



**Department of Energy**



**Office of Scientific and Technical Information**

**Supporting DOE's STI with External Partnerships**

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Richland, Washington



# External Partnerships



## Value for DOE's STI

**OSTI's partnership activities must help DOE, its researchers, and its valuable STI transition successfully into the information environment of the future.**

Must bring tools, services, a span/scope of reach and reputation, methodologies, or technologies that:

- Create better retrievability
- Provide more visibility
- Reduce ambiguity
- Enhance attribution
- Ensure validation
- Support preservation
- Enhance user experience
- Enlarge user community

# What does that future information environment look like?

Ever more virtual

Securely fluid; global, of course

Seamlessly integrated

Unstructured information that can be rendered automatically, through smart filters, into structured metadata elements

Elements that carry, from birth to archive, unseen link codes and keys that can be gathered up in a thousand different configurations as quickly as fillings jump to a magnet.



Whatever the future of information will look like, part of **the job we do now is to get today's metadata ready for it.**

Whether metadata will be created as objects or simply shaken from products like leaves from trees doesn't matter. Metadata will still be the DNA of the future's body of information.

So, knowing **WHY** we engage in these external partnership activities ... keeping one eye on the immediate benefit to DOE... and one eye on future value...

Focus on four:

**ORCID**

**FundRef**

**CrossRef**

**DataCite**

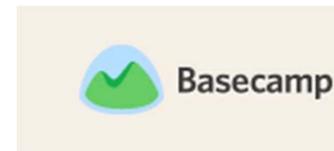


*More than 600,000 scholars and researchers now have an ORCID.*

ORCID

## Aggressive Adoption and Outreach Programs:

- **External funding and/or projects** (ORCID Adoption and Integration Program, funded by Alfred P. Sloan Foundation)
- **Ambassador Program**



March 2014: Hi everyone, just wanted to report that the NASA ADS has 298 or roughly 300 ORCID iDs in the metadata that they have captured from the publishers so far. Only two publishers have been sending them, IOP and Elsevier. Strange that APS and AIP have not.

March 2014: A search in Pubmed for ORCID returns 978 records.

- **Through conference booths, workshops**

Physicist Antony Bourdillon, is using ORCID search and link wizards to link his 100+ publications to his new ORCID iD: 0000-0002-3824-2107



American Physical Society,  
March 2014, Boulder, CO



# Aggressive Adoption and Outreach Programs (cont)

## – Through marketing



**Get Recognized**

**WHAT IS ORCID?** ORCID is a registry of unique identifiers for researchers and scholars that is open, non-proprietary, transparent, mobile, and community-based. ORCID provides a persistent digital identifier that distinguishes you from every other contributor and supports permanent linkages among all your professional activities.

ORCID is about disentangling your research from others' with the same or similar names. Without disambiguation, we will continue to manually weed our bibliographies. We have better things to do with our time.

How can I ensure I receive credit and recognition for all of my contributions? Shouldn't there be a way to reduce time spent on administrative and reporting requirements? How can I maintain control over my own record of contributions?

Regardless of your discipline or place of work, it is critical to your reputation and career that research and scholarly organizations and funders, publishers, scholarly societies and associations, and your fellow researchers and students be able to quickly and unambiguously identify and attribute your work – and only your work – to you. ORCID helps you easily and reliably link your unique identity with your contributions such as datasets, articles, books, media stories, samples, experiments, patents, and textbooks.

ORCID recognizes that you own your record of contributions. You can manage all of your key information in one place, and you control your own privacy settings, including what information is displayed publicly, what is shared only with trusted partners, and what those trusted partners are.

ORCID is founded on interoperability with multiple systems and standards. ORCID allows you to link with other identifier systems, including those maintained by funders and publishers, and exchange data freely with those research information systems. Registration is free and fast for all researchers and scholars.

ORCID, an independent, non-for-profit organization designed to benefit all stakeholders, is unique in its ability to reach across disciplines, research sectors, and national boundaries. The ability to connect research and researchers enhances the scientific discovery process and improves the efficiency of research funding and collaboration. ORCID is engaging with all sectors of the research community to make this vision a reality.

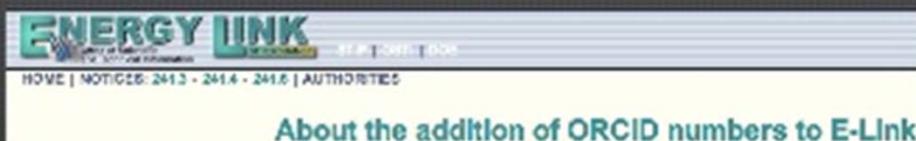
Visit [orcid.org](http://orcid.org) to learn more. Join ORCID today and become part of the solution.

<http://www.cafepress.com/orcid>

- One-page flyers providing a general overview of ORCID (in 7 different languages)
- Banners that you can print and post
- A general-purpose slidedeck that you can adapt for use in your own organization



- ❖ The US Department of Energy has integrated ORCID iDs into their E-Link and Announcement Notices.



<https://www.osti.gov/mlink/aboutorcid.jsp>

- ❖ The Australian NHMRC has integrated ORCID identifiers into their RGMS grant application system.

#### Add your ORCID ID to RGMS

Researchers with an Open Researcher and Contributor ID (ORCID) can now include this in their RGMS user profile. ORCID allows researchers to create a unique identifier for themselves to assist funding agencies, journal editors and other groups involved in scholarly communications.

<http://www.nhmrc.gov.au/media/newsletters/research-tracker/2013/nhmrc-research-tracker-28-june-2013>

- ❖ The Wellcome Trust has integrated ORCID iDs into its eGrants application system.



## ORCID Headliners:

- ORCID and DataCite are joined “at the hip” in the European Union via the ORCID and DataCite Interoperability Network (ODIN) – Many software tools and integration bridges being built.
- ORCID holders can now **import** FundRef information into their profile.
- Starting in March 2014, an authentication-only API is available for members and non-members alike to use.
- Launched an ORCID Ideas Forum – 8 API ideas, 26 user interface ideas, etc.
- Researchers can add research datasets – and other content with DataCite DOIs, including all Figshare content – to their ORCID profile by integrating with the DataCite Metadata Store.
- A very cool “bells/whistles” application: ORCIDLive <http://orcidlive.org/>

ORCID

# OSTI and ORCID since April 2013

Completed membership  
documents - officially joined  
ORCID on May 1, 2013



**NOW:**

- Text string entry allowed  
OR
- ORCID “author block” allowed
- Contributor Org field added for  
collaborations

**EOLINK**  
OFFICE OF SCIENTIFIC AND TECHNICAL INFORMATION

**Before:**

\*AUTHOR(s):  
[Text input field]

Author E-mail Address(es):  
[Text input field]

**After:**

\*AUTHOR(s): Add/Remove Authors + - (Clicking the minus button will remove the last author record in the list below.)  
Click and hold to drag author records below into required order.

Last Name: [Text input field] First Name: [Text input field] Middle Name: [Text input field]  
Email Address: [Text input field] ORCID: [Text input field] Affiliation: [Text input field]



In response to STIP comment,  
revamped the first attempt to  
incorporate ORCID into  
author entry.

**EOLINK**  
OFFICE OF SCIENTIFIC AND TECHNICAL INFORMATION

\*AUTHOR(s):  
 Enter All Authors  
[Text input field]

Enter Each Author Add/Remove Authors + - (Clicking the minus button will remove the last author record in the list below.)  
Click and hold to drag author records below into required order.

\*Last: [Text input field] \*First: [Text input field] Middle: [Text input field] (if initial only, add period)  
Email: [Text input field] ORCID: [Text input field] Affiliation: [Text input field]

CONTRIBUTOR ORGANIZATIONS:  
[Text input field]

# OSTI and ORCID since April 2013

- Accepted an invitation to serve on the Outreach Steering Committee
- Added a full page write-up about ORCID to E-Link Instructions
- Evaluated Harvesting for intake of ORCID “author block”
- Just added the ORCID “author block” option to web services for AN 241.1 and 241.6. Provides the option for records with text string entry and records with “author block” entry to be mixed in single file.



Documentation changes are underway for the web services manuals

What about YOU? Tell us and let us help!



- OSTI's processes have long included automated interaction with CrossRef.
- OSTI generates an automated query to CrossRef for all journal citations submitted to processing. The query contains a subset of the metadata and "asks" CrossRef if there has been a DOI assigned to this particular article and, if so, what is it?
- The DOI that comes back as an answer is included by OSTI in the record and is a permanent link to the article on the publisher's website.
- OSTI also assigns DOIs to technical reports, and these are registered with CrossRef.

## An Explosion of Services



The proven model that researchers live by, citation tracking and analysis, has been tweaked again... this time to help the funding organizations themselves.



## Why does this matter?



**With the beta version of FundRef now available, we've been looking at how we might improve its DOE content.**

**As part of that, OSTI has surfaced the issue of attribution for scientific user facilities. These facilities represent a slightly different type of organization that could be and needs to be included in the FundRef Registry.**

Until now, many publishers have not extracted funding information so it's been buried in text. There has been no standard way to tag this information as metadata or deposit it in a centralized place. Having publishers universally support the FundRef initiative and integrate it into their publishing process is the key to resolving these challenges.

**Integration beyond publishers !**





## Headliners:

Took from 2009 until Sept 2013 to reach 2.8 million DOIs registered. This March, in just six additional months, DOIs jumped to 3.1 million.

CERN is a new member and will register DOIs for High Energy Physics datasets from the Durham HEPData Project. Corresponding publications are on InSPIRE.

22 full members;  
9 affiliate members

The data confirming the existence of the Higgs-Boson can be cited with a DataCite DOI:

**[10.7484/INSPIREHEP.DATA.A78C.HK44](https://doi.org/10.7484/INSPIREHEP.DATA.A78C.HK44)**

**Joint declaration of Data Citation Principles**

## More Automation and Integration (of course!)

### On GitHub

<https://github.com/mpaluch/datacite-metadata-generator>

An updated version of the DataCite Metadata Generator tool which supports DataCite Metadata Kernel version 3.0 . The tool is a single HTML form which allows users to create metadata through text inputs and drop-down selections. Newly added features include support for all version 3 metadata elements, clear identification of mandatory, recommended, and optional elements, and the ability to save the resulting metadata to a file. The tool does not require any software installation or application servers, just download the form, open it in a browser, and start creating.

#### DOI Citation Formatter

Another service created in collaboration with CrossRef is the DOI Citation Formatter. This service creates different citation formats for DataCite and Crossref DOIs. User can choose from more than 500 different citation formats in 45 different languages.

An ORCID widget implemented by ANDS has also been integrated into the form, enabling you to search the ORCID registry for a given creator name and that creator's ORCID will be inserted directly into the resulting metadata.

# OSTI and DataCite since April 2013

## **As part of the Metadata Working Group:**

- OSTI helped complete version 3.0 of the Metadata Schema – Released July 2013. (Go to <http://schema.datacite.org/> to access the DataCite Metadata Schema Repository)
- We work with customers via Google Group called DataCite Metadata

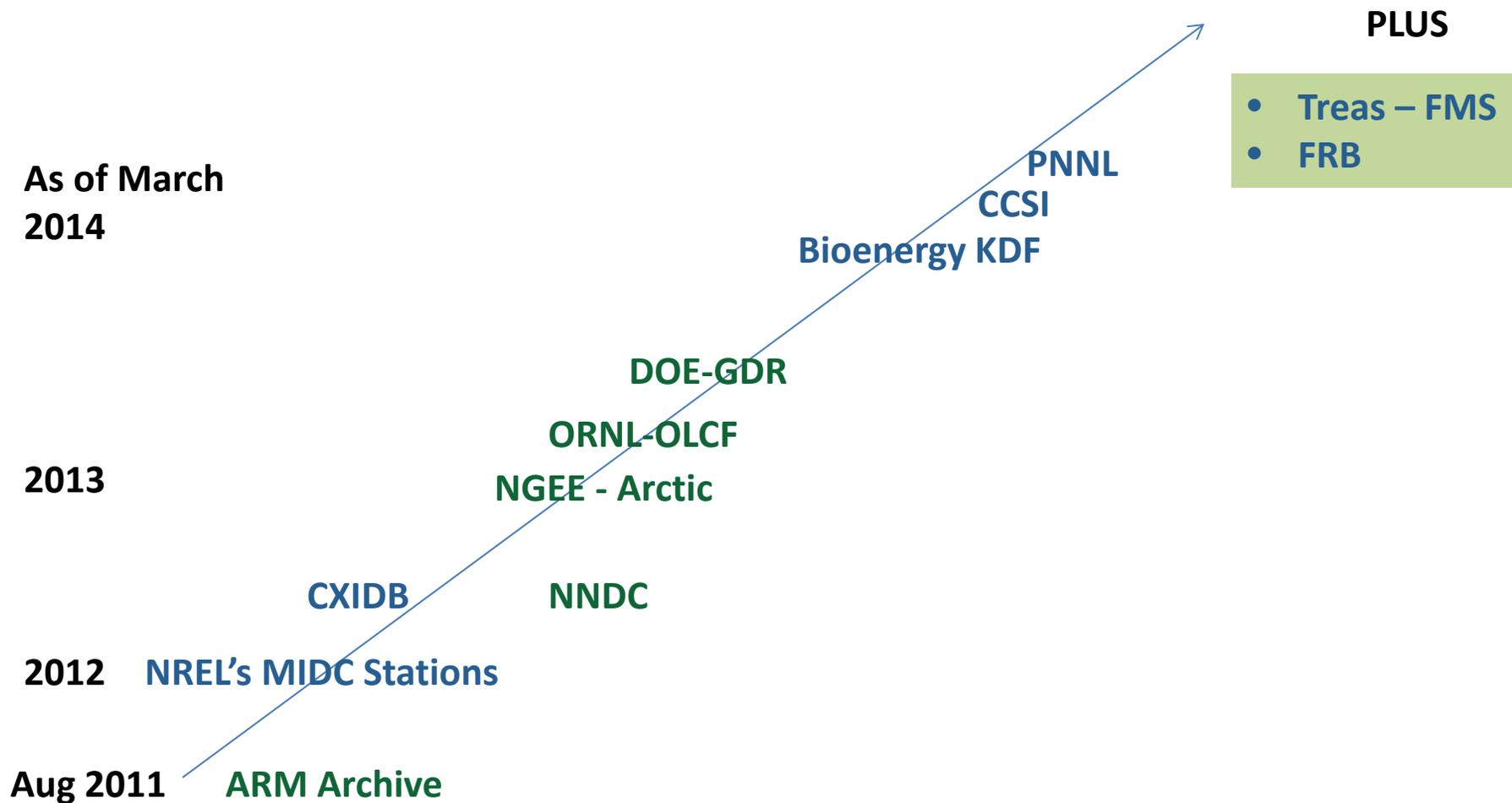
## **As operator of the Data ID Service:**

- We've just added additional fields to the flow of metadata we send to the DataCite Registry
- Decided to alter our original, internal stance on embargoed datasets

## **As a member of the STIP community:**

- We're ready to provide unique DOI prefixes for labs' normal STIP submission processes in support of program office directions regarding data packages, supplementary materials, etc.
- We've modified all the data ingest mechanisms to allow reporting of ORCIDs obtained by data creators.

# Steady Growth in Number of DOE Customers Ready to Register Datasets



## A Closer Look



20 datasets equal seven million LCLS images



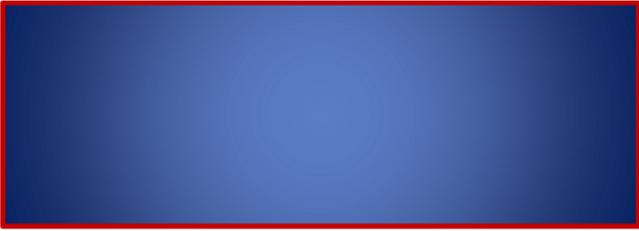
30 petaflops of data as of 2013



Curated datasets!



Hundreds of datasets, models, and tools



# RECAP



## Why spend time on external partnerships and activities?

- Benefit DOE's STI now
- Prepare DOE's STI for the future

**OSTI**

**STIP**

## How does the process work?

- Join, then collaborate with STIP
- Adopt and use
- Customize and improve
- Influence the overall direction
- Make it work for DOE's STI

**Me**

**You**

**Us !!!!**