

Connecting Research and Researchers

ORCID in a world where machines read

ACSE Annual Conference Dubai 10-11 August 2016

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Twitter @mjbuys
http://orcid.org/0000-0001-7234-3684



Researchers focus

"Researchers want to be read, acknowledged, and quoted."

"Researchers want to spend their time on research, not reporting"



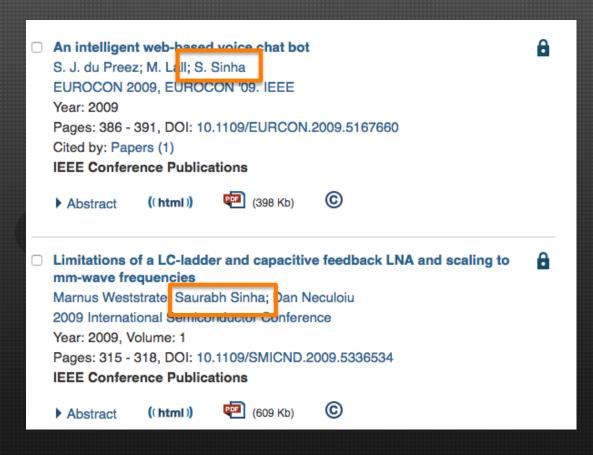
Why is there a problem?

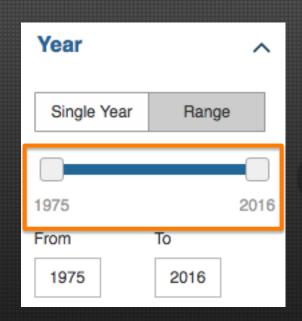
The research community has lacked the ability to link researchers and scholars with their professional activities.

- Name variations:
 - Matthew J Buys, MJ Buys, M Buys, Matthew John Buys, بایز ، ماثیو
- Institutional variations:
 - ORCID, ORCID Incorporated, ORCID Inc, ORCID EMEA



Algorithms are not enough







Using a persistent iD

Search results

ORCID iD	First name	Last name
0000-0003-0305-6731	Saurabh	Sinha
0000-0001-7453-9576	Saurabh	Sinha
0000-0003-4634-3925	Saurabh	Sinha



Connecting Research and Researchers

FOR RESEARCHERS

FOR ORGANIZATIONS

ABOUT

HELP

SIGN IN

SIGN IN

REGISTER FOR AN ORCID ID

2,451,547 ORCID iDs and counting. See more...

Professor Saurabh Sinha

ORCID ID

Dorcid.org/0000-0003-4634-3925

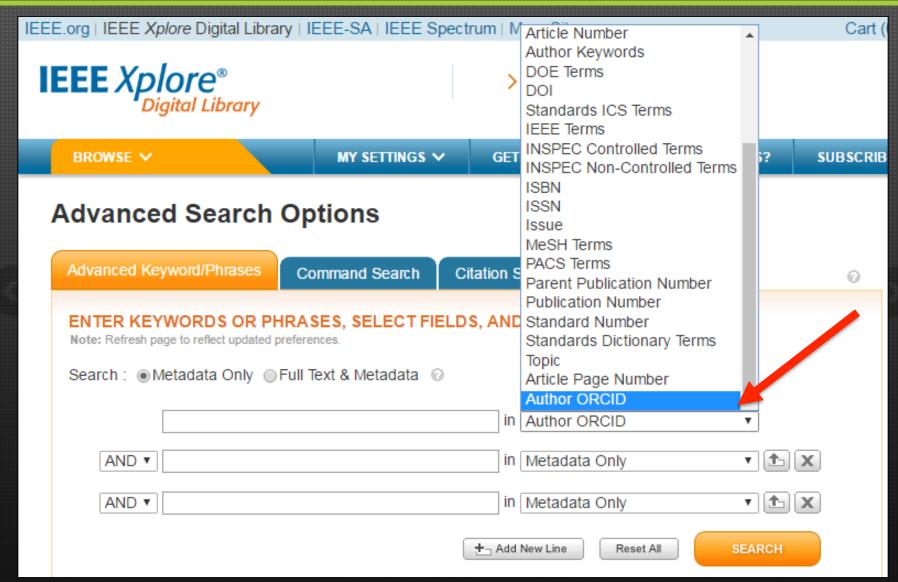
Biography

Saurabh Sinha, SMIEEE, FSAIEE, obtained his B. Eng, M. Eng and PhD (Electronic Engineering) degrees from the University of Pretoria (UP), South Africa. After more than a decade of service to the UP, Prof. Sinha now serves as Executive Dean: Faculty of Engineering and Built Environment, University of Johannesburg, South Africa. He has authored or co-authored over 60 publications in peer-reviewed journals and at international



and Researchers

Search using an ORCID ID







Can names be cleaned up?

Of course they can!

We need to use digital names: persistent identifiers that uniquely specify the person, organization, or object to which a name refers

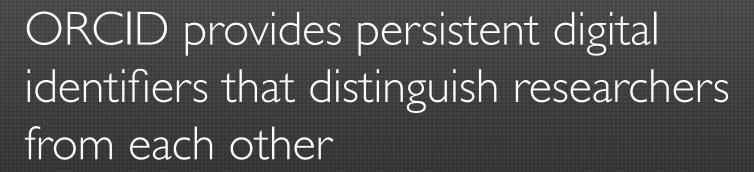


So what was needed...

An open infrastructure

ORCID connects systems together through a community driven infrastructure - with user authentication and permission









ORCID ID	First name	Last name
0000-0002-8898-4520	Koichi	Tanaka
0000-0001-9115-2015	Koichi	Tanaka
0000-0001-8666-6396	Koichi	Tanaka
0000-0002-3180-7881	Koichi	Tanaka

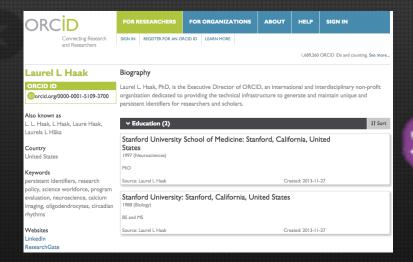


ORCID record



ORCID provides a <u>persistent digital identifier</u> that distinguishes researchers from each other and links them to an <u>organization identifier</u>

Individuals register for free and use this at their institution, funders and publishers



Organizations join as members and can build integrations into their systems



What's in a ORCID record?

Organized into two sections.

Person:

Names, Countries, Keywords, Websites, Person Identifiers

Activities:

Education, Employment, Funding, Peer Reviews, and Works

then ORCID returns things like this!

XML Data

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<orcid-message xmlns="http://www.orcid.org/ns/orcid">
    <message-version>1.1</message-version>
    <orcid-profile type="admin">
        <orcid-identifier>
           <uri>http://orcid.org/0000-0002-0036-9460</uri>
            <path>0000-0002-0036-9460</path>
           <host>orcid.org</host>
        </orcid-identifier>
        <orcid-preferences>
           <locale>en</locale>
        </orcid-preferences>
        <orcid-history>
            <creation-method>website</creation-method>
            <completion-date>2012-10-24T21:27:54.324Z</completion-date</pre>
            <submission-date>2012-10-24T20:23:17.739Z</submission-date</pre>
            <last-modified-date>2016-05-12T22:50:11.179Z</last-modified
           <claimed>true</claimed>
        </orcid-history>
        <orcid-bio>
            <personal-details>
                <given-names>Robert</given-names>
                <family-name>Peters</family-name>
                <other-names visibility="public">
                    <other-name>Rob Peters</other-name>
                    <other-name>r.peters</other-name>
                    <other-name>rcpeters</other-name>
                </other-names>
            </personal-details>
            <researcher-urls visibility="public">
                <researcher-url>
                   <url-name>Github - RCPETERS</url-name>
                    <url>http://github.com/rcpeters</url>
                </researcher-url>
                <researcher-url>
                    <url-name>LinkedIn - RCPETERS</url-name>
                    <url>http://linkedin.com/in/rcpeters</url>
                </researcher-url>
                <researcher-url>
                    <url-name>Impact Story - 0000-0002-0036-9460</url-
                    <url>https://impactstory.org/u/0000-0002-0036-9460
                </researcher-url>
            </researcher-urls>
            <contact-details>
                <email primary="true" current="true" verified="true" v</pre>
                <email primary="false" current="true" verified="true"</pre>
                <address>
                    <country visibility="public">AR</country>
                </address>
```

"message-version" : "1.1".

"orcid-identifier" : {

"host" : "orcid.org"

"orcid-deprecated" : null,

"completion-date" : {

"submission-date" : {

"orcid-preferences" : {

"locale" : "EN"

"orcid-history" : {

"claimed" : {

"value" : true

"source" : null, "deactivation-date" : null,

"path": "0000-0002-0036-9460",

"creation-method" : "WEBSITE",

"value" : 1351114074324

"value" : 1351110197739

"value" : 1463093411179

"last-modified-date" : {

"verified-email" : null,

"visibility" : null

"personal-details" : {

"given-names" : {

"family-name" : {

"value" : "Robert",

"visibility" : null

"value" : "Peters",

"visibility" : null

"credit-name" : null.

"other-names" : {

"orcid-bio" : {

"verified-primary-email" : null,

"uri" : "http://orcid.org/0000-0002-0036-9460",

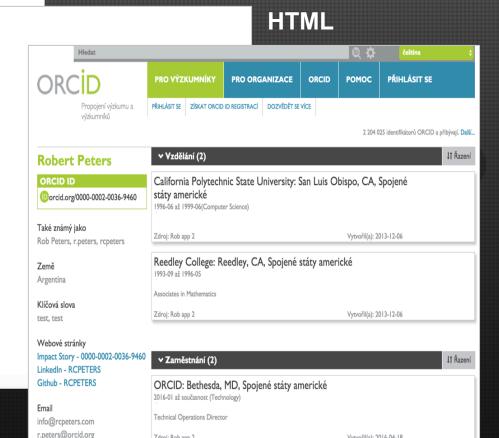
"orcid-profile" : {

"orcid" : null,

"orcid-id" : null,

"value" : null,

JSON Data



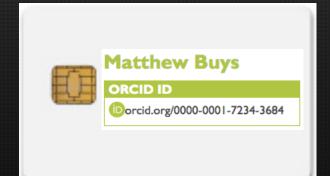
Vytvořil(a): 2016-04-18

Zdroi: Rob app 2



How does ORCID work

- ORCID works in a similar way to that of a credit card
 - It can be used across systems
 - It provides the researcher with a secure iD ("card") with asserted connections
 - ...and importantly synchronizes metadata and requires no manual input from the user

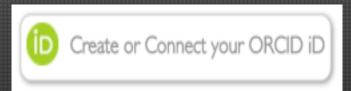


Note: ORCID does not store any sensitive private data about the individual



User permission

Instead of swiping a card — researchers provide permission using their username and password



Sign in using your Personal Account Image: Institutional Account Sign in with your ORCID account Email or iD Email or iD ORCID Password ORCID Password Forgotten password? Sign into ORCID Sign in with a social media account The state of the s

Don't have an ORCID iD yet? Register now



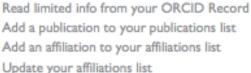
Your Client Application @

has asked for the following access to your ORCID Record









Update your publications list

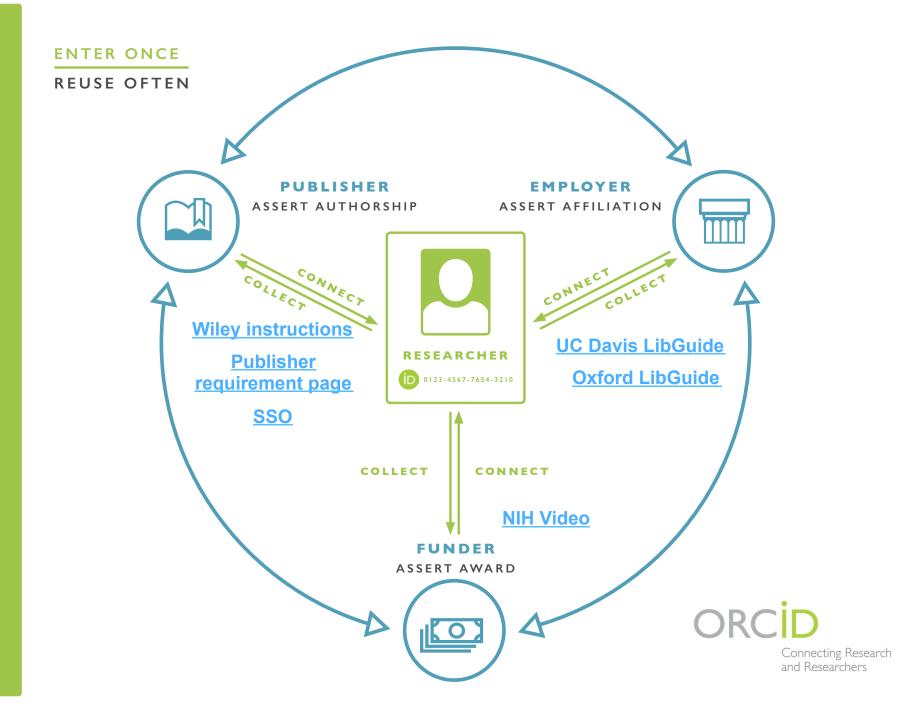


Allow this permission until I revoke it.

(You may revoke permissions on your account settings page.

Unchecking this box will grant permission this time only.)

This application will not be able to see your ORCID password, or other private info in your ORCID Record. Privacy Policy.





ORCID "transactions"

Credit cards

- Arrive and swipe card
- Transaction details are populated in all the connected systems
- There is no manual entry of transactional details



ORCID iDs

- Researchers enter their username and password
- Metadata is populated in publisher, research institute, funder, and association systems
- There is no manual entry of metadata

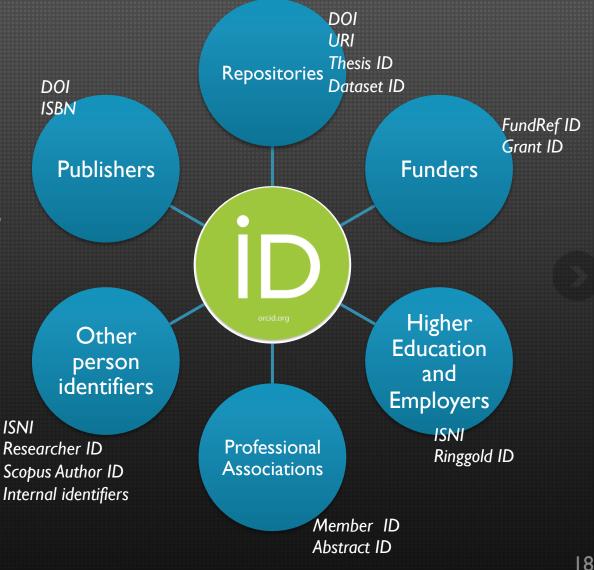
orcid.org



ORCID is a hub

ORCID connects different ID systems through open & persistent identifiers

- Machine-readable
- Interoperable





ORCID is Open

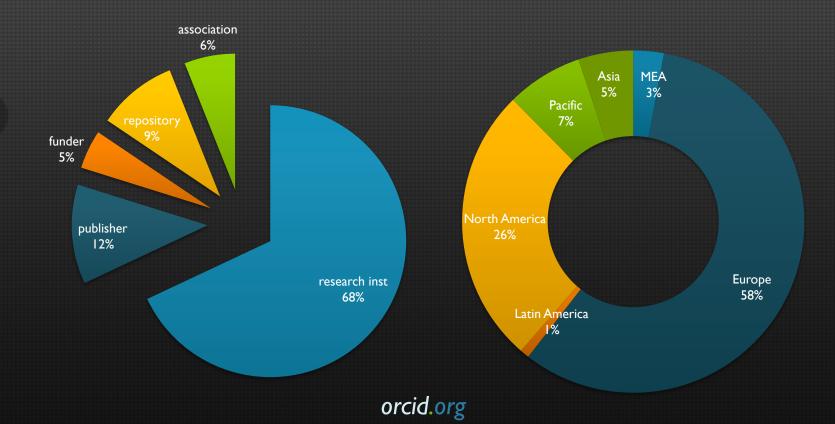


- Non-proprietary and platform-neutral
- International service that integrates with other researcher identifiers
- Registry use is free for individuals
- Independent non-profit membership organization
- Open data, software, APIs, and documentation



Who uses ORCID iDs?

2.4M+ live iDs, 500+ members, multiple national consortia, and 300+ integrations in every region and sector of the international research community.





Universities Implementing

- Country-wide adoption in Denmark, UK, Italy, Australia, Finland, Belgium and more in 2016
- US consortia: CIC, GWLA, and NERL

"We want to use ORCIDs to simplify the life of Oxford's researchers for working with institutional systems and publishers' systems by re-using already available information for publication data management and reporting. The motto is: Input once — re-use often."

Wolfram Horstmann, (former) Assoc. Director, Bodleian Libraries, University of Oxford http://orcid.org/0000-0001-8673-6104



ORCID enables assertions





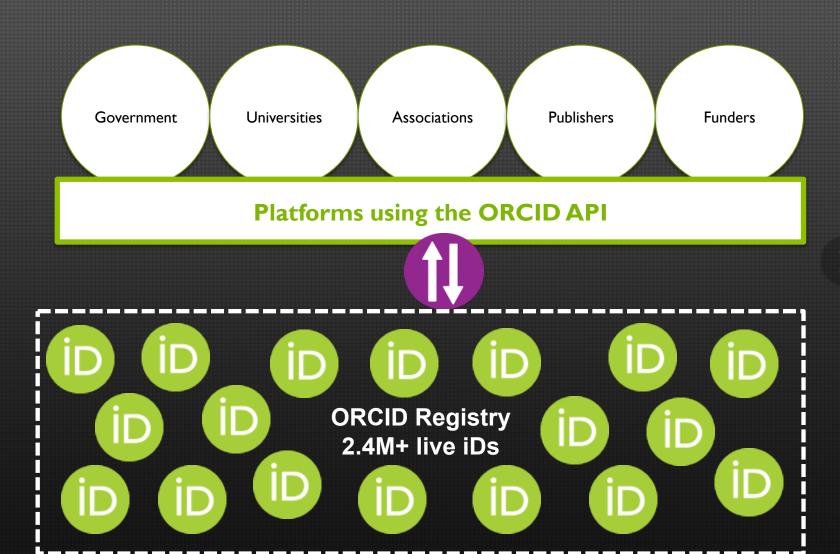
Organizations are use ORCID APIs to authenticate, collect, display, and connect persistent identifiers for people, places, and things in research workflows







ORCID & platforms





Connecting Research and Researchers

Pull:

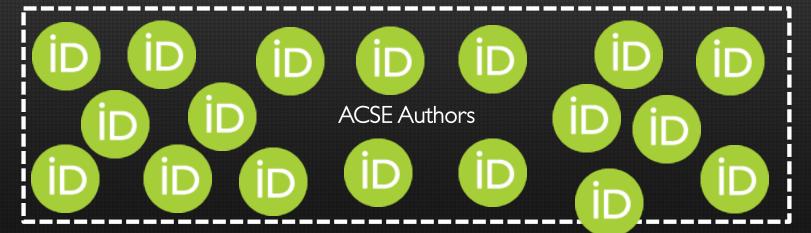
- Names
- Biography
- Affiliation
- Funding
- Works

Internal Systems



Push:

- Works
- Peer review





Connecting Research and Researchers





Assert information on neluge Distriction DISPLAY CONNECT on sites information to & metadata record **AUTHENTICATE** @ 0000-0001-2345-6789 COLLECT SYNCHRONIZE Enter Reuse with ORCID iD Once Often record Synchronize tens Publishers Employers Funders

DISPLAY

- In metadata
- On sites
- In publications

CONNECT

- Affiliations (employers)
- Works (publishers)
- Awards (funders)



Collect & Connect goals

- Clarify how plumbing works
- Standardize experience
- Standard connection installation guidelines
- Increase predictability and trust in the "utility"
- Community approach to reliable connections



Collect & Connect



11 August 2016 orcid.org 28



Collect



COLLECT validated ORCID iDs for individuals

- Explain what ORCID is
- Explain why you're collecting iDs
- Consistent user experience
- Authenticated connections

Ensure individuals are correctly connected with your institution

Converis, Pure, Symplectic Elements, VIVO use the OAuth process

authors & referees

Personal profile Professional profile		
My Account → Personal Prof	île	
(* = mandatory fields)		Reset
(D) ORCID	Create/link an Open Researcher Contributor ID(ORCID)	?
Title	•	
* First Name		
Middle Name		
* Last Name	Garcia	
* Primary Email Address	s.garcia@orcid.org	



Nature Publishing Group O

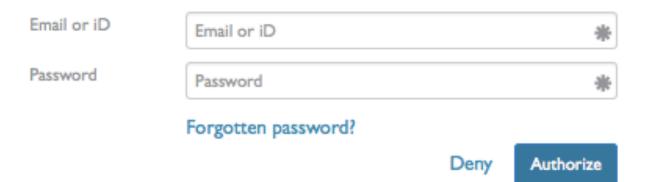
has asked for the following access to your ORCID Record



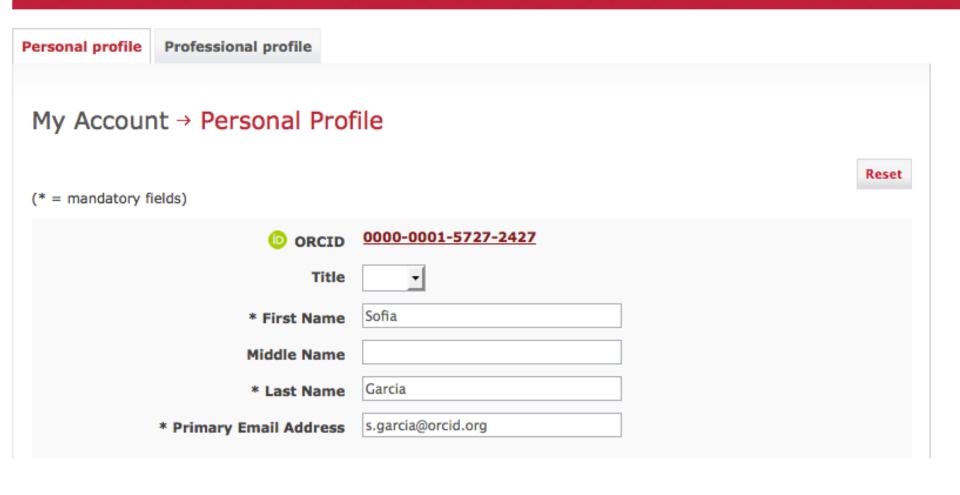
Read your ORCID record

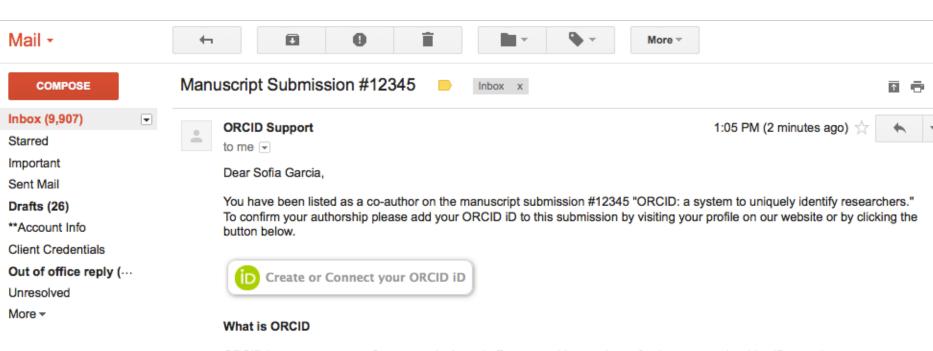
This application will not be able to see your ORCID password, or other private info in your ORCID Record. Privacy Policy.

Don't have an ORCID iD? Register.



authors & referees





ORCID is an open, non-profit, community-based effort to provide a registry of unique researcher identifiers and a transparent method of linking research activities and outputs to these identifiers. ORCID is unique in its ability to reach across disciplines, research sectors, and national boundaries and its cooperation with other identifier systems.

Why use ORCID

As researchers and scholars, you face the ongoing challenge of distinguishing your research activities from those of others with similar names. You need to be able to easily and uniquely attach your identity to research objects such as datasets, equipment, articles, media stories, citations, experiments, patents, and notebooks. As you collaborate across disciplines, institutions and borders, you must interact with an increasing number and diversity of research information systems. Entering data over and over again can be time-consuming, and often frustrating.







DISPLAY iDs on your website, platform, systems

- iDs shown as a link
- iDs in metadata
- Use the ORCID Member logo
- Explain why iDs are collected

Signal that your systems are plumbed to support ORCID iDs

http://orcid.org/trademark-and-id-display-guidelines

You have the iD, now display it!

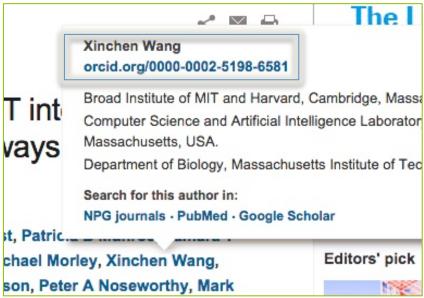
iDs in print



Royal Society, Biology Letters



iDs electronically



Nature, Genetics



You have the iD, now display it!





Science China Mathematics, vol. 57, no. 6, pp. 1203-1220, 2014

5 Möhius hamageneous hypersurfaces with two distinct principal curvatures in Sn+1

Hindawi, Geometry

Publication Ethics

Recently Accepted Articles

You have the iD, now display it!

ORCID iD in DOI metadata:



iD available in search





Connect

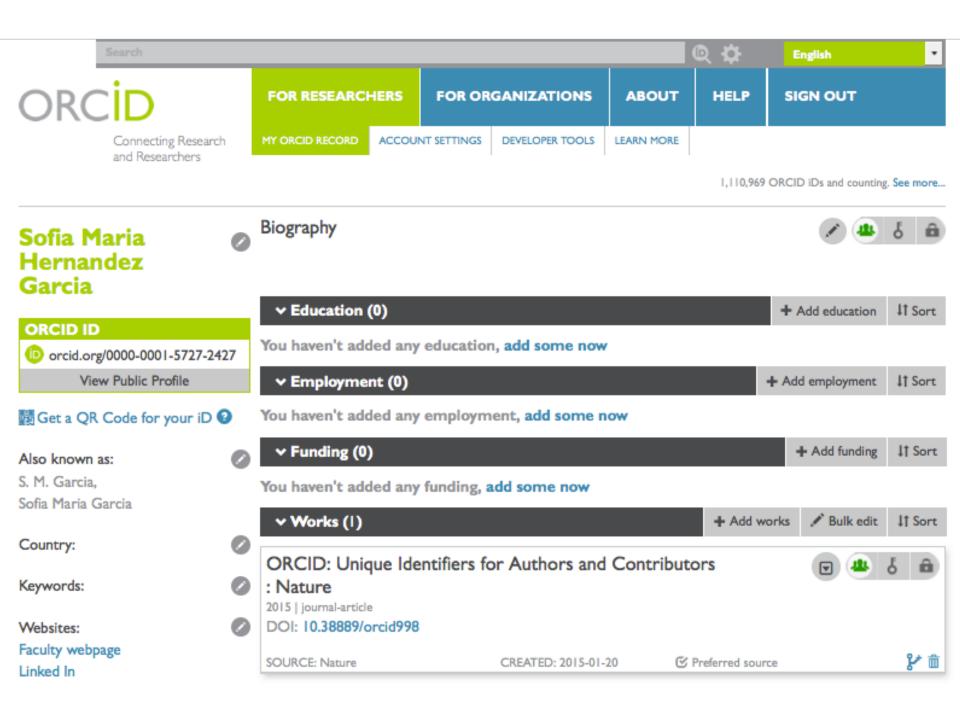


CONNECT your data to ORCID Records

- Request permission to write to Records
- Store long-lived tokens
- Add data that you uniquely can (authoritative)
- Explain the connection

Enable researchers to provide validated data to others

https://orcid.org/blog/2015/10/26/auto-update-has-arrived-orcid-records-move-next-level



→ Peer review (15)

+ Add peer review

↓↑ Sort

> review activity for Journal of Neuroscience (4)

Search & link



> review activity for Welcome Trust (1)



✓ review activity for Nature Neuroscience (4)



journal. Nature Neuroscience is a multidisiplinary journal that publishes papers of the highest quiality and significance in all areas of neuroscience. The editors welcome contributions in molecular, cellular, systems and cognitive neuroscience.

Туре	Role	Actions
Review	Reviewer	🕒 show details 👉 view 🗓
Review	Reviewer	🕒 show details 🗁 view 🛍
Review	Editor	🗈 show details 🗁 view 🗓
Review	Reviewer	🗹 hide details Ժ view 🗓
	Review Review Review	Review Reviewer Review Reviewer Review Editor

Review identifier(s): DOI: 3498/203.283 | http://url.for.the.review.com/weio.2i3oslg.html

Convening organization: NPG (London, United Kingdom)

Review subject: Title of the publication that was reviewed (journal article) Nature Neuroscience.

DOI: 230.3/0239x894.85 | C view



Synchronize



SYNCHRONIZE with your systems

- Update information when it changes
- Auto-add new information
- Search & link wizards
- Sync data from others

Saved time, better reporting, improved information flow

https://members.orcid.org/api/tutorial-webhooks https://orcid.org/blog/2015/10/26/auto-update-has-arrived-orcid-records-move-next-level



Sector Responsibilities

	COLLECT iDs	PUBLISH on your site	POST to record
Funders	At grant application & review	With award	Grant award IDs
Research institutions	For new staff & students; at thesis submission	With works; in faculty profiles	Affiliation ID for institution
Publishers & repositories	For authors, contributors, reviewers	With works	Paper, dataset and review Ids
Associations	For members, authors, meeting participants	With member profiles	Affiliation ID with association, work IDs for publications



Universities

"We want to use ORCIDs to simplify the life of Oxford's researchers for working with institutional systems and publishers' systems by re-using already available information for publication data management and reporting.

The motto is: Input once — re-use often."

Wolfram Horstmann, Assoc. Director, Bodleian Libraries, University of Oxford http://orcid.org/0000-0001-8673-6104



Alex Smith @Alex_Smith_Ants 12m
Hour number 2 of entering and
updating my publications to indicate
that the were "published" and refereed.
#CanadianCommonCV #wasteoftime



Terry Wheeler @ta_wheeler

Details

@Alex_Smith_Ants Meanwhile, in an alternate universe, another You just typed his Orcid, linked it all up & went for a run.

9:07am · 29 Jul 2014 · Twitter for iPhone



National funding agencies are using ORCID in their grants management systems including the National Institutes of Health (US), Research Councils UK and the Australian Research Council.

Box 2. Funder Mandates. These funders are requiring use of ORCID by researchers.

- Autism Speaks, USA (2014)
- FCT, Portugal (2014)
- QNRF, Qatar (2014)
- SRC, Sweden (2014)
- Department of Transportation, US (2015)
- NIHR, UK (2015)
- Wellcome Trust, UK (2015)
- FWF, Austria (2016)

http://orcid.org/blog/2015/12/04/research-funders-and-orcid-new-members-mandates-and-platforms

600+ publishers integrate with ORCID

19 publishers will require ORCID iDs as mandatory during 2016, including:

Science
EMBO
PLOS
Royal Society
ACS
eLIFE
Hindawi
IFFF

AGU

From January you'll need an ORCID

7 December 2015 by Phil Hurst



Mandating the use of Open Researcher and Contributor ID (ORCID) by submitting authors.

ORCID provides a unique identifier for all researchers that can be linked to their different research works and activities across multiple platforms. It also serves to distinguish authors with similar names and simplify searching of publications databases (such as PubMed, Scopus, etc.) to avoid retrieving articles by authors with similar names. Close to 1.8 million researchers have already created their ORCID iD. The service is non-profit and community driven.



From 1 January 2016, we will require the submitting author to provide an ORCID identifier as part of the manuscript submission process. Details of the practicalities will be provided shortly, but don't worry, it takes less than a minute to register for an ORCID iD and it's free of charge. A <u>recent survey</u> carried out by ORCID indicates strong support in the research community for mandates by publishers, funders, and universities.



People and Things



submit manuscript



submit metadata



update author ORCID record



notifications to member systems



University Library



Faculty Profiles



Funders



Auto-update in action



Jake VanderPlas @jakevdp · 2h

My first @JOSS_TheOJ paper passed review and is published! joss.theoj.org
/papers/10.2110...







11

000



Jake VanderPlas @jakevdp





🛂 Follow

Wow... that was fast! @ORCID_Org @JOSS_TheOJ



Hi Jacob VanderPlas,

You have 1 new notification in your ORCID inbox - see summary below. Please visit your ORCID Inbox to take action or see more details.

& Crossref: Add your published work(s) to your ORCID record

→ Works (1)

mst_clustering: Clustering via Euclidean Minimum Spanning Trees http://dx.doi.org/10.21105/joss.00012

more info...

Add now

View details in your ORCID inbox



Researcher Responsibility



- Register for an iD
- 2 Use it!

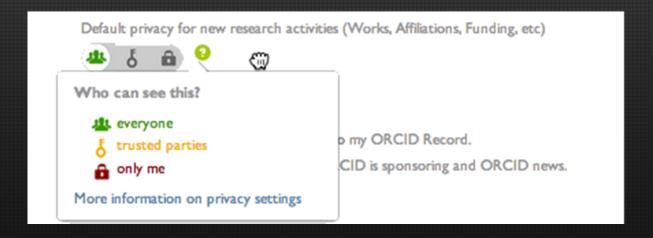
Remember <u>authentication</u> is key





Privacy Management

- 1) Privacy setting per item in their record granular control
 - ② Default privacy setting for new items added by trusted parties





Why consider Membership?

• Importantly, by using ORCID in your system(s), you can play your part in building a trusted research infrastructure by asserting the connection between researchers and scholars and their professional research activities

ORCID member API and support



Thank you!



- Find out more at http://orcid.org
- Register at http://orcid.org/register

Matthew Buys Regional Director, ORCID m.buys@orcid.org

http://orcid.org/0000-0001-7234-3684

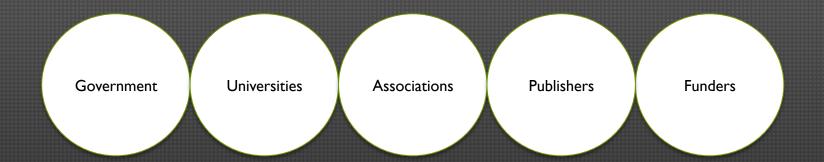


Appendix A

Authentication Steps



Authentication Steps: Request



Organizations will ask for permission





Authentication Steps: Permission

Individual then provides permission



Your Client Application

has asked for the following access to your ORCID Record







Read limited info from your ORCID Record Add a publication to your publications list Add an affiliation to your affiliations list Update your affiliations list Update your publications list

Allow this permission until I revoke it.

(You may revoke permissions on your account settings page. Unchecking this box will grant permission this time only.)

This application will not be able to see your ORCID password, or other private info in your ORCID Record. Privacy Policy.

Already have an ORCID iD? Sign In.



Authentication Steps: Complete

Access has now been provided until you revoke this

Thank you for connecting your ORCID (D)



You will now be directed back to the submission system website.



Authentication Steps: Managing Permissions

Account settings		
Email and contact preferences	Edit	
ORCID inbox notifications	Edit	
Password	Edit	
Privacy preferences	Edit	
Security question	Edit	
Close account	Close this ORCID record	

Trusted organizations

You can allow permission for your ORCID Record to be updated by a trusted organisation. Find out more

ORCID record	Approval date	Access type	
ResearcherID http://www.researcherid.	2015-11-18 com	Read your biographical information Read items in your ORCID record	
Scopus to ORCID http://orcid.scopusfeedba	2016-06-08 ck.com	Add a person identifier Add works Read your ORCID record Update your works	

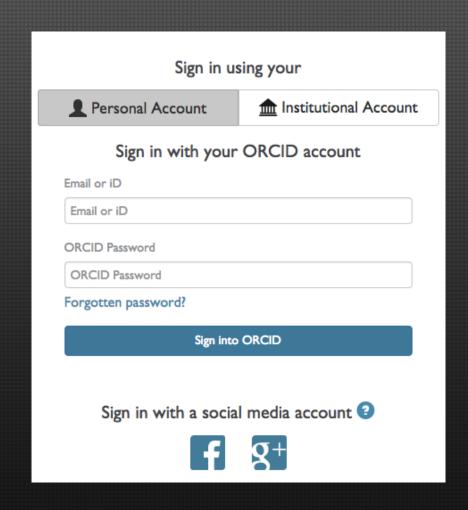


Appendix B

ORCID Record Overview

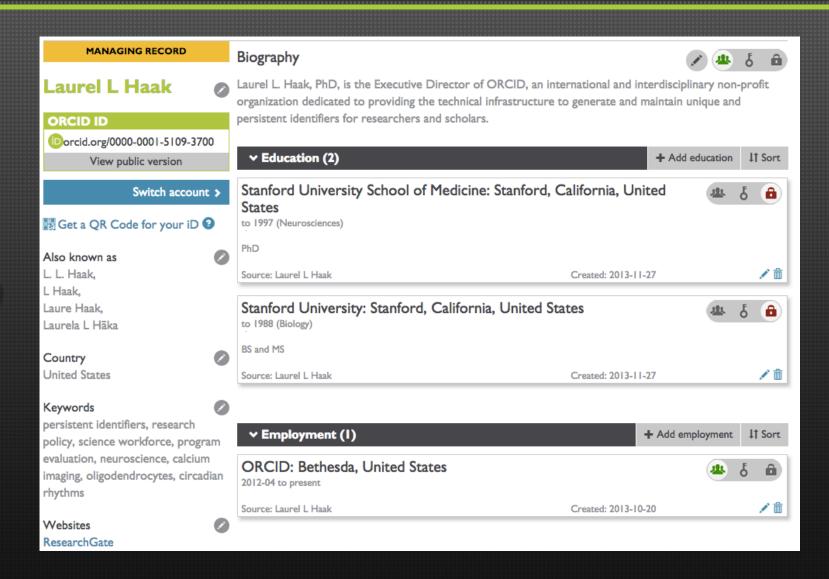


An ORCID record: Sign In





An ORCID record: Overview





An ORCID record: Overview

Keywords

persistent identifiers, research policy, science workforce, program evaluation, neuroscience, calcium imaging, oligodendrocytes, circadian rhythms

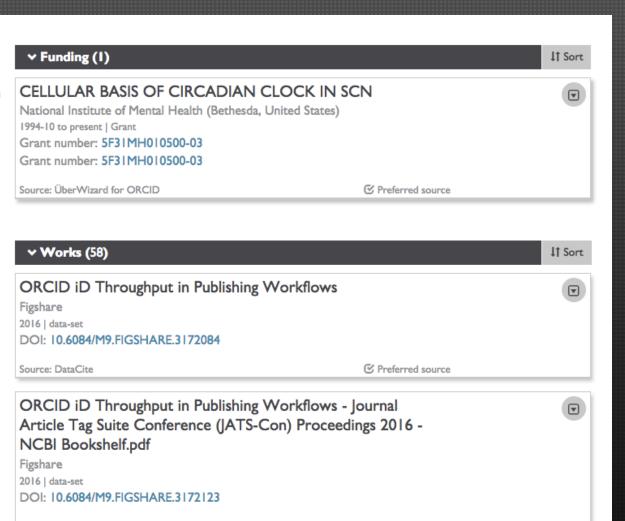
Websites

LinkedIn

ResearchGate

Other IDs

ISNI: 0000000138352317 ResearcherID: C-4986-2008 Scopus Author ID: 6602258586





Appendix C

Live API example

<u>Live example</u>

Google playground http://tinyurl.com/zrmbxqb

https://sandbox.orcid.org/signin

Scope: /orcid-works/create

Header name: accept / Header value: application/vnd.orcid+xml

Header name: Content-type / Header value: application/vnd.orcid+xml