



Federal Demonstration Partnership Meeting

January, 2012

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Chief Science Officer
Custom Analytics and Engineered Systems
13 January 2012



THOMSON REUTERS

RESEARCH REPORTING WORKFLOW

- Identify people, concepts, and organizations
- Determine connections
- Track research activities and outputs




DEFINING THE PROBLEM




NAME AMBIGUITY


How do I get credit
for my work?

Peterson, J **FIND** →  1839 articles

Current literature searches lump together all the papers appearing under identical names.

Peterson, J **FIND** →  •Janet Peterson
55 articles

Disambiguation software can help find out who wrote what. But an author's work is often broken up into multiple groups, for instance, because they changed jobs. And papers published under misspelled or former names aren't found.

 •Janet Peterson
37 articles

WON'T FIND:

- ✗ Janet Petersen – one article (name misspelled)
- ✗ Janet Holden – three articles (written under birth name)

1965496543 **FIND** → 96 articles


A number identification system could help find all the papers written by an author, independent of changes in fields, affiliations, or name. It could also help keep contact information up-to-date.

JANET PETERSON

Alternative Name:
JANET HOLDEN

E-mail Address:
JPETERSON@UFA.EDU

Current Affiliation:
UNIVERSITY OF FLORIDA AT ARCADIA



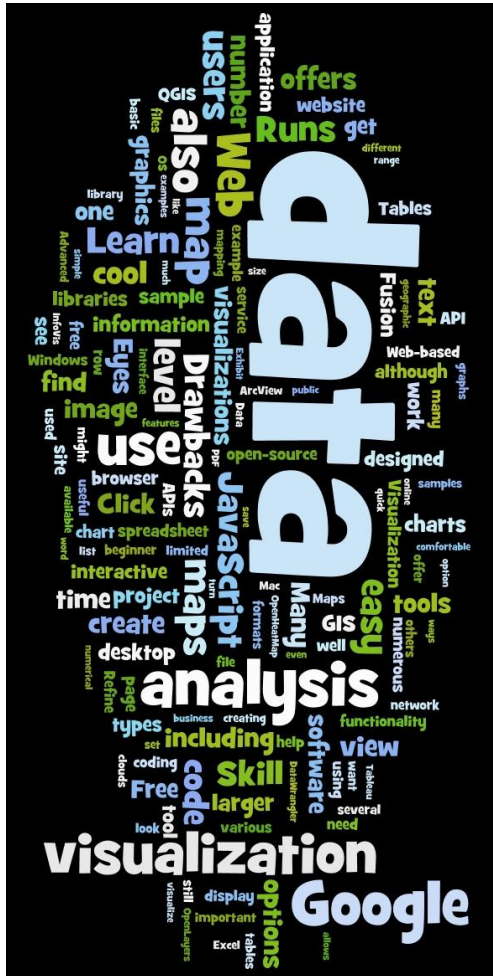
RESEARCHER

If it provides a more efficient way to manage my profile data and institutional and funder reporting requirements, I'll use it.



- I need to submit a paper
- I need to list my scholarly output in a grant application biosketch
- I want to know what other papers were published by these authors
- I want to find potential collaborators

Funding, personnel, and output data sources were not designed for the purpose of tracking or reporting



RESEARCH INSTITUTION

If it provides a more efficient way to manage expertise and impact data and supports seamless institutional reporting, we'll use it.



- We need to understand our institutional research strengths and impact
- We want to know how we compare to other institutions
- We need to track faculty publications for our institutional repository and/or profiling system.
- We want to know with whom our faculty are collaborating

FACING THE CHALLENGE

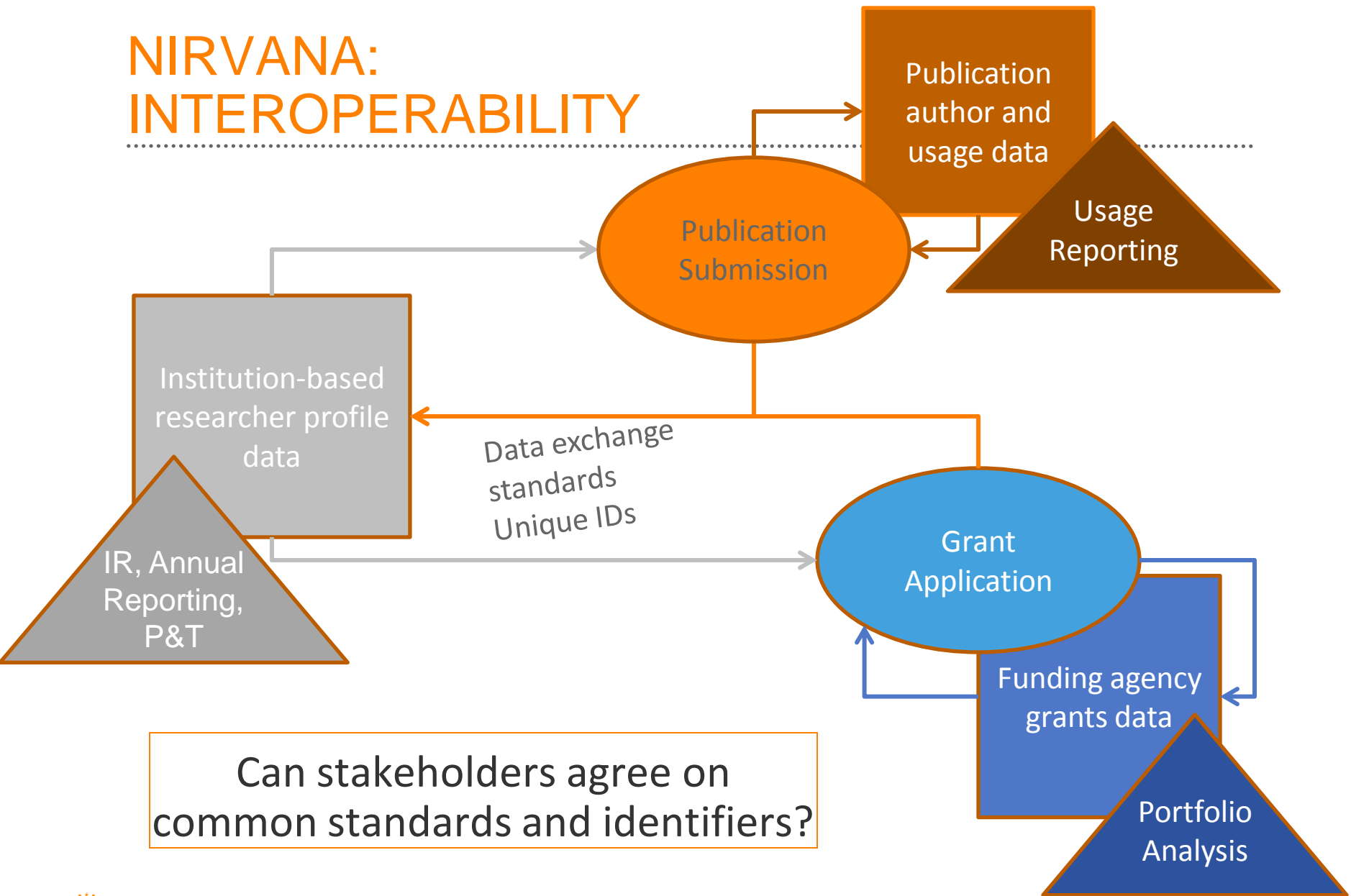
Adopt definitional standards within and across data sources and types

Apply unique ID to person records across data sources and types

Enlist all sectors in data collection and standards effort



NIRVANA: INTEROPERABILITY



STANDARDS AND UNIQUE IDENTIFIERS



ORCID

ORCID is a permanent
registry of unique contributors

ORCID provides a
disambiguation service

ORCID is the crux of a
disambiguated record of
research activity

Example ID: <http://orcid.org/0137-1963-7688-2319>



WHY ORCID?

TRUSTWORTHY: Inclusive and transparently governed
not-for-profit

GLOBAL: Not limited by discipline, institution, geography

OPEN: Data and source code available under recognized
open licenses

EFFICIENT: Third-party seeding of profiles

INTEGRATED: Part of institutional, publisher, and funding
agency infrastructure

ORCID IN CRITICAL WORKFLOWS

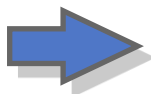
Researcher



Joins faculty
Joins student body



- Track output of researchers
- Locate collaborators



Applies for grant



- Streamline application process
- Support research assessment

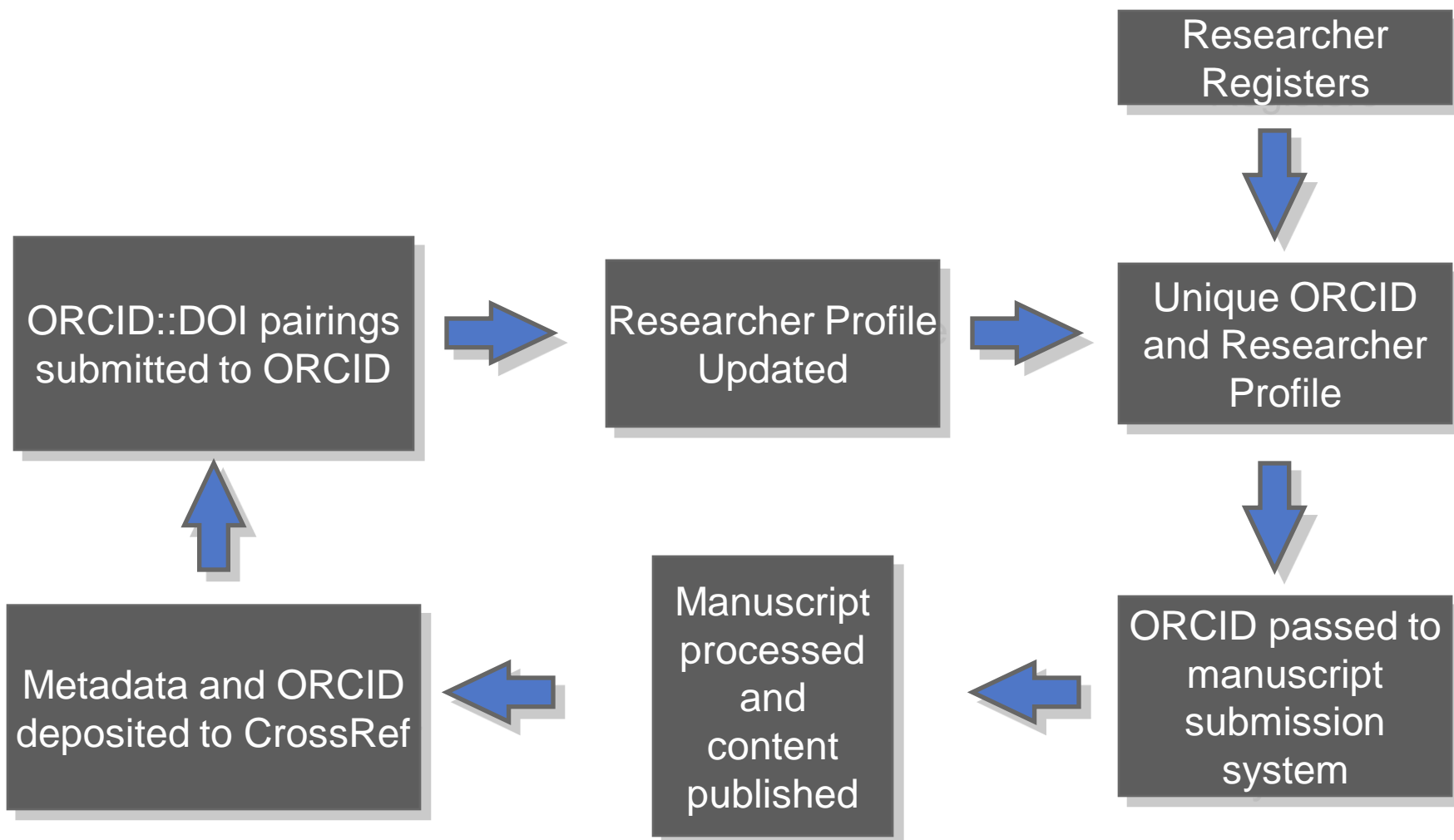


Submits
manuscript



- Streamline data input
- Create author links

AUTHOR → ORCID → PUBLISHER WORKFLOW



ORCID PROFILE

Researchers create and maintain an ORCID ID and profile free of charge, with fine-grained control of privacy settings

Personal Information My Affiliations Password Options [Return to My Researcher Profile](#)

Update your information. Optionally, use the "public" setting to indicate which information to display on your Profile page. Clear a public check box to make that information private. Note: Click the "Submit Changes" button on each page. * required fields.

[Submit Changes on this Page](#) [Cancel](#)

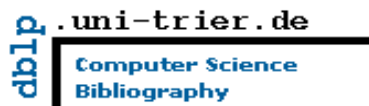
<input checked="" type="checkbox"/> Public (Master)	First / Given Name: <input type="text" value="Martin"/> *	Public (Master): Clear the "Public (Master)" check box to make your information private. Only you, when logged in, will be able to view your information. Name: Your name will be searched and displayed on your profile page. ORCID ID: This is your unique identification.
	Last / Family Name: <input type="text" value="Fenner"/> *	
	Middle Initials: <input type="text" value="H"/>	
	ORCID ID: AAA-1034-2010	

<input checked="" type="checkbox"/> Public	Other Names Used by You: <input type="text"/> Add <div><input type="text"/></div> Remove	Other Names: If you've published under different names or if you are known by more than one name, enter Other Names. These will be searched if made public.
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<input checked="" type="checkbox"/> Public	URL: http://www.orcidsandbox.org/rid/AAA-1034-2010	URL: The URL can be used to link directly to your profile page.
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RESEARCHER IDENTIFICATION STANDARD

ORCID will interact with other researcher identification systems

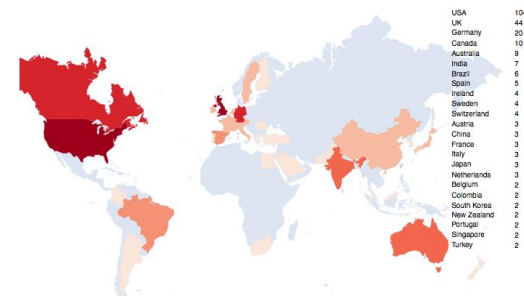
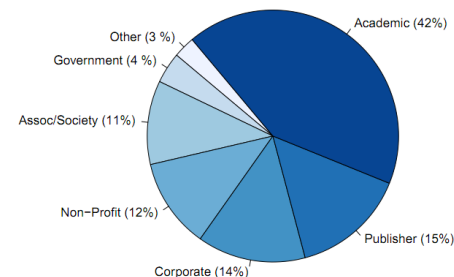


ORCID BRINGS STAKEHOLDERS TOGETHER

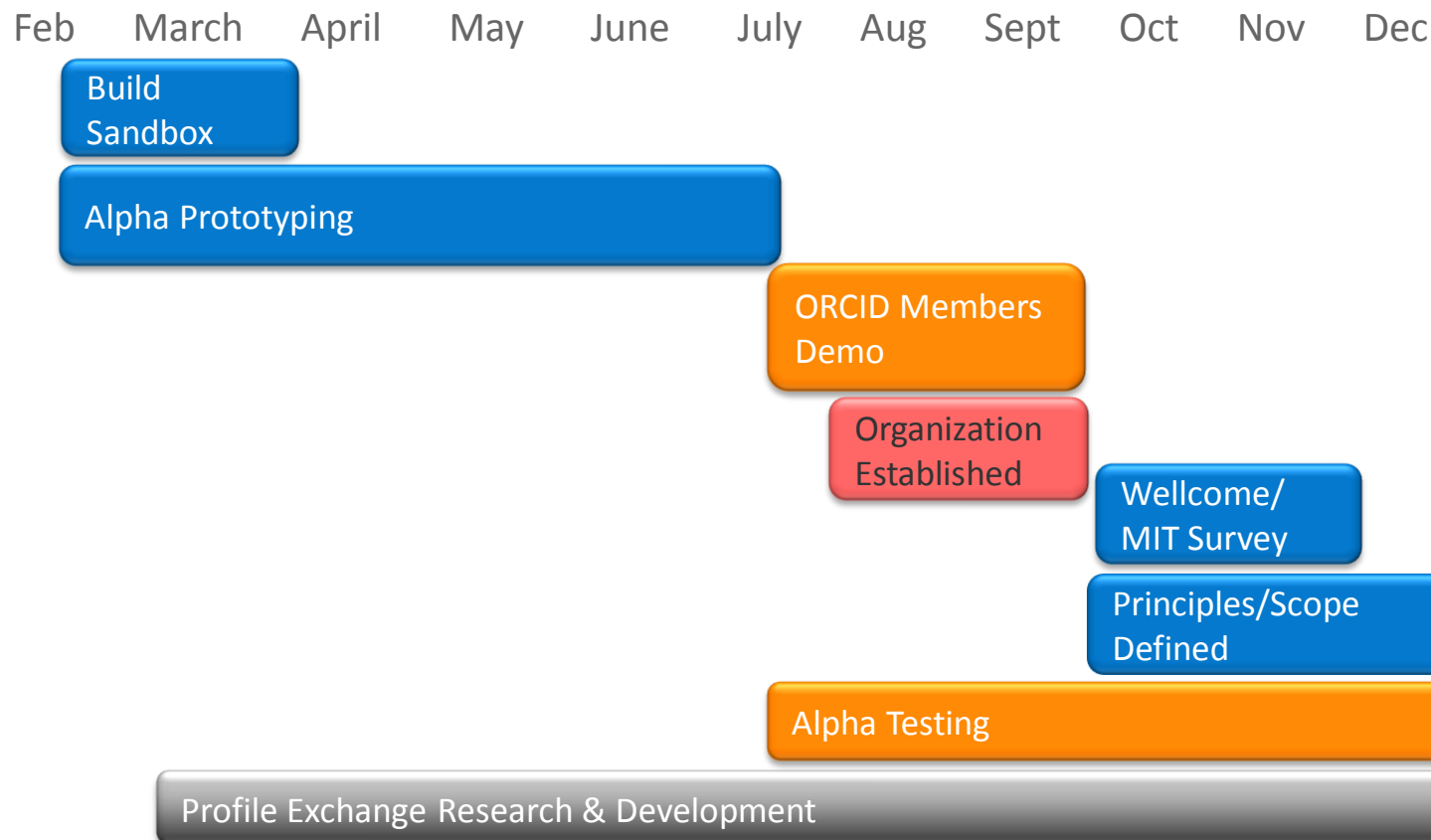
❖ ORCID members include publishers, research institutions, funding organizations, and data aggregators.

❖ ORCID governance is majority non-profit by design

❖ Software developed by ORCID will be released under an Open Source Software license.



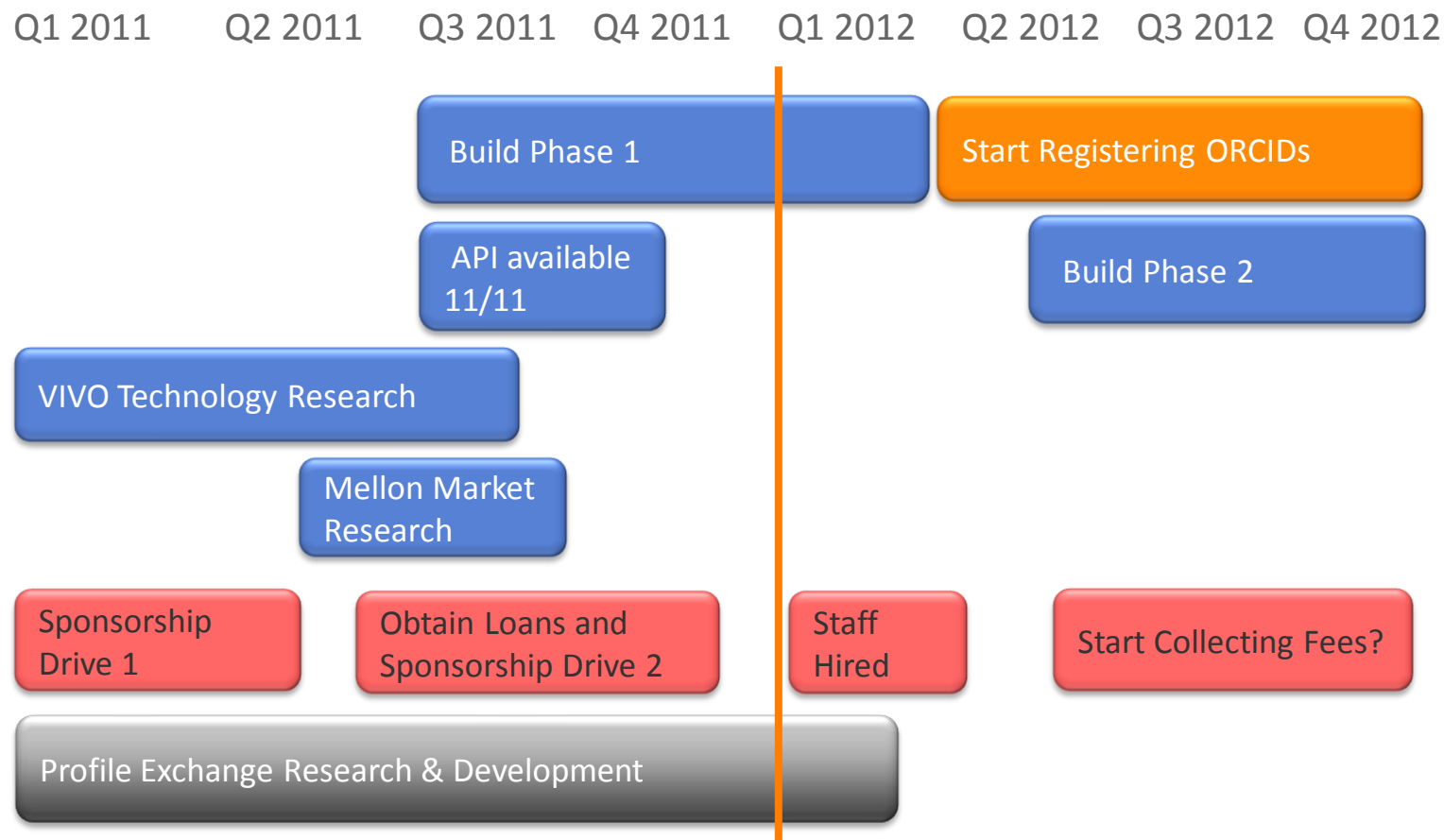
TIMELINE 2010



ORCID SYSTEM

In August, 2011, ORCID and Thomson Reuters reached an agreement that enables ORCID to start building the ORCID service based on Researcher ID code, giving ORCID the critical technology to create its system.

TIMELINE 2011-12



ORCID PHASE 1 SYSTEM

- ❖ Researcher self-claim, delegated management, and institutional seeding of data
- ❖ Fine-grained control of privacy settings (public/private/protected)
- ❖ Data exchange into grant/manuscript submission systems
- ❖ ORCID identifier resolution and metadata search via GUI and REST API
- ❖ API mockups posted at <https://github.com/ORCID>

PHASE 1 QUERY TYPES

Name	Key	Returned	Description
Bio	ORCID	Profile metadata	Given an ORCID, give me name and affiliation data.
Works	ORCID	List of work metadata	Given an ORCID, tell me what works they have contributed to.
Full	ORCID	Profile metadata, work metadata and ORCIDs	Given an ORCID, tell me what works they have contributed to, name and affiliation data.
Work	Work identifiers (e.g. DOIs)	ORCIDs & associated metadata	Given a work, tell me who contributed to it.
Search	ORCID, Work identifiers, or profile metadata	ORCIDs & associated metadata	Given whatever metadata I have, give me a ranked list of potential parties identified by that metadata.

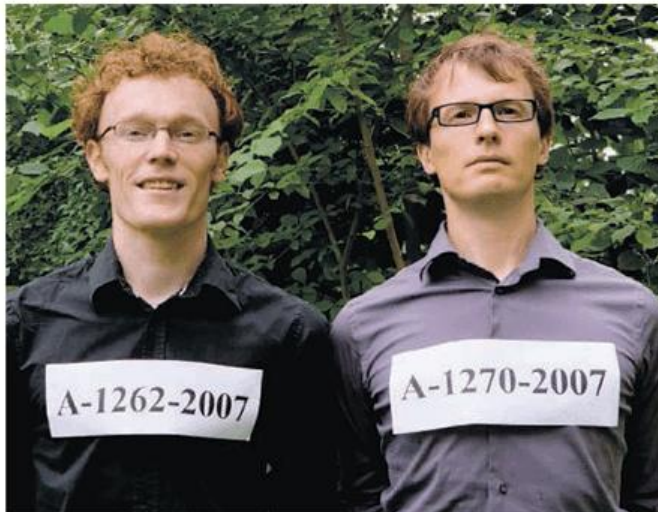
ORCID PHASE 2

- ❖ Non-university, third-party deposit of data
- ❖ Automatic de-duplication of records
- ❖ Ability to collect and protect sensitive data
- ❖ Ability to claim non-publication contributions
- ❖ Ability for institutions and/or publishers to verify researcher claims
- ❖ Ability to capture contribution roles (for example, second author, editor, reviewer, etc.).

QUESTIONS?

Are You Ready to Become a Number?

Science 27 March 2009:
vol. 323 no. 5922 1662-1664



Identity solution.

Jochen Cals (*left*) and Daniel Kotz argue that a global system of unique identifiers, such as their ResearcherIDs, will help scientists better search research literature and work with colleagues.

CREDIT: APPIE DERKS/MAASTRICHT UNIVERSITY MEDICAL CENTRE

Laure Haak

Chief Science Officer

Discovery Logic/Thomson Reuters

laurel.haak@thomsonreuters.com



Name	Institution(s)	Country / Territory	Researcher ID
Haak Laurel	Discovery Logic	United States	C-4986-2008

APPENDIX



casrai

Consortia Advancing Standards in
Research Administration Information

Scope of Research Data Standards

- Master entity profiles with data elements, semantic definitions, structural specifications and codes tables
- Business documents as 'point-in-time' snapshots of profile data
- Exchange packages grouping related business documents

- Research Personnel Data
- Research Activity Data
- Research Organization Data
- Research Impact Data
- Research Classification Taxonomy

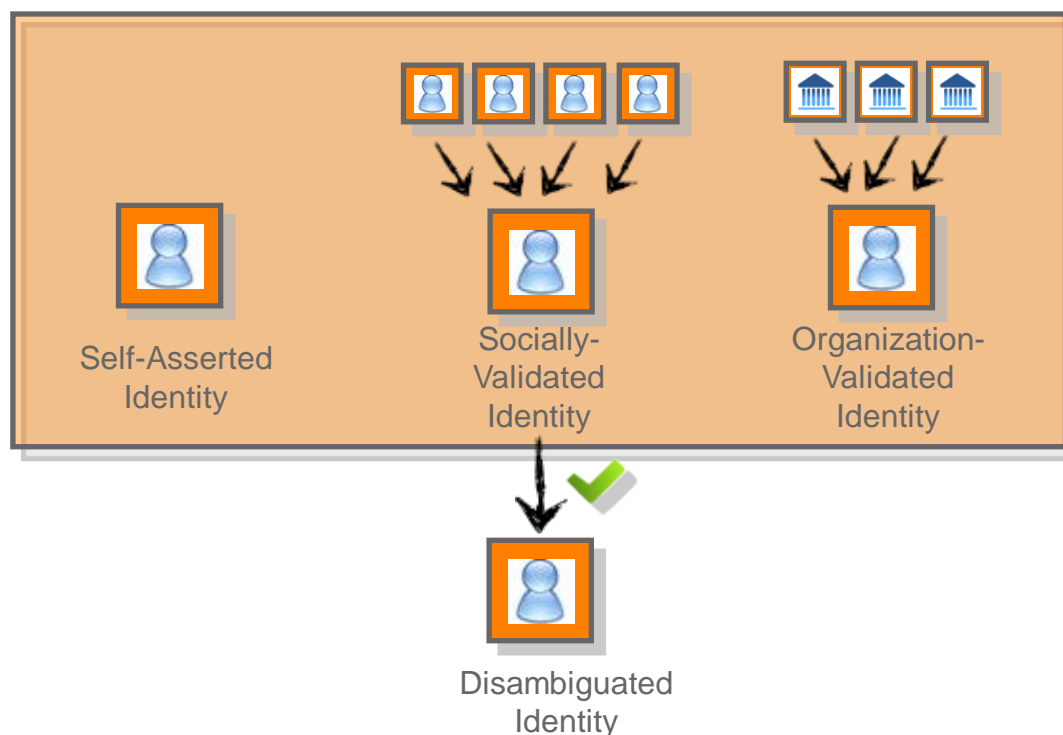
<http://dictionary.casrai.org>

- ORCID for Personnel
- DOI for Research Outputs
- Exploring ID options for Activities and Organizations



COMMUNITY-VALIDATED PROFILES

***Self-asserted + socially-validated + organizationally-asserted attribution
= more credible assertion***



MICRO ATTRIBUTION

WorkClaim: for a particular work (i.e., a DOI), tell me not only what contributors (ORCIDs and associated metadata) are responsible for it, but also what each contributor actually contributed (e.g., “wrote paper”, “designed study”, “collected data”, “performed experiments”, “contributed reagents”, “performed statistical analysis”, “acquired funding”, etc.)



ORCID FUNDERS TO DATE

VIVO – to model VIVO-ORCID profile exchange

Mellon – to conduct business feasibility study and planning

NSF – to examine the value of ORCID in advancing the science of science policy, via NSF-ORCID-UChicago/Harvard profile exchange

Wellcome Trust – market research, and forthcoming workshop on micro-attribution

OTHER SPONSORS

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Elsevier
NPG
Hindawi
Mendeley
Bloomsbury Qatar Foundation Journals
American Society of Civil Engineers
Copyright Clearance Center
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California Digital Library / Innovation Alliances and Services
Royal Society Publishing
Emerald Group Publishing
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Aries Systems

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SAGE Publications
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APA
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ACM
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Wellcome Trust
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AAAS
Hogrefe Group
Cornell University Library
Harvard University
Cambridge Crystallographic Data Centre
eJournal Press
SSRN
Microsoft Research
Atypon
JSTOR

DECADAL MEMBERSHIP TARGETS

Exhibit 2: Projected ORCID Members, By Segment

Market Segment	Participating Organizations
For-profit Publishers	60
Nonprofit publishers	40
Governmental & Private Funders	10
Universities & Research Institutes	325
Total	435

MEMBERSHIP TIERS

- Membership is at the institutional – not library – level.
- Tiers tied to level of research intensity, a function highest degree granted and number of faculty

Exhibit 3: Fee Ranges, By Segment

Market Segment	Annual Fee/Capitalization Fee	
	Low Tier	High Tier
For-profit Publishers	\$500/\$550	\$44,100/\$48,510
Nonprofit publishers	\$400/\$440	\$35,280/\$38,810
Governmental & Private Funders	\$12,500/\$13,250	\$58,000/\$63,800
Universities & Research Institutes	\$600/\$660	\$9,400/\$10,340