

REUTERS/Pawel Kopczynski

# IDENTIFIERS & THE DATA CITATION INDEX

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DISCOVERY, ACCESS, AND CITATION OF PUBLISHED RESEARCH DATA

NIGEL ROBINSON

17 OCTOBER 2013

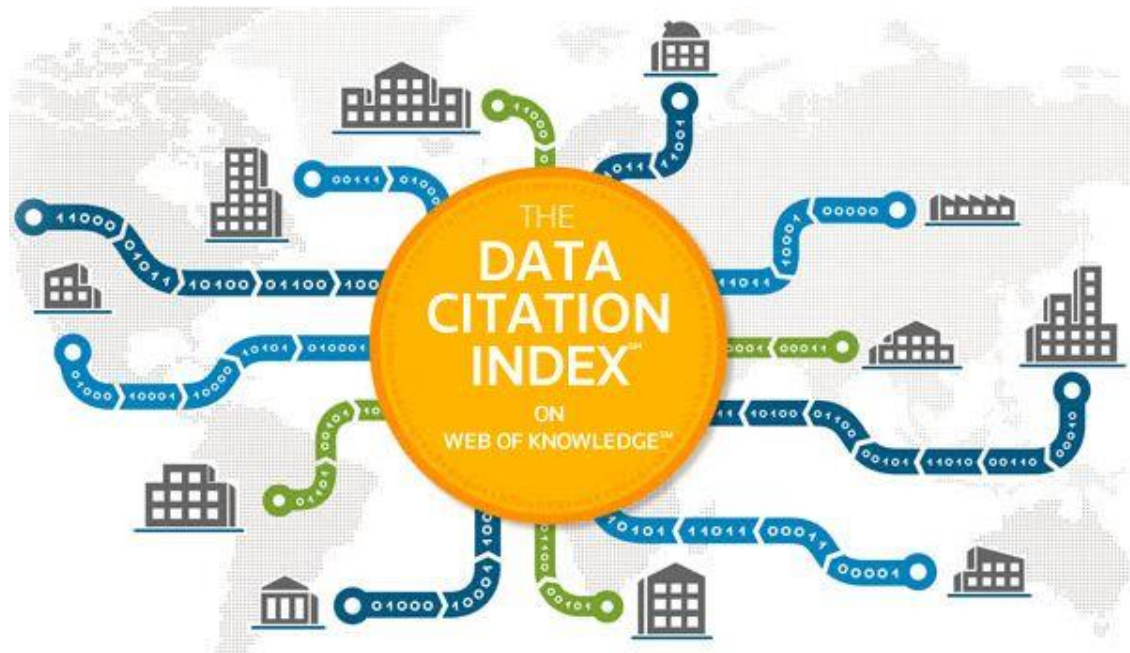


THOMSON REUTERS

# OVERVIEW

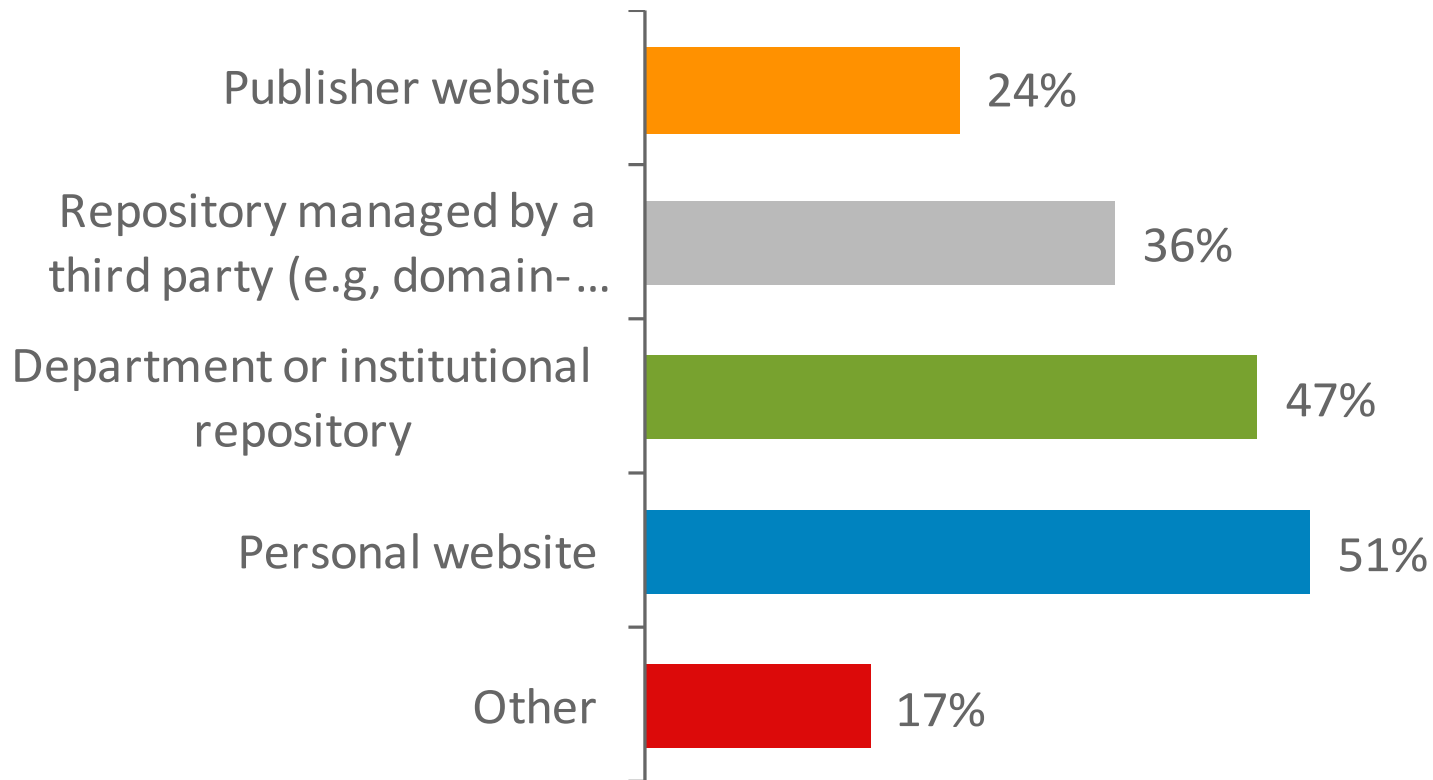
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- What is the Data Citation Index?
- Building the Data Citation Index
- Integration of identifiers



# DEPOSITION OF DATA BY RESEARCHERS

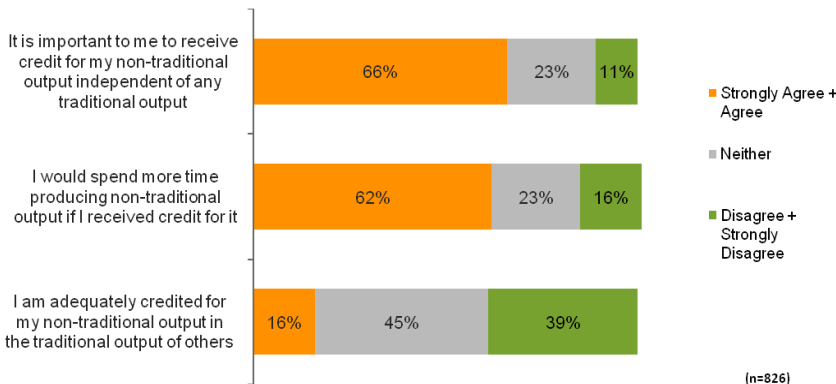
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# RESEARCHERS NOT RECEIVING CREDIT

## ► Researchers are not receiving adequate credit for digital scholarship

- Researchers would spend more time producing output if they received credit
- Few are currently receiving adequate credit



## ► Institutional policies and the lack of standards for sharing digital output is an impediment both to research and sharing

*“Lack of knowledge about standards for citation and of proper scholarly recognition and/or evaluation of such materials.” (Researchers, Canada)*

## Barriers to creating and sharing data:

- Researchers are hesitant to spend time and effort to create and share data because they don't feel the work is **adequately exposed** or **accredited**
- Researchers find it difficult to expose data they have produced because **data repositories do not have clear standards or mechanisms** in place for doing so

# RESEARCHER PROBLEMS

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- Access & discovery
- Citation standards
- Lack of willingness to deposit and cite
- Lack of recognition / credit



# IMPACT ON RESEARCH LIBRARIES

## Data Management at Harvard

- Overview
- Feedback
- Harvard Guidelines and Policies
- Funding Agencies Guidelines and Policies**
- Publishing and Storing Your Data
- Security
- Best Practices

### Funding Agencies Guidelines and Policies

#### National Science Foundation

ARL ASSOCIATION OF RESEARCH LIBRARIES

www.arl.org > transforming research libraries > evolving e-research > e-science > guide for research libraries: the nsf data sharing policy

### Transforming Research Libraries

Contact: Judy Ruttenberg

#### E-Science

#### Guide for Research Libraries: The NSF Data Sharing Policy

Share Print

Authors: [Patricia Hswe](#) and [Ann Holt](#)

#### Overview

In Spring 2010, the National Science Foundation announced that it would alter its data management plans (DMPs) in funding agency: The Association for Research

UNIVERSITY OF MINNESOTA Driven to Discover™

### UNIVERSITY LIBRARIES

#### Creating a Data Management Plan

In general, all research proposals for projects expected to generate significant digital data should include a detailed Data Management Plan (DMP). We suggest a general template that includes questions to address in your plan, however, many funding agencies and programs have specific guidelines on what information to include in your DMP that should take precedence.

1. [Funding Agency Guidelines](#): Review your funder's requirements for data sharing.

Managing Your Data

Contact Us

[Lisa Johnston](#), Research Services Librarian

[Meghan Lafferty](#), Chemistry, Chemical Engineering and Material

# DATA CITATION INDEX AIMS

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- Enable the discovery of data repositories, data studies and data sets in the context of traditional literature
- Link data to research publications
- Help researchers find data sets and studies and track the full impact of their research output
- Provide expanded measurement of researcher and institutional research output and assessment
- Facilitate more accurate and comprehensive bibliometric analyses



Launched October 2012  
3.5M data records

# REPOSITORY SELECTION & EVALUATION

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REUTERS/ Moutam Rizka

## REPOSITORY EVALUATION, SELECTION, AND COVERAGE POLICIES

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

As we evaluate repositories for inclusion, some of the things we consider are:

- Editorial Content - ensuring that material is desirable to the research community.
- Persistence and stability of the repository, with a steady flow of new information.
- Thoroughness and detail of descriptive information.
- Links from data to research literature.



THOMSON REUTERS



# REPOSITORY EVALUATION

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## Data deposit

- Repository must hold data
- Repository must provide access to data

## Active

- Material added/updated
- Provide statistics on deposited data
- Actively curate data in the archive

## Persistent

- Persistent IDs, DOIs or other permanent ID
- Contacts available for confirmation of interpretation
- Indication of intention to preserve data or provide access over the long term
  - Contingency if repository was to cease to operate
- Make data accessible (or state licensing terms)
- Sustainable
  - Funding information available for repository and deposited data

## Proof of reuse

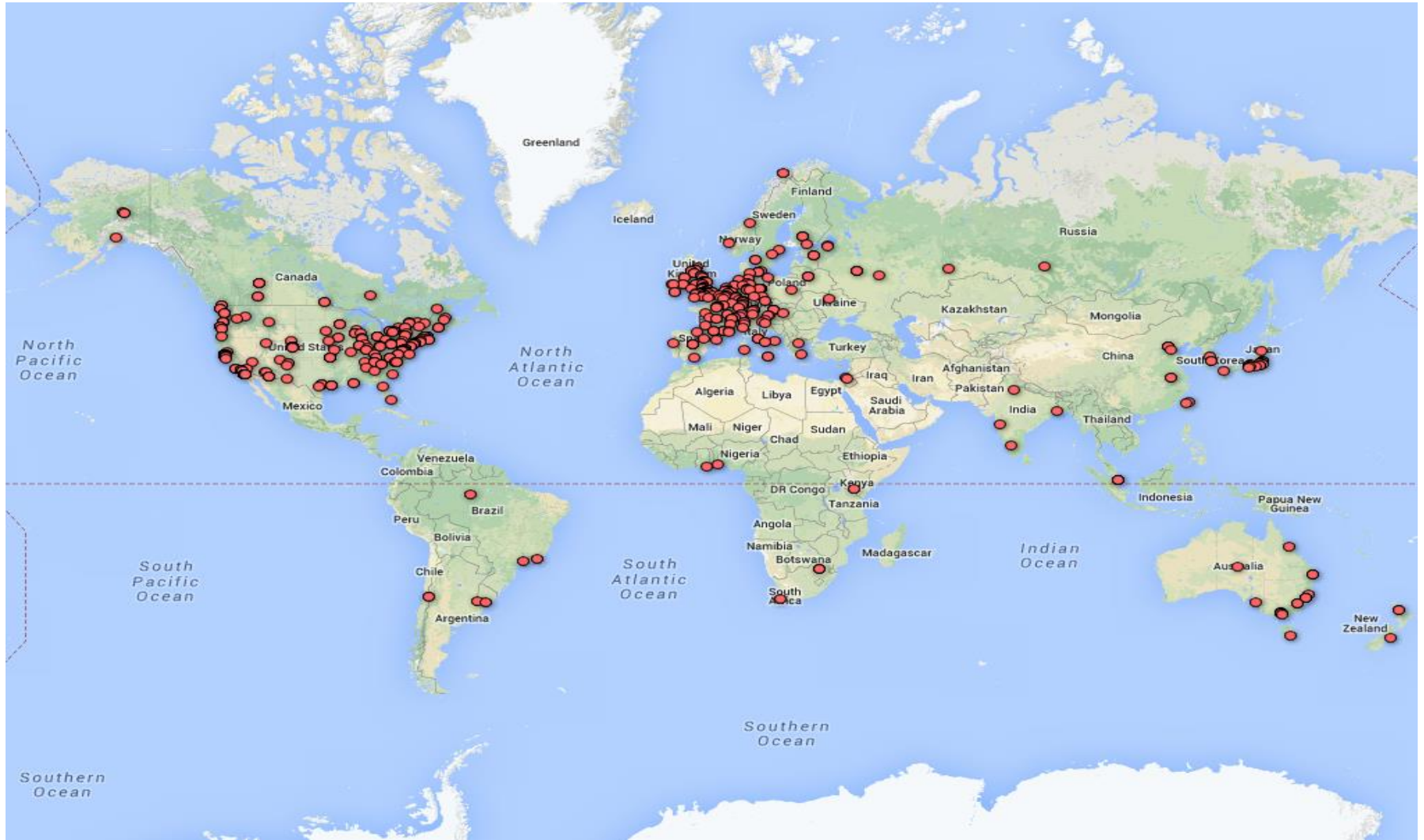
- Links to literature
- Citation in literature databases



# DATA REPOSITORIES

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- Over 900 repositories identified



# TYPES OF DATA BY DISCIPLINE

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## ART & HUMANITIES

CULTURAL  
HERITAGE

LANGUAGE CORPUS

IMAGE  
COLLECTIONS

RECORDINGS

## SOCIAL SCIENCES

POLL DATA

ECONOMIC  
STATISTICS

LONGITUDINAL DATA

NATIONAL CENSUS

PUBLIC OPINION  
SURVEYS

## SCIENCE & TECHNOLOGY

MAPS

ALGORITHMS

GENOMICS

SKY SURVEYS

ASTROPHYSICS

REMOTE SENSING

MUSEUM SPECIMENS

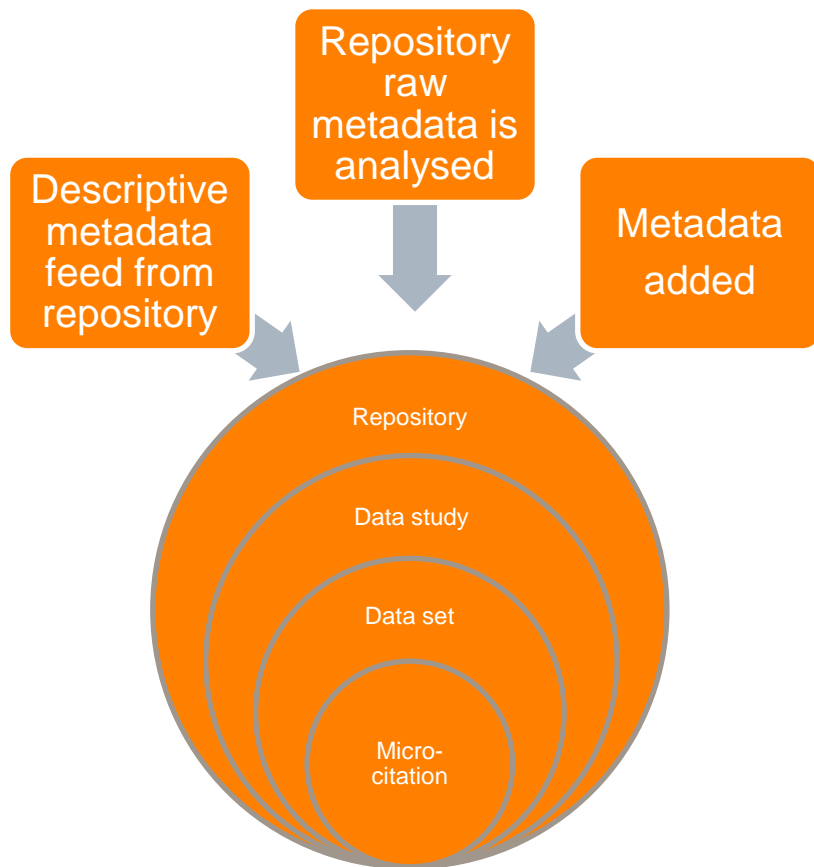


# INDEXING A DATA REPOSITORY ON WEB OF KNOWLEDGE

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## Record Types

- **Repository/Source:** Comprises data studies, data sets and/or microcitations. Stores and provides access to the raw data.
- **Data Study:** Descriptions of studies or experiments with associated data which have been used in the data study. Includes serial or longitudinal studies over time.
- **Data Set:** A single or coherent set of data or a data file provided by the repository, as part of a collection, data study or experiment.
- **Microcitation:** (nanopublication) An assertion about concepts that have been found to be linked by scientific enquiry, and can be uniquely identified and attributed to its author. Made up of three separate parts: a subject, a predicate and an object.



Search Results within the Data Citation Index present the powerful Web of Knowledge options for exploring a body of information.

All Databases | Select a Database | Data Citation Index | Additional Resources

Search | Cited Reference Search | Advanced Search | Search History

### Data Citation Index<sup>SM</sup>

**Results** Topic=(child\* health\*)  
Timespan=All Years. Databases=DCI-S, DCI-SSH.  
Lemmatization=Off

Scientific WebPlus<sup>SM</sup> View Web Results >>

Results: 128 Page 1 of 13 Go Sort by: Year Published -- newest to oldest

Save to: ENDNOTE<sup>®</sup> WEB | ENDNOTE<sup>®</sup> | RefWorks | ResearcherID | **Analyze Results**

more options

#### Refine Results

Search within results for

**Web of Science Categories** Refine

- SOCIOLOGY (88)
- PUBLIC ADMINISTRATION (25)
- POLITICAL SCIENCE (20)
- URBAN STUDIES (20)
- EDUCATION EDUCATIONAL RESEARCH (16)

more options / values...

**Subject Areas** Refine

**Document Types** Refine

- DATA STUDY (118)
- DATA SET (10)

more options / values...

**Authors**

**Group Authors**

**Editors**

**Source Titles**

**Data Types** Refine

- STRUCTURED QUESTIONNAIRE (94)
- SEMI STRUCTURED QUESTIONNAIRE (11)
- RNA (5)
- SURVEY DATA (5)
- EXPRESSION PROFILING BY ARRAY (3)

more options / values...

**Years Published**

**Institutions** Refine

- UNIVERSITY OF JYVASKYLA DEPARTMENT OF PSYCHOLOGY (12)
- UNIVERSITY OF TAMPERE TAMPERE SCHOOL OF PUBLIC HEALTH (7)
- INSTITUTE FOR TROPICAL MEDICINE (6)
- FINNISH FEDERATION FOR SOCIAL WELFARE AND HEALTH (5)
- NATIONAL RESEARCH AND DEVELOPMENT CENTRE FOR WELFARE AND HEALTH STAKES (4)

- Title: **School Well-being Profile 2010-2011: Personnel.**  
Author(s): Konu, Anne  
Source: Finnish Social Science Data Archive  
Source URL: <http://www.fsd.uta.fi/english/data/catalogue/FSD2645> Version: 1.0  
Document Type: Data study Times Cited: 0 (from All Databases)  
[ View abstract ]
- Title: **University Student Health Survey 2008.**  
Author(s): Kunttu, Kristina; Huttunen, Teppo  
Source: Finnish Social Science Data Archive  
Source URL: <http://www.fsd.uta.fi/english/data/catalogue/FSD2608> Version: 1.0  
Document Type: Data study Times Cited: 0 (from All Databases)  
[ View abstract ]
- Title: **Temporary Agency Work in Health Care 2006.**  
Author(s): Palukka, Hannele; Tiilikka, Tiina  
Source: Finnish Social Science Data Archive  
Source URL: <http://www.fsd.uta.fi/english/data/catalogue/FSD2516> Version: 1.0  
Document Type: Data study Times Cited: 0 (from All Databases)  
[ View abstract ]
- Title: **Health Promotion Barometer 2011: Citizens.**  
Group Author(s): Finnish Centre for Health Promotion  
Source: Finnish Social Science Data Archive  
Source URL: <http://www.fsd.uta.fi/english/data/catalogue/FSD2640> Version: 1.0  
Document Type: Data study Times Cited: 0 (from All Databases)  
[ View abstract ]
- Title: **Health Promotion Barometer 2010: Citizens.**  
Group Author(s): Finnish Centre for Health Promotion  
Source: Finnish Social Science Data Archive  
Source URL: <http://www.fsd.uta.fi/english/data/catalogue/FSD2652> Version: 1.0  
Document Type: Data study Times Cited: 0 (from All Databases)  
[ View abstract ]
- Title: **Health Promotion Barometer 2010: Municipalities.**  
Group Author(s): Finnish Centre for Health Promotion  
Source: Finnish Social Science Data Archive  
Source URL: <http://www.fsd.uta.fi/english/data/catalogue/FSD2650> Version: 1.0  
Document Type: Data study Times Cited: 0 (from All Databases)

+ (0) Save to: [ENDNOTE<sup>®</sup> WEB](#) [ENDNOTE<sup>®</sup>](#) [RefWorks](#) [ResearcherID](#) more options

## Roper Center for Public Opinion Research.

**Editor(s):** Roper Center

**Source:** Roper Center for Public Opinion Research

**Source URL:** <http://www.ropercenter.uconn.edu/> (View)

**Cited References:** 0

**Abstract:** Founded in 1947, the Roper Center for Public Opinion Research is the largest archive of survey data in the field of public opinion. The Center exists to promote public opinion in addressing the problems faced by Americans in an increasingly complex and interdependent global environment. The Center's mission is to promote international understanding and to promote cross-national research. The Center is the largest archive of survey data in the world's largest archive of survey data, and through its efforts, the Roper Center strives to improve the practice of survey research in the United States and abroad. 2012 Roper Center, University of Connecticut.

**Document Type:** [Repository](#)

**Accession Number:** DRCI:DATA2012001000656741

**Language:** English

**Addresses:**

1. Roper Center, University of Connecticut, 369 Fairfield Avenue, Storrs, CT 06269

**Web of Science Category:** Social Sciences, Interdisciplinary

**Subject Area:** Social Sciences - Other Topics

**Associated Records:** [\[ View All \]](#)

Link to all Data Citation Index content associated with this particular Repository.

**Associated Records**

Title: [Roper Center for Public Opinion Research.](#)  
 Editor(s): [Roper Center](#)  
 Source: [Roper Center for Public Opinion Research](#)  
 Source URL: <http://www.ropercenter.uconn.edu/>  
 Document Type: [Repository](#)

---

Results: **972** Page  of 98 [Go](#)

Sort by: [Year Published -- newest to oldest](#)

+ (0) Save to: [ENDNOTE<sup>®</sup> WEB](#) [ENDNOTE<sup>®</sup>](#) [RefWorks](#) [ResearcherID](#) more options [Analyze Results](#)

**Refine Results**

Search within results for  [Search](#)

**Web of Science Categories** [Refine](#)

- SOCIOLOGY (972)
- SOCIAL SCIENCES INTERDISCIPLINARY (962)
- POLITICAL SCIENCE (5)
- COMMUNICATION (4)
- ECONOMICS (2)
- [more options / values...](#)

**Subject Areas** [Refine](#)

---

1. Title: [USIA/DIVO | Poll # USIA1957-XX10.](#)  
 Group Author(s): United States Information Agency [USIA]  
 Source: Roper Center for Public Opinion Research  
 Source URL: [http://www.ropercenter.uconn.edu/cgi-bin/hsrun.exe/roperweb/Catalog40/Catalog40.htm?start=summary\\_Link?Archno=GMUSIA1957-XX10](http://www.ropercenter.uconn.edu/cgi-bin/hsrun.exe/roperweb/Catalog40/Catalog40.htm?start=summary_Link?Archno=GMUSIA1957-XX10)  
 Document Type: Data study Times Cited: **0** (from All Databases)  
[\[ View abstract \]](#)

2. Title: [USIA Poll # 1987-I87072: American Image.](#)  
 Group Author(s): United States Information Agency [USIA]

<a href="#">USIA/DIVO   Poll # USIA1957-XX10.</a>	Data study	<a href="#">Link to External Source</a>
<a href="#">USIA Poll # 1987-I87072: American Image.</a>	Data study	<a href="#">Link to External Source</a>
<a href="#">Harvard/Health Canada Poll # 2003-SARS: SARS.</a>	Data study	<a href="#">Link to External Source</a>
<a href="#">USIA Poll # I200140: El Salvador's Economic Situation/Politics/Osama bin Laden.</a>	Data study	<a href="#">Link to External Source</a>

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### Dataset Abstract

NEW SEARCH

#### DOWNLOAD DOCUMENTATION

Survey questionnaires and documentation are available for free download.  
PDF file (3994kb)

#### DOWNLOAD DATASET

Datasets are available for this survey.

If you are a member with a personalized account, please Sign In, otherwise contact Data Services at 860.486.4440 or rcweb@ropercenter.uconn.edu.

**Title:** USIA Poll # 1957-XX10: War/Science/Foreign Policy [GMUSIA1957-XX10]

**Survey Sponsor:** United States Information Agency [USIA]

**Survey Firm:** DIVO-Institut für Wirtschaftsforschung, Sozialforschung und Angewandte Mathematik

**Study Date:** November, 1957

**Sample:** West German adults--21 years old and over

**Sample Size:** 813

**Variables:** 187

**Abstract:** Feelings toward various countries (4); USSR favorability (2); US favorability (2); feelings toward political leaders (4); atomic energy (1); West Germany aligning with east or west (1); side in US-Russia war (1); West German war involvement (1); America preventing war (1); Soviet Russia preventing war (1); US vs. USSR as stronger power (2); stronger scientifically developed country (3); stronger military power (2); stronger atomic power (1); ensuring security (1); NATO effectiveness (2); increasing military for modern weapons (2); American forces in West

Subject Area: Social Sciences - Other Topics

Associated Records: [ View All ]

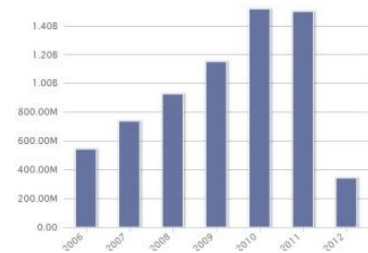
USIA/DIVO   Poll # USIA1957-XX10.	Data study	<a href="#">Link to External Source</a>
USIA Poll # 1987-I87072: American Image.	Data study	<a href="#">Link to External Source</a>
Harvard/Health Canada Poll # 2003-SARS: SARS.	Data study	<a href="#">Link to External Source</a>
USIA Poll # I200140: El Salvador's Economic Situation/Politics/Osama bin Laden.	Data study	<a href="#">Link to External Source</a>

Link out directly to the original item, in this case a Data Study.



# REQUIREMENTS & CHALLENGES

- Metadata availability
  - Lack of repository resources
  - Lack of repository expertise
- Citable data source
- Metadata quality
  - Metadata inconsistencies
  - Consistent file format
  - Consistent content
- Desirable characteristics
  - English language for key metadata fields
  - Metadata curation and quality control
  - Required metadata fields present for citation
  - Consistent metadata to allow mapping to DCI fields
  - Member of extended network
  - Data dictionary and schema available
- Data repositories are not static
  - How is version control handled?
- Partnerships



```

:GAGCATTGTGCACAATCGTGCTTATAGCGGCCGCGTGGCCGTC
:GTACTACGAAAGCTTTGGCGTCCCAGACGCCAGCTGGCTTACTG
:GAGGTGCCCTTCTTTAATAAGGCTATCGGGAGGCGCCCGAGGA
:ACCCGGTGCATCTACTCAGAGTCTACCACCCTACAACCTCTG
:TTCCATCGGGCCAACTCCAACCCCGCTGTGTGTCAGCAGCTCA
:GACAARTCTGGTAGCCATGGGCTTACAGTCTCCACAGGGAGGG
    
```

Partner	2007	2008	2009	2010	2011	Avg Ann growth
World	\$1,162,708.3	\$1,300,135.6	\$1,656,816.3	\$1,277,388.4	\$1,479,492.0	6.8
Europe and Eurasia	\$286,484.8	\$328,286.9	\$258,646.0	\$286,023.0	\$326,873.4	3.7
European Union	\$246,356.9	\$272,951.8	\$219,880.2	\$238,913.9	\$267,463.7	2.1
–Austria	\$3,172.0	\$2,649.3	\$2,538.5	\$2,427.0	\$3,886.6	-2.2
–Belgium	\$25,291.9	\$29,026.4	\$21,629.7	\$25,551.1	\$28,876.2	4.5
–Cyprus	\$169.0	\$217.4	\$160.8	\$134.3	\$07.1	-10.6
–Czech Republic	\$1,263.4	\$1,378.3	\$969.7	\$1,415.6	\$1,680.6	8.3
–Denmark	\$2,927.2	\$2,712.1	\$2,058.5	\$2,125.3	\$2,244.7	-5.8
–Estonia	\$242.3	\$225.6	\$183.2	\$188.0	\$311.0	10.2
–Finland	\$3,133.2	\$3,761.6	\$1,665.6	\$2,181.2	\$3,159.0	0.2
–France	\$27,407.1	\$29,186.9	\$36,523.3	\$27,010.1	\$27,844.2	0.4
–Germany	\$49,652.0	\$54,732.3	\$43,296.6	\$48,201.2	\$49,134.2	-0.3
–Greece	\$2,111.0	\$1,931.8	\$2,475.7	\$1,106.8	\$1,083.4	-12.2
–Hungary	\$1,291.7	\$1,431.2	\$1,231.7	\$1,290.2	\$1,473.2	3.5
–Ireland	\$9,010.7	\$8,652.9	\$7,516.4	\$7,272.0	\$7,607.7	-3.9
–Italy	\$14,141.3	\$15,478.6	\$12,232.6	\$14,191.4	\$15,991.2	3.3



Save to: [ENDNOTE® WEB](#) [ENDNOTE®](#) [RefWorks](#) [ResearcherID](#) more options

## UniProt Knowledgebase.

**Editor(s):** Uniprot Consortium

**Source:** UniProt Knowledgebase

**Source URL:** <http://www.uniprot.org/>

### Cited References: 0

**Abstract:** The UniProt Knowledgebase accurate, consistent and rich annotated amino acid sequence, protein name or possible is added. This includes widely of the quality of annotation in the form

**Document Type:** Repository

**Accession Number:** DRCI:DATA201

**Language:** English

### Funding:

Funding Agency	
National Institutes of Health	
European Commission SLING	
NIH GO	
Swiss Federal Office of Education and Research	
GEN2PHEN	
MICROME	222886-2
NIH	5R01GM080646-04
NIH	3R01GM080646-04S2
NIH	1G081M010720-01

From protein sequences to 3D-structures and beyond: the example of the UniProt Knowledgebase

**Author(s):** Hinz, U (Hinz, Ursula)<sup>1</sup>

**Group Author(s):** UniProt Consortium

**Source:** CELLULAR AND MOLECULAR LIFE SCIENCES **Volume:** 67 **Issue:** 7 **Pages:** 1049-1064 **DOI:** 10.1007/s00018-009-0229-6 **Published:** APR 2010

**Times Cited:** 5 (from Web of Science)

**Cited References:** 106 [ [view related records](#) ] [Citation Map](#)

**Abstract:** With the dramatic increase in the volume of experimental results in every domain of life sciences, assembling pertinent data and combining information from different fields has become a challenge. Information is dispersed over numerous specialized databases and is presented in many different formats. Rapid access to experiment-based information about well-characterized proteins helps predict the function of uncharacterized proteins identified by large-scale sequencing. In this context, universal knowledgebases play essential roles in providing access to data from complementary types of experiments and serving as hubs with cross-references to many specialized databases. This review outlines how the value of experimental data is optimized by combining high-quality protein sequences with complementary experimental results, including information derived from protein 3D-structures, using as an example the UniProt knowledgebase (UniProtKB) and the tools and links provided on its website ( <http://www.uniprot.org/> ). It also evokes precautions that are necessary for successful predictions and extrapolations.

**Accession Number:** WOS:000275419800003

**Document Type:** Review

**Language:** English

**Author Keywords:** Data flood; Annotation; Swiss-Prot; Knowledgebase; UniProtKB; Proteomics; Structural genomics; Protein 3D-structure

**KeyWords Plus:** DEPENDENT K+ CHANNEL; X-RAY-STRUCTURE; STRUCTURAL GENOMICS; CRYSTAL-STRUCTURE; UNIPROT; SWISS-PROT; DISORDERED PROTEINS; INTERACTOME NETWORK; ATOMIC

**Times Cited: 11**

[Create Citation Alert](#)

This article has been cited 11 times in Web of Knowledge.

Hinz, Ursula. From protein sequences to 3D-structures and beyond: the example of the UniProt Knowledgebase. CELLULAR AND MOLECULAR LIFE SCIENCES, APR 2010.

Lima, Tania. HAMAP: a database of completely sequenced microbial proteome sets and manually curated microbial protein families in UniProtKB/Swiss-Prot. NUCLEIC ACIDS RESEARCH, JAN 2009.

Suzek, Baris E. UniRef: comprehensive and non-redundant UniProt reference clusters. BIOINFORMATICS, MAY 15 2007.

[\[ view all 11 citing articles \]](#)

**Cited References: 0**

**Additional information**

[How to cite this Resource](#)

[Suggest a correction](#)

Save to: [ENDNOTE<sup>®</sup> WEB](#) [ENDNOTE<sup>®</sup>](#) [RefWorks](#) [ResearcherID](#) [more options](#)

## GSE12195: Mutations of multiple genes deregulate the NF-κB pathway in diffuse large B cell lymphoma.

**From Repository:** Gene Expression Omnibus.

**Author(s):** Pasqualucci, Laura; Basso, Katia

**Source:** Gene Expression Omnibus **Source URL:** <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE12195> (Viewed Date: 12 Dec 2011)

**Published Year:** 2009

**Cited References:** 0

**Abstract:** Diffuse large B-cell lymphoma (DLBCL), the most common form of lymphoma in adulthood, comprise distinct subtypes including germinal center B cell-like (GCB) and activated B cell like (ABC) DLBCL. Gene expression of its most aggressive subtype, ABC-DLBCL, is associated with constitutive activation of the NF-κB transcription factor. In a fraction of cases, it remains unclear whether NF-κB activation in these tumors represents an intrinsic program or a pathogenetic event. Here we show that >50% of ABC-DLBCL and a smaller fraction of GCB-DLBCL carry somatic mutations including negative (TNFAIP3/A20) and positive (CARD11, TRAF2, TRAF5, MAP3K7/TAK1 and TNFRSF11A/RANKL) A20 gene, which encodes for a ubiquitin-modifying enzyme involved in termination of NF-κB responses, in the majority of the patients displaying biallelic inactivation by mutations and/or deletions, suggesting a tumor suppressor role for TRAF2 and CARD11 produce molecules with significantly enhanced ability to activate NF-κB. Thus, our results suggest that DLBCL is caused by genetic lesions affecting multiple genes, whose loss or activation may promote lymphomagenesis through prolonged NF-κB responses. We show that most ABC-DLBCL and a smaller fraction of GCB-DLBCL display germline mutations in A20 pathway genes, with A20 representing the most frequently mutated gene.

**Document Type:** [Data study](#)

**Data Type:** Expression profiling by array

**Accession Number:** DRCI:DATA2012007000275875

**Language:** English

**Author Keywords:** Phenotypic characterization of human DLBCL

**Addresses:**

1. Columbia University, Institute for Cancer Genetics, 1130 St Nicholas Ave, New York, 10032, USA
2. Columbia University, Institute for Cancer Genetics, 1150 St. Nicholas Avenue, New York, 10032, USA

**E-mail Address:** [lp171@columbia.edu](mailto:lp171@columbia.edu); [kb451@columbia.edu](mailto:kb451@columbia.edu)

**Web of Science Category:** Biochemistry & Molecular Biology; Genetics & Heredity

**Subject Area:** Biochemistry & Molecular Biology; Genetics & Heredity

**Taxonomic Data:**

SUPER TAXA	TAXA NOTES	Organism Classifier	Organism Name
Animalia, Chordata, Vertebrata, Mammalia, Primates	Animals, Chordates, Humans, Mammals, Primates, Vertebrates	Hominidae	Homo sapiens

**Miscellaneous:** Transcription; missense mutation; Gene Expression Profiling; phenotype; Tumor; B-Cell lymphoma; Germinal Center; genomics; Molecular Genetics

**Associated Records:** [ [View All](#) ]

GSM476306: Lymphoblastoid B cell line_IARC.304.	Data set	<a href="#">Link to External Source</a>
GSM476290: Follicular lymphoma_FL.E.14.	Data set	<a href="#">Link to External Source</a>
GSM476291: Follicular lymphoma_FL.E.15.	Data set	<a href="#">Link to External Source</a>
GSM476279: Follicular lymphoma_FL.E.03.	Data set	<a href="#">Link to External Source</a>

**Times Cited:** 4

[Create Citation Alert](#)

This article has been cited 4 times in Web of Knowledge.

Pasqualucci, Laura. *Inactivating mutations of acetyltransferase genes in B-cell lymphoma.* NATURE, MAR 10 2011.

**How to cite this Resource - Windows Internet Explorer**

Thomson Reuters recommend citing this resource as:  
**Pasqualucci, Laura; Basso, Katia (2009): GSE12195: Mutations of multiple genes deregulate the NF-κB pathway in diffuse large B cell lymphoma. Gene Expression Omnibus. <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE12195>**

**Cited References:** 0

[How to cite this Resource](#)

**Suggest a correction**

If you would like to improve the quality of the data in this record, please [suggest a correction](#).



# DATA CITATION BEHAVIOUR

## Current citation style (in full text of article)

**III. Data Description**

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

## Desired/future citation style (as part of cited references)

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



**Supplementary Material**

Supplemental Data  
[Click here to view.](#)

**Acknowledgments**

We thank Junghwa Seo, Lei Cho, and Jongmin Kim for technical assistance and Hyunjung Lim for consultation on image handling.

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The microarray data reported in this paper have been deposited to the Gene Expression Omnibus (GEO) data base under accession number [GSE11574](#).

**S** The on-line version of this article (available at <http://www.jco.org>) contains supplemental [Figs. S1-S8](#) and [Tables 1-4](#).

†A. Jang, H.-J. Lee, J.-E. Suk, J.-W. Jung, K.-P. Kim, and S.-J. Lee, submitted for publication.

Lee, Seung-Jae; Lee, He-Jin; Cho, Ji-Hoon; Rho, Sangchul; Hwang, Daehee (2008): GSE11574: The responses of astrocytes stimulated by extracellular a-synuclein. Gene Expression Omnibus. <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE11574>



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### Molecular signatures of peripheral blood mononuclear cells following chronic IFN-alpha: Relationship of OAS2 with Fatigue.

From Repository: ArrayExpress Archive.

Author(s): Cole, Steve W; Pace, Thaddeus W; Felger, Jennifer C; Doho, Gregory; Miller, Andrew H; Raison, Charles L; Hu, Fang; Woolwine, Bobbi J

Source: ArrayExpress Archive Source URL: <http://www.ebi.ac.uk/arrayexpress/experiments/E-GEOD-31187> (Viewed Date: 12 Jun 2012) Published Year: 2012

Cited References: 0

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**Abstract:** Interferon (IFN)-alpha causes high rates of depression and fatigue, and is used to investigate the impact of innate immune cytokines on brain and behavior. However, little is known about transcriptional profiles of circulating immune cells during chronic IFN-alpha administration. Accordingly, genome-wide transcriptional profiling was performed on peripheral blood mononuclear cells from 21 patients with chronic hepatitis C virus either awaiting IFN-alpha therapy (n=10) or after 12 weeks of IFN-alpha treatment (n=11). Significance analysis of microarray data identified 252 up-regulated gene transcripts, the majority of which were related to IFN-alpha/antiviral or innate-immune/inflammatory signaling. Of these upregulated genes, 2'-5'-oligoadenylate synthetase 2 (OAS2) was the only gene that was differentially expressed in patients that developed IFN-alpha-induced depression/fatigue, and correlated with depression and fatigue scores at 12 weeks of IFN-alpha administration. Promoter-based bioinformatic and cellular origin analyses revealed IFN-alpha-induced increases in genes bearing transcription factor binding motifs (TFBMs) related to myeloid differentiation, IFN-alpha signaling, API and CREB/ATF family of transcription pathways, with changes derived primarily from monocytes and plasmacytoid dendritic cells. Patients with high depression/fatigue scores demonstrated up-regulation of genes bearing TFBMs for myeloid differentiation, IFN-alpha and AP1 signaling, and down regulation of TFBMs for CREB/ATF-related transcription factors. Cellular origin analyses indicated a shift toward genes derived from CD8+T and NK cells in subjects with high depression/fatigue scores. These results reveal an antiviral and inflammatory transcriptional profile after 12 weeks IFN-alpha, accompanied by increased OAS2 expression, decreased CREB/ATF transcriptional control, and a shift from monocyte-derived genes to those of cytotoxic lymphocytes in IFN-alpha-induced depression/fatigue. Total RNA was isolated from the peripheral blood mononuclear cells (PBMC) obtained at 12 weeks from HCV patients treated with IFN-alpha plus ribavirin (n=11) and untreated HCV patients awaiting IFN-alpha/ribavirin therapy (control subjects, n=10).

Document Type: Data study

Data Type: normalization; processed Data

Accession Number: **DRCI:DATA2012152001366731**

Language: English

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Author	ResearcherID Number [ ? ]	ORCID Number [ ? ]
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Web of Science Category: Genetics & Heredity

Subject Area: Genetics & Heredity

Taxonomic Data:

SUPER TAXA	TAXA NOTES	Organism Classifier	Organism Name
Animalia, Chordata, Vertebrata, Mammalia, Primates	Animals, Chordates, Humans, Mammals, Primates, Vertebrates	Hominidae	Homo sapiens

Method: transcription profiling by array

Miscellaneous: Gene; Genetics; transcription factor; RNA; Cytokine; Interferon; Lymphocyte; Inflammation; Innate immunity; Up-Regulation

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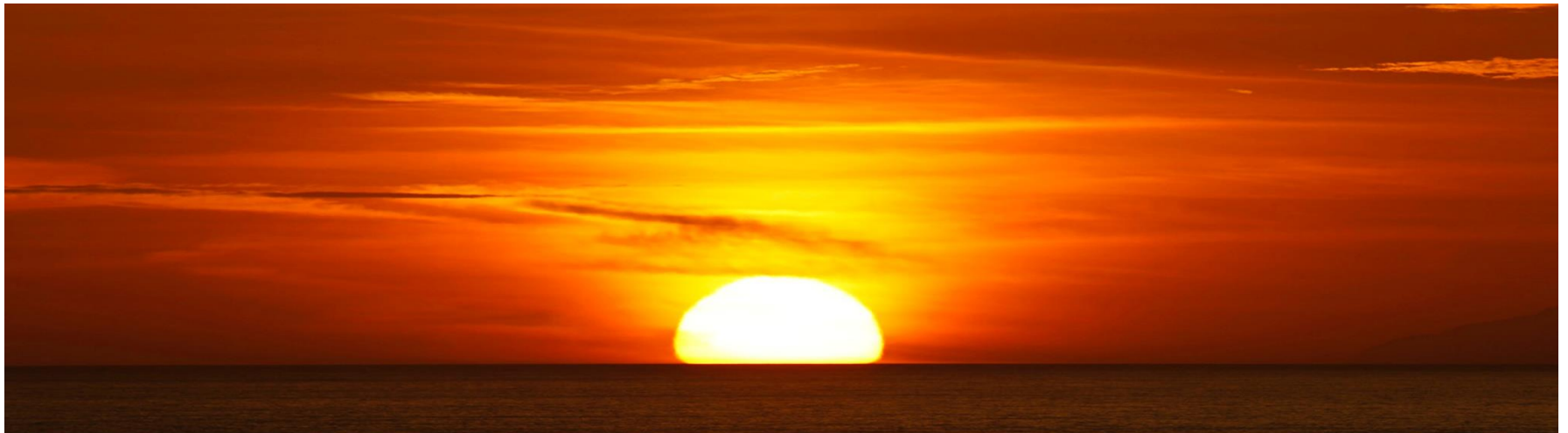
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# Thank you

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