



Your Institutional Research Enterprise: Tools for Illuminating and Communicating Its Impact and Influences, and Strategizing for Future Development

7th Annual NORDP Research Development Conference Bethesda --- April 29 - May 1 2015 Panel Discussion

Presented by

Melanie Gardner
Acting Assoc Director, Information Products Division
Acting, Information & Customer Services Branch Chief
Digital Library Branch Chief
National Agricultural Library
Melanie.gardner@ars.usda.gov

Kelsey Rosell
Director of Sales
Digital Science and Symplectic
kelsey.rosell@symplectic.co.uk

Colleen Willis Sr. Librarian, Digital Strategies and Technology National Academies – Library/Research Center cwillis@nas.edu Sara Rouhi Product Specialist Altmetric Sara@altmetric.com

The Research Information Management (RIM) System – for a university, provides the capability to measure, better understand, and evaluate the strength of one's research enterprise.

The necessary, foundational strength of a RIM system is its role as **an authoritative institutional data source**, dedicated to supporting the capture, linking and dissemination of information associated with the research lifecycle.

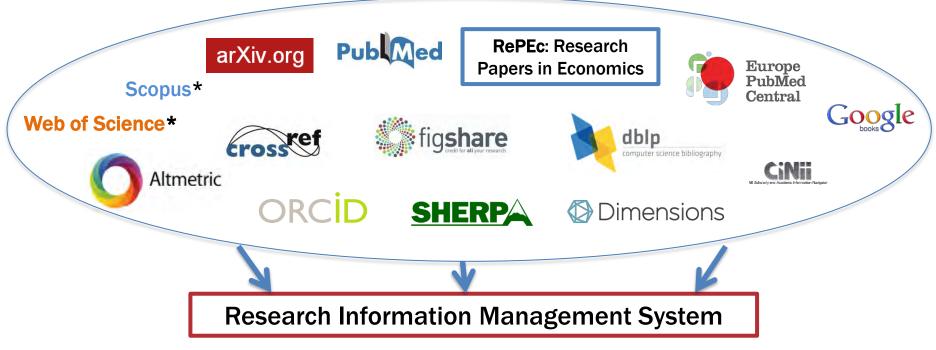
The RIM system classic data model includes:

- Person data (incl. positions, skills, cv)
- Research Outputs (e.g. publications) and Datasets
- Patents
- Grants and projects
- Professional & teaching activities
- Org Units (e.g. research groups)
- Equipment and facilities



The Research Information Management (RIM) System – as an authoritative institutional data source, should **facilitate capture of critical information in a manner that reduces the burden on faculty.**

Auto Harvesting and Disambiguation of Research Output Data



Integration of internal data from institutional resources may occur as well, typically from HR systems, Grant Management systems, etc.



The Research Information Management (RIM) System – diverse authoritative data, made available for re-use.



		Total	
Courses taught	D	2	Export []
Courses developed	•	0	
See more		2	
TOTAL		4	Export [
My Professional Activitie	es		
My Professional Activitie		Total	
My Professional Activitie		Total 0	

.

0

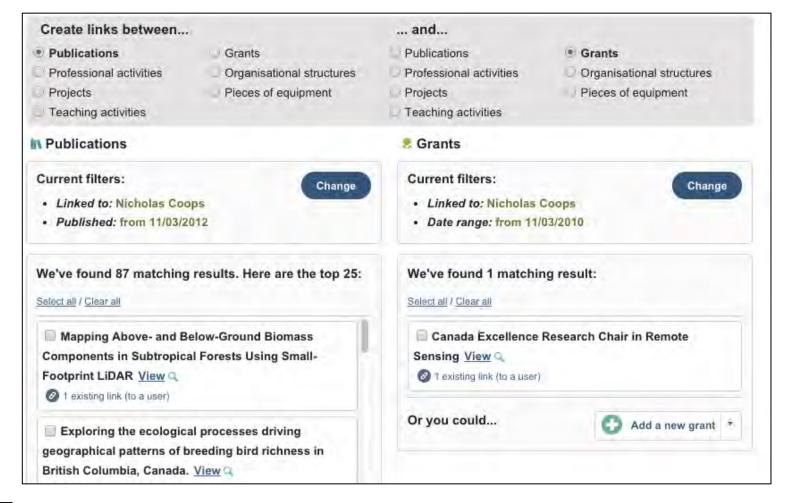
Distinctions

Memberships



Export [1]

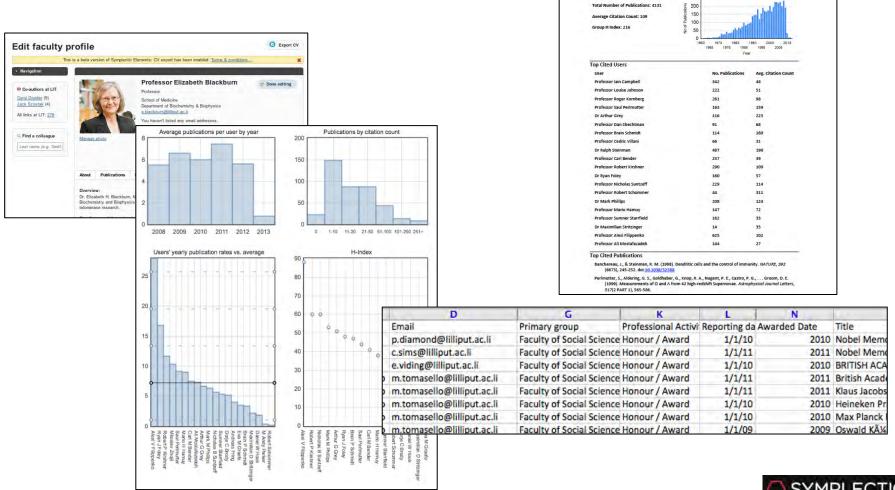
RIMs themselves should help to establish relationships between people, publications, grants, etc. ...





The Research Information Management (RIM) System – diverse authoritative data, made available for re-use.

Reporting and CV generation...

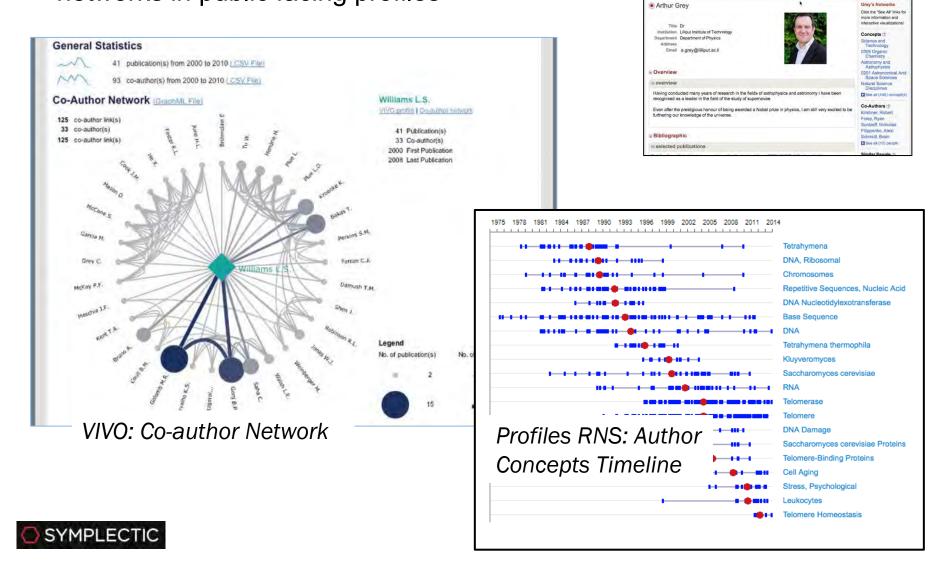


School of Natural Sciences

Elements

Publications by year

RIMs help institutions visualize individual and institutional research networks in public facing profiles

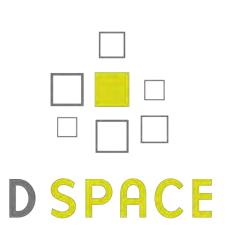


Support of Open Access Policy, Institutional and Funder



Support of Open Access Policy, Institutional and Funder --- Institutional Repository Integration

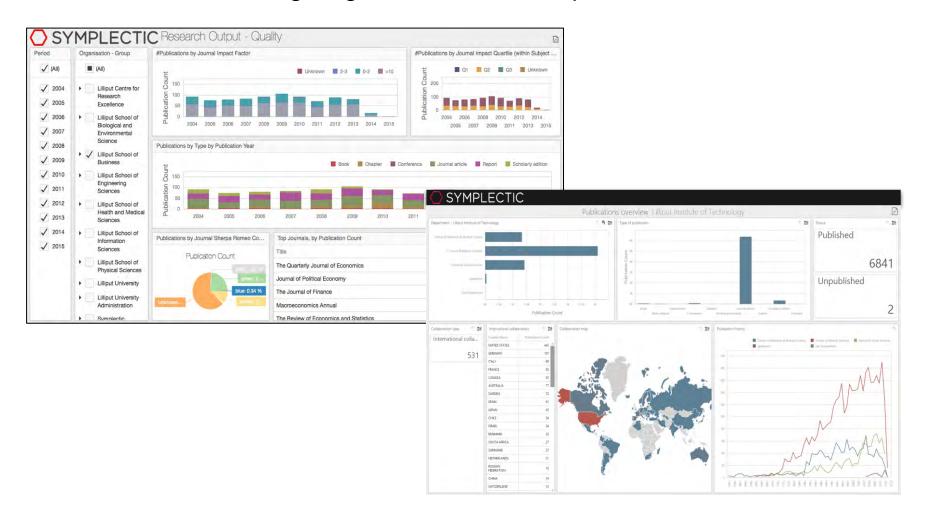
RIMs, as an authoritative institutional data source should support the population of institutional digital repositories with captured publications metadata. The automatic detection of files elsewhere on the also web helps reduce the burden placed on academics.



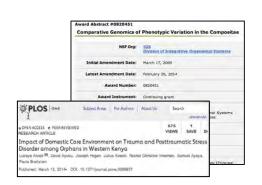




Analytics -- Key to Illuminating and Communicating Its Impact and Influences, and Strategizing for Future Development







Publications, Grants, etc. – **Data Automatically Harvested**from External Sources, and
integrated from Internal Sources

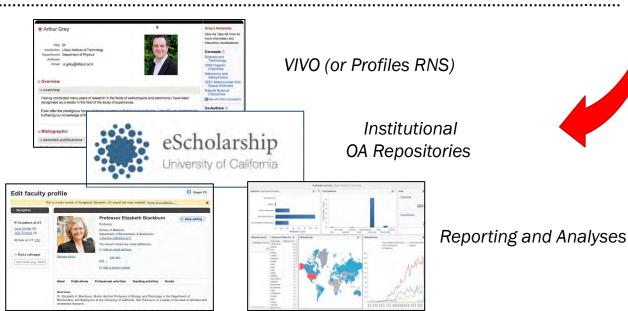


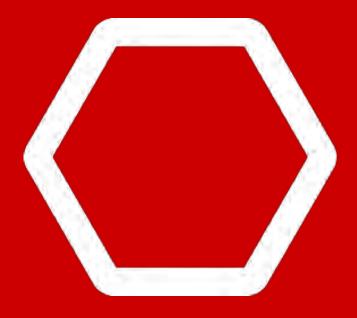


Elements aggregates, organizes, de-duplicates data from multiple sources, preparing it for re-use

Capture of data within
Elements provides for a
range of reuse options for
universities, streamlining
processes and reducing
the burden on staff
– and faculty.

Profile and CV generation





Thank You!

USDA – Research

Melanie Gardner Acting Associate Director, Information Products Division USDA, ARS, National Agricultural Library April 30, 2015



USDA Research ...

- Stove-piped by Agency
- Created USDA VIVO research networking system
- Sources of data ...
 - Multiple systems
 - Dirty data
 - Incomplete data
 - Need for editing profiles and approving them before pushing to public web
- Now, public access is mandate "PubAg"





United States Department of Agriculture



About

Contact Us

FAOs

Index

Search

Home

People

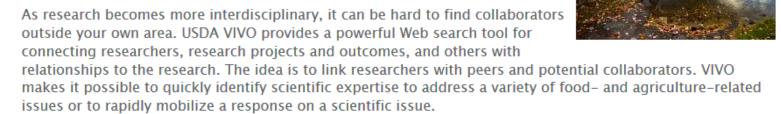
Organizations

Research

Projects

Welcome to VIVO

The U.S. Department of Agriculture (USDA) provides leadership on food, agriculture, natural resources, rural development, nutrition, and related issues based on sound public policy, the best available science. USDA employs over 5,000 researchers to advance that science, and provides grants to many times that number of researchers outside the Department.



USDA's <u>Agricultural Research Service</u> (ARS), <u>Economic Research Service</u> (ERS), <u>National Institute of Food and Agriculture</u> (NIFA), <u>National Agricultural Statistics Service</u> (NASS), and <u>U.S. Forest Service</u> (USFS) are the first five USDA agencies to participate in VIVO. The <u>National Agricultural Library</u> (NAL), part of ARS, hosts the USDA VIVO. All information contained in USDA's VIVO is public information.





About

Contact Us

FAQ5

00 W

Home

People

Organizations

Research

Projects



Zimmerman, Lewis Biological Scientist

Positions

▶ BIOLCL SCNTST, Forest Inventory and Analysis





Izimmerman@fs.fed.us





United States Department of Agriculture National Agricultural Library

Ask a Question | Contact Us | Visit the Library

Home	e Advanced Search FAQ					
	PubAg		Search			
	includes nearly 450,000	ubAg is a portal to USDA-authored and other highly relevant agricultural research. At launch, it delivers over 40,000 full-text journal articles by USDA staff and cludes nearly 450,000 citations. The Library will add about 20,000 citations each month. The initial release also previews its directions for intended functionality and Il serve as the foundation for further enhancements.				
	Using PubAg		More Resources			
	PubAg FAQs		NAL Agricultural Thesaurus			

NAL Home | USDA | Agricultural Research Service | Science.gov | GPO's FDsys | Web Policies and Important Links | Site Map FOIA | Accessibility Statement | Privacy Policy | Non-Discrimination Statement | Information Quality | USA.gov | White House



Sympletic Elements ...

- Assist with automatic and "clean" data pull of citations
- Allows Agency editor to review and approve profile information
- Assists with deposit of research outcomes publications and data
- Allows connections with research projects
- Enables program managers to monitor research outputs of individuals and units



Contact – Melanie Gardner, melanie.gardner@ars.usda.gov

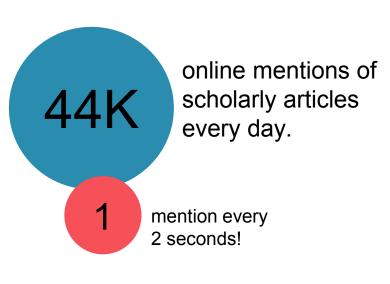


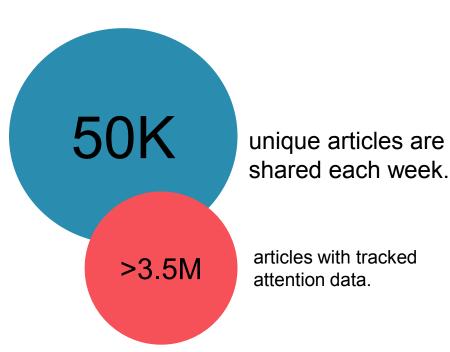


Intro to altmetrics and Altmetric.com

Sara Rouhi
Product Sales Manager
sara@altmetric.com

Democratization of information: *Everyone*, not just researchers, *can read* research...and talk about it







Source: Altmetric internal data, March 2015

Print based paradigm in a digital age: Lagging indicators

Article metrics for: The evolution of cichlid fish egg-spots is linked with a cis-regulatory change M. Emília Santos, Ingo Braasch, Nicolas Boileau, Britta S. Meyer, Loïc Sauteur, Astrid Böhne, Heinz-Georg Belting, Markus Affolter & Walter Salzburger Nature Communications 5, Article number: 5149 (2014) | doi:10.1038/ncomms6149 Last updated: 14 October 2014 13:45. Online attention Total citations Altmetric score (what's this?) Tweeted by 48 Data not Data not Data not On 6 Facebook pages available available available Picked up by 12 news outlets Blogged by 1 Web of Science CrossRef Scopus This Altmeurs me the article is: . in the 99 percentile (ranked 281st) of the 38,911 tracked articles of a similar



The cichlids egg-spots: How evolution creates new characteristics

age in all journals

The evolution of new traits with novel functions has normally posed a challenge to evolutionary biology. Studying the colour mar ..

in the 94 percentile (ranked 14th) of the 274 tracked articles of a similar age



2014-10-09T10:17:50+01:00

Funding pools drying up: Show me the (broader) impact!

Grant funders looking for proof of "broader impacts" often defined as "an effect, change, or benefit to the economy, society, culture, public policies, health, the environment, etc."



Research Excellence Framework, http://www.ref.ac.uk/panels/assessmentcriteriaandleveldefinitions/

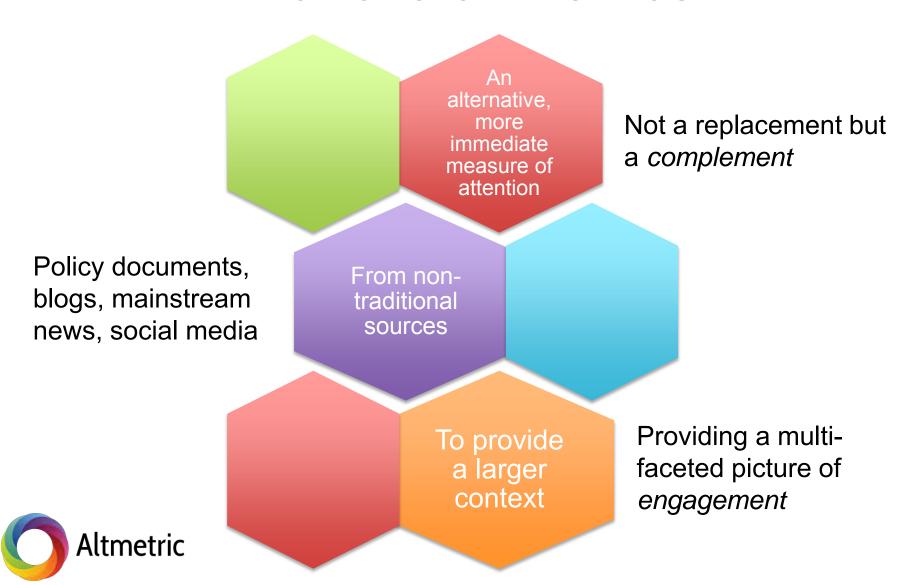


Broaden dissemination to enhance scientific and technological understanding, for example, by presenting results of research and education projects in formats useful to students, scientists and engineers, members of Congress, teachers, and the general public.

http://www.nsf.gov/pubs/2007/nsf07046/nsf07046.jsp



What are altmetrics?



Note: Altmetric.com and altmetrics are not the same thing!

Altmetric.com is one of several altmetrics providers.



Who are we?

Altmetric is a data science company that tracks attention to research outputs, delivering output level metrics via visually engaging, intuitive interfaces.

In other words, we help give *credit where credit* is due.



Why would my institution use altmetrics?

They answer *key administrator needs* and questions!



Why? **Administrators**

- Are we in compliance with grant/govt mandates?
- Do our research outputs work toward our group/dept/instit. mission?
- Does our campus have global reach?
- Does our research influence policy, legislation, best practices?



Why? Libraries

- Do our collections reflect where our research gets the most attention (i.e. are we missing anything? Are we purchasing the wrong things?)
- Does our OA policy bring more attention to our work?
- How does our institutional repository bring attention to campus research?



Why? Marketing/PR/Communications

- Is anyone out there getting it wrong?
- Have we missed opportunities to get in front of a PR/communications storm?
- Can we benchmark our outreach efforts?
- Are we reaching the target markets we want?
- Are we using the right media?



Why? Research Groups

- Are we reaching the audiences we want to see our work?
- Is anyone misrepresenting/confused by our work?
- How do we demonstrate "broader impact" to grant funders?
- How can we reach more people with our research?
- Are we engaging unexpected communities?



Multifaceted picture of engagement: **Audiences**

Practitioners General Public **Scholars** Professional Interested Parties Communicators



Multi-faceted picture of engagement:

Interaction

- Scholars
 - Downloads
 - Citations
 - Bookmarks/saves
- Early career
 - Social media, blogs
- General public
 - News, blogs,
 - Social media

- Practitioners
 - Policy documents
 - Field-specific blogs/Social Media
- Research communicators
 - News, blogs, social media
- Interested parties
 - Policy docs, blogs



How do we collect this data?



We need three things to track an output:

An **output** (journal article, dataset, etc)

An identifier attached to the output (DOI, RePEc, etc)

Mentions in a **source we track**



Our terminology



Items for which we track 'Mentions'.

e.g. Data set, journal article, etc.



Places where we look for 'mentions' to Research Outputs

e.g. News, blogs, social media, etc.



References or links to a Research Output across our Attention Sources.

e.g. Link to a paper in a policy document



Unique IDs we track...



DOIs General PubMed ID **Health Sciences** Physics, Mathematics arXiv ID & Computer Sciences Astrophysics data ADS ID system SSRN ID Social Sciences RePEC ID **Economics** Handles General



Sources we follow...

News outlets

- Over 1,300 sites
- Manually curated list
- Text mining
- Global coverage

Post-publication peer review

Publons Pubpeer

Reference managers

- Mendeley etc
- Demographics

Social media and blogs

Twitter, Facebook, Google+, Sina Weibo Public posts only 8,000+ Blogs

Other sources

Youtube
Reddit
F1000
Q&A
Wikipedia
Policy Docs



So where will you find altmetrics?

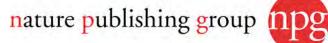


Where will you see our data? Publisher platforms





















Where will you see our data? Books





Where will you see our data? Other metrics providers









Where will you see our data? Author Tools



"A CV that documents alternative metrics [...] offers a much more compelling argument to a tenure committee of their research impact than a traditional publication is the state of the sta

- Donald Samulack, Editage











Where will you see our data? *Platforms*



Recommendation Engine
Integration for Medical research Apps



Integrating Altmetric service into publishing platform



Altmetric Integration for JAMA and others to monitor research impact



Integrates Altmetric data for over 1 million articles



Where will you see our data? *Institutional* repositories/discovery systems

- Institutional repository badge embeds
- Badge integration with discovery systems







Who uses our data? **Research Management Systems**

Unprecedented recent summer warmth in Arctic Canada

Summary LU users (3) History (1) Data sources (3) Full text Links (3)

Miller GH, Lehman SJ, Refsnider KA, Southon JR, Zhong Y

GEOPHYSICAL RESEARCH LETTERS 40(21):5745-5751 16 Nov 2013 Author URL

1012

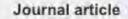
Funder Acknowledgement: We thank J. Briner, R. Anderson, K. Zalzal, C. Florian, C. Anderson, and S. DeVogel for assistance in the field and laboratory; W. Colgan for advice on short-wave radiation; and the Inuit of Pond Inlet and Qikiqtarjuaq for help during fieldwork and for permission to access field sites. Field and analytical programs were supported by National Science Foundation grants ARC-0454662, ARC-0714074, and ARC-0903024. Polar Continental Shelf Project assisted with field logistics. G.H.M. designed the study. G.H.M. and K.A.R. collected the samples. S.J.L. and J.R.S. carried out the radiocarbon dating. G.H.M. and S.L.J. wrote the manuscript. All authors contributed to the interpretations and conclusions.: ARC-0454662/National Science Foundation, ARC-0714074/National Science Foundation, ARC-0903024/National Science Foundation











Reporting date: 16 Nov 2013 Edit



Thanks!

Sara@altmetric.com @RouhiRoo

Impact Services



- Impact Libguides
 - Curated searches in Scopus, Web of Science and LexisNexis, integrated NAXchange and Altmetric data
- Impact Summaries
 - Compiled data to be used for marketing and potential funding opportunities
- Motivational Metrics: Using Data to Communicate Impact Workshop
 - Designed to train staff on how to use institutional metric tools

Research Center / LibGuides / IOM Impact LibGuide / New Directions in Child Abuse and Neglect Research (2013)

IOM Impact LibGuide: New Directions in Child Abuse and Neglect Research (2013)

Home + IOM + BCYF + BGH + BPH + BSP + FNB + HCS + HSP

New Directions in Child Abuse and Neglect Research (2013)



Report Downloads

5,658 total PDF downloads since September 12th, 2013.

Search by report title in NAP NAXchange, to view statistics for PDF downloads (from 2003-present) and print sales (from 2000-to present) for all NAP reports. Accessible in IE9, Chrome and FireFox.

Altmetric Score See more details Tweeted by 10 On 3 Facebook pages Mentioned in 1 Google+ posts

Cited in Scopus

See below for a sampling of articles that have cited this report. Check the **References** section of the article to see how the report is cited.

Click here to see a complete list of peer reviewed articles that cite the report in Scopus. Tip: Sort by Cited by - to see which of these articles have had the most impact.

Search strategy: REF("New Directions in Child Abuse and Neglect Research")

- Interagency collaboration and identifying mental health needs in child welfare: Findings from Los Angeles County
 Culture and context in understanding child maltreatment: Contributions of intersectionality and
- neighborhood-based research

 Child Maltreatment and Children's Developmental Trajectories in Early to Middle Childhood
- Interpersonal difficulties mediate the relationship between child sexual abuse and depression symptoms
- Pilot study of a program delivered within the regular service system in Germany: Effect of a short-term attachment-based intervention on maternal sensitivity in mothers at risk for child abuse and neglect

Website | Feed

Cited in Web of Science

See below for a sampling of articles that have cited this report. Check the Cited References section of the article to see how the report is cited.

Click here to run a Cited Reference Search to see a complete list of peer reviewed articles that cite the report in Web of Science.

Follow the instructions below.

- From the main Search page, select the blue drop down arrow and click on "Cited Reference Search" to begin.
- 2. In the Cited Work field, copy & paste the following search strategy:

(NEW DIR CHILD AB NEG OR NEW DIRECTIONS IN CHILD ABUSE "AND" NEGLECT RESEARCH)
and then in the Cited Year field. copy and paste the following years:

(2013-2014)

Click Search.

3. The next page you will see is the Cited Reference Index. Click Select All, and then Finish Search

Legislative Impact in LexisNexis

Enter Search Words

Select the link below to view the legislative impact of the report in the Congressional Record, the Federal Register, law reviews, federal & state cases, and legislative history.

Search

Tip: Sign into LexisNexis with your nas.edu email first if the link below does not work.

 New Directions in Child Abuse and Neglect Research

Cited in the Press

Select the LexisNexis link below to view news articles that cite this report. Includes all news, all languages, and all dates.

Tip: Sign into LexisNexis with your nas.edu email first if the link below does not work.

 New Directions in Child Abuse and Neglect Research

Tracking Impact

The information we collect about a report, workshop summary, dissemination article or other NAP related product helps us understand its national or global influence. We can package that information for our Executives, RSOs, sponsors, and the consumer to demonstrate the value in the products we deliver. Ideally it will help Academy decision makers and national

Visit the Motivational Metrics LibGuide to learn more.

leaders understand that what we do has

Request Impact Summary

Report an Impact

tangible value.

Next Steps

- More staff training
 - Connect the dots for staff
- Embed the library in the communications planning for projects
 - Library can assist in identifying how and where metrics can be collected
- Improve analysis techniques of usage/peer review metrics and altmetrics.
 - ➤ Package for staff to be used for marketing and business development.



Contact Information

Colleen Willis

Senior Librarian, Digital Strategies and Technology

cwillis@nas.edu