

Mission Statement and reuse of **Scholars@Cornell** (VIVO) Developments



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Ontology Engineer / Tech Lead (Scholars@Cornell)



Cornell University
Library

@mjaved495 

March 28th, 2019

DEFF Open Research Analytics Workshop, DTU, Denmark

VIVO

connect
share
discover

<http://vivoweb.org/>

VIVO creates an integrated record of the scholarly work of your organization

Download VIVO

Current version is v1.10.0

<https://github.com/vivo-project/>

VIVO is a member-supported, open source semantic technologies-based software for recording, editing and browsing scholarship data.

Scholars@Cornell

is an (Cornell-specific) extension to the VIVO application ...



Mission Statement

of Scholars@Cornell

Introduction

to the vision

Key Features

to re-use



MISSION

VISION

VALUES

Mission Statement



CORNELL UNIVERSITY LIBRARY

SCHOLARS@CORNELL

Research and scholarship across the university

*Advance the visibility and accessibility of
Cornell scholarship and creative expression*

Data Aggregation | Data Mapping | Data Deduplication | Linked Data Transformation

&

Data Analytics

*Explore the scholarship of Cornell from the
perspective of what the scholarly record itself
can tell us.*



Mission Statement

of Scholars@Cornell

Introduction

to an un-finished vision

Key Features

to re-use



VIVO offers customizable Faculty Profiles by default, BUT

Duke UNIVERSITY | SCHOLARS@DUKE

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Search People, Places or Things Search

Advanced Search

Home > People | Schools / Institutes | Research | About

Hiba Abou Assi
Assistant Professor of Medicine

Manage This Profile
Add Data to my Website

Current Appointments & Affiliations
Assistant Professor of Medicine, [Medicine, Endocrinology, Metabolism, and Nutrition, Medicine](#) 2017

Contact Information
227 Baker Hse, Box 3924, Durham, NC 27710
✉ hiba.abouassi@duke.edu

Background
+ Education, Training, & Certifications
+ Duke Appointment History

Research
+ Selected Grants

Publications & Artistic Works
+ Selected Publications

Publications in VIVO
8 in the last 10 full years

Co-Author Network

BROWN Researchers@Brown

Find an expert... Search

Back to search | Manage your Profile

Thomas G Schestag
Professor of German Studies

Overview

Schestag studied philosophy, German, and Comparative Literature in Berlin, Paris, and Strasbourg. He received his doctorate at the University of Zurich in 1988 and his habilitation at the University of Frankfurt in 2003. He has taught at universities in Germany (including Bochum, Bonn, Frankfurt, and Munich), Japan, Hungary, and the U.S., including Johns Hopkins, Michigan, Northwestern, NYU, and Virginia. In the fall of 2013 he was the John P. Birkelund Fellow in the Humanities at the American Academy in Berlin. He joined the faculty of Brown's German Department in January 2014.

Overview
Publications
Research
Background
Affiliations
Teaching
View All

TIB VIVO [BETA]

Index Log in

Menu Search for an Expert... Search

Prof. Dr. Auer, Sören

Positions
Director, Technische Informationsbibliothek (TIB) Leibniz-Informationszentrum Technik und Naturwissenschaften und Universitätsbibliothek 2017 - More...

Research Areas
[Digital humanities](#) (LCSH) [Knowledge representation \(Information theory\)](#) (LCSH) [Linked data](#) (LCSH)
[Semantic Web](#) (LCSH) [Software engineering](#) (LCSH)

Overview | Affiliation | Publications | Research | Teaching | Service
Contact | Identity | View All

overview

Sören Auer studied Mathematics and Computer Science in Dresden, Hagen and Yekaterinburg (Russia). Before pursuing a scientific career Sören was managing director of adVIS GmbH, a

Publications in VIVO
Books Articles Other

VIVO connect • share • discover

Weill Cornell Medical College

Index Log in

Home | People | Organizations | Research | Support

Guillaume Alinier | Adjunct Professor of Education in Medicine

Publications | Background | Contact | Other

- Adjunct Professor of Education in Medicine, [Medicine](#), [Weill Cornell Medical College](#) 2018 -
- Director of Research, Ambulance Service, [Hamad Medical Corporation](#) 2015 -
- Professor of Simulation in healthcare Education, [University of Hertfordshire \(United Kingdom\)](#) 2011 -
- Visiting Fellow, [Northumbria University](#) 2009 -

Guillaume has a strong interest in clinical simulation-based education, patient safety, and human factors and has held senior positions with various healthcare simulation societies. He is regularly involved in educational simulation activities in various medical specialties and contributes to the planning and running of single and multi-agency full-scale and table top major incident simulation exercises. He has been affiliated with the field of pre-hospital care since the beginning of his academic career nearly 20 years ago. He serves on 7 peer reviewed journal editorial boards and has published widely, including 2 books on debriefing. Some of his other recent work has been on ECMO education and simulation education, accreditation, and certification.



Scholars@Cornell

is not a

**Faculty Profile
System**

But a

**Research Info.
Mgmt. System
(RIMS)**

We were not interested in

(Stand-alone) Faculty Profiles



Rachit Agarwal

Assistant Professor
Computer Science



Chekesha Watson

Professor
Art & Language Studies



Sandra Babcock

Professor of Law
Law School



Steven Graham

Assistant Professor
Meinig School of Biomedical Engineering



Jie Shaun

Professor
Veterinary Sciences





Linked Open (Scholarship) Data



Mission Statement

of Scholars@Cornell

Introduction

to an un-finished vision

Key Features

to re-use / extend



Data Analytics & Infographics

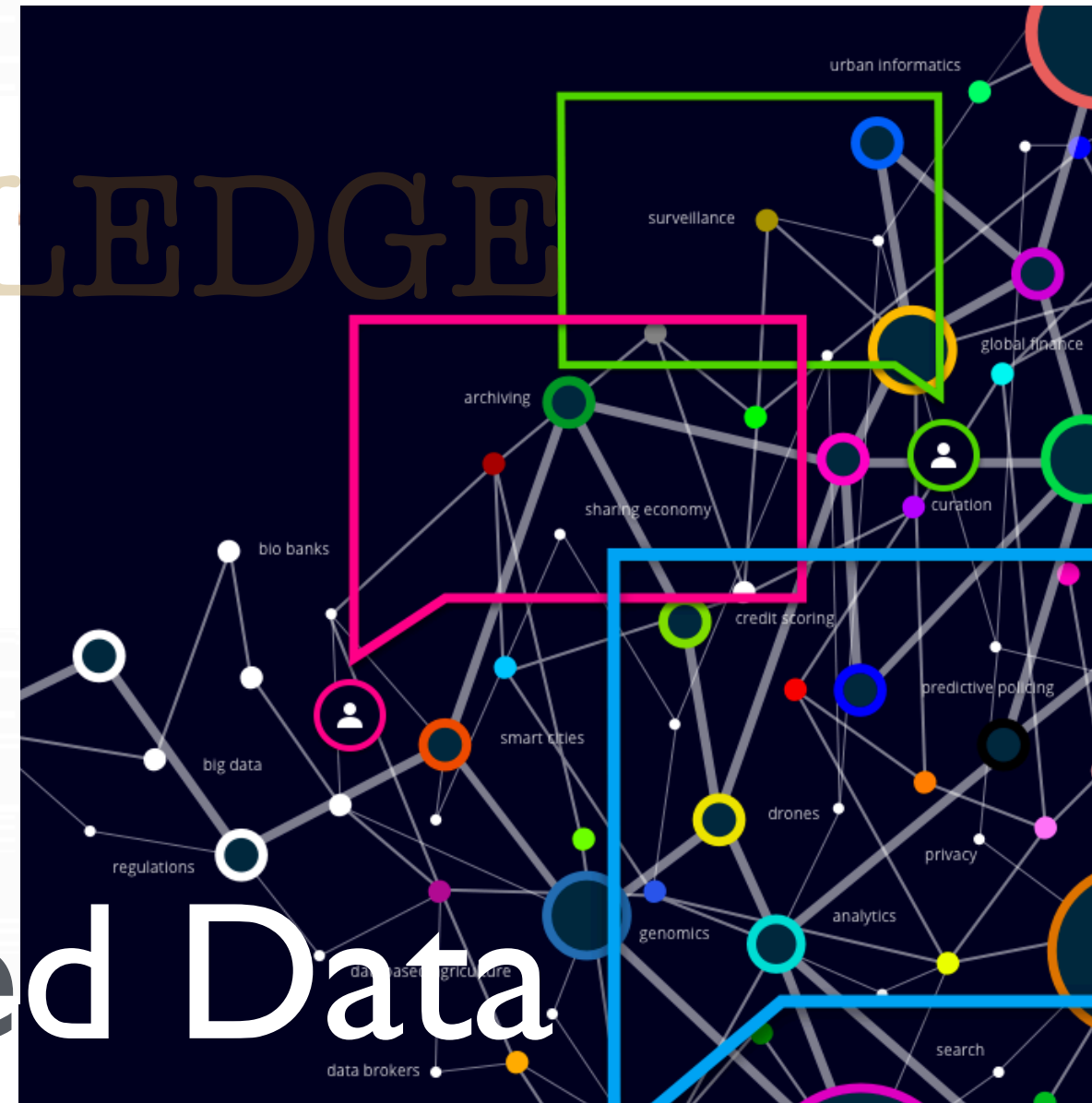
From (LD) Data to Knowledge

Data is merely a record & VIVO is just a (linked) data warehouse unless we pull the knowledge out of it.



KNOWLEDGE

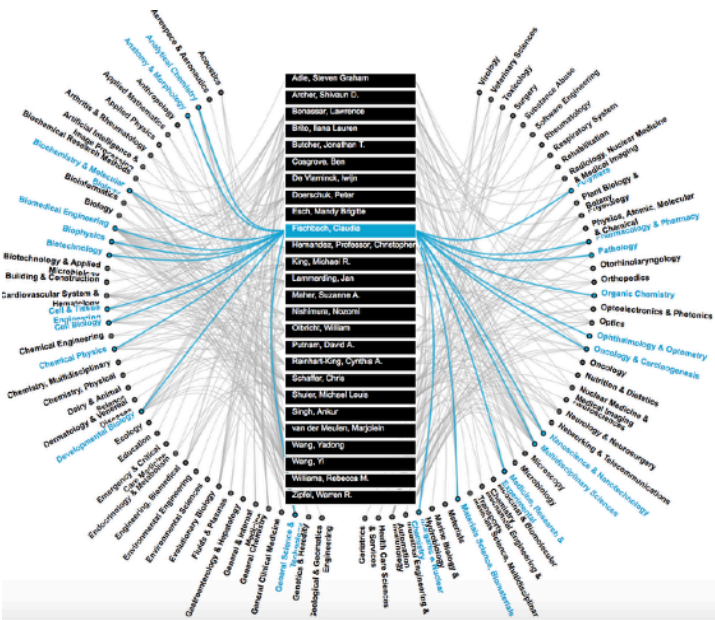
Linked Data



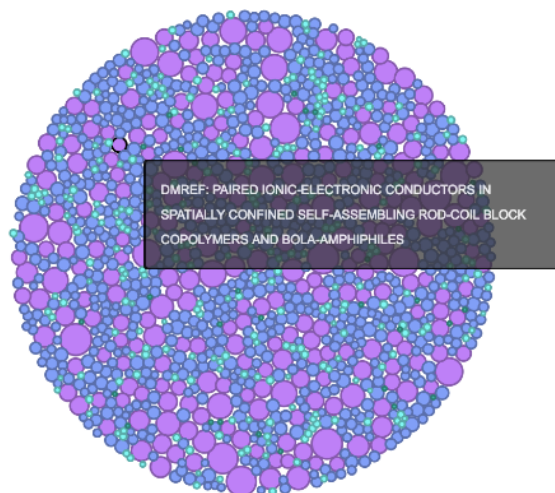
Knowledge Share via Infographics

Research Interests

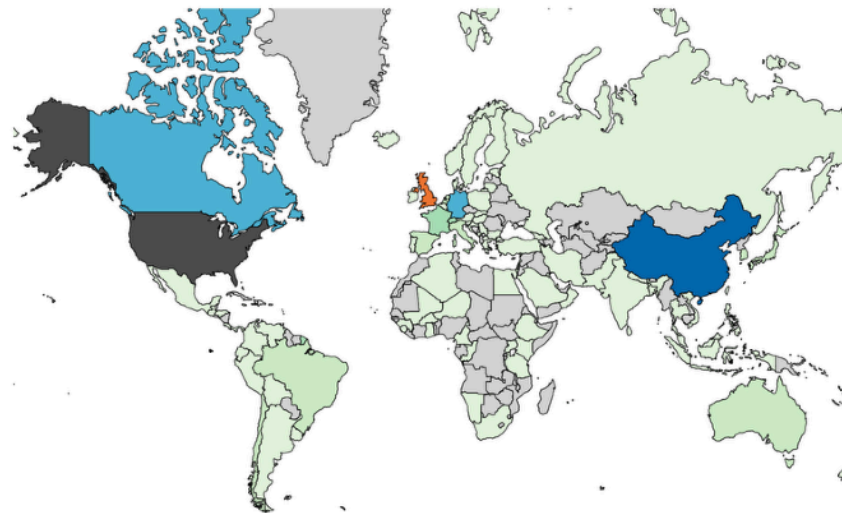
(in a department)



Grants



Global Collaborations

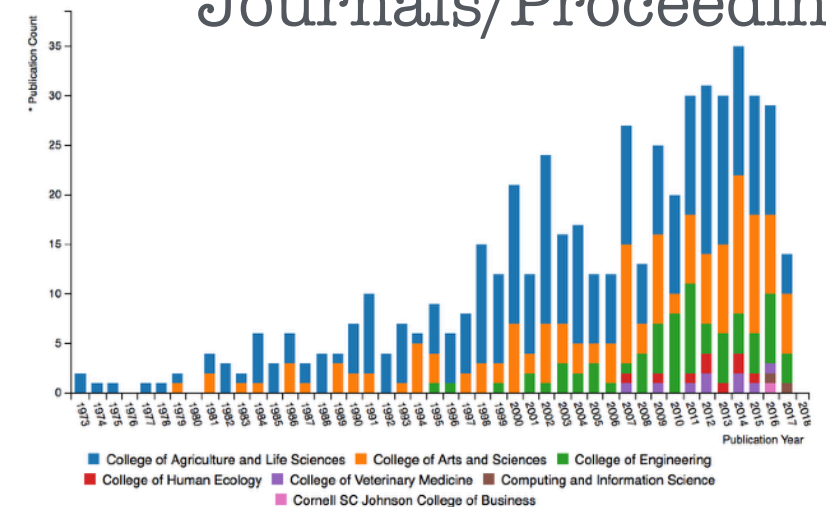


Inter-departmental co-authorships

Keyword Cloud



Journals/Proceedings



Co-authorships



Data Distribution API

WE TALK DIFFERENT LANGUAGES/DATA FORMATS

RDF OWL
RDF/XML TURTLE

**Ontology
Engineers**



TSV JSON
CSV XML

**Software
Developers**

1) Data Access

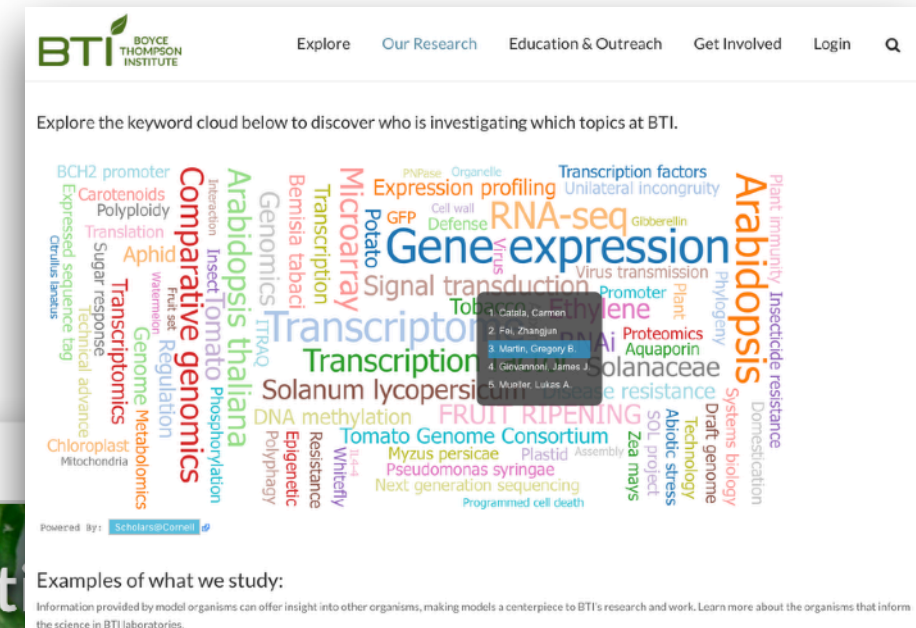
```
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  "label": "Phosphate in the arbuscular mycorrhizal symbiosis: transport properties and regulatory roles",
  "authors": [
    {
      "rank": 1,
      "label": "Javot, H."
    },
    {
      "rank": 2,
      "label": "Pumplin, N."
    },
    {
      "rank": 3,
      "label": "Harrison, Maria J."
    }
  ],
  "pubDate": "2007",
  "journalName": "Plant Cell and Environment",
  "doi": "10.1111/j.1365-3040.2006.01555.x",
  "volume": "30",
  "issue": "3",
  "pages": {
    "pageStart": 355,
    "pageEnd": 365
  }
}
```

```

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  <rdf:type rdf:resource="http://purl.obolibrary.org/obo/ro:ro:Phosphate in the arbuscular mycorrhizal symbiosis" />
  <rdfs:label>Phosphate in the arbuscular mycorrhizal symbiosis</rdfs:label>
  <Transport properties and regulatory roles</rdfs:label>
  <vivo:dateTimeValue>
    <rdf:Description rdf:about="http://scholars.cornell.edu/individual/UR-608510-DTV">
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      <vivo:dateTimePrecision rdf:resource="http://vivoweb.org/ontology/core#yearPrecision"/>
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    </rdf:Description>
  </vivo:dateTimeValue>
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  <bibo:pageEnd>322</bibo:pageEnd>
  <bibo:volume>30</bibo:volume>
  <bibo:issue>3</bibo:issue>
  <bibo:doi>10.1111/j.1365-3040.2006.01617.x</bibo:doi>
  <bibo:issn>0140-7791</bibo:issn>
  <bibo:eissn>1365-3040</bibo:eissn>
  <dc:language rdf:resource="http://id.loc.gov/vocabulary/iso639-2" />
  <dc:language rdf:resource="http://id.loc.gov/vocabulary/iso639-2" />
  <bibo:abstract>
    In response to the colonization by arbuscular mycorrhizal (AM) fungi, plants reprioritize their phosphorus allocation strategies to take advantage of nutrient transfer via the symbiosis. The mechanisms underlying Pi transport are beginning to be understood. Recently, details of the regulation of plant and fungal Pi transporters in the AM symbiosis have been revealed. This review discusses recent advances in this area and explores current hypotheses of how the symbiosis affects the symbiosis. The implications of an interrelationship of Pi and nitrogen (N) in the AM symbiosis are discussed.</bibo:abstract>
  <bibo:placeOfPublication>United States</bibo:placeOfPublication>
  <bibo:citationFrequency>
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      <vivo:dateTimePrecision rdf:resource="http://vivoweb.org/ontology/core#yearPrecision"/>
      <vivo:dateTime rdf:datatype="http://www.w3.org/2001/XMLSchema#dateTime">2007-01-01T00:00:00</vivo:dateTime>
    </rdf:Description>
  </bibo:citationFrequency>

```

3) Infographics Reuse



2) Data Reuse

BTI ROYCE THOMPSON INSTITUTE

Publications

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Examples of what we study:
Information provided by model organisms can offer insight into other organisms, making models a centerpiece to BTI's research and work. Learn more about the organisms that inform the science in BTI laboratories.

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 Search

A novel chloroplast gene reported for flagellate plants

2018. Song, M., L.-Y. Kuo, L. Huiet, K.M. Pryer, C.J. Rothfels, F.-W. Li.
American Journal of Botany. in press

A guide to sequence your favorite plant genomes

2018. Li, F.-W., A. Harkess
Applications in Plant Sciences. in press

The P. patens chromosome-scale assembly reveals moss genome structure and evolution

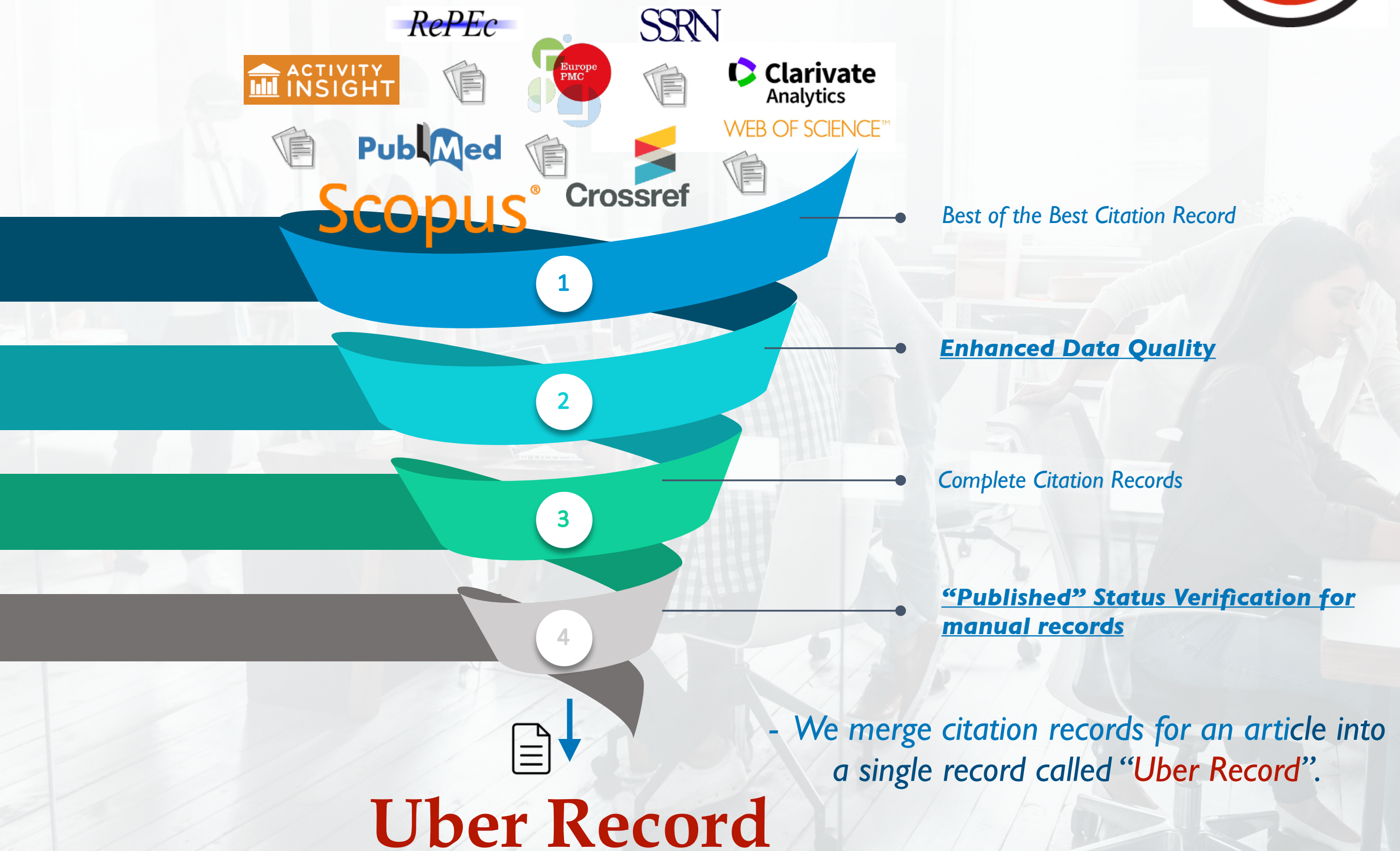
2018. Lang, D., K. Ullrich, F. Murat, J. Fuchs, J. Jenkins, F. Haas, M. Piednoel, H. Gundlach, M. Van Bel, R. Meyberg, C. Vives, J. Morata, A. Symeonidi, M. Hiss, W. Muchero, Y. Kamisugi, O. Saleh, G. Blanc, E. Decker, N. van Gessel, J. Grimwood, R. Hayes, S. Graham, L. Gunter, S. McDaniel, S. Hoernstein, A. Larsson, F.-W. Li, P.-F. Perroud, J. Philipps, P. Ranjan, D. Rokhsar, C.J. Rothfels, L. Schneider, S. Shu, D. Stevenson, F. Thümmel, M. Tillich, J.C. Villarreal, T. Widiez, G.K.-S. Wong, A. Wymore, Y. Zhang, A. Zimmer, R. Quatrano, K. Mayer, D. Goodstein, J. Casacuberta, K. Vandepoele, R. Reski, A. Cumig, G. Tuskan, F. Maumus, J. Salse, J. Schmutz, S. Rensing
Plant Journal. in press

View

RDF to JSON: Data Distribution API for VIVO
<https://cul-it.github.io/vivo-data-distribution-api/>

Data/Viz. Share and Access

Uberization - Merging Data extracted from different sources



Cornell has subscription of Symplectic Elements to aggregate Publication data. We (small organizations) do not afford (Elements) subscription cost. **What about us?**



VIVO Conference 2017 - An Attendee



OpenHarvester

A java prototype that processes the result set of pre-downloaded data (from a data source) and allows one to claim his/her publications from a ranked list.





Scopus®



...

Search name in
the author list
(Dean OR Krafft)

2

3

Result Set

Ranking

4

Ranked list of
Publications

Claim a Publication

6

List of my
Publications

Update Profile

7

Re-Ranking
(based on update profile)

8

List Review
from top

5



• Dean Krafft

(String)

Set of
Publications

Name

- Dean Krafft
- Dean B. Krafft
- D. Krafft
- Dean Blackmar Krafft

USER PROFILE

Desktop Application

Currently it supports to search publications in CrossRef, PubMed and DBLP

OpenHarvester

Home Search Databases Claim Publications

AUTHOR PROFILE SETTINGS:

Given Name Middle Initial Family Name

Sandy Payette

Sandy

Affiliations: Cornell Add

Co-Authors: last name, first name Add

/Users/mj495/Documents/DataHarvesterApp/OpenHarvester-master/CR Browse Search

List of ranked pending publications:

Hopper and Dijkstra: Crisis, Revolution, and the Future of Programming

An Interoperable Fabric for Scholarly Value Chains

Pathways: augmenting interoperability across scholarly repositories

The policy knot

Towards Sustainable

What Is a Digital Library

Rethinking Scholarly

Fedora: an architecture

Pathways core

Holocene Vegetation

doi=10.1007/s00799-007-0016-7,
title=Pathways: augmenting interoperability across scholarly repositories,
authors=Simeon Warner, Jeroen Bekaert, Carl Lagoze, Xiaoming Liu, Sandy Payette, Herbert Van de Warner,
venue=International Journal on Digital Libraries,
pubYear=2007,
type=journal-article,
issn=[1432-1300, 1432-5012],
published_print=2007, and their relationships
published_online=2007,
rank=15.0,
source=CROSSREF,
ids=[Identifier [type=CROSSREF, id=10.1007/s00799-007-0016-7]], th-Western Quebec
scopusId=null,
language=null,
subject=null

Claim Reclaim Process Publications

Claimed Publications Rejected Publications

Unclaim Publication Claimed publication count: 0 Save

Save Results View

Select Output format(s)

☒ CSV

☒ PDF

☒ TXT

☒ RDF (VIVO-Model)

http://scholars.cornell.edu/individual/sdp6

journal mapping file (optional) Browse

Close SAVE

Warner, Simeon

Kraft, Dean B.

Bekaert, Jeroen

Start Year:

Identifiers:

Select Identifier Type Add

Unclaim Publication Claimed publication count: 6 Save

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ABOUT TAKE THE TOUR DISCOVER

Fischbach, Claudia

Associate Professor, Meinig School of Biomedical Engineering, College of Engineering

Publications Grants

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Perivascular Niche in Regulating Cancer Stem Cells In
Multiforme. *TISSUE ENGINEERING PART A*. S11-S11.

ix Metalloproteinase-dependent Collagen Matrix Remodeling by
ose Stromal Cells Regulates 3-D Sprouting Angiogenesis. *TISSUE
ENGINEERING PART A*. S285-S285. 2015

sity-associated Inflammation Contributes to Adipose Stromal Cells
fibrotic Phenotype. *FASEB JOURNAL*. 2015

article

st cancer cells alter the dynamics of stromal fibronectin-collagen
ractions. *Matrix biology : journal of the International Society for
ix Biology*. 60-61:86-95. 2017  2  PlumX Metrics

st cancer-derived extracellular vesicles stimulate myofibroblast
rentiation and pro-angiogenic behavior of adipose stem cells. *Matrix
gy : journal of the International Society for Matrix Biology*. 60-
90-205. 2017  3  PlumX Metrics

“VIVO 2 ORCID” Data Push

Where does the code exist ?



Data Distribution API

<https://cul-it.github.io/vivo-data-distribution-api/index.html>

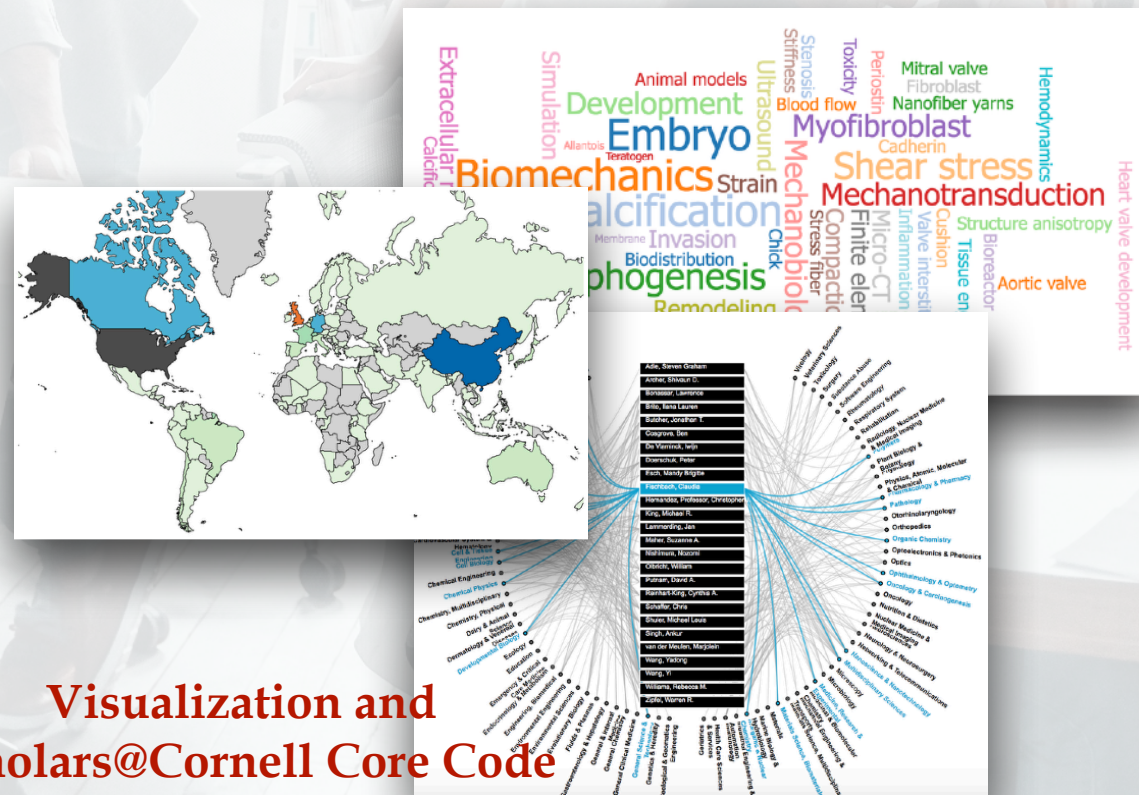
OpenHarvester

A java prototype that processes the result set of pre-downloaded data (from a database) and allows one to claim his/her publications from a ranked list.

<https://github.com/mjaved495/OpenHarvester>

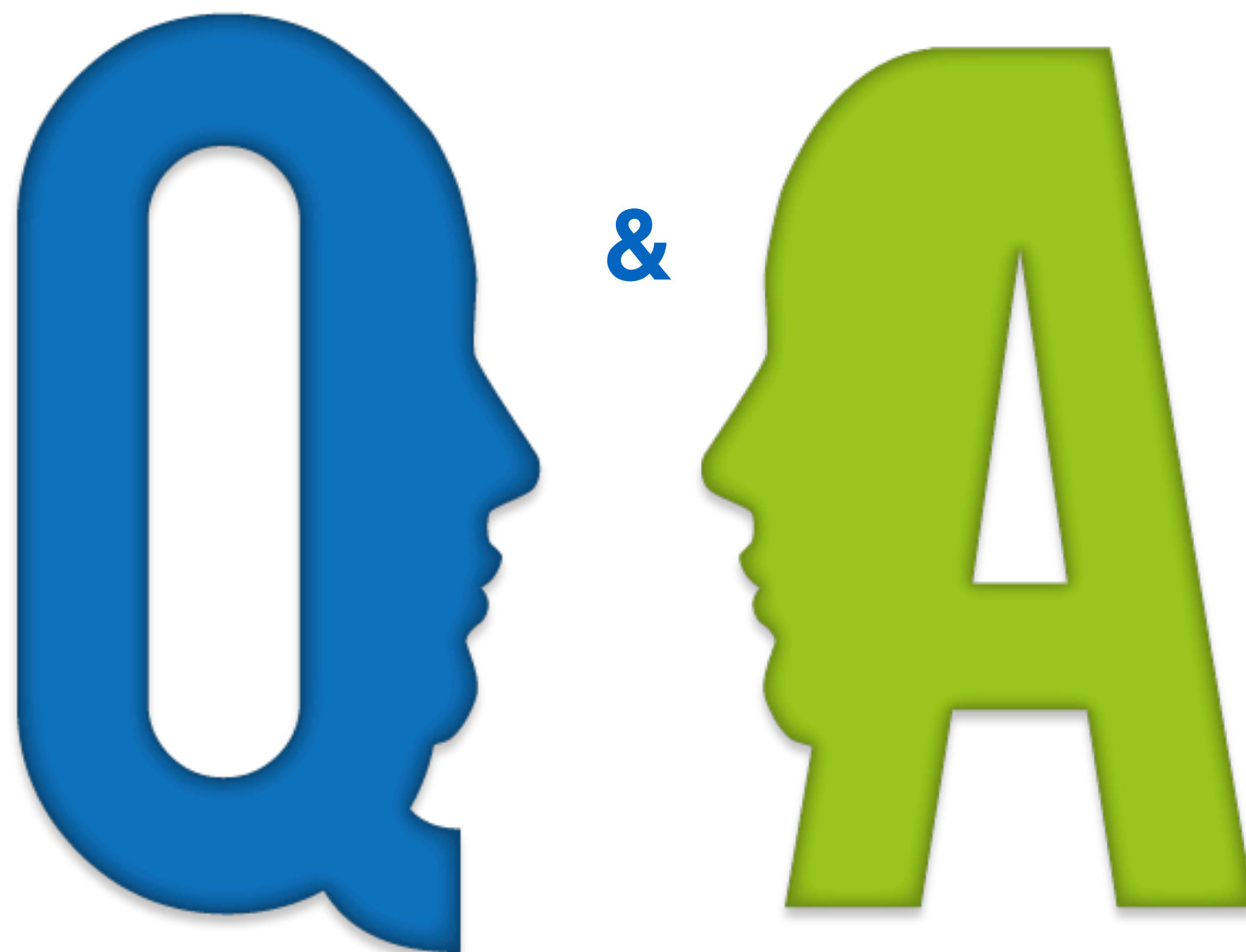
Visualization and
Scholars@Cornell Core Code

<https://github.com/cul-it/scholars>



In summary...

1. *Scholars@Cornell - A Research Information Mgmt. Sys. (RIMS)*
2. *Knowledge Share via Infographics*
3. *Data Share in a format that is understandable by the consumer.*
4. *Uberization - A mechanism to merge scholarship data from different sources*
5. *OpenHarvester - Open source desktop application to find publications for a faculty in open source databases. (under progress)*



The Team



Amit Mizrahi



Travis Beach



Lylla Younes



Tim Worrall



Jim Blake



Joe McEnerney

Sandy Payette



Muhammad Javed