conference Workshop
Jon Corson-Rikert, Kristi Holmes, Brian Lowe, Julia Trimmer, and Alex Viggio
August 14 -16, 2013
St. Louis, Missouri • vivoweb.org/conference

Overview

- Introductions all around
- What is VIVO?
- VIVO as a semantic web application
- The VIVO community
- Case study – Duke University
- Case study – Colorado
- Implementation & building an open source community project

Instructors

- Jon Corson-Rikert
  - VIVO Core Development WG lead; Head of Mann Library Information Technology Services, Cornell University Library
- Brian Lowe
  - ISF/VIVO ontology WG co-lead; Semantic Applications Programmer, Cornell University Library
- Kristi Holmes
  - VIVO Engagement WG lead; Bioinformaticist, Becker Medical Library, Washington University School of Medicine
- Julia Trimmer
  - Manager, Faculty Data Systems & Analysis, Duke University
- Alex Viggio
  - VIVO Implementation WG lead; FIS Lead Developer, Faculty Affairs, University of Colorado-Boulder

Jon Corson-Rikert, VIVO Development Lead
Head of Information Technology Services
Albert R. Mann Library, Cornell University
jc55@cornell.edu

What is VIVO?

What is VIVO?

- A semantic-web-based research and researcher discovery tool
  - People plus the research they do
- Publicly-visible information, across disciplines
  - For external as well as internal audiences
- An open, shared platform for connecting scholars, research communities, campuses, and countries using Linked Open Data

A brief VIVO history

2003-2005	First realization for the life sciences at Cornell, as a relational database
2006-2008	Expansion to all disciplines at Cornell, and conversion to Semantic Web
2009-2012	National Institutes of Health-sponsored *VIVO: Enabling the National Networking of Scientists* project transforms VIVO to a multi-institutional open source platform
2013-2014	VIVO incubator project with DuraSpace for open community development

Key VIVO principles

- Open software
- Open data
- Open ontology
- Open community
- Decentralized infrastructure
  - Local control

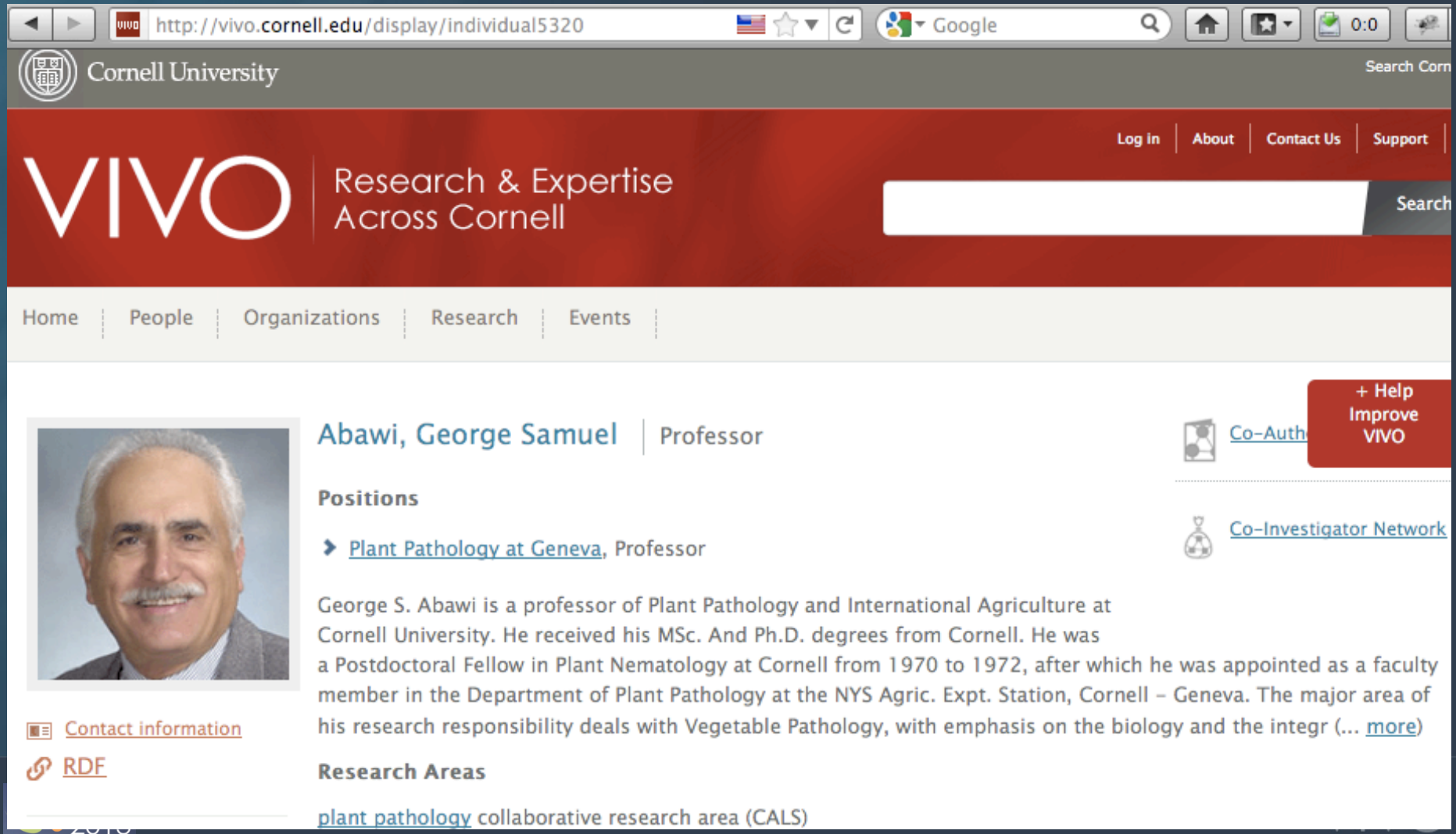
What does VIVO do?

- Integrates multiple sources of data
  - Systems of record
  - Faculty activity reporting
  - External sources (e.g., Scopus, PubMed, NIH RePORTER)
- Provides a review and editing interface
  - Single sign-on for self-editing or by proxy
- Provides integrated, filterable feeds to other websites

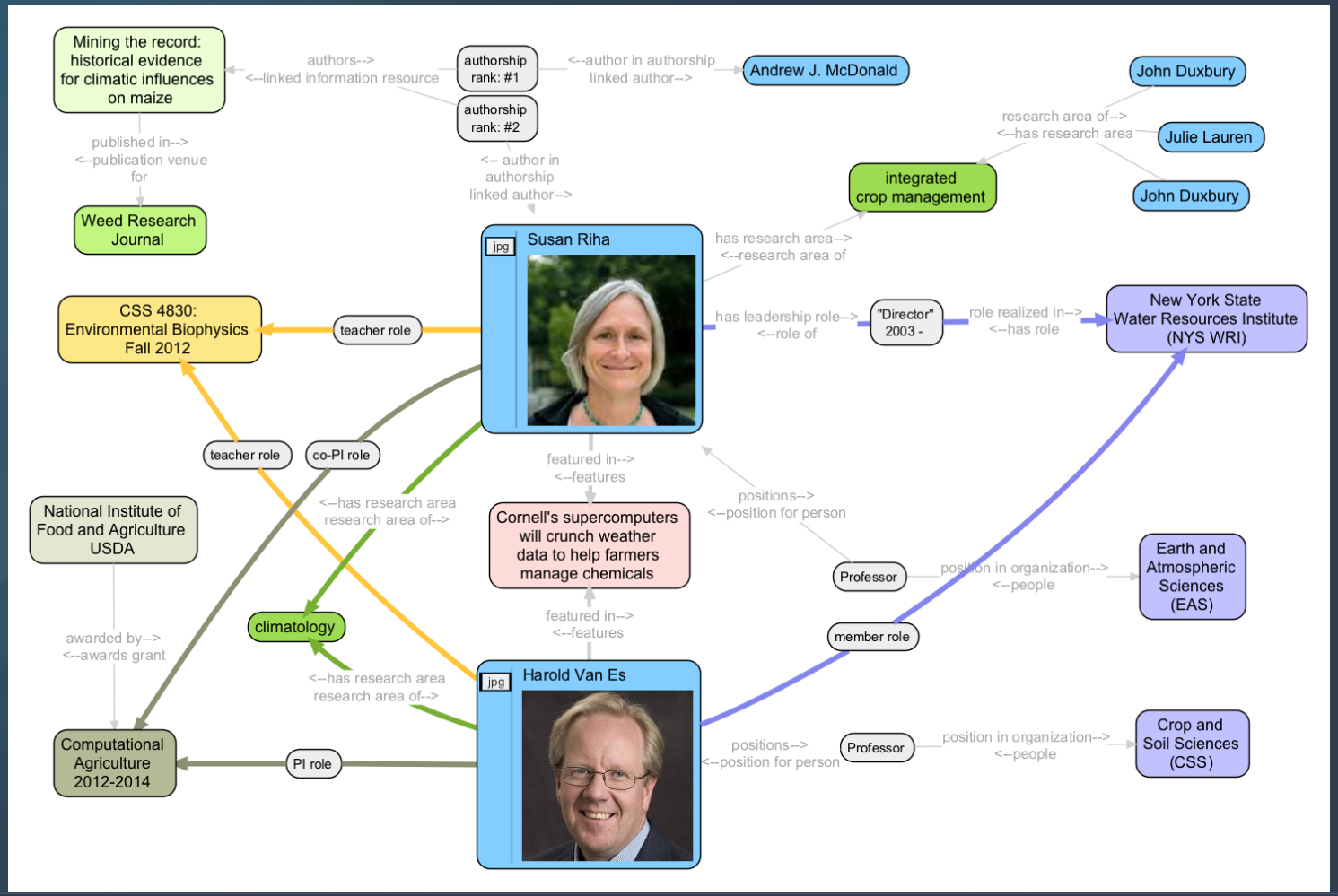
What does VIVO model?

- People and more
  - Organizations, grants, programs, projects, publications, events, facilities, and research resources
- Relationships among the above
  - Meaningful
  - Bidirectional
  - Navigable context
- Links to URIs elsewhere
  - Concepts, identifiers
  - People, places, organizations, events

People


http://vivo.cornell.edu/display/individual5320
Google
Cornell University
Search Corn
Log In
About
Contact Us
Support
VIVO
Research & Expertise
Across Cornell
Search
Home
People
Organizations
Research
Events
+ Help Improve VIVO
Abawi, George Samuel
Professor
Co-Auth
Positions
Co-Investigator Network
Plant Pathology at Geneva, Professor
George S. Abawi is a professor of Plant Pathology and International Agriculture at Cornell University. He received his MSc. And Ph.D. degrees from Cornell. He was a Postdoctoral Fellow in Plant Nematology at Cornell from 1970 to 1972, after which he was appointed as a faculty member in the Department of Plant Pathology at the NYS Agric. Expt. Station, Cornell – Geneva. The major area of his research responsibility deals with Vegetable Pathology, with emphasis on the biology and the integr (... more)
Contact information
RDF
Research Areas
plant pathology collaborative research area (CALS)

People and what they *do*



Co-Author Network (GraphML File)

Profile

Riha, Susan Jean

Charles L. Pack Professor in t...

VIVO profile | Co-author network

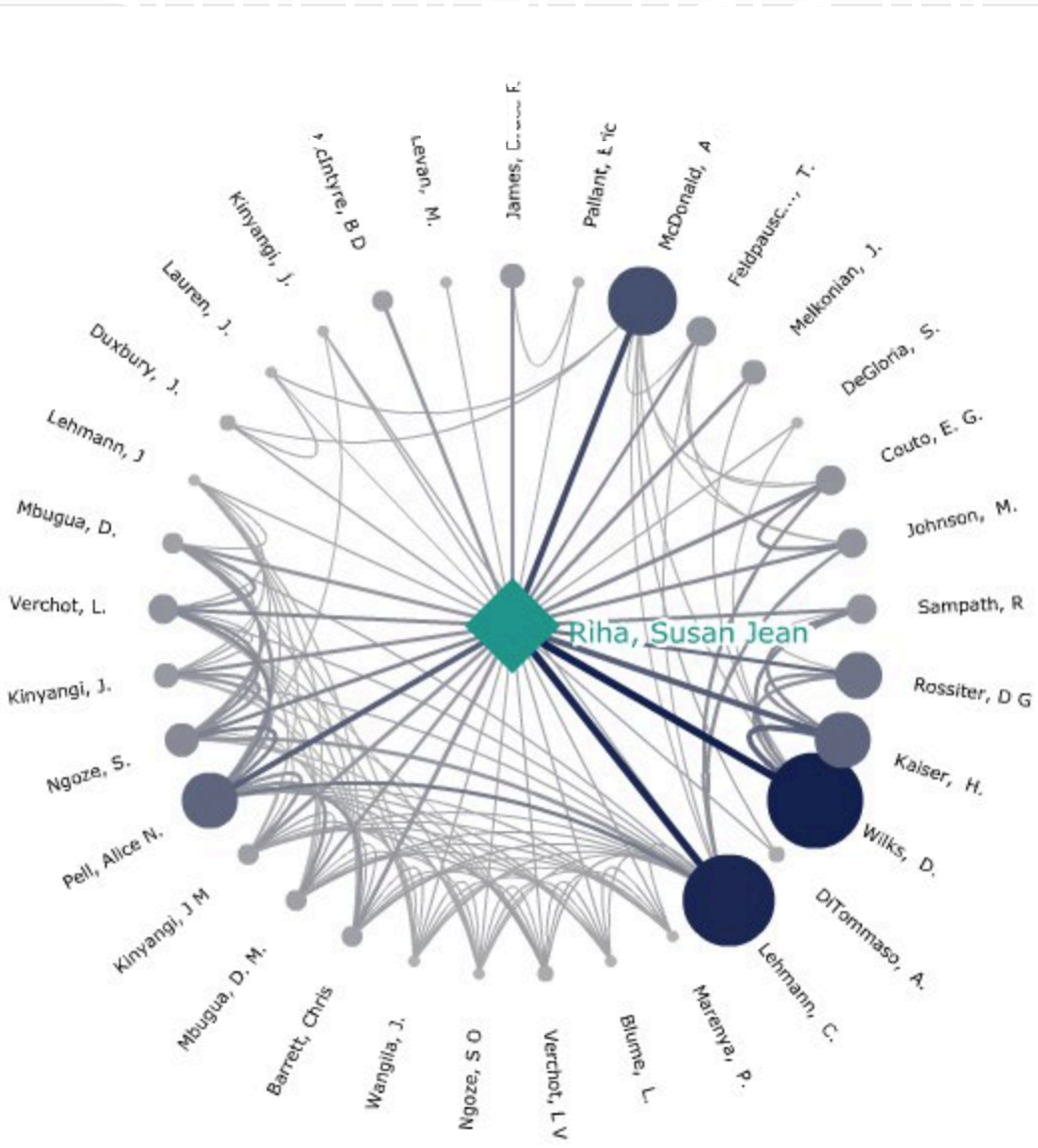
132 Publication(s)

33 Co-author(s)

1980 First Publication

2010 Last Publication

Note: This information is based solely on publications which have been loaded into the VIVO system. This may only be a small sample of the person's total work.



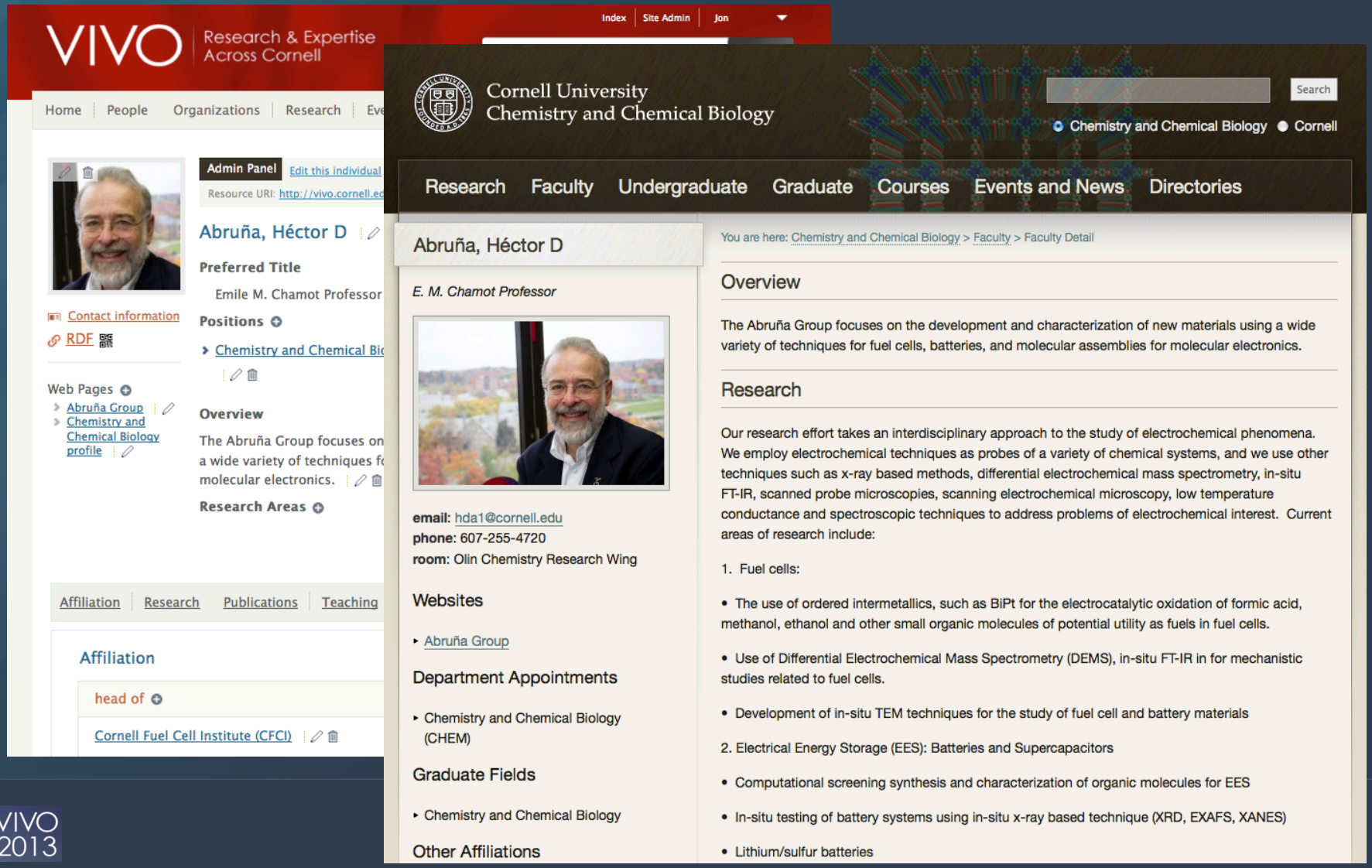
Typical data sources

- HR – people, appointments
- Research administration – grants & contracts
- Registrar – courses
- Faculty reporting system(s)
  - publications, service, research areas, awards
- Events calendar
- Internal and external news
- External repositories – *e.g.,* Pubmed, Scopus

Value for institutions

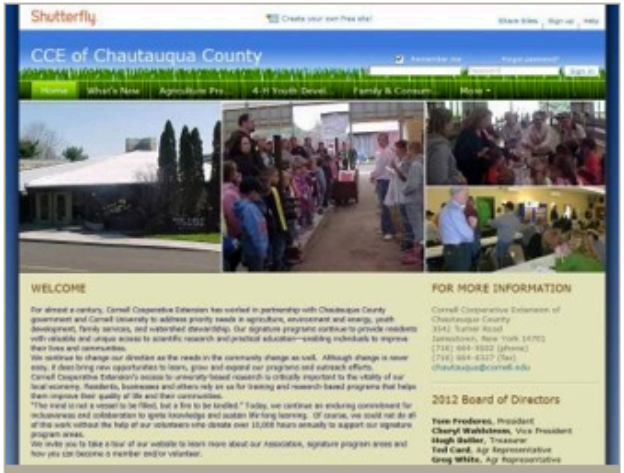
- Common data substrate
  - Public, granular and direct
  - Discovery via external and internal search engines
  - Available for reuse at many levels
- Distributed curation
  - E.g., affiliations beyond what HR system tracks
  - Data coordination across functional silos
  - Feeding changes back to systems of record
  - Direct linking across campuses
- Data that is visible gets fixed

Enter data once, use it many times



Cornell Cooperative Extension Association of Chautauqua County

Cornell Cooperative Extension Association



CCE Chautauqua Web Page

Overview | Affiliation | Service | Other

Overview

local program

4-H Beef Breeding Project at CCE Chautauqua

4-H Clothing and Textiles at CCE Chautauqua

CALS Research and Impact

Information about CALS research projects and their impact throughout the world

Find CALS projects by date, geographic focus, or other criteria

995 projects

Mentor junior extension faculty in journal submission

2009 to 2012
Over the past two years, I have engaged a number of (7) EDI extension professionals in the writing of ten articles (Melissa Bjelland, Arun Karpur, Sarah von Schrader, Thomas Golden, Ray Cebulla, Sukeong Pi, Carol Blessing), as well supported Melissa Bjelland and Doug Webber in working on two articles to complete responsibilities on two grants that I oversee.

Nutritional needs of the developing chick embryo

2007 to 2008
Eggs contain approximately 200 mg of cholesterol. This project will determine how much of this cholesterol is needed for chick embryo development and will determine the consequences of cholesterol deficiency for the developing embryo.

CCE educators lend garden-based learning knowledge to Cornell students

2008 to 2009
Cornell Cooperative Extension educators increasingly find it challenging to make meaningful connections in a "too busy" world. In addition, they rarely have opportunities to engage with Cornell undergraduate. This is unfortunate for the educators, who benefit from the innovative engagement with the students, and for the students, who benefit from the real world connections and mentoring opportunities offered by interacting with educators.

SEARCH

Enter keywords...

FILTER BY NEW YORK STATE FOCUS:

- New York (424)
- Tompkins (89)
- Ontario (66)
- Delaware (63)
- Cayuga (62)

Show more

FILTER BY UNITED STATES FOCUS:

- New York (424)
- Pennsylvania (133)
- Vermont (99)
- Massachusetts (93)
- New Jersey (81)

Show more

CALS Research and Impact

Information about CALS research projects and their impact throughout the world

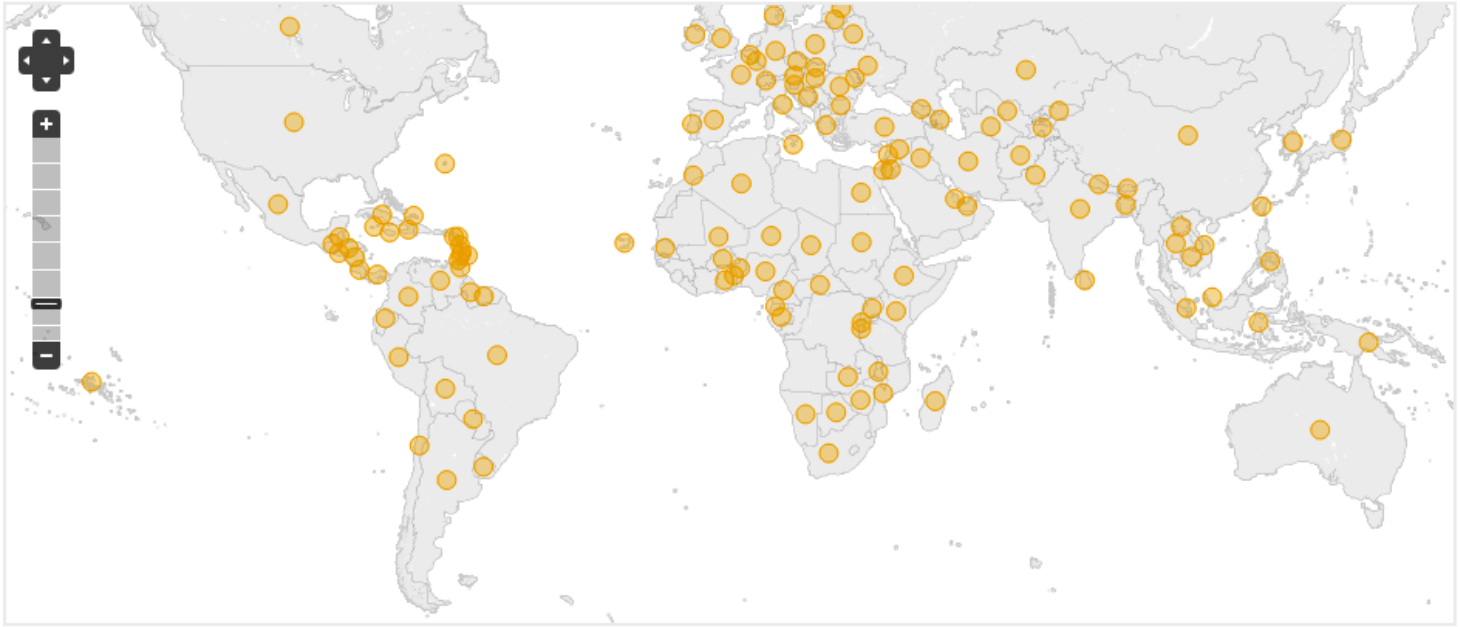
International and domestic locations where CALS research focuses

International United States New York State

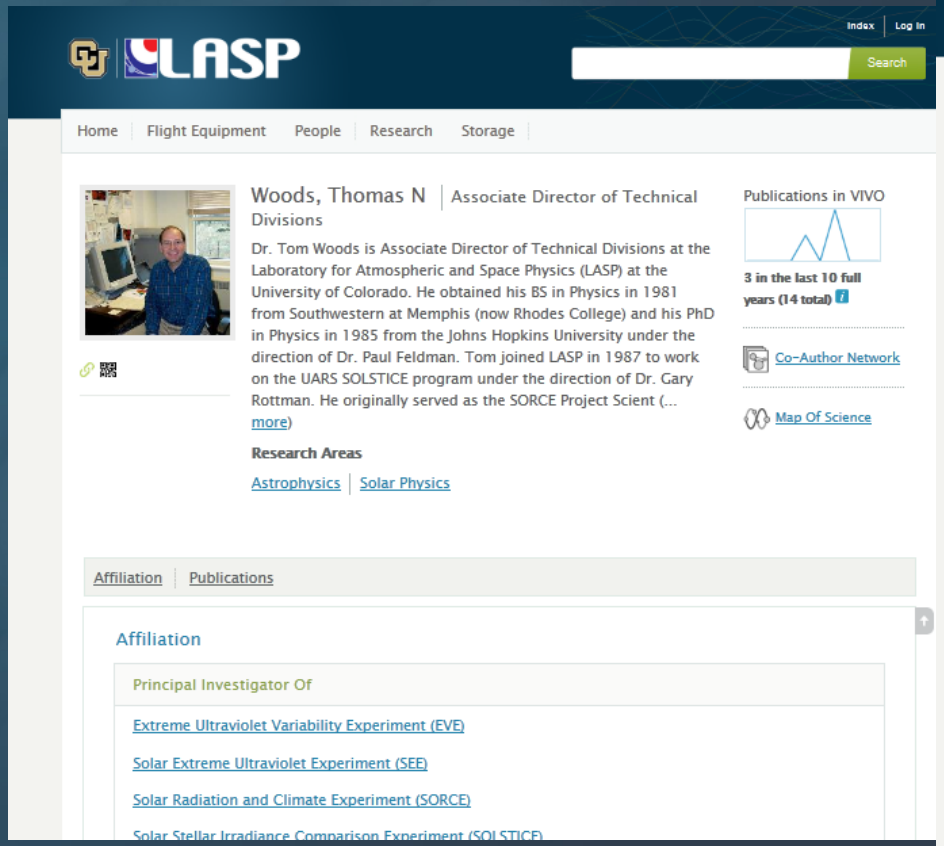
International

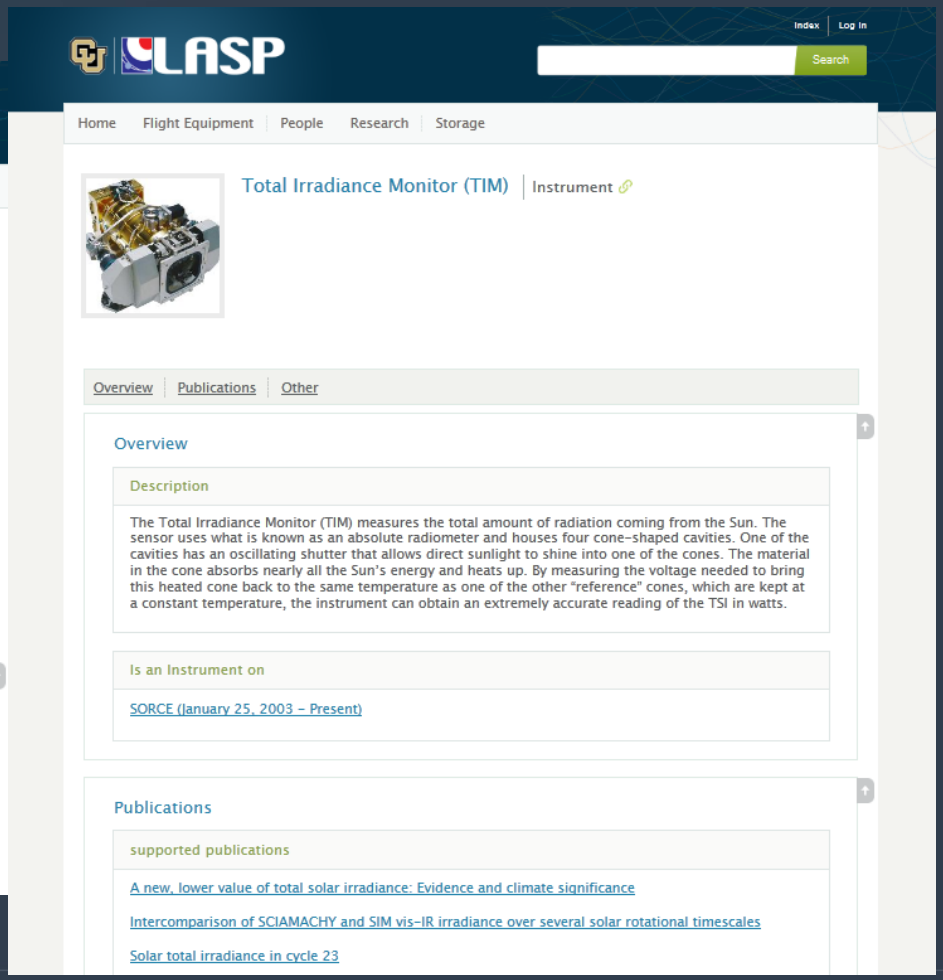
280 projects focusing on 142 countries

- Choose a country - Show projects



Atmospheric & space physics





Flight Equipment

Instrument (42)

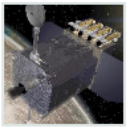
Space Craft (8)

Space Craft

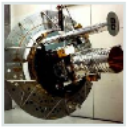
All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Cassini Orbiter

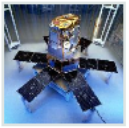
POLAR



Solar Dynamics Observatory (SDO)

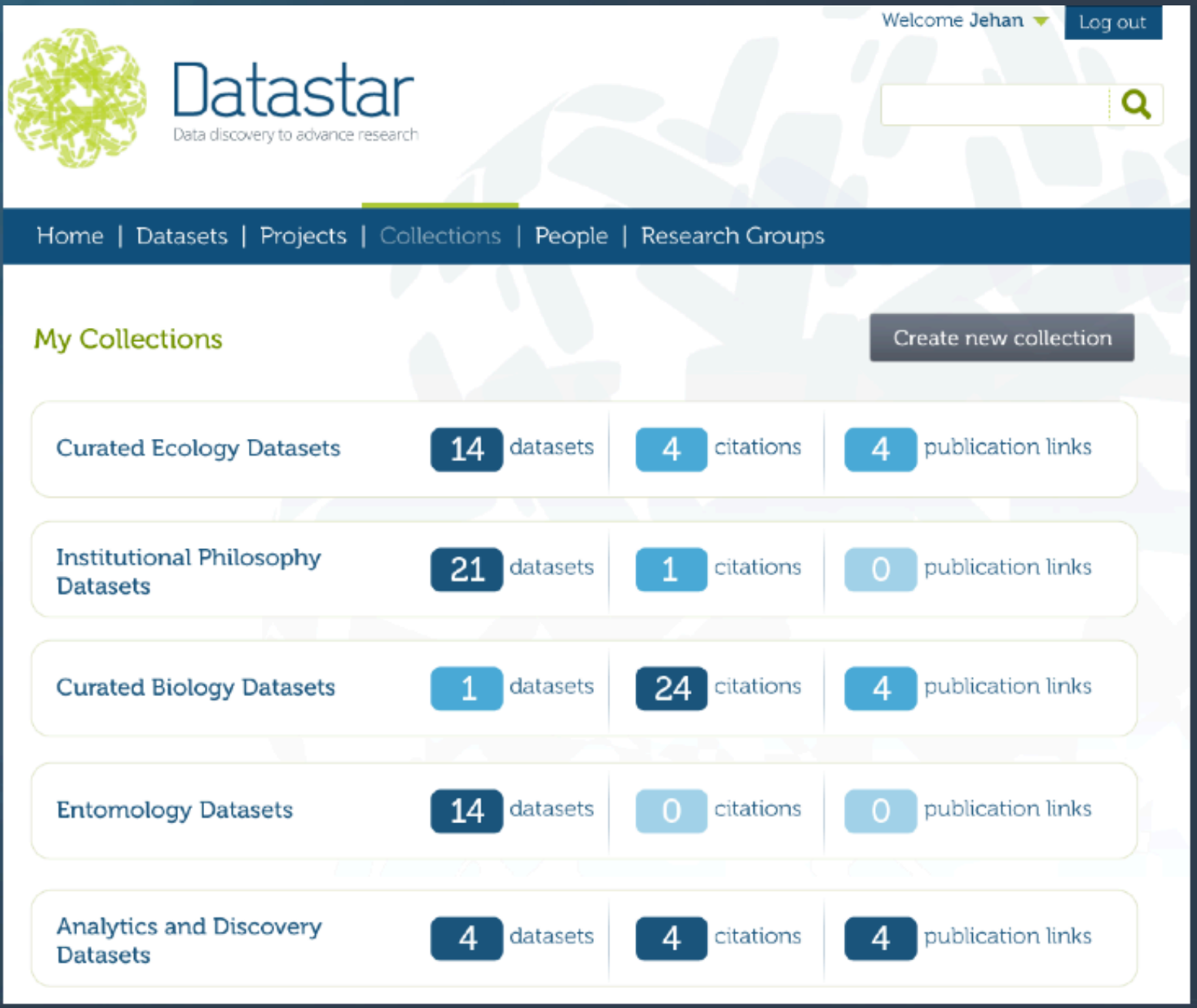


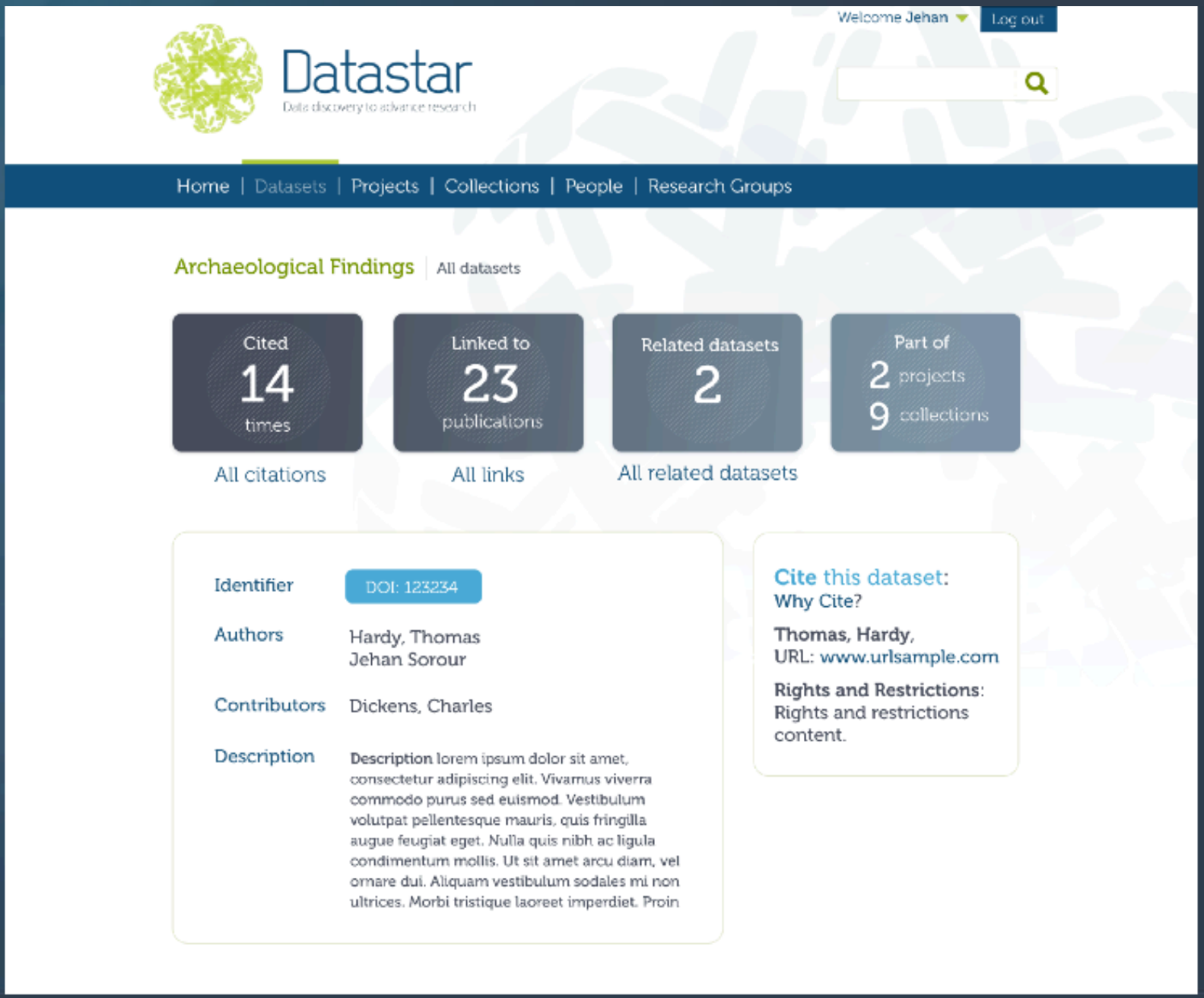
Solar Mesosphere Explorer (SME)



Solar Radiation and Climate Experiment (SORCE)

Student Nitric Oxide Explorer (SNOE)


Welcome Jehan
Log out
Datastar
Data discovery to advance research
Home | Datasets | Projects | Collections | People | Research Groups
My Collections
Create new collection
Curated Ecology Datasets
14 datasets
4 citations
4 publication links
Institutional Philosophy Datasets
21 datasets
1 citations
0 publication links
Curated Biology Datasets
1 datasets
24 citations
4 publication links
Entomology Datasets
14 datasets
0 citations
0 publication links
Analytics and Discovery Datasets
4 datasets
4 citations
4 publication links


Welcome Jehan
Log out
Datastar
Data discovery to advance research
Home | Datasets | Projects | Collections | People | Research Groups
Archaeological Findings | All datasets
Cited 14 times
Linked to 23 publications
Related datasets 2
Part of 2 projects 9 collections
All citations
All links
All related datasets
Identifier
DOI: 123234
Authors
Hardy, Thomas
Jehan Sorour
Contributors
Dickens, Charles
Description
Description lorem ipsum dolor sit amet, consectetur adipiscing elit. Vivamus viverra commodo purus sed euismod. Vestibulum volutpat pellentesque mauris, quis fringilla augue feugiat eget. Nulla quis nibh ac ligula condimentum mollis. Ut sit amet arcu diam, vel ornare dui. Aliquam vestibulum sodales mi non ultrices. Morbi tristique laoreet imperdiet. Proin
Cite this dataset:
Why Cite?
Thomas, Hardy,
URL: www.urlsample.com
Rights and Restrictions:
Rights and restrictions content.

Refine your results

Access
- At the Library 613
- Online 128

Format
- Book 688
- Musical Recording 39
- Video 10
- Journal 7
- Musical Score 6

Author/Creator

Publication year

Language

Subject/Genre

Subject: Region

Subject: Era

Fiction/Non-fiction

Call number

Library location

VIVO | All Fields | Search | or Start over

Advanced search

VIVO ×

« Previous | 1 - 20 of 752 | Next »

20 per page | Sort by relevance

1. VIVO 2003- Select

Ithaca, N.Y. : Cornell University Library, 2003- English

Online

2. In vivo Select

In vivo (Norwalk, Conn.)

Journal Norwalk : Windhover Information Inc., English

Multiple locations

3. Dinheiro Vivo Select

Dinheiro Vivo (Online)

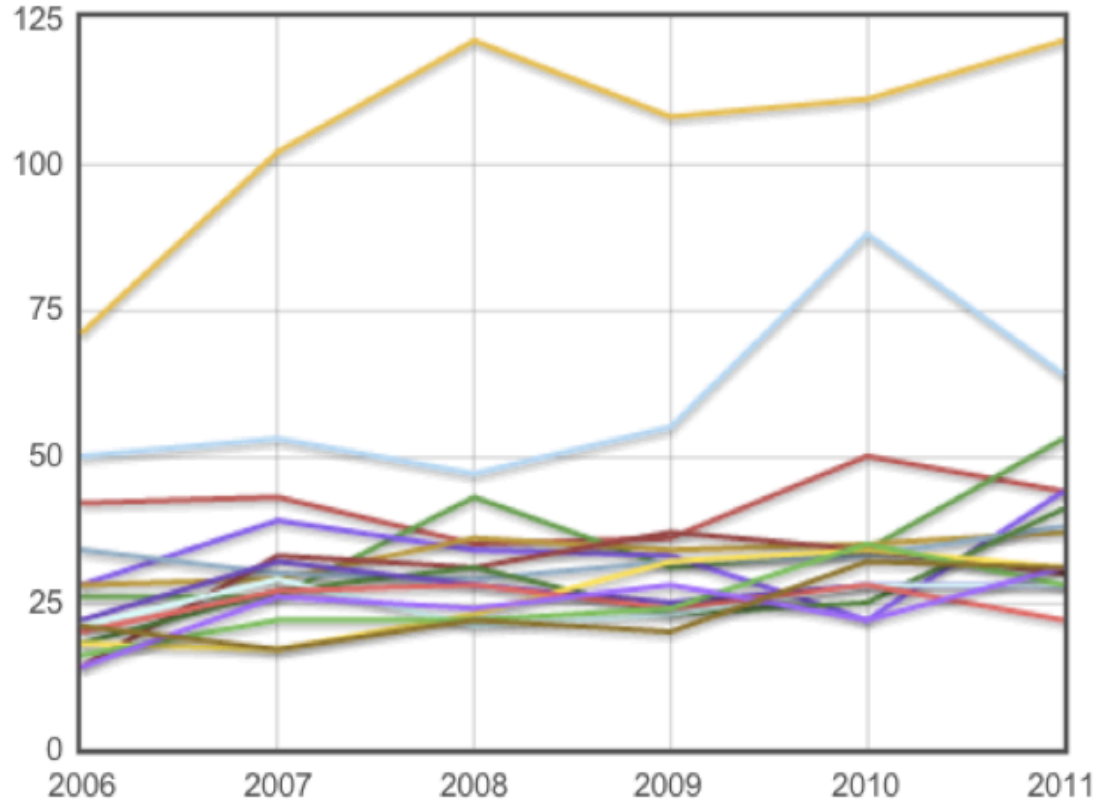
Journal [S.l.] : [s.n.]

Online

4. In vivo neuromethods c1998 Select

General neurochemical techniques.

Weill Cornell research reporting



- Memorial Sloan-Kettering Cancer Center
- Cornell University
- Hospital for Special Surgery
- Rockefeller University
- New York Presbyterian Hospital
- Columbia University (Medical)
- Columbia University
- Brigham and Women's Hospital
- Mount Sinai School of Medicine
- University of California, San Francisco
- Albert Einstein College of Medicine (Yeshiva)
- VA Medical Center
- Harvard Medical School
- Baylor College of Medicine
- Columbia University Medical Center
- Massachusetts General Hospital

Data Dashboard Weill Cornell Medical College

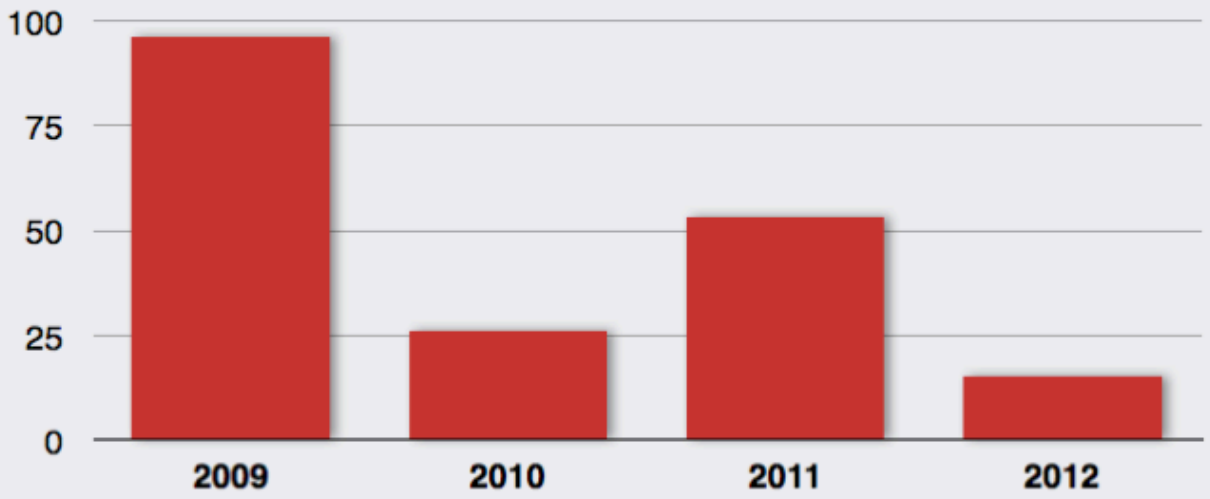
Logged in as: Laurie Glimcher

Publications | Co-Authors | Dual Appointments | Post-M.D. Appointments | Global Health | Request Analysis

All | Most Cited | By Person | By Organization | PubMed Central Deposits

Papers created with federal funding but not deposited in PubMed Central

Graph | List | Create Alert



Federal law mandates publications resulting from NIH-funded research must be deposited in the open access archives PubMed Central within twelve months...Read more

Refine Results

Year

2009 — Present

Publication Type

- ✓ Academic Article
- ✓ Comment
- ✓ Conference Paper
- ✓ Editorial
- ✓ In Press
- ✓ Letter
- ✓ Review

Organization

Cardiothoracic Surgery

Cardiology (Pediatrics)

Cardiology (Medicine)

Cardiothoracic Surgery

- ✓ Otolaryngology

Questions from Weill Cornell

- Leadership
  - Which publications produced in the last quarter are by our authors with first or last author rank?
- Collaboration
  - Which Pis have the most collaborations based on grant support?
  - How has the number of publications co-authored with other institutions changed year to year?
- Policy
  - Who are our institution's open access key opinion leaders?
- Impact
  - In any given year, which papers have the most incoming citations?
  - Which researchers have published the most research articles within a given set of journals in the past 5 years?
- Compliance
  - Which papers that have received federal funding are not deposited in PubMed Central?

Policy issues

- Dirty data
- Lack even of common definitions of organizational structure or who's faculty
- Data ownership
- Opt-in vs. opt-out and the many dimensions of privacy
- Short-term "go it alone" vs. common good

Brian Lowe
Semantic Applications Programmer
Mann Library, Cornell University
bjl23@cornell.edu

VIVO as a Semantic Web Application

The Semantic Web

- Turn data into a web of simple links
- Use *ontology* to explain *how* things are linked
- Use *reasoning* to add new links automatically
- Be flexible and extensible

The VIVO ontology

- Describe people, organizations, and research resources in the ***process*** of doing research
- Stay discipline neutral
- Use existing scientific domain terminology to describe ***content*** of research

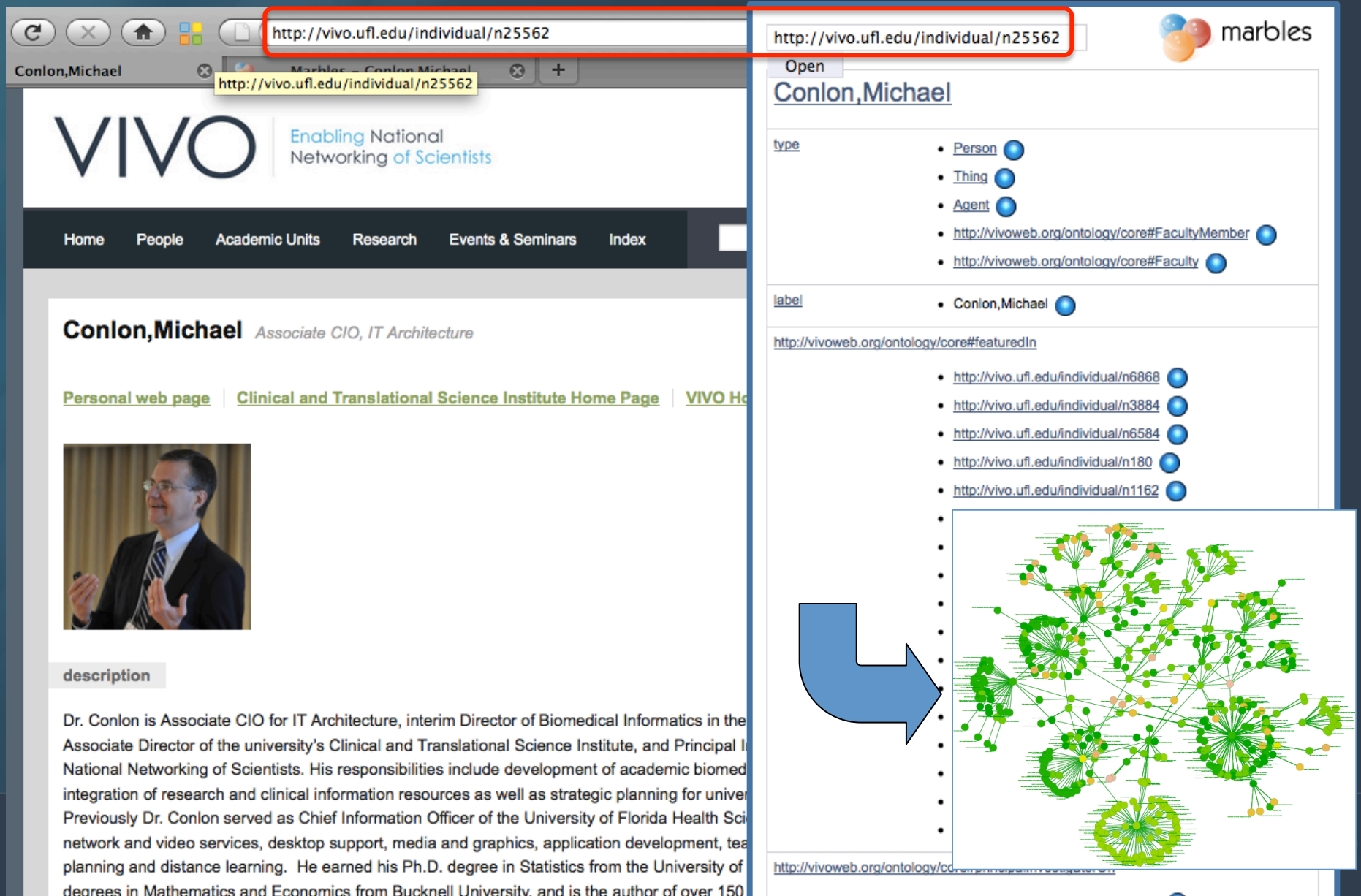
CTSAconnect and the ISF

- VIVO and eagle-i project for research resources have unified their ontologies and extended both into the clinical domain
- The unified ontology is known as the Integrated Semantic Framework, or ISF
- VIVO 1.6 and eagle-i's next release use the ISF
- This ISF is modular to allow selective data population based on local needs

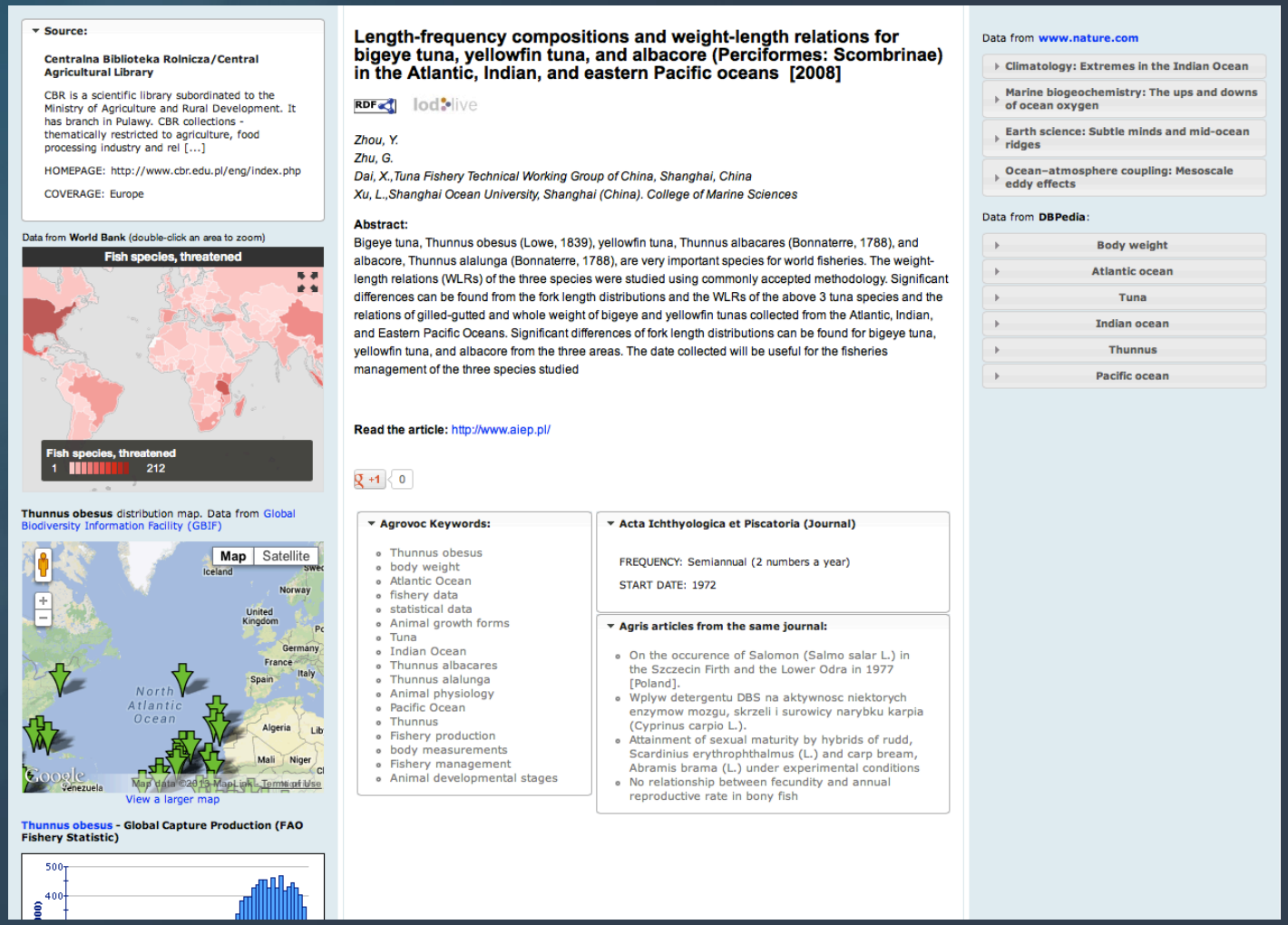
What is Linked Open Data?

- Data
  - Structured information, not just documents with text
  - A common, simple format
- Open
  - Available, visible, mine-able
  - Anyone can post, consume, and reuse
- Linked
  - Directly by reference
  - Indirectly via common references and inference

Linked Open Data

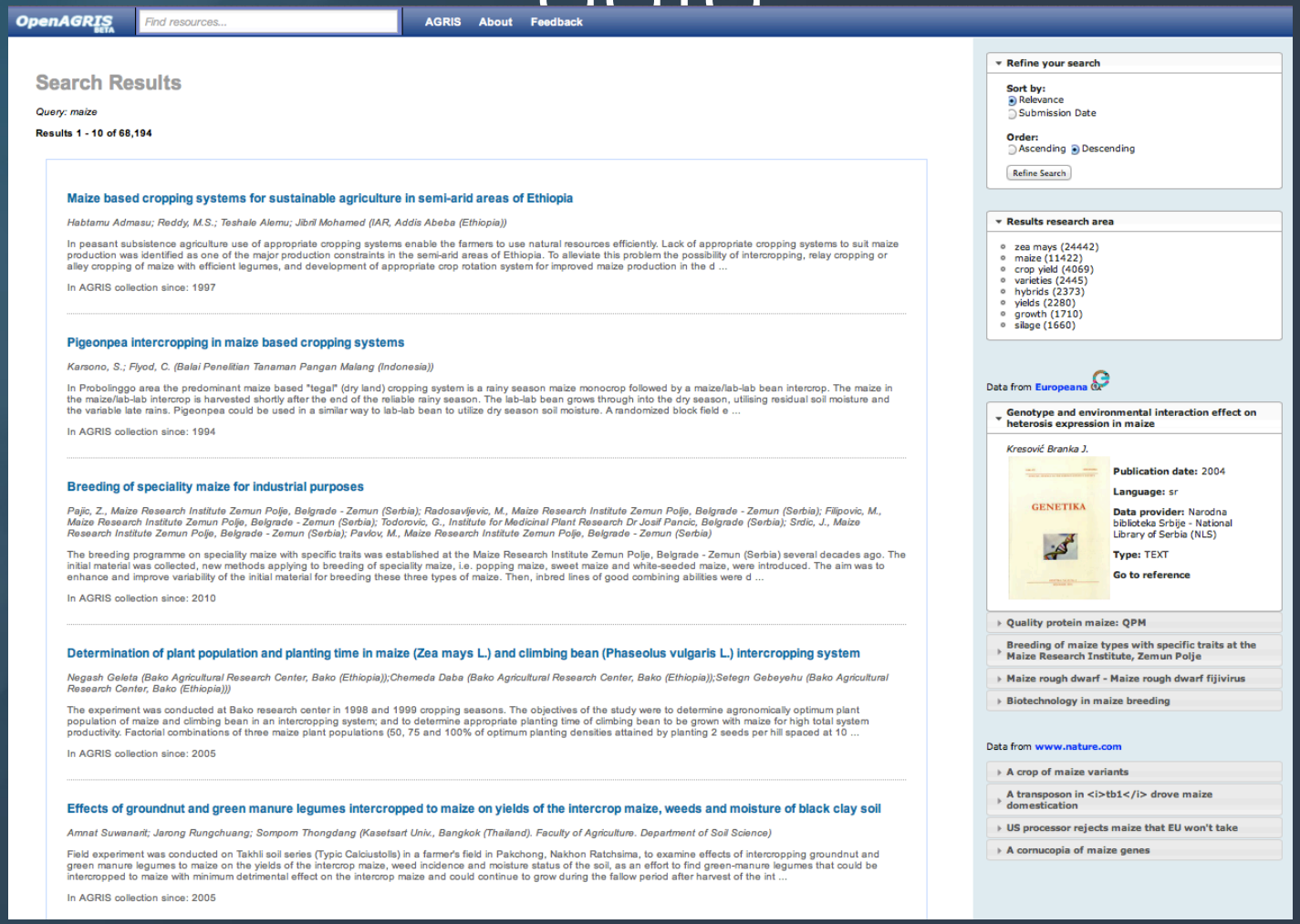


Linked data in AGRIS



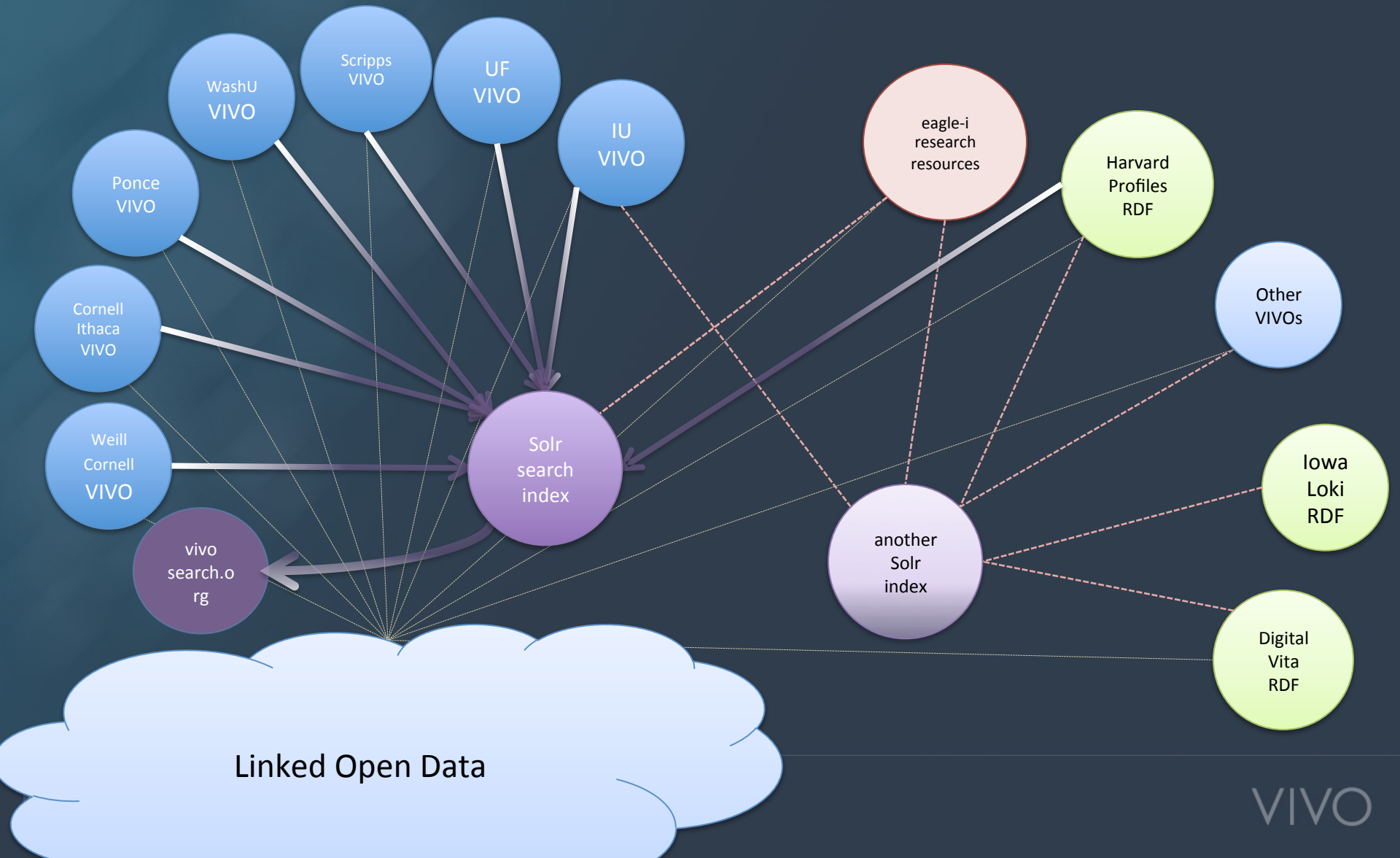
http://agris.fao.org/openagris/search.do?recordID=PL2009000495

Search augmented by linked data



http://agris.fao.org/openagris/searchIndex.do?query=maize

VIVO data indexed for search



http://vivosearch.org

Home | VIVO Search

beta.vivosearch.org

About VIVO Faculty... CTSI Google Pandora UF VIVO UF VIVO Other bookmarks

VIVO Search BETA

Known Issue: Data for Cornell University and Indiana University is incomplete. We continue to gather complete data from the seven partner institutions.

Find research and expertise

Enter keywords...

Publications

- People
- Publications
- Organizations
- Activities
- Events
- Courses
- Equipment

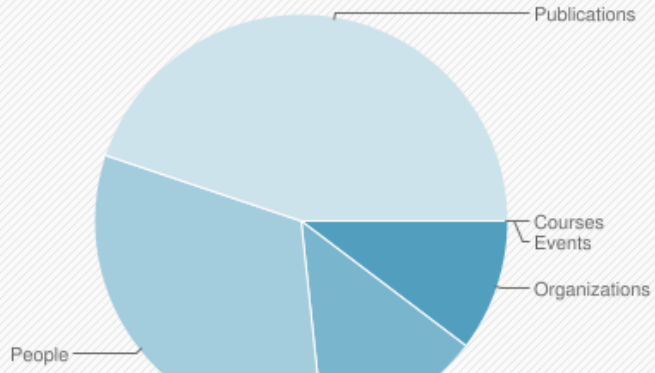
People include faculty members, librar staff.
Try these keywords: alternative energy a

A demonstration of multi-institutional search

A group of seven top research institutions dedicated to facilitating global research efforts recognize the challenges faced by researchers in uncovering parallel and related efforts, and have decided to join forces in standardizing the way institutional data gets published. Each institution uses the VIVO software to manage and publish up-to-date information about researchers and their activities.

This website provides a working example of how a multi-institutional search functions, allowing you to search across all seven partner institutions and across all disciplines to find people and information that could dramatically

Distribution of institutional data



VIVO BETA Search

Known Issue: Data for Cornell University and Indiana University is incomplete. We continue to gather complete data from the seven partner institutions.

Find research and expertise

child abuse | People

People | Publications 44 | Organizations 16 | Activities 12 | Events | Courses | Equipment

45 results

Eckenrode, John

... : BUILDING INFRASTRUCTURE AND CAPACITY: ARRA FUNDING NATIONAL DATA ARCHIVE ON **CHILD ABUSE** AND NEGLECT AT CORNELL UNIVERSITY AGE-27 FOLLOW-UP OF EARLY ...

Cornell University

Nackashi,John A

... - Fifth Judicial Circuit **Child Abuse** Prevention Project (Capp) District 3 Capp Program District XIII North Florida Area Health Education Centers Program ...

University of Florida

Nunno, Michael A

... and Understanding **Abusive** Families, **Child Abuse** and Neglect: An International Journal, Children and Society, Protecting Children, Children and Youth Services Review ...

Cornell University

Thomas, Margaret Gilboy

... PROJECT **CHILD** AND SPOUSE **ABUSE** PREVENTION: UNITED STATES MARINE CORPS ARMY COMMUNITY SERVICES PROGRAM ACCOUNTABILITY DOD EXCEPTIONAL FAMILY MEMBER PROGRAM ...

Cornell University

Results by Institution

Cornell University	16
WashU in St. Louis School of Medicine	9
Harvard University	8
University of Florida	7
Weill Cornell Medical College	4
Indiana University	1
Ponce School of Medicine	0
The Scripps Research Institute	0

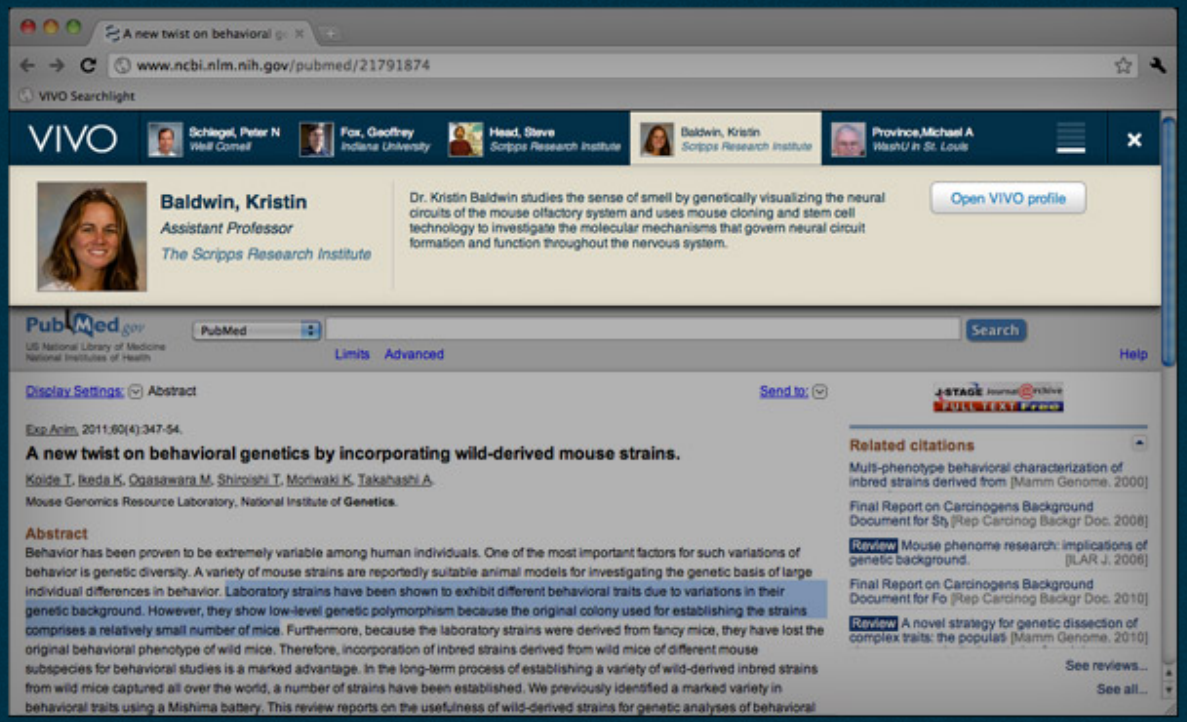
Results by Type

Faculty Member	34
Non-Faculty Academic	9
Non-Academic	2

VIVO Searchlight

A convenient way to find researchers

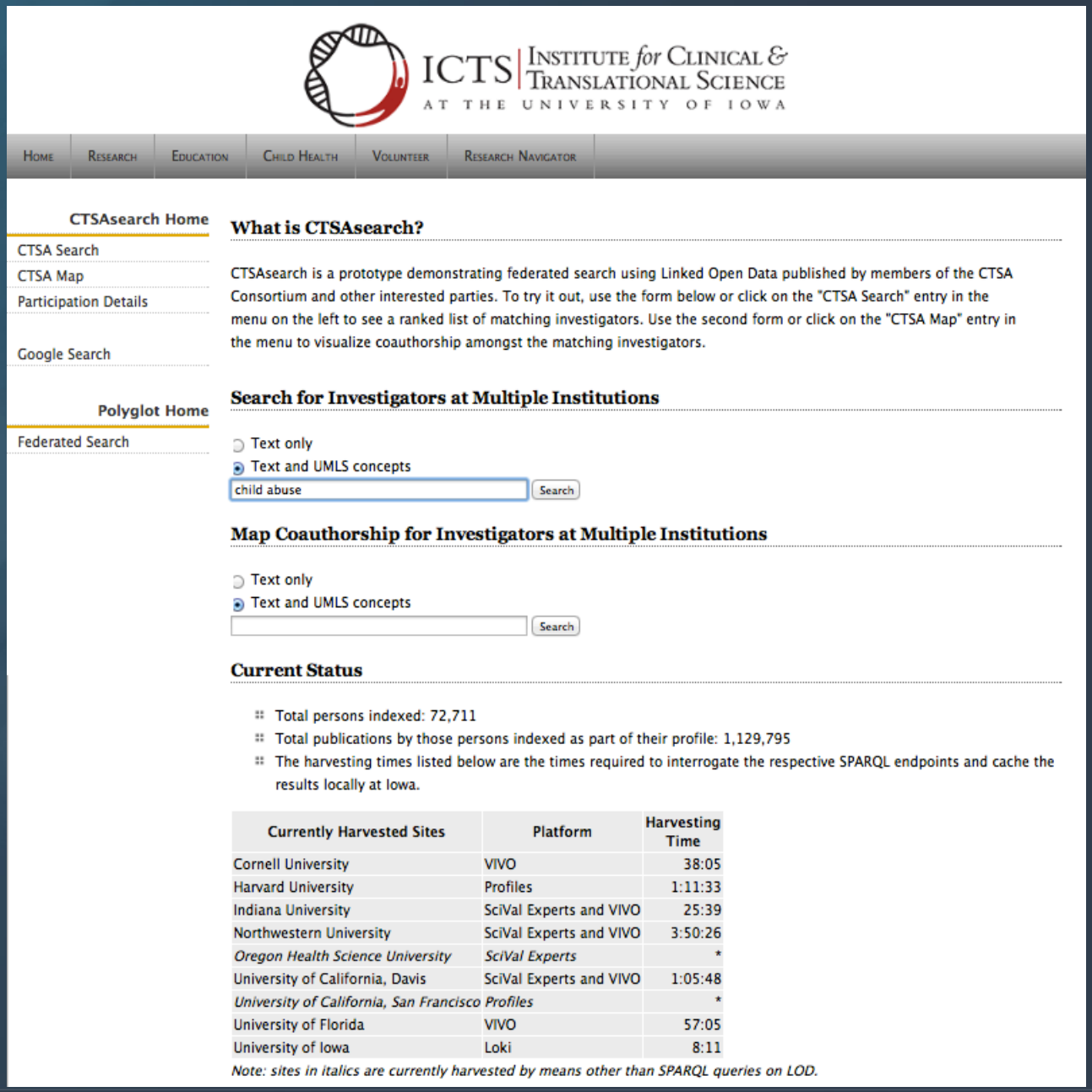
Searchlight is a small app that automatically shows you VIVO profiles related to the page you're reading.



http://about.vivosearchlight.org

Multi-institutional scenarios

- Multiple campuses of one university
- University and federal lab connections
  - *E.g.,* Colorado ties with regional federal labs
- Consortia
  - 60 NIH Clinical & Translational Science Awards adopted VIVO as an ontology standard in 2011
- International
  - 13 Netherlands universities and the National Library
  - AgriVIVO.net



http://research.icts.uiowa.edu/polyglot/

Benefits across institutions

- Sharing experience provides clarity and new ideas
- Incentives from sharing development, tools, customizations
- Potential data-level connectivity
  - Research is happening increasingly in teams that span institutions
  - Meeting the needs of short and long-term virtual organizations

International engagement

casrai
Connecting Research

ABOUT PROGRAM UPDATES

Home

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VIVO joins CASRAI in advancing research interoperability

Posted by Asha Law on Mon, 2012-04-23 09:18

The Leaders of the VIVO Project team (VIVO) and the Consortia Advancing Standards in Research Administration Information (CASRAI) are today announcing a collaboration to advance a common global approach to research interoperability.

VIVO is an open source ontology and software system designed at Cornell University for researchers and used in many universities in the USA that has attracted interest more widely internationally. It is based on the Semantic Web / Linked Open Data

International engagement

News Release

Share Printer friendly version

euroCRIS
Current Research Information Systems

VIVO enabling national networking of scientists
Please register to view contact details

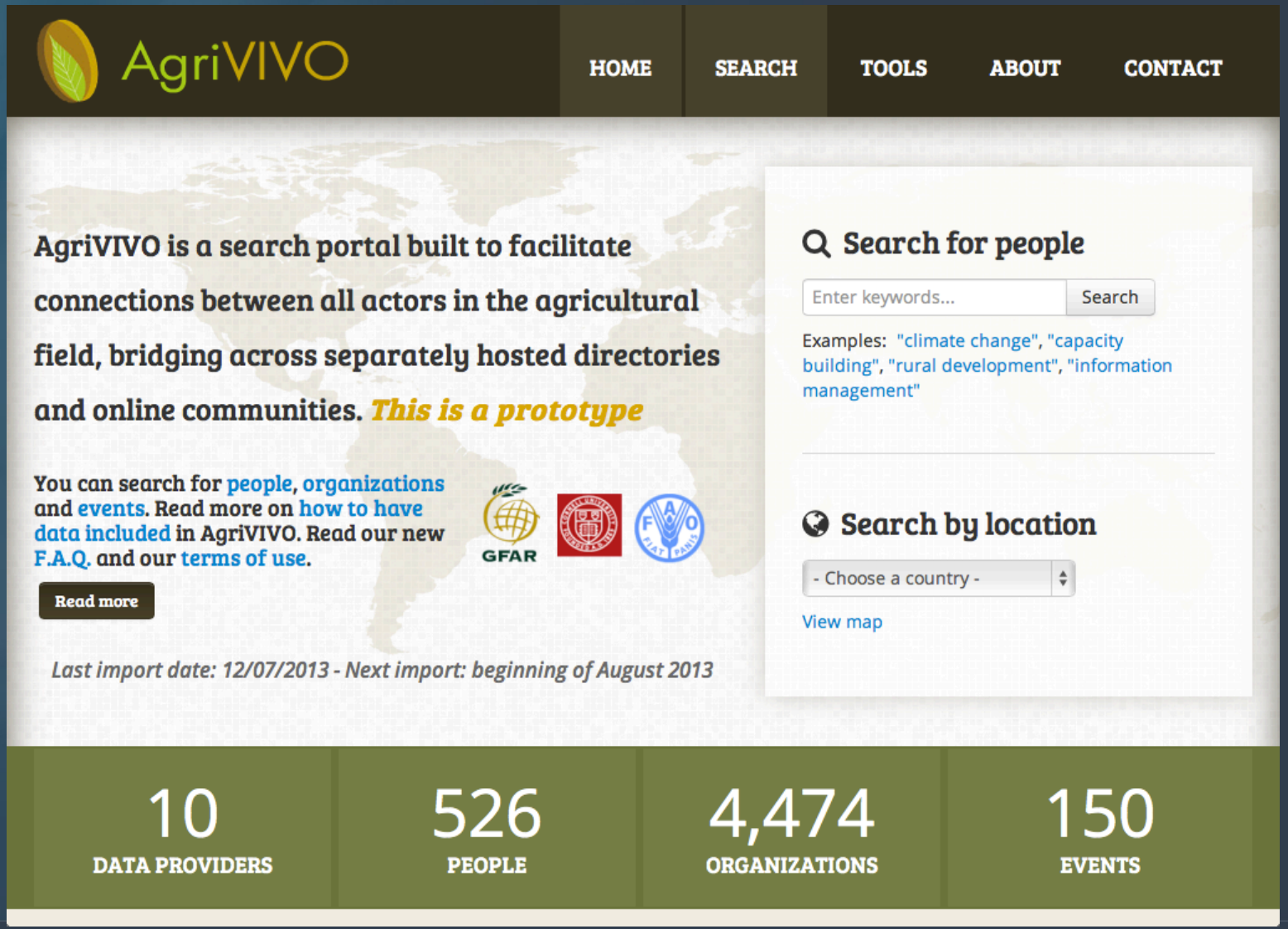
Strategic partnership of euroCRIS and VIVO

23 November 2011 euroCRIS

euroCRIS, a not-for-profit scientific association registered in the Netherlands, and the leaders of the project team of VIVO, an open source Semantic Web sofware application originally developed at Cornell University, have entered into a strategic partnership.

euroCRIS (www.eurocris.org) is furthering the implementation and linking of Current Research Information Systems (CRIS) based on the Common European Research Information Format (CERIF) - commonly indicated with the acronym CERIF-CRIS - and promotes best practice in CRISs, spanning the field from raw experimental and simulated data through research management systems to research publications.

AgriVIVO



http://agrivivo.net

AgriVIVO


Search
People
Organizations
Events
GFAR
Current search
plant protection
Narrow your results
plant protection
Search
Filter by expertise:
Plant Protection 45
Crop Management 39
Entomology 5
Botany 2
Information Science 2
Show more
Filter by location:
The United Kingdom Of Great Britain And Northern Ireland 17
Switzerland 14
Last import date: 12/07/2013
Show map
57 people
Name: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Powered by Leaflet — Tiles © Esri
Yelitza, Colmenarez
CABI
Brazil
Source: CABI

Hands on:

VIVO & linked data

Hands on: VIVO & linked data

Learning about VIVO adopters

- Browse any of the publicly available VIVO implementations to compare interfaces, branding, and unique features
- Browse the VIVO Map on our wiki
- Visit vivo.vivoweb.org (ask us for a login)

Multi-institutional search

- Experiment with vivosearch.org
- Try Polyglot, a search across multiple NIH Clinical and Translational Research Awards by Dr. David Eichmann of the University of Iowa

Understanding Linked Open Data (LOD) and basic SPARQL queries

- Exercise: Finding VIVO Data with the University of Florida's public SPARQL endpoint

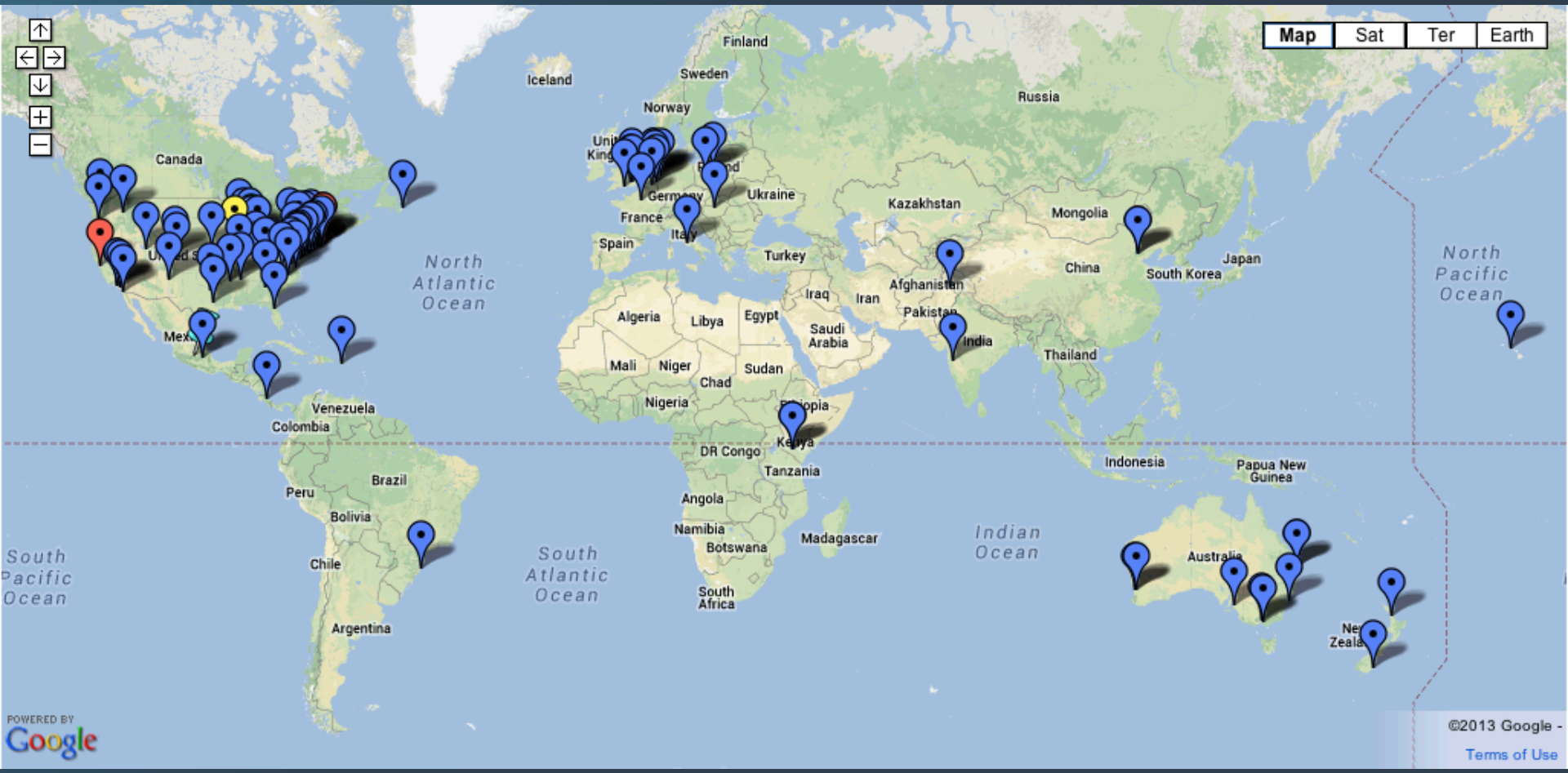
Kristi Holmes, VIVO Outreach Lead
Bioinformaticist
Becker Medical Library, Washington University
kristi@vivoweb.org

The VIVO Community

VIVO/DuraSpace Partnership

- DuraSpace is a not-for-profit organization supporting the DSpace and Fedora repositories
- Proven track record of managing community developed open source projects
- Two-year initial startup period
- Serves as the open source community home for ISF/VIVO ontology, software, tools, and engagement in eScience, research networking, and other initiatives

The VIVO community worldwide



VIVO community in North America

VIVO 2013

VIVO

Where to start?

- Assessing whether VIVO is a good fit for your institution or virtual organization is more about your goals than the technology
- Fundamentally, it's about understanding your needs, VIVO's fit with those needs, and your capacity to sustain the effort

Important indicators

- Do you have institutional sponsors?
  - Starting as a skunk works project is okay but not the best recipe for long-term success
- Does VIVO align with a key institutional initiative?
  - Strategic reinvestment, new academic programs, new senior hires needing information
- Can you marshal resources?

It takes a network

- VIVO is cross-functional
  - Policy, communications, research, library
  - Multiple sources of data
- Requires stakeholder engagement
- VIVO needs to be transparent and fit the research/scholarship culture
  - Not just an "administrative thing"
- It helps to have strong project management
  - It's usually obvious whether it's there

Be realistic

- Small, successful pilots targeting one or two constituencies can build momentum
  - Relates closely to CTSA goals but there are equally dynamic initiatives in earth & atmospheric sciences, social sciences, and humanities
- Timelines must allow for ramping up people and technology

Think sustainability

- Loss leader efforts are tempting but if they can't be sustained may backfire
  - E.g., entering a lot of data on behalf of people with no clear update path
- Work with data stewards
  - First, to get access to data you need (public data)
  - To help them better meet your needs via improved APIs or web services
  - To alert them to data issues you may discover
  - VIVO is adept at making problems in source data visible

Reach out

- Interview researchers to learn what they need and want
  - Especially up and coming people building a reputation and more interested in strong online presence
- Create and use an advisory board
- Create a support network
  - Duke has "power users"
  - Provide materials and training

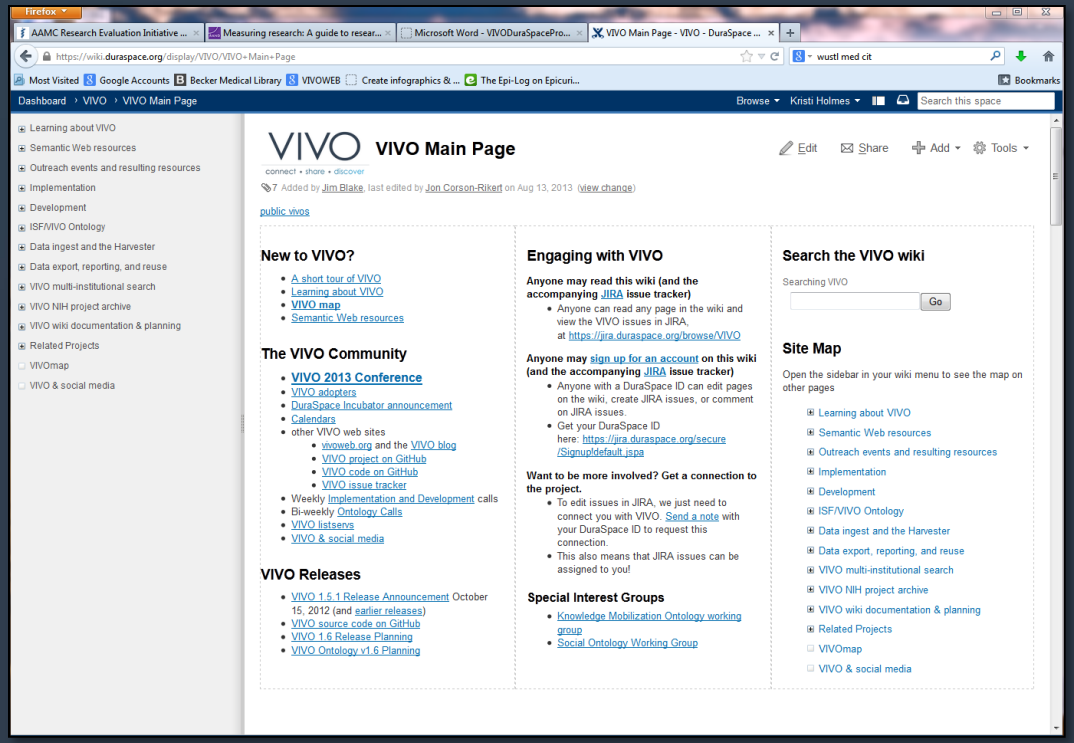
Use the VIVO community

- We're approachable
- Someone very likely has encountered a similar question or issue before
- Your ideas will be welcome

Use and contribute to the VIVO community resources!

- wiki
- Listservs
- Regular phone calls
- Attend VIVO events
- Develop local interest groups (e.g., NYC-area sites)

https://wiki.duraspace.org/display/VIVO



Collaborations – ORCID

- Open Researcher and Contributor ID
  - Attribution for works of any type
- ORCID and VIVO
  - ORCID is an attribute in a VIVO profile
  - Tools are being developed for submission of researcher registrations from VIVO

http://orcid.org

For more information

vivoweb.org , vivoweb.org/blog

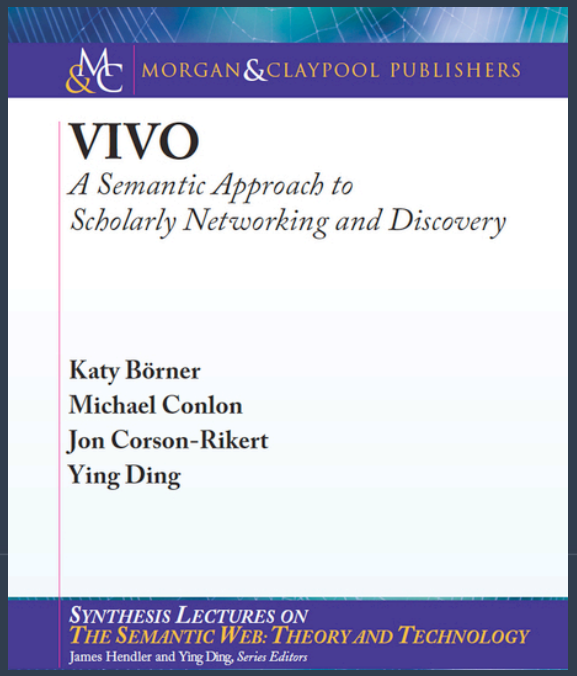
wiki.duraspace.org/display/VIVO

linkedin.com/groups/VIVO-connect-share-discover

facebook.com/VIVOcollaboration

github.com/vivo-project

@VIVOcollab



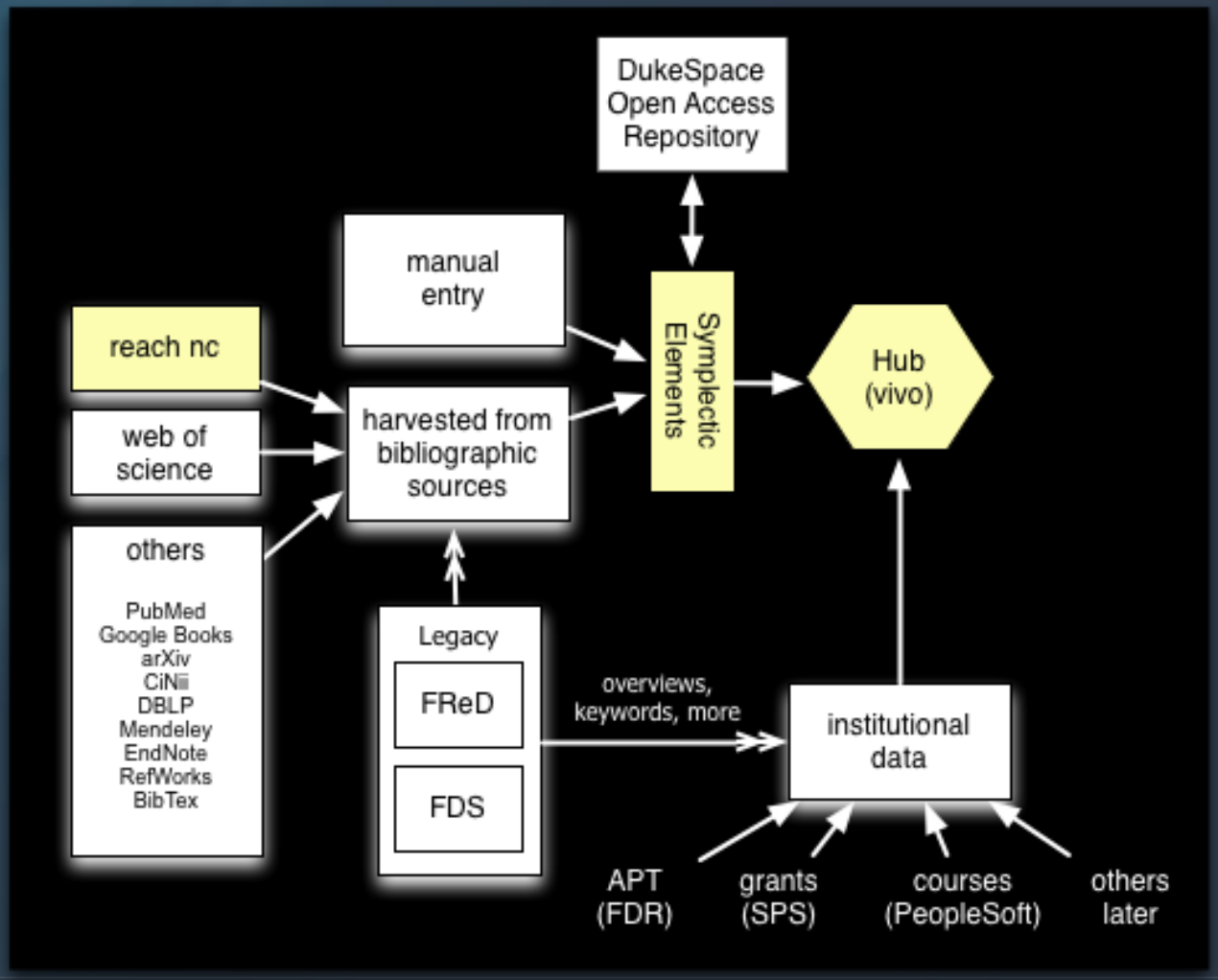
Julia Trimmer
Manager, Faculty Data Systems and Analysis
Office of the Provost
julia.trimmer@duke.edu

Case Study – Scholars@Duke

VIVO at Duke

- Project team under Provost's Office
- Developers in University IT group
- Elements team in Library
- Currently: 3,500 faculty in 29 departments and centers, 100K pubs
- By Dec: adding 2,100 faculty in 16 schools and institutes, 60K pubs
- Replacing two legacy systems

Data Sources



Scholars@Duke publications

Harvest

- Source of articles and keywords
- Identifies authors
- Works well in STEM fields

Manage

- Harvests from REACH NC
- Adds other pubs
- Links to full text publications
- Private profiles

Display

- Publication list displayed on profile
- Profile data can be re-purposed
- Public profiles

REACHNC
research, engagement, and capabilities hub of north carolina

SYMPLECTIC ELEMENTS

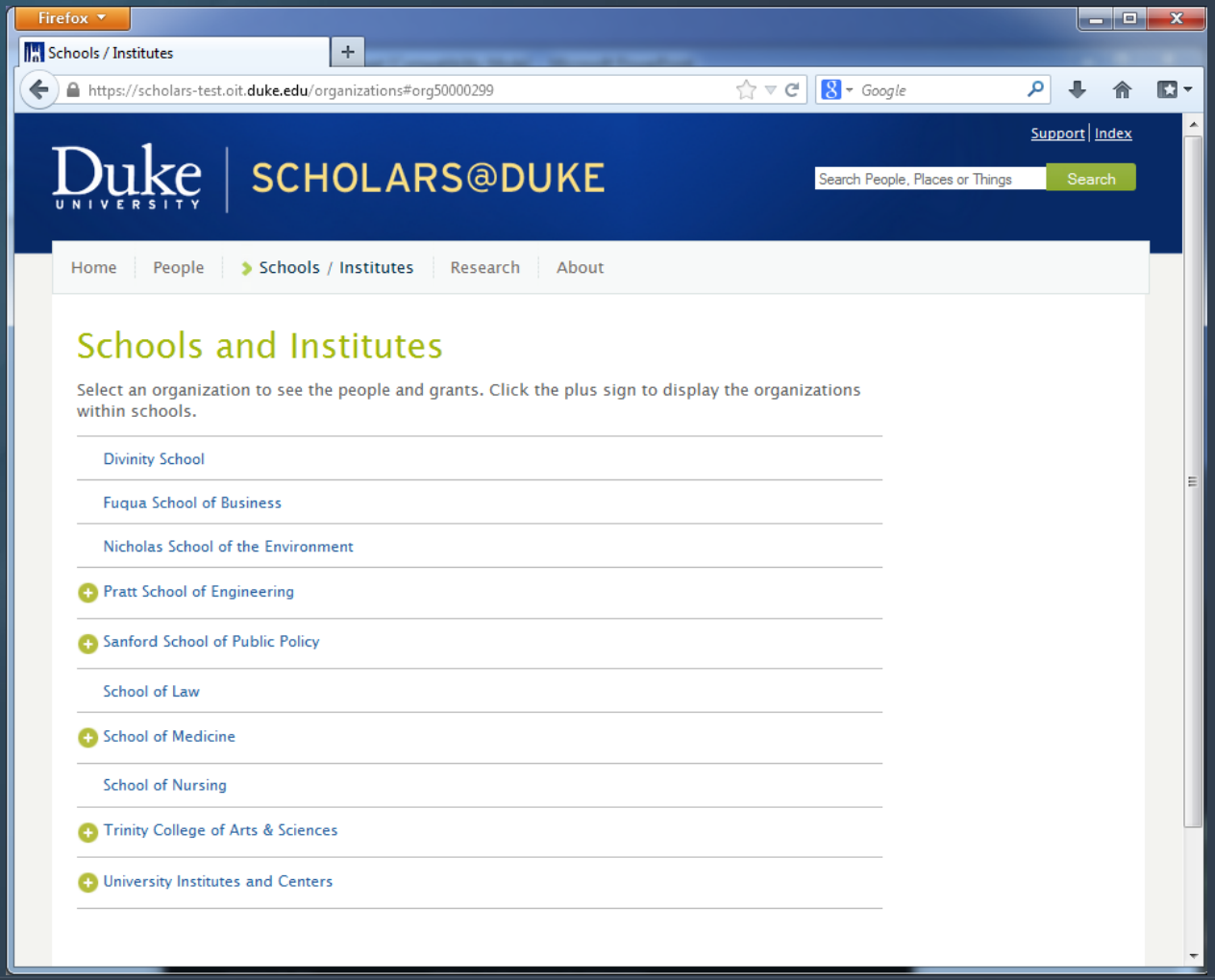
Duke UNIVERSITY | SCHOLARS@DUKE

Rollout Plan

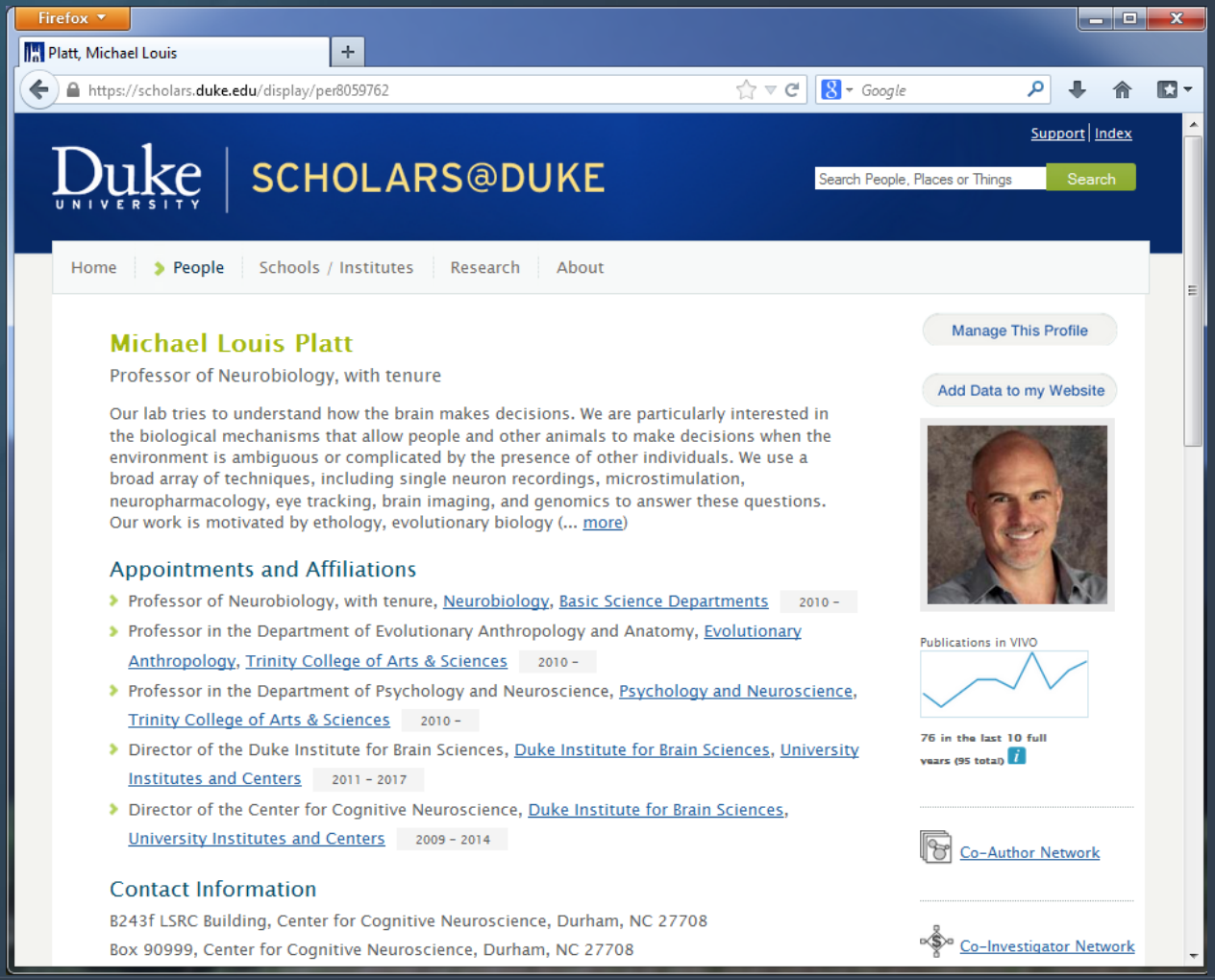
- School of Medicine: May 13
- Business, Environment, Engineering, Nursing: July 15
- Arts & Sciences, Divinity, Law, Public Policy: October?
- Faculty Annual Reporting tool: 2014

Scholars@Duke

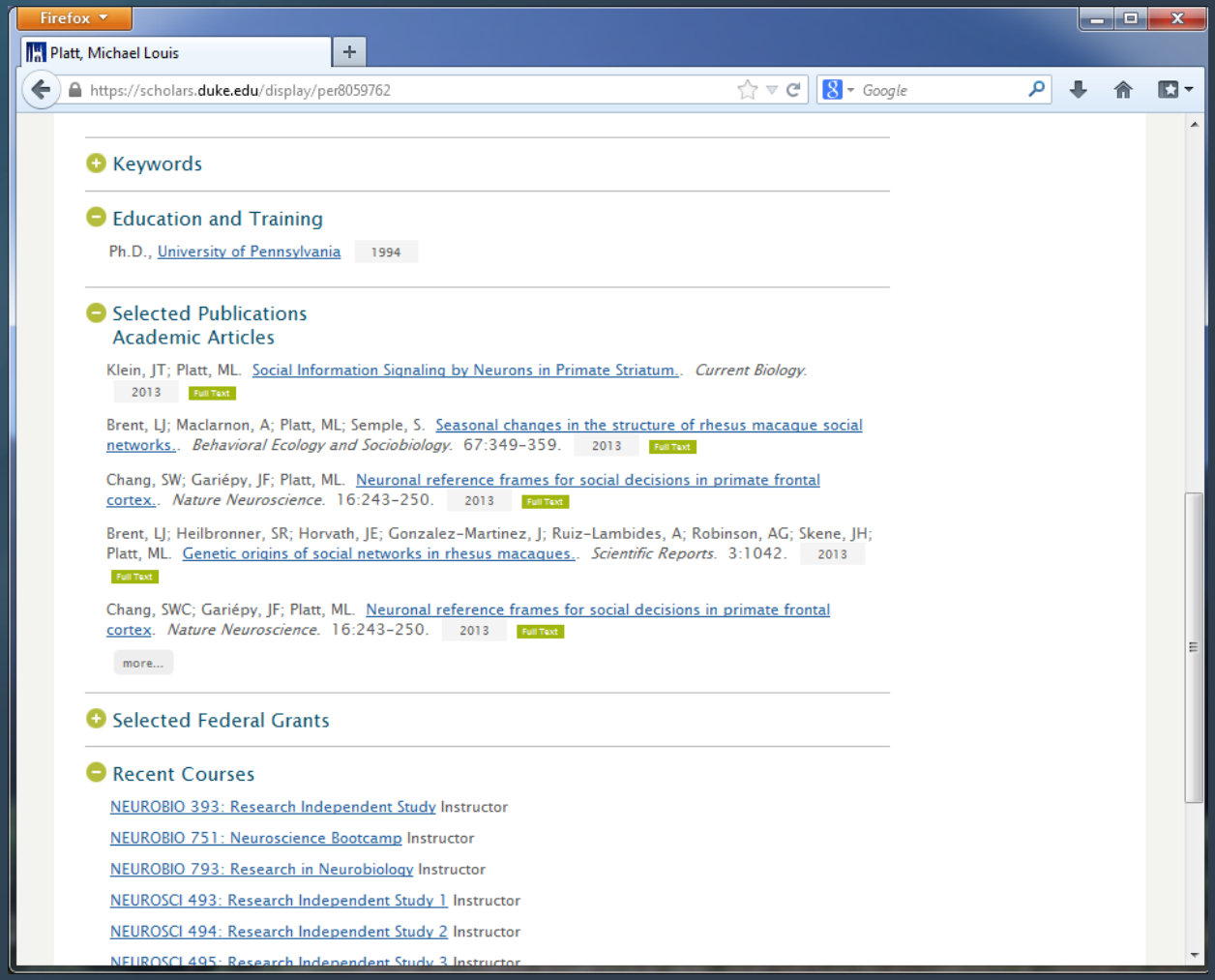
Organizations



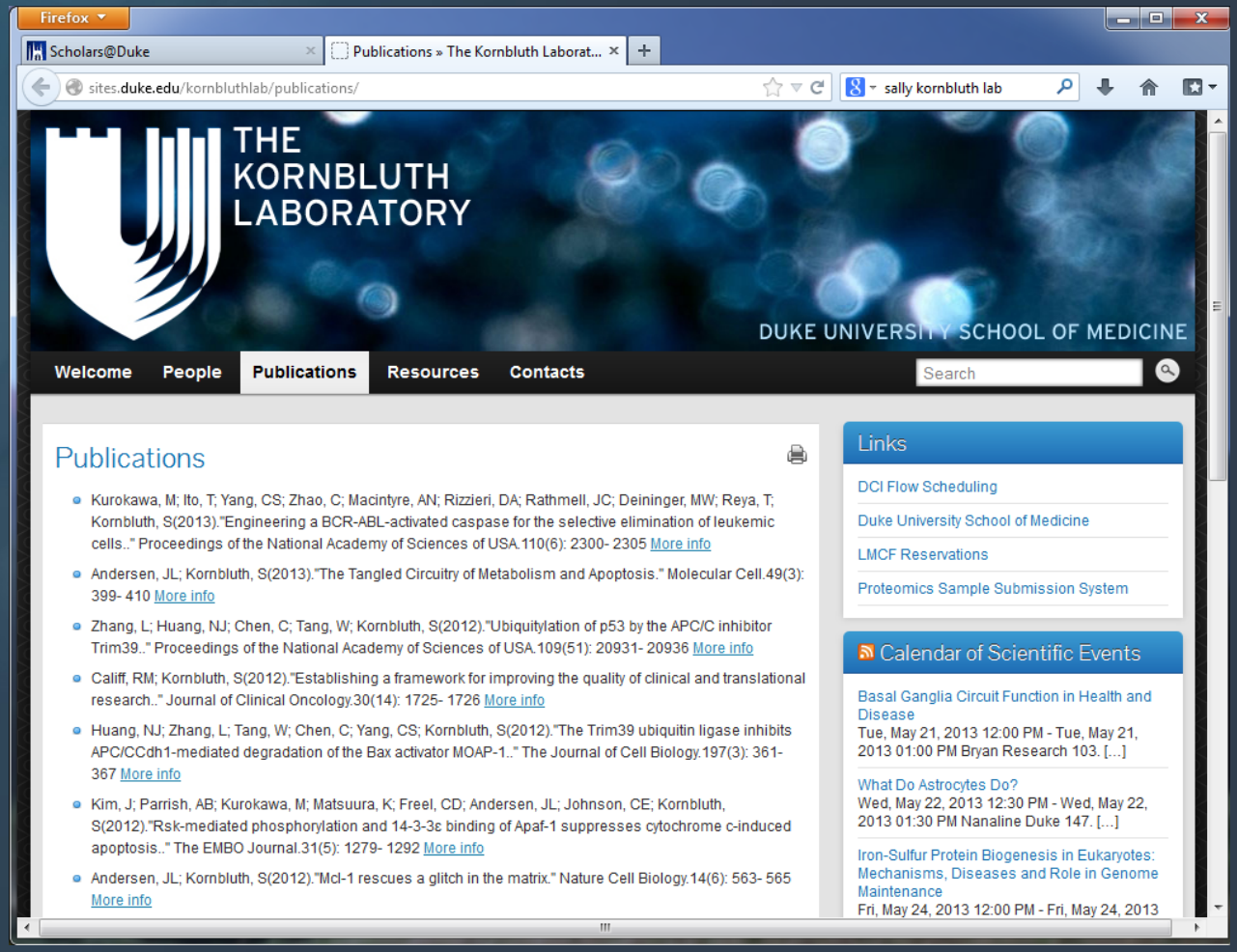
Profile Page



Profile Page, part 2



Widget Example



Support for Scholars@Duke

- Small army of “power users”
- First level of support for faculty
- Liaisons for issues or problems
- Support page lists power users plus learning and support materials

Exploration:

Will VIVO map to SciENCV?

Federal-Wide Researcher Profile Project

SciENcv
Science Experts Network Curriculum Vitae
Mission:
Create a researcher profile system for all individuals who apply for, receive or are associated with research investments from federal agencies, in order to:

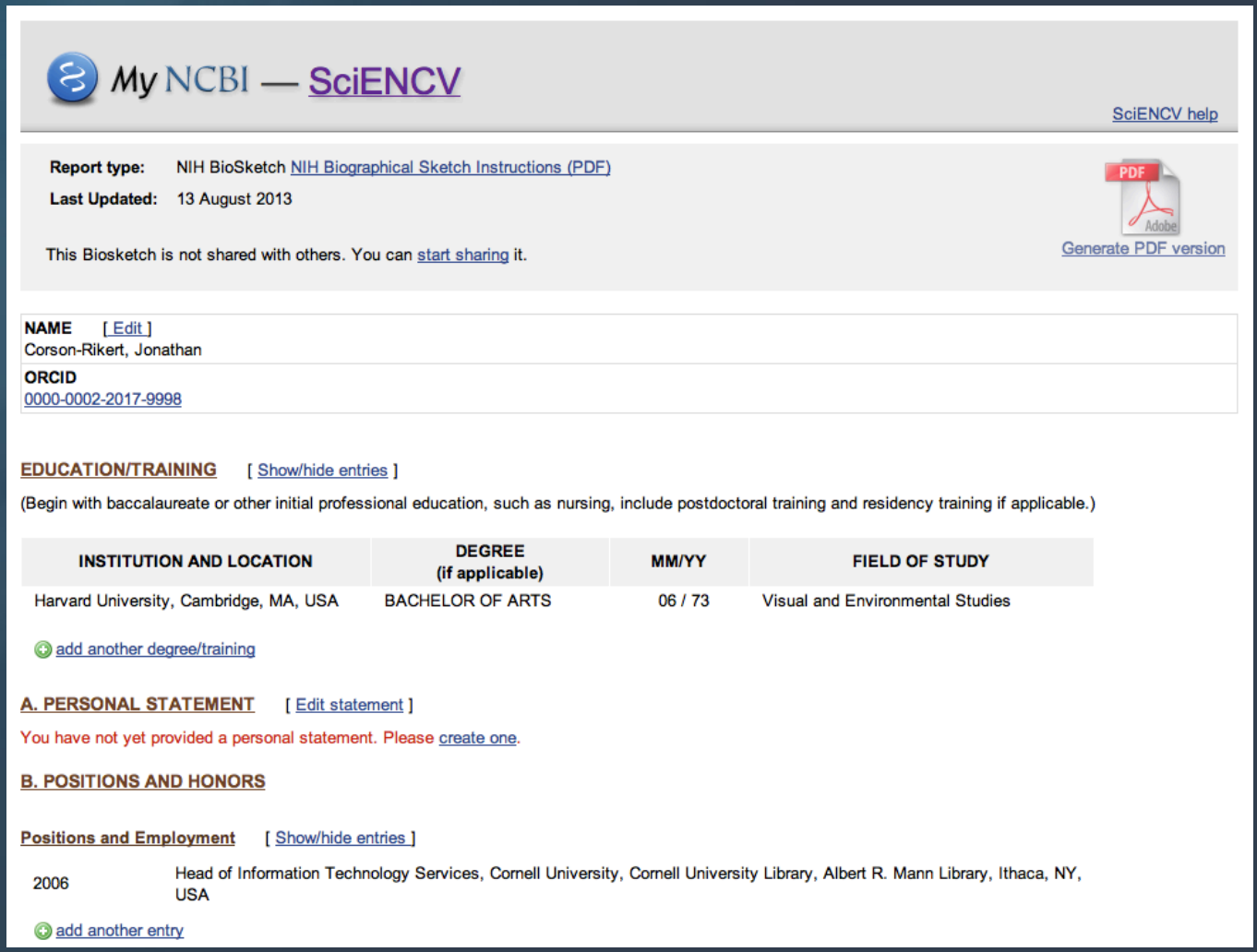
- Eliminate the need to repeatedly enter biosketch information and therefore reduce the administrative burden associated with federal grant submission and reporting requirements
- Provide access to a researcher-claimed data repository with information on expertise, employment, education, and professional accomplishments
- Allow researchers to describe their scientific contributions in their own language.

Who We Are:
The Federal Demonstration Partnership (FDP), an association of academic research institutions and federal agencies, is developing the requirements for theSciENcv platform in concert with an Interagency Workgroup that operates under the NSTC's Research Business Models and Science of Science Policy Committees. The SciENcv project is closely connected to the STAR METRICS program. The underlying data model is being built by the National Center of Biotechnology Information (NCBI) at the National Institutes of Health (NIH) in collaboration with FDP and the Department of Defense, the Department of Energy, the Environmental Protection Agency, the National Science Foundation and the United States Department of Agriculture.

Most importantly, the development of the SciENcv platform will be based on input from the broader research community.
Guiding Principles:

- Any researcher may register in the system (i.e., no criteria for registration)
- Profile data will be owned by the researcher
- Researchers will control which data elements the system makes publicly available
- Researchers will be able to auto-populate their profile from existing data sources.
- Researchers will be able to augment and modify information in the system
- Profile data will be available to federal agencies and if desired by the researcher - to the public Federal agencies will be encouraged to use profile data in lieu of biosketches and to pre-populate forms (e.g., grant applications and progress reports) submitted by the researchers

SciENCV is live for testing



My NCBI — SciENCV

SciENCV help

Report type: NIH BioSketch NIH Biographical Sketch Instructions (PDF)

Last Updated: 13 August 2013

This Biosketch is not shared with others. You can start sharing it.

Generate PDF version

NAME [Edit]
Corson-Rikert, Jonathan

ORCID
0000-0002-2017-9998

EDUCATION/TRAINING [Show/hide entries]

(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Harvard University, Cambridge, MA, USA	BACHELOR OF ARTS	06 / 73	Visual and Environmental Studies

add another degree/training

A. PERSONAL STATEMENT [Edit statement]

You have not yet provided a personal statement. Please create one.

B. POSITIONS AND HONORS

Positions and Employment [Show/hide entries]

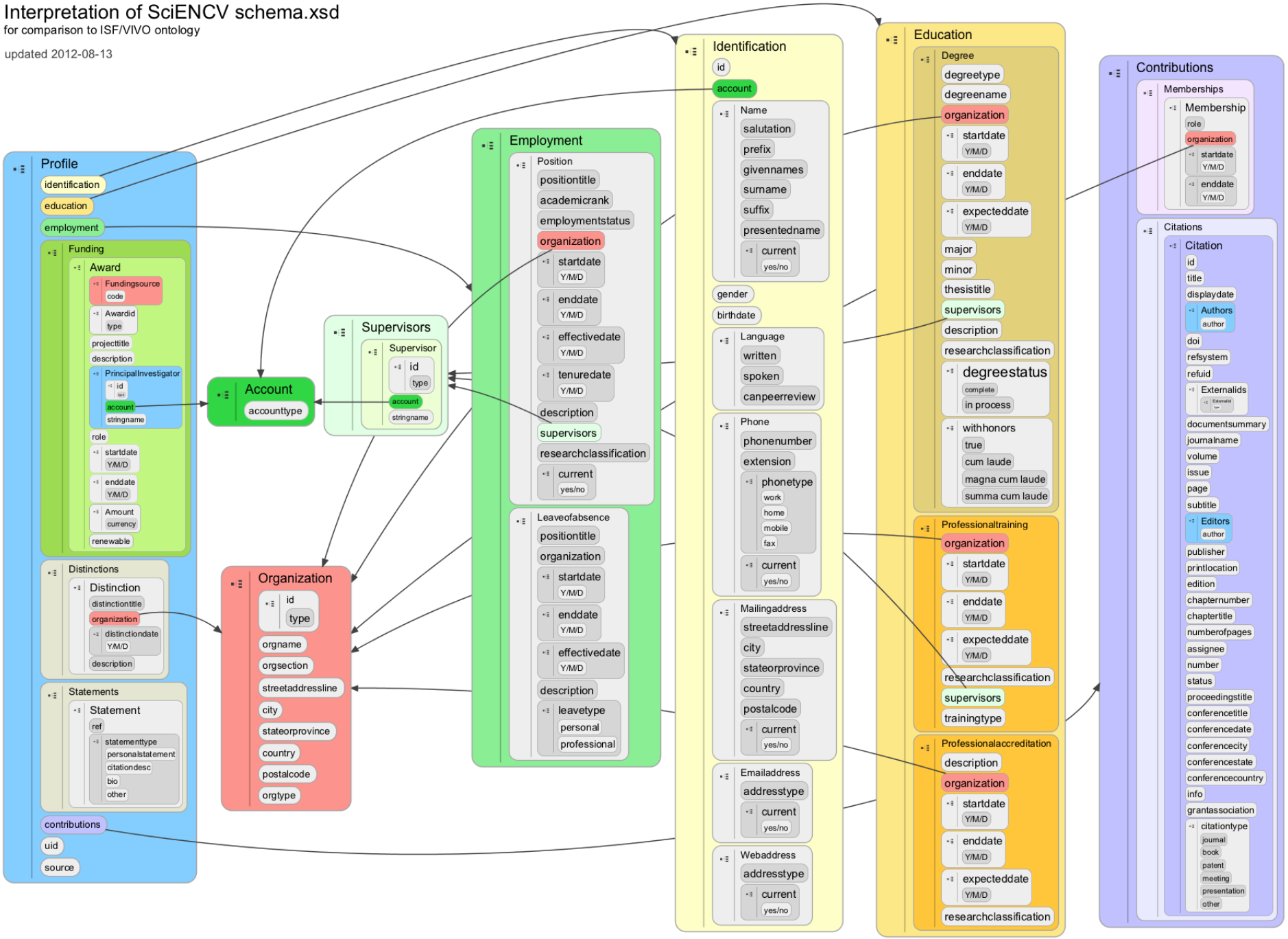
2006 Head of Information Technology Services, Cornell University, Cornell University Library, Albert R. Mann Library, Ithaca, NY, USA

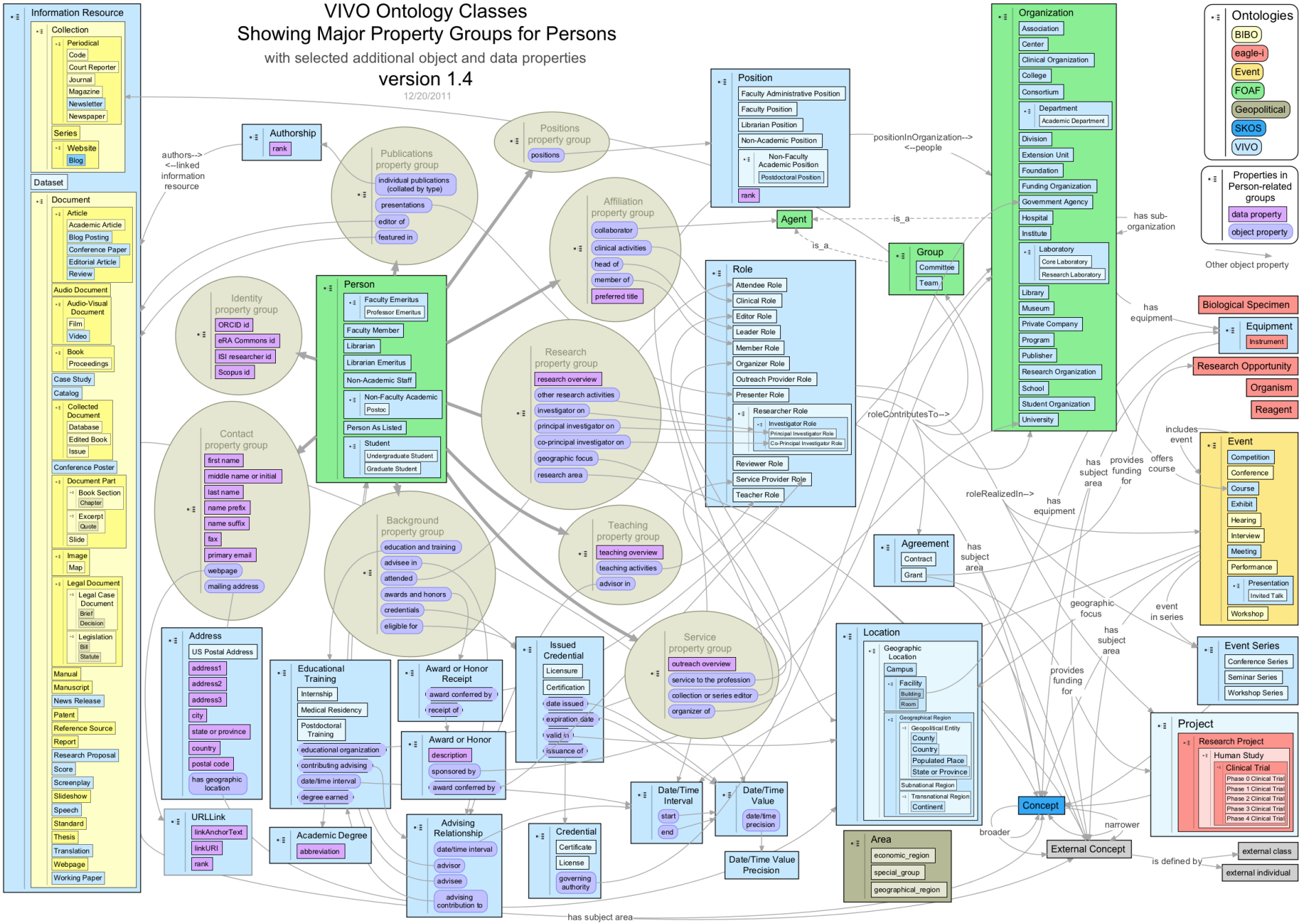
add another entry

Interpretation of SciENCV schema.xsd

for comparison to ISF/VIVO ontology

updated 2012-08-13

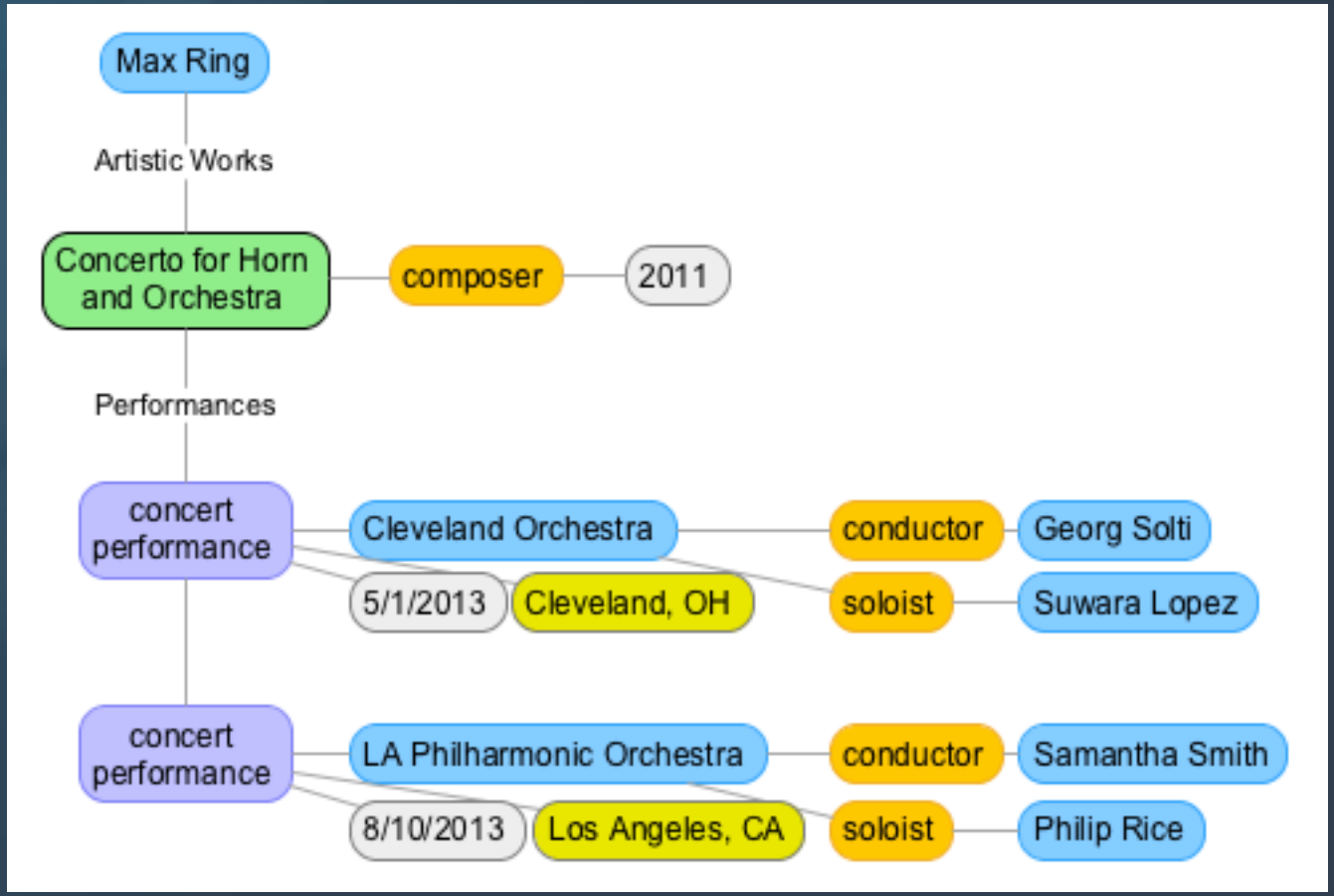


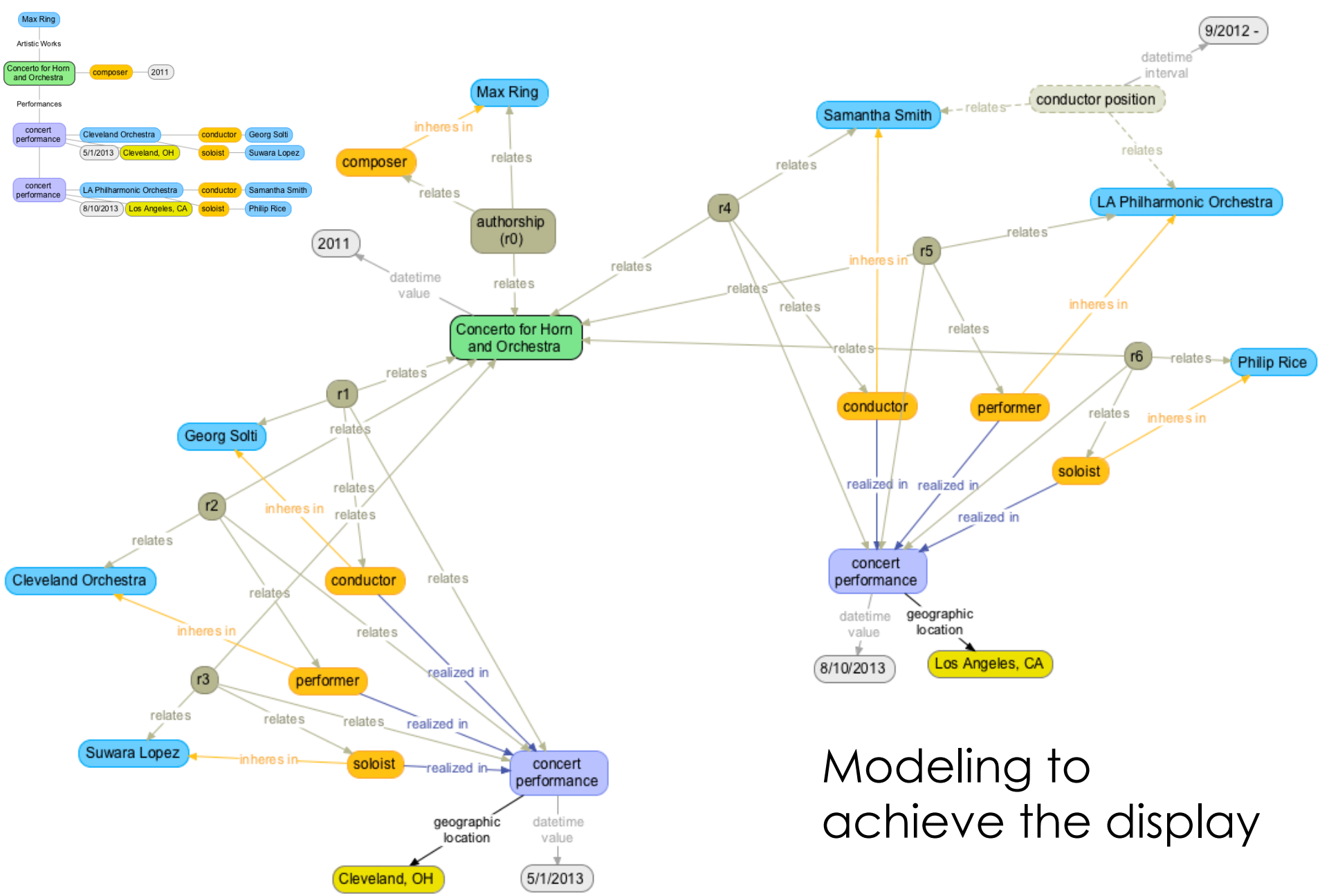

VIVO Ontology Classes
Showing Major Property Groups for Persons
with selected additional object and data properties
version 1.4
12/20/2011
Information Resource
Collection
Periodical
Code
Court Reporter
Journal
Magazine
Newsletter
Newspaper
Series
Website
Blog
Dataset
Document
Article
Academic Article
Blog Posting
Conference Paper
Editorial Article
Review
Audio Document
Audio-Visual Document
Film
Video
Book
Proceedings
Case Study
Catalog
Collected Document
Database
Edited Book
Issue
Conference Poster
Document Part
Book Section
Chapter
Excerpt
Quote
Slide
Image
Map
Legal Document
Legal Case Document
Brief
Decision
Legislation
Bill
Statute
Manual
Manuscript
News Release
Patent
Reference Source
Report
Research Proposal
Score
Screenplay
Slideshow
Speech
Standard
Thesis
Translation
Webpage
Working Paper
Authorship
rank
authors--> <--linked information resource
Publications property group
individual publications (collated by type)
presentations
editor of
featured in
Positions property group
positions
Position
Faculty Administrative Position
Faculty Position
Librarian Position
Non-Academic Position
Non-Faculty Academic Position
Postdoctoral Position
rank
positionInOrganization--> <--people
Affiliation property group
collaborator
clinical activities
head of
member of
preferred title
Agent
is_a
Group
Committee
Team
Organization
Association
Center
Clinical Organization
College
Consortium
Department
Academic Department
Division
Extension Unit
Foundation
Funding Organization
Government Agency
Hospital
Institute
Laboratory
Core Laboratory
Research Laboratory
Library
Museum
Private Company
Program
Publisher
Research Organization
School
Student Organization
University
has sub-organization
Ontologies
BIBO
eagle-i
Event
FOAF
Geopolitical
SKOS
VIVO
Properties in Person-related groups
data property
object property
Other object property
Identity property group
ORCID id
eRA Commons id
ISI researcher id
Scopus id
Person
Faculty Emeritus
Professor Emeritus
Faculty Member
Librarian
Librarian Emeritus
Non-Academic Staff
Non-Faculty Academic
Postoc
Person As Listed
Student
Undergraduate Student
Graduate Student
Role
Attendee Role
Clinical Role
Editor Role
Leader Role
Member Role
Organizer Role
Outreach Provider Role
Presenter Role
Researcher Role
Investigator Role
Principal Investigator Role
Co-Principal Investigator Role
Reviewer Role
Service Provider Role
Teacher Role
roleContributesTo-->
Research property group
research overview
other research activities
investigator on
principal investigator on
co-principal investigator on
geographic focus
research area
Contact property group
first name
middle name or initial
last name
name prefix
name suffix
fax
primary email
webpage
mailing address
Background property group
education and training
advisee in
attended
awards and honors
credentials
eligible for
Teaching property group
teaching overview
teaching activities
advisor in
Biological Specimen
Equipment
Instrument
Research Opportunity
Organism
Reagent
has equipment
includes event
Event
Competition
Conference
Course
Exhibit
Hearing
Interview
Meeting
Performance
Presentation
Invited Talk
Workshop
has subject area
provides funding for
offers course
roleRealizedIn-->
has equipment
Agreement
Contract
Grant
has subject area
geographic focus
has subject area
event in series
Event Series
Conference Series
Seminar Series
Workshop Series
provides funding for
Project
Research Project
Human Study
Clinical Trial
Phase 0 Clinical Trial
Phase 1 Clinical Trial
Phase 2 Clinical Trial
Phase 3 Clinical Trial
Phase 4 Clinical Trial
Service property group
outreach overview
service to the profession
collection or series editor
organizer of
Issued Credential
Licensure
Certification
date issued
expiration date
valid in
issuance of
Location
Geographic Location
Campus
Facility
Building
Room
Geographical Region
Geopolitical Entity
County
Country
Populated Place
State or Province
Subnational Region
Transnational Region
Continent
Address
US Postal Address
address1
address2
address3
city
state or province
country
postal code
has geographic location
Educational Training
Internship
Medical Residency
Postdoctoral Training
educational organization
contributing advising
date/time interval
degree earned
Award or Honor Receipt
award conferred by
receipt of
Award or Honor
description
sponsored by
award conferred by
Date/Time Interval
start
end
Date/Time Value
date/time precision
Date/Time Value Precision
Concept
broader
narrower
External Concept
is defined by
external class
external individual
URLLink
linkAnchorText
linkURI
rank
Academic Degree
abbreviation
Advising Relationship
date/time interval
advisor
advisee
advising contribution to
Credential
Certificate
License
governing authority
Area
economic_region
special_group
geographical_region
has subject area

Exploration:

Modeling the Humanities

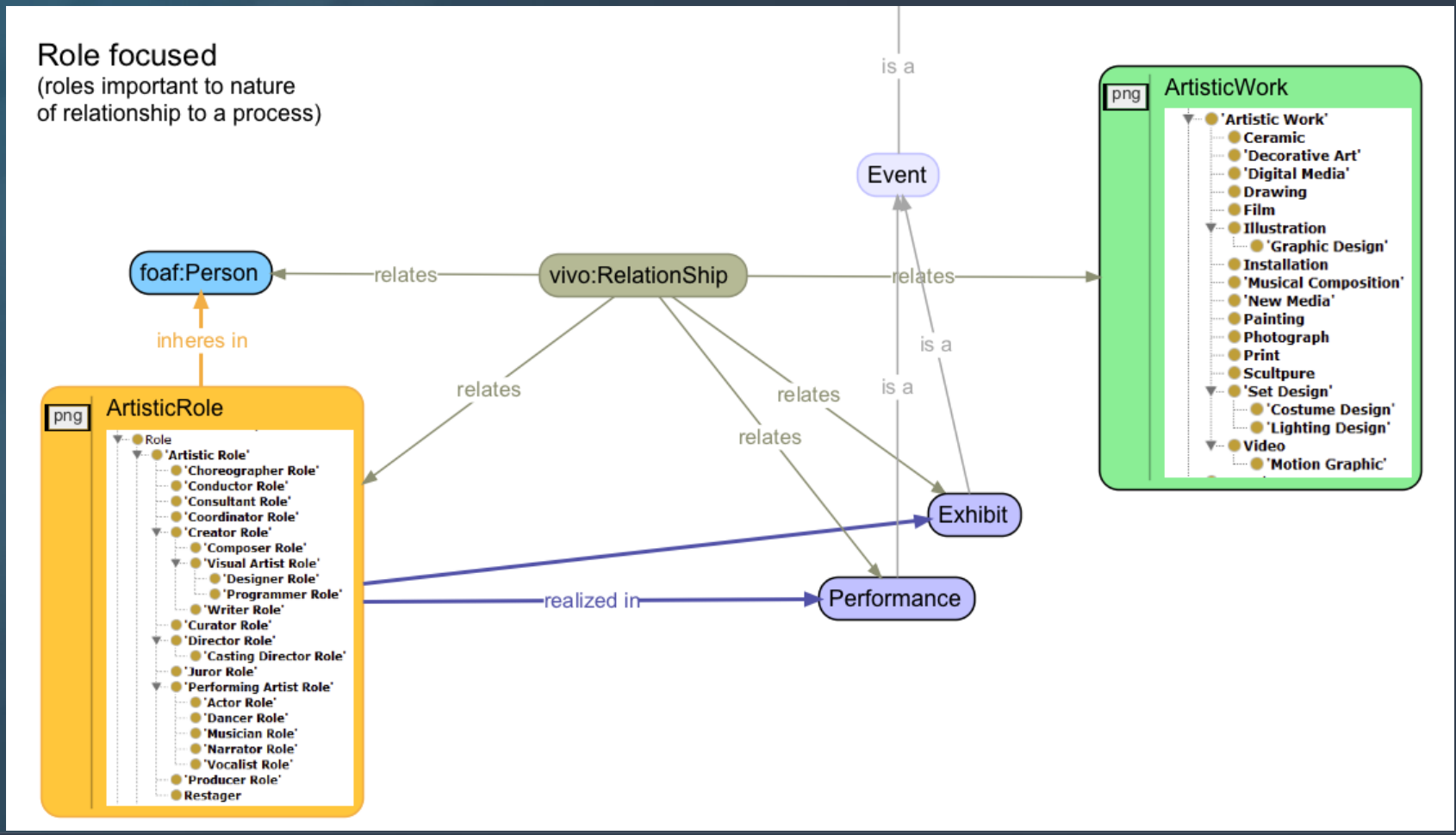
Desired humanities work display





Modeling to achieve the display

Roles and relationships



Entity page for artistic work

scholars.duke.edu/individual/art######

Title (Commissioned Work)
Company/Organization Name
Abstract/Summary of Work
Hyperlink + Text

Type
> Artistic Work Type(s)

Collaborators (in alphabetical order)
> Name 1, Role(s)
> Name 2, Role(s)

Events (in chronological order)
> Venue Geographic Location Date Interval

Faculty page showing roles in artistic works

scholars.duke.edu/individual/per######

You have 5 artistic works pending approval

+ **Artistic Works**

Musical Compositions
Title, Company/Organization Name, Role(s) (Featured Role), Characters played, Hyperlink + Text, Date Interval

2D Artwork

3D Artwork

Theatrical Performances

Exhibits

Alex Viggio
FIS Lead Developer
Office of Faculty Affairs
alex.viggio@colorado.edu

Case Study – VIVO@CU Boulder

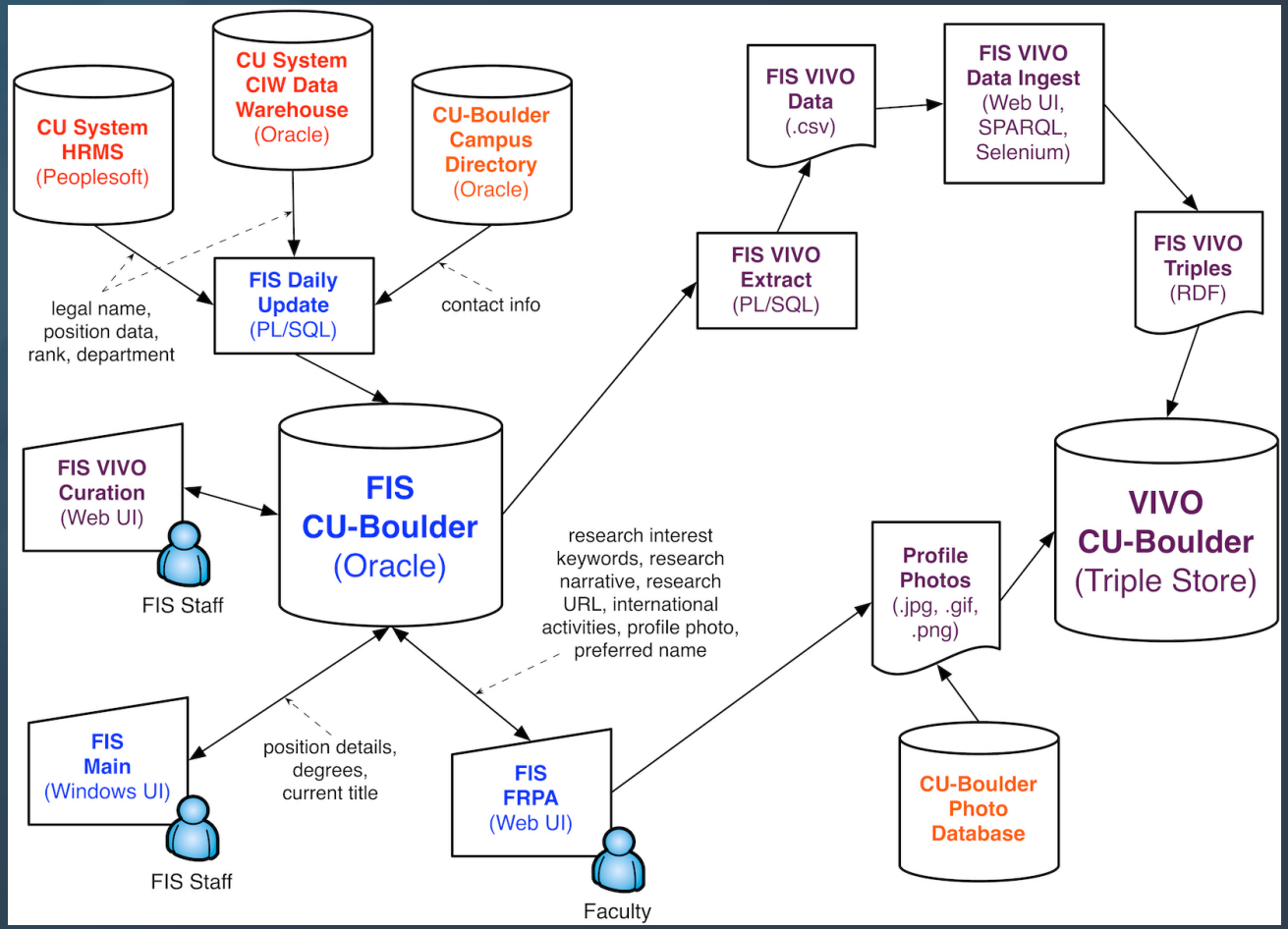
VIVO at CU-Boulder

- Project led by Faculty Information System (FIS) team in the Office of Faculty Affairs
- 1 domain expert FTE, 2.5 developer FTEs, <0.5 system admin FTE
- Original developers and IT group had Java and SQL/RDBMS expertise, but no prior Semantic Web work experience
- Partner with campus IT Managed Services group for web and database hosting
- Reuse existing FIS database and web servers

CU-Boulder Rollout

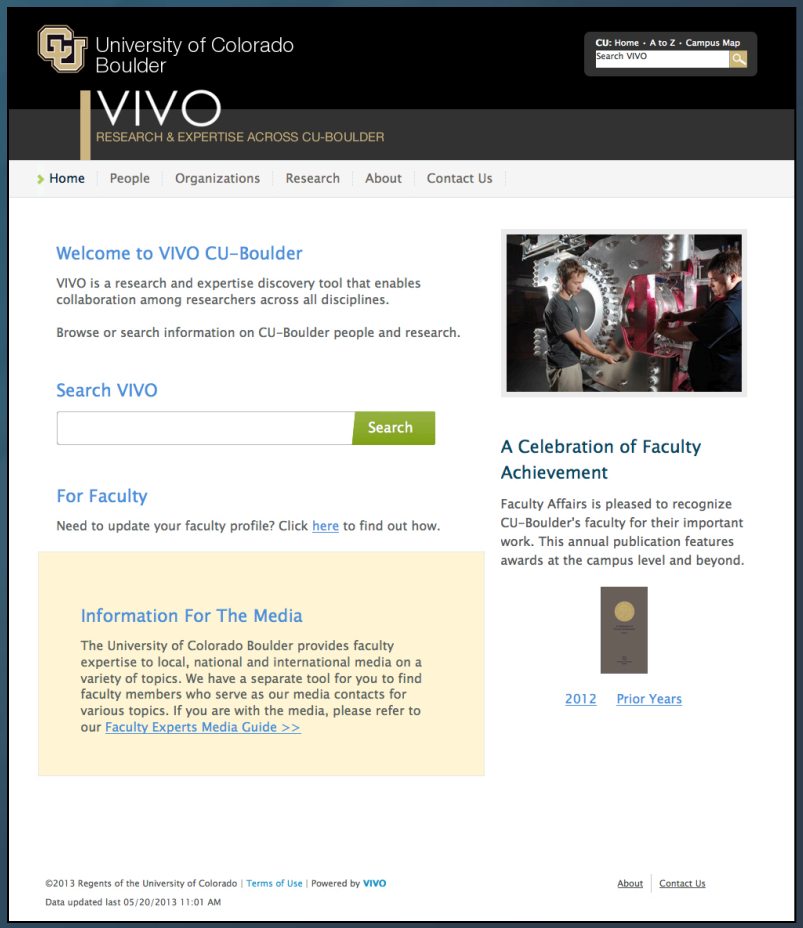
- Demos for CU-Boulder Provost, VC of Research and Dean of the Graduate School in late 2010
- Implementation started in January 2011
- Initial campus launch in April 2011
- Public WWW launch in September 2012
- Current status
  - Covers 64 academic units in seven schools and colleges, as well as the libraries, 11 research institutes and more than 40 non-academic units
  - 1,750+ profiles updated twice a week
  - No direct edits, no publications or grants data yet
- Publications ingest project starting Summer 2013

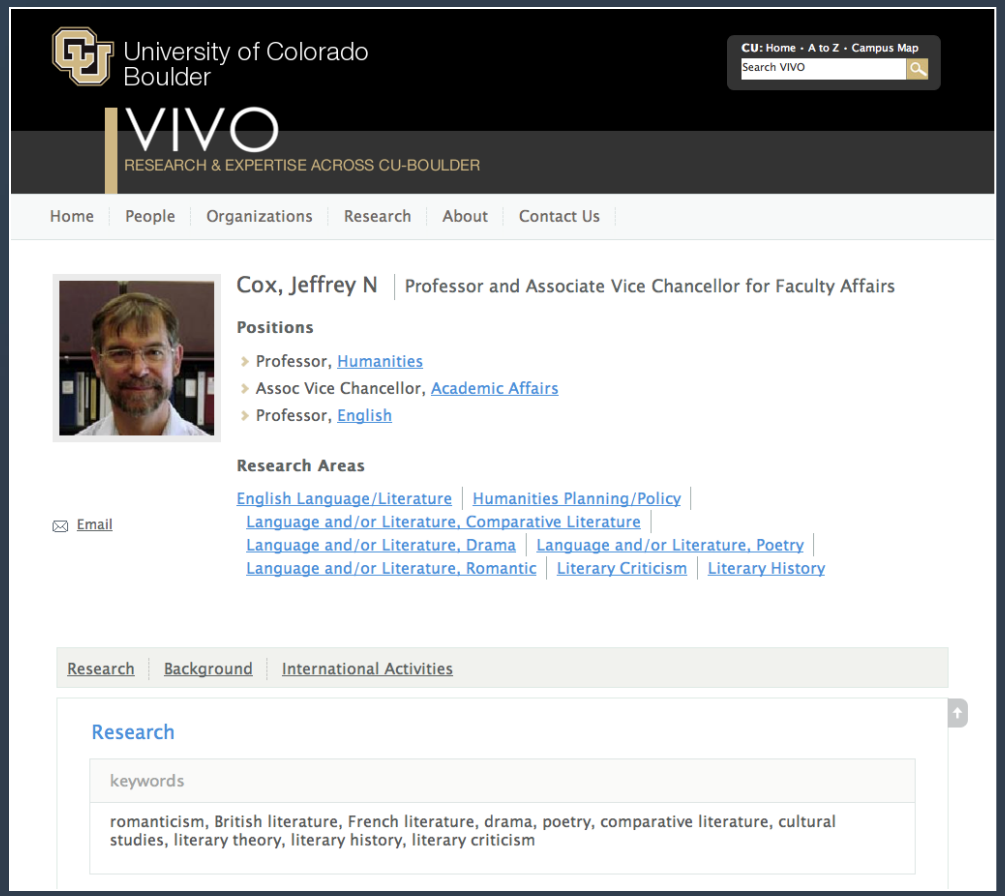
CU-Boulder FIS Overview



*from **VIVO: A Semantic Approach to Scholarly Networking and Discovery**, Figure 4.1*
http://www.morganclaypool.com/doi/abs/10.2200/S00428ED1V01Y201207WBE002

VIVO CU-Boulder





VIVO CU-Boulder About Page

University of Colorado Boulder

VIVO

RESEARCH & EXPERTISE ACROSS CU-BOULDER

CU: Home · A to Z · Campus Map

Search VIVO

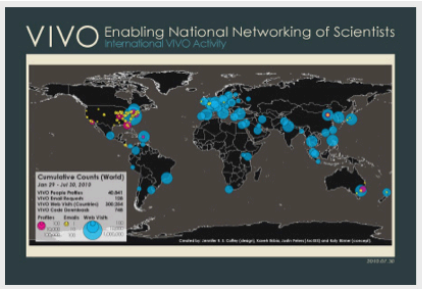
Home | People | Organizations | Research | About | Contact Us

About VIVO CU-Boulder

Learn how VIVO enables (SMALL CHANGE) discovery >>

Who's Included in VIVO CU-Boulder?
Most CU-Boulder faculty are included >>

How to Update VIVO Profile Data
For faculty – quick tips on how to add a photo, research areas and more >>



How VIVO Supports the Mission of the Boulder Campus
Collaboration, connections, vision. Get a sense of VIVO CU-Boulder and the big picture >>

We Value Feedback
Share your ideas. Find out how to be part of the future of VIVO CU-Boulder >>

Features List and Project Plan
See what's in store as VIVO grows >>

Known Bugs and Technical Issues
Nothing's perfect. Here's what we're working on >>

About VIVO CU-Boulder

Top

"The VIVO National Network enables the discovery of researchers across institutions. Participants in the network include institutions with local installations of VIVO or those with research discovery and profiling applications that can provide semantic web-compliant data. The information accessible through VIVO's search and browse capability will therefore reside and be controlled locally, within institutional VIVOs or other semantic web-compliant applications.

VIVO is an open source semantic web application originally developed and implemented at Cornell. When installed and populated with content at an institution, it enables the discovery of research and scholarship across disciplines at that

How to Update VIVO Profile Data

Top

How quickly will updates show in VIVO?

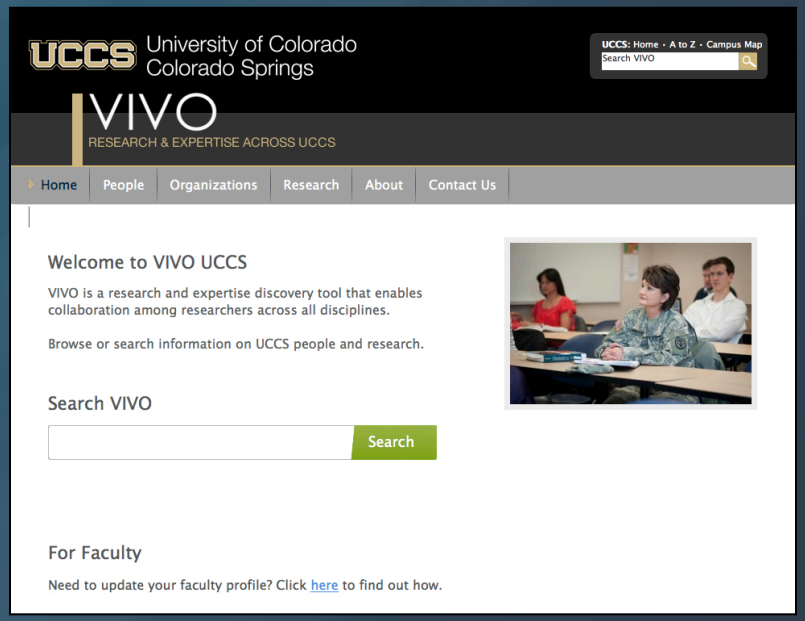
VIVO will be updated Monday, Wednesday and Friday afternoons by 5pm.

Fields updated through FRPA Online will appear in VIVO within 24 to 48 hours Monday through Friday. Data elements requiring updates through the HR system or through ITS registry systems may take longer to show in VIVO due to processing and system update schedules. Curated items may take longer to show on a VIVO profile as they are reviewed by staff prior to posting on VIVO. The curation process is applied to research interests, the research overview and the submitted web URL.

VIVO CU-Boulder Data Sources

Name	This field currently defaults from your official/legal name as it is stored in the Human Resources (HR) system and is maintained by your departmental payroll liaison. A 'Profile Name' option is now available through FRPA Online which allows faculty to enter the name they wish displayed on their VIVO CU-Boulder profile. To enter an alternate preferred profile name, go to 'Profile Name' in the navigation frame of FRPA Online. Faculty may change any or all three name fields (first, middle, last). These changes will only show in the VIVO profile. Name changes for legal or payroll reasons must be submitted through your payroll liaison.
Academic Rank	This field indicates your highest academic rank in order to best characterize your position at CU-Boulder. Payroll records are used to determine this listing. Some supplemental titles are handled individually and maintained in FIS by Faculty Affairs (e.g., Nobel laureate, endowed professor, etc.), as they are not always part of the payroll database. Your departmental payroll liaison is responsible for corrections to HR job class data. For updates to endowed appointments, please contact Faculty Affairs at **303-492-3055** or email **kristina.cizmar@colorado.edu**.
Positions Data	Positions information displays the unit and rank of each position currently held by a faculty member as entered into the HR system. Please contact your payroll liaison if corrections are needed.
Research Areas	This information comes from the FRPA database maintained by Faculty Affairs. To revise what is listed as your research interests, log in to FRPA Online through the Faculty Reporting Channel of **MyCUInfo** at any time and modify as needed by adding or removing items associated with the FRPA keywords code list, user-defined keywords or your research overview found in the Research & Expertise module of **FRPA Online**. Contact Faculty Affairs at **303-492-4226** or email **tomich@colorado.edu** if further assistance is needed.
International Activities	Country data submitted through the International Activities module of FRPA Online are the source for data showing as International Activities in the VIVO profiles. Updates to this field can be made in **FRPA Online** via the Faculty Reporting Channel on **MyCUInfo** at any time.

Regional Linked Data Efforts



Colorado Clinical and Translational Sciences Institute (CCTSI)
UNIVERSITY OF COLORADO DENVER | ANSCHUTZ MEDICAL CAMPUS

LASP
Laboratory for Atmospheric and Space Physics

NCAR UCAR | University Corporation for Atmospheric Research

NREL
NATIONAL RENEWABLE ENERGY LABORATORY
Leading clean energy innovation
OpenEI
U.S. DEPARTMENT OF ENERGY

Host institution of 2012 and 2013 VIVO Implementation Fests
http://2013vivoimplementationfest.sched.org

CU-Boulder Lessons Learned

- An incremental, value focused approach works for VIVO implementation
- Address faculty concerns as a priority
  - Limit launch to campus users to allow for review
- Data quality
  - All data requires clean up before public display
  - FIS VIVO Curation Module
- Building the campus initiative with internal PR
  - Address perceived competition with similar efforts
- VIVO's low cost – harder to justify resource needs
  - A small, entrepreneurial team worked for us
- VIVO builds conversation about Big Data, Linked Open Data, Open Access

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Implementation & the Open Source Community

Implementation from a technical vantage point

- Options and typical solutions
- Skills and FTE requirements
- Learning about your source data
- Developing an ingest and update strategy
- Leveraging vendor solutions as well as open source communities

Major options

- Physical or virtual hardware
- Choice of OS and base software
- Division of labor
- Approach to data
  - Especially for publications
- Staging strategy
- Hosted options?

Physical or virtual?

- Likely depends mostly on your institution's IT environment
  - Physical servers take an up-front investment but may give you more control
  - Virtual servers can usually be scaled according to need
  - Hosted virtual servers can compensate for lack of server administration resources

Choice of OS and software

- Windows or Linux
  - Linux more common, but some IT shops have a big Windows investment
- Database – MySQL is default, Oracle Enterprise Database an option
- Servlet engine – Tomcat is default, Glassfish and others supported
- Web server optional but recommended – Apache HTTP Server

Division of Labor

- Skills/roles needed (often from the same person)
  - Sysadmin
  - Database Admin
  - Data conversion/ETL specialist (Java/Python)
  - Data curator
  - Web developer (HTML/CSS)
  - Java developer (optional) for customizing VIVO or adding custom forms
  - User training and support
  - Project management
- Not all need to be full time

Approach to data

- Negotiate with data stewards
- Tools options
  - Harvester and other XML tools
  - Karma, Open (Google) Refine and RDF/ semantic tools
  - Python and R
- Commercial options
- Important to think through data updates, not just a one-time load

Staging strategy

- Give your techs time to learn Semantic Web concepts and tools
- Don't start with the hardest data
- Think through what will be interactively updated vs. batch update/ replacement
- Work with data sources to make it easier on both ends

Resources

- VIVO DuraSpace Wiki
- VIVO Mailing lists
- Weekly dev/implementation and biweekly ontology calls
  - Updates
  - Bug reports and issue discussion
  - Demos of implementations
  - Invited guest presentations
- https://wiki.duraspace.org/display/VIVO

VIVO working groups

- Ontology
- Implementation
- Core development
- Engagement
- Apps & Tools

VIVO Implementation Fests

- Successful events in 2011, 2012, and 2013
- Increasingly about sharing and collaboration more than presentations
- Emphasis on small-group interactions
- Reaching out to related tool providers
- Internationalization code sprint after 2013 IFest

4 kinds of open source communities

- Single vendor open source projects
- Development communities
- User communities
- Open source competence centers

What are/will be the salient features of the VIVO community?

Highlights of the conference

Discussion

Starting a VIVO and participating in the community

Wrap up

Q&A: technical, policy, or strategic