DATA CITATION INDEX

NOW ON

THOMSON REUTERS WEB OF KNOWLEDGESM

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Thomson Reuters
April 30, 2013



Thomson Reuters, ISI and the Web of Knowledge

OVER 50 YEARS OF EXPERIENCE

IN CITATION INDEXING, ANALYSIS AND METRICS

In 1955, Dr. Eugene Garfield revolutionized research with his concept of citation indexing and searching, giving birth to the Science Citation Index®

Web of Science is the largest citation database with approx. 900 million cited references from 1900 to 2013

The Web of Knowledge expands and complements the Web of Science --- 24,000+ Journals, Books, Proceedings, Patents, and now Data...

1961



1961 Science Citation Index® revolutionizes scientific research

1974 Derwont World Parents to patents from all rechnologies

1997 Wah of Science of provides Index © provides searchable access seamless access to information from worldwide research journals

provides a single research platform for Journal literature, patents, chemical compounds, genedic sequencing and more

2006 ScholarOne Manuscrines Management® enables authors to create manuscripts in EndNote and seamlessly submit them for

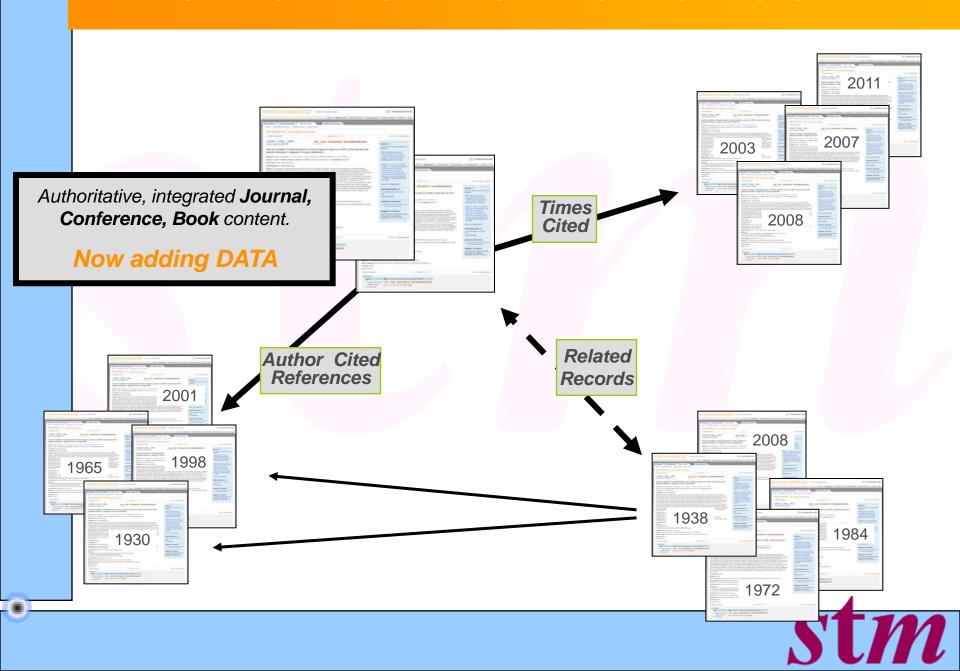
an invaluable index to accurate author identification and

Launches In Citos, the first ever tool to provide comprehensive, customized citation-based research evaluation on the Web undertakes massive data collection exercise, partnering with hundreds of universities worldwide in the Global institutional Profiles Project

In Vlavⁿⁱ helps redefine research management. The enterprise wide solution links and standardizes data from multiple sources, connecting scholarly



WEB OF KNOWLEDGE - A FULL RESEARCH PICTURE





Advancing Discovery, Access, Citation and Metrics on Research Data



BENEFITS OF RESEARCH DATA SHARING



- Advancement of scholarship
- Verification of results
- Promotion of scholar's work





INFLUENCE OF FUNDING AGENCIES

2010 Mandate from the US National Science Foundation -

All funding proposals submitted or due on or after January 18, 2011, must include a "Data Management Plan" describing how the proposal will conform to NSF policy on the dissemination and sharing of research results.





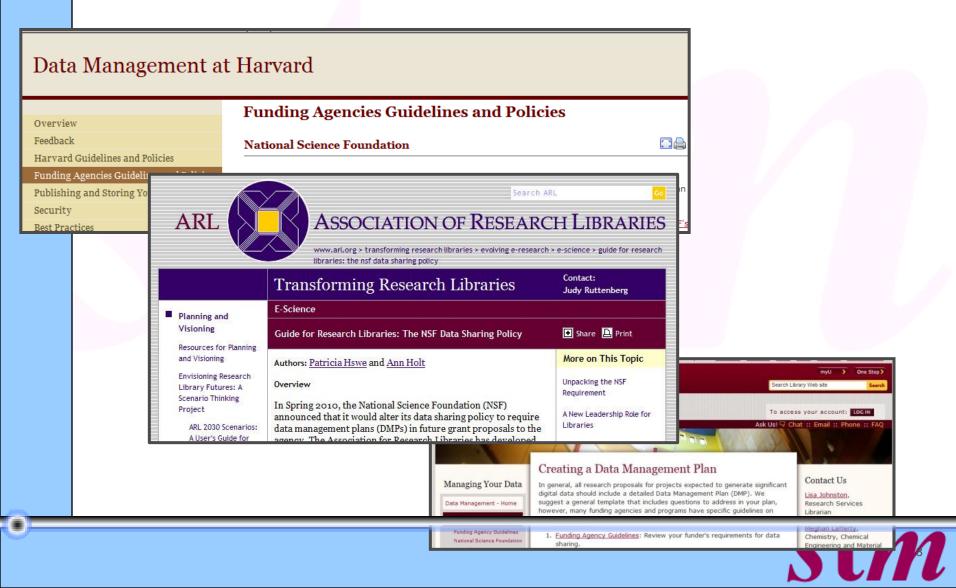
Data elevated to "Article Status"?

January 14, 2013.. Biographical Sketch(es), has been revised to rename the "Publications" section to "Products".... This change makes clear that products may include, but are not limited to, publications, data sets, software, patents, and copyrights.

Biosketches now include "Products", not "Publications



IMPACT ON RESEARCH LIBRARIES



VISIBILITY OF RESEARCH DATA

Grant funding agencies

Journal publishers

Data repositories & registration agencies























WHERE DO WE START?

Discover data repositories, data studies & data sets in the context of traditional literature

Help researchers find data sets and studies and track the full impact of their research output



REPOSITORY SELECTION & EVALUATION



- Editorial Content
- Persistence and stability
- Thoroughness of descriptive information.
- Links from data to research literature.

REPOSITORY EVALUATION, SELECTION, AND COVERAGE POLICIES

FOR THE DATA CITATION INDEX™ WITHIN THOMSON REUTERS WEB OF KNOWLEDGE™





CHALLENGES

Data availability

Data quality





U.S. Dept. of Justice, Bureau of Justice Statistics (1996): MURDER CASES IN 33 LARGE URBAN COUNTIES IN THE UNITED STATES, 1988. Version 1. Inter-university Consortium for Political and Social Research [distributor].

http://dx.doi.org/10.3886/ICPSR09907.v1

Our first data set is the Bureau of Justice Statistics "Murder Cases in 33 Large Urban Counties."

This is a random sample of homicide cases drawn from prosecutors' files. The data set includes information on offender characteristics, victim characteristics and trial outcomes for 2800 murders. The 75 largest counties account for more than half of the murders in the U.S. each year. This data set brings together information on the crime, the offender, the victim, and the sentence. Such information cannot all be linked in other larger data sets such as the Uniform Crime Reporting (UCR) Data or the National Crime Victimization Survey (NCVS). Most crime



INDEXING OF RESEARCH DATA REPOSITORIES

TR takes
descriptive
metadata feed
from repository

Repository raw metadata is analyzed by TR

TR adds metadata

TR DCI records:

- data repository
 - data study
 - data set





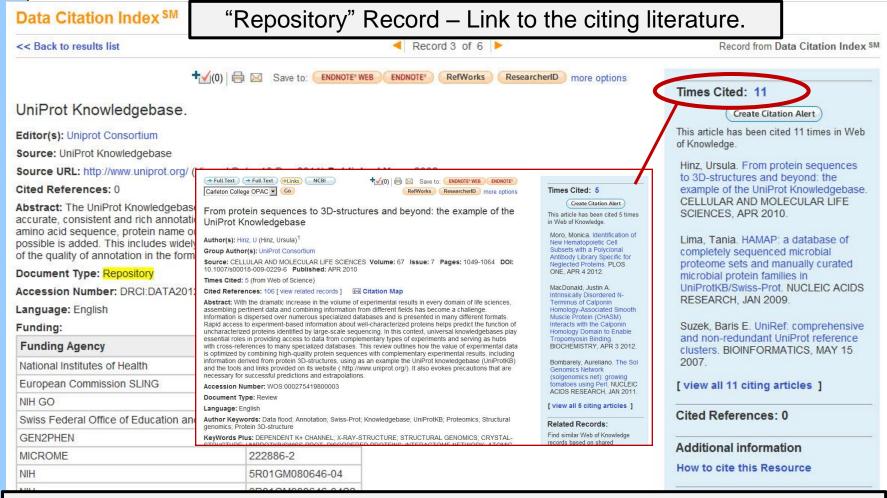
REUTERS/Aly Song

- >Almost 100 repositories covered
- **Comprising >2.5 million records**
- > Reciprocal links to/from DCI and WoS records



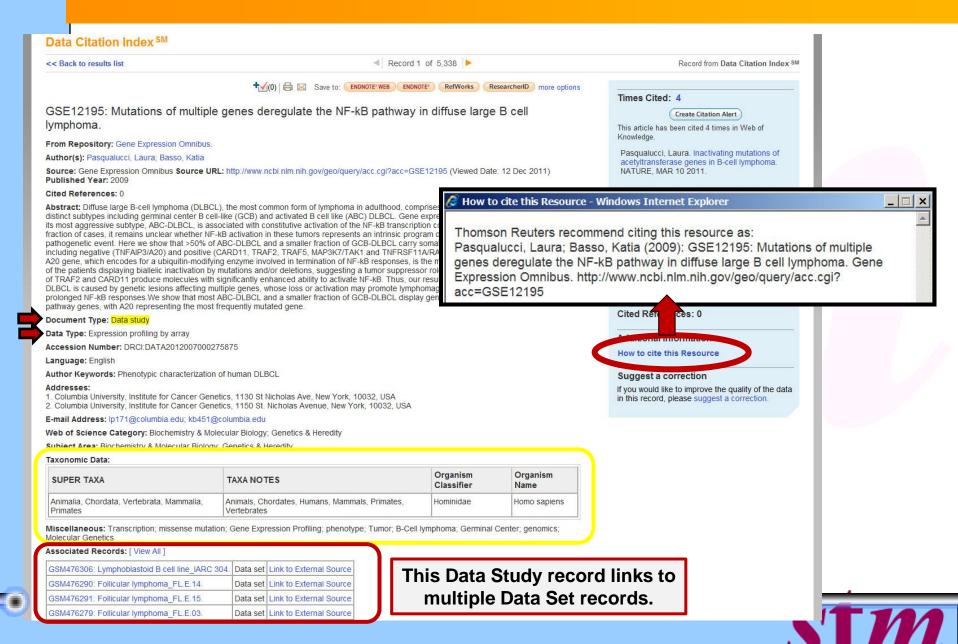
The first 100 Data Types (by record count) are shown. For advanced refine options, use	Analyze results .	
RNA (507,025)	NUMERIC (1,434)	TEXTUAL DATA INDIVIDUAL MICRO LEVEL (210)
PROTEIN SEQUENCE DATA (500,413)	GENOME BINDING OCCUPANCY PROFILING BY GENOME TILING ARRAY (1,108)	SNP GENOTYPING BY SNP ARRAY (190)
VECTOR DIGITAL DATA (189,171)	BATHYMETRY SINGLEBEAM (841)	PRESSURE (184)
GENOMIC (105,257)	NUMERIC DATA INDIVIDUAL MICRO LEVEL (755)	CTD ANCILLARY (179)
TABULAR DIGITAL DATA (89,966)	GRAVITY FIELD (738)	NUMERIC SURVEY DATA (174)
RAW DATA (21,338)	MAGNETIC FIELD (683)	NUMERIC SUMMARY STATISTICS (162)
MIRNA SEQUENCE DATA (18,227)	EVENT TRANSACTION DATA (670)	METHYLATION PROFILING BY GENOME TILING ARRAY (158)
EXPRESSION PROFILING BY ARRAY (17,977)	TEMPERATURE (662)	SEISMIC REFLECTION SCS (147)
SURVEY DATA (16,873)	STRUCTURED QUESTIONNAIRE (650)	TEXTUAL DATA NUMERIC DATA INDIVIDUAL MICRO LEVEL (148)
PROCESSED DATA (16,229)	BATHYMETRY SWATH (643)	NUMERIC DATA ALPHA NUMERIC DATA INDIVIDUAL MICRO LEVEL (1
SCAN (15,302)	ADMINISTRATIVE RECORDS DATA (566)	GIS VECTOR DATA (141)
NORMALIZATION (11,548)	AGGREGATE DATA (558)	PHENOTYPE STRAIN SURVEY (141)
SRA (10,721)	METEOROLOGICAL (534)	CLINICAL DATA (131)
PROCESSED DATA MATRIX (9,127)	CENSUS ENUMERATION DATA (524)	NUMERIC DATA AGGREGATE MACRO LEVEL (124)
CURRENT ALL LINES COUNTY BASED (6,468)	GENOME VARIATION PROFILING BY GENOME TILING ARRAY (488)	CURRENT BLOCK GROUP STATE BASED (112)
CURRENT AREA HYDROGRAPHY COUNTY BASED (6,468)	GENOME BINDING OCCUPANCY PROFILING BY HIGH THROUGHPUT SEQUENCING (477)	CURRENT BLOCK STATE BASED (112)
TOPOLOGICAL FACES POLYGONS WITH ALL GEOCODES COUNTY BASED SHAPEFILE (6.468)	NON CODING RNA PROFILING BY ARRAY (463)	CURRENT CENSUS TRACT STATE BASED (112)
CURRENT TOPOLOGICAL FACES AREA HYDROGRAPHY COUNTY BASED RELATIONSHIP FILE (6,487)	BATHYMETRY (404)	CURRENT COUNTY SUBDIVISION STATE BASED (112)
CURRENT FEATURE NAMES COUNTY BASED RELATIONSHIP FILE (6,466)	CONDUCTIVITY (390)	CURRENT PLACE STATE BASED (112)
ALL ROADS COUNTY BASED (6,464)	EXPRESSION PROFILING BY GENOME TILING ARRAY (346)	CURRENT UNIFIED SCHOOL DISTRICT STATE BASED (112)
LINEAR HYDROGRAPHY COUNTY BASED (6,484)	GENOME VARIATION PROFILING BY ARRAY (342)	CECONCENTRATION (112)
ADDRESS RANGE FEATURE COUNTY BASED (6,442)	NAVIGATION (335)	PRIMARY AND SECONDARY ROADS STATE BASED (112)
CURRENT ADDRESS RANGE FEATURE NAME COUNTY BASED RELATIONSHIP FILE (6.442)	GENOME VARIATION PROFILING BY SNP ARRAY (327)	DATASET (107)
CURRENT ADDRESS RANGES COUNTY BASED RELATIONSHIP FILE (6,442)	NON CODING RNA PROFILING BY HIGH THROUGHPUT SEQUENCING (321)	CURRENT STATE LEGISLATIVE DISTRICT SLD UPPER CHAMBER ST BASED (104)
TEXT TAB SEPARATED VALUES (4,257)	SIDESCAN (280)	CURRENT STATE LEGISLATIVE DISTRICT SLD LOWER CHAMBER S BASED (100)
OTHER IDENTIFIERS RELATIONSHIP FILE (4,161)	BACKSCATTER ACOUSTIC (263)	SEQUENCE DATA (100)
NAVIGATION PRIMARY (3,691)	SALINITY (254)	SOUNDVELOCITY (92)
CURRENT AREA LANDMARK COUNTY BASED (3,222)	EXPRESSION PROFILING BY HIGH THROUGHPUT SEQUENCING (245)	GENOME BINDING OCCUPANCY PROFILING BY ARRAY (90)
CURRENT TOPOLOGICAL FACES AREA LANDMARK COUNTY BASED RELATIONSHIP FILE (3,222)	RADIATION VISIBLE (234)	NON CODING RNA PROFILING BY GENOME TILING ARRAY (89)
CURRENT POINT LANDMARK COUNTY BASED (3,219)	EXPRESSION PROFILING BY SAGE (225)	TEXTUAL DATA NUMERIC DATA ALPHA NUMERIC DATA (87)
MIXED (3,069)	RADIATION INFRARED (221)	ALPHA NUMERIC DATA INDIVIDUAL MICRO LEVEL (85)
SAGE (2,531)	MPSS (211)	NUMERIC DATA (82)
PROTEIN (2,382)	FLUORESCENCE (210)	FIELD STUDY (80)

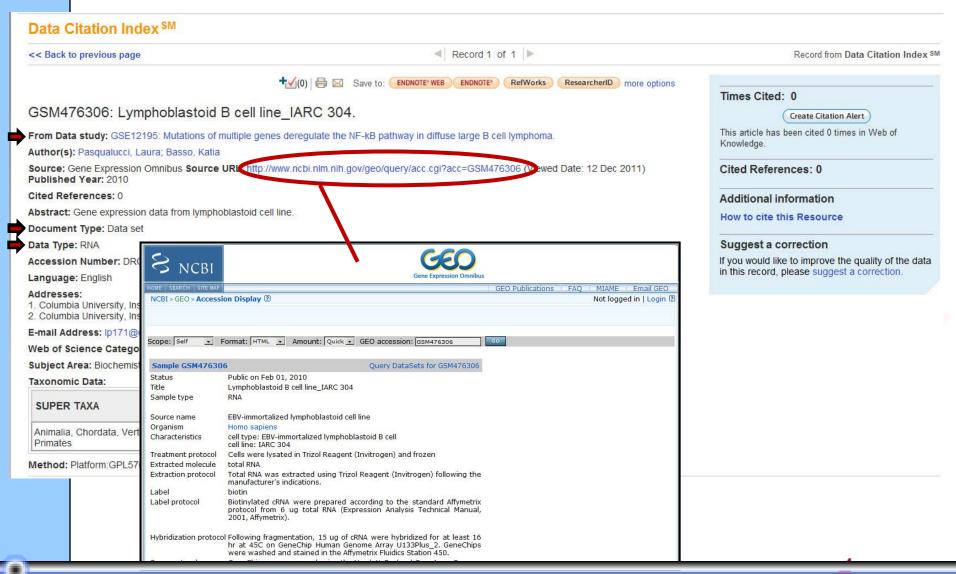




"Repository" Records – information presented may vary depending upon the characteristics of the repository.









What's next for DCI?

- ✓ More repositories and data sets
- ✓ Improving Data citation capture
- ✓ Developing new Metrics
- ✓ Continue working with industry partners to influence data citation practice



Time's Up!

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